



Hi-Fi Choice PASSION FOR SOUND

Welcome

www.hifichoice.co.uk Issue No. 422 April 2017







Musicreviews





EDITOR'S
CHOICE:
Awarded to those
products that are
judged to deliver
outstanding
performance

RECOMMENDED: Products that we feel meet a high standard of performance GROUP TEST WINNER: Comparative tests can only have one winner, and this badge says it all!



Spotify is the world's most popular music streaming service and has recently surpassed 50 million subscribers, according to its own stats. The streaming service giant's popularity is also confirmed by the results of our own Twitter poll that ran online in early March asking: "What's the best music

streaming service for you?" – see full survey results on p69. Somewhat surprisingly, the results show that even among quality audio fans Spotify's ad-free Premium subscription service with sound quality only up to 320kbps for its music streams comes top of our poll.

As an advocate of lossless streaming services, the results are a little disappointing. In our most recent streaming services test (*HFC* 414) covering six of the main players, Tidal HiFi came out top for its near-CD sound quality from up to 1,411kbps streams. In sound quality terms, Tidal is superior but Spotify's top place in our poll highlights that a winning streaming service isn't just about sound quality for listeners. Spotify has risen to the top of the league because of its excellent user interface and uniquely versatile features that make it easy for listeners to access the music they want to hear.

Lossless audio streaming fans may soon be able to experience Spotify's slick platform for themselves, as rumours abound that it's about to launch a Hi-Fi subscription tier, offering near-CD quality streams for an increased monthly fee. How this will affect Tidal is unclear, but we'll be following the story very closely.

Lee Dunkley Editor

Follow us:





Twitter: @HiFiChoiceMag Facebook: facebook.com/hifichoice.co.uk



SUITE 25, EDEN HOUSE, ENTERPRISE WAY, EDENBRIDGE, KENT TN8 6HF

hifichoice.co.uk Issue No. 422 April 2017

NEWS & OPINION

6 AudiofileThe latest news on the hottest products from the world of hi-fi coming your way

14 Webwatch

Essential websites to direct your browser towards for all your hi-fi requirements

69 Letters

Put your points of view and queries on audio matters to our team of experts

79 Opinion

The Hi-Fi Choice team say it as they see it as they discuss the issues of the day

99 Music Reviews

The month's essential new CD, vinyl and hi-res releases given a work out

READER SERVICES

122 Reader Classifieds

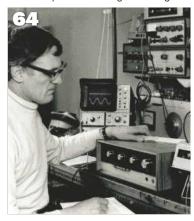
Sell your unwanted hi-fi for FREE here

130 Next Issue

The sonic treats to look out for next month

FEATURES 10 Show Report

We're off to Bristol to mark the 30th anniversary of the UK's longest running show



64 History in the making

As Sugden celebrates its 50th year in business, we meet MD Patrick Miller

90 Dealer Visit

Sound Cinergry does things a little different with some well-known brands

94 Labelled With Love

How BIS became the source of the world's largest catalogue of classical SACDs

102 Music Legends

The turbulent tale of Fleetwood Mac, one of the best-selling rock bands ever

GROUP TEST





Audiofile: Mission's LX loudspeaker series



Music Reviews: Luke Daniels Making Waves



CONTENTSAPRIL 2017

"Sugden can restore and fettle practically any of its historic products, should a customer wish"

Sugden Audio Insider Feature p64

TESTED THIS MONTH



Larsen 8 2.5-way floorstanding speaker



Musical Fidelity Encore 225



Rega Brio integrated amplifier



Kit testing

VPI

Prime Scout belt-drive turntable

Larsen

8 2.5-way floorstanding speaker (Exotica)

46 Musical Fidelity

Encore 225 one-box music system

Rega

Brio integrated amplifier

Rosso Fiorentino

Elba 2.5-way floorstanding loudspeaker

Raumfeld

Stereo L 3-way wireless floorstanding loudspeaker

Yamaha

WXA-50 integrated amplifier

Rotel

T14 tuner/streamer

88 Sony DTC-ZE700 Digital Audio Tape player

GROUP TEST

Standmount loudspeakers £700-£1,000

27 Acoustic Insight Vivide

29 Arcaydis EB2S

31 Heco Elementa 300

33 Piega Classic 3.0

35 Russell K Red 50

37 Totem Mite

THE KNOWLEDGE

DACs

106 DACs explained

108 Arcam irDACII

108 Audiolab M-DAC+

108 Copland DAC215

109 Mytek Brooklyn

109 Roksan k3 DAC

109 Simaudio

Moon Neo 230 HAD

110 Accessories

HOICE EXTRAS

Master & Dynamic

MW50 wireless on-ear headphones

115 Korg DS-DAC-10R 1-bit USB DAC/ADC

116 Leema Acoustics

Reference 1 digital RCA cable

MCRU

Optimus in line mains filter

117 Supra CablesLimited Edition LoRad 2.5 SPC shielded

mains cable

7 Russ Andrews

Mini Purifier Superclamp

JAYS

uJAYS on-ear headphone

Never miss an issue – turn to p120 for our latest subs offer

AUC OF STINDUSTRY NEWS...

Value Mission

Following the launch of the all-new LX-2 and LX-3 loudspeakers, the British manufacturer shows its full LX entry-level series at Bristol Sound & Vision

PRICE: £110-£750 AVAILABLE: NOW CONTACT: 01480 447700 WEB: MISSION.CO.UK

SHOWCASING ITS SIX-STRONG

LX lineup at the Bristol Sound & Vision show held in February - see highlights starting on p10 – visitors to the fourth floor of the Marriott Hotel City Centre got the chance to experience Mission's complete entry-level range of loudspeakers for the first time. Touted as offering exceptional performance and value, the £160 LX-2 standmount and £400 LX-3 floorstanding speakers were launched almost a year ago. They are joined by four new models that augment the range with a further standmount speaker, two additional floorstanders as well as a centre channel model if your audio aspirations extend to multi-channel loudspeaker installations.

Mission control

As with the first models unveiled, Mission tells us that its LX series has been designed to deliver compelling musicality. Cabinets are braced at key points to control unwanted resonances and vibrations. For the LX series, the Huntingdon-based company has produced a tweeter with a neodymium magnet (selected for maximum magnetic force in such a small space) and a 25mm microfibre dome. It's positioned in an inverted arrangement and is partnered with a self-damping advanced fibre formulation mid/bass driver cone that measures 100mm in the £110 LX-1, 130mm in the £160 LX-2 standmount models, with two 130mm drivers in the £400 LX-3 floorstander, while the LX-4 has twin 165mm drivers. All designs are two-way configurations except for the £750 LX-5, which is a three-way floorstander that uses a dedicated midrange and two 165mm bass drivers.

The complete Mission LX series is on sale now from your local distributor and available in a choice of white, black and walnut finishes.





COMMENT

FOR THE RECORD

When is a turntable not a turntable? What individual components does a vinyl spinner require to actually be considered a proper record player? A cartridge? Without doubt. A tonearm? You'd certainly hope so. A rotating platter? Yes, of course. So what are we supposed to make of some of the new breed of 'record players' (and we use the words in their loosest possible form) that are emerging for the swanky hipster that wants all the functionality of the black stuff without anything that can be identified as even vaguely related to what most people consider a turntable?

Our first candidate, Love (yep, it's really called that) is described by its maker as "the first intelligent turntable" and claims to maintain the intimacy and quality of vinyl, but adds smart features, "while keeping the crackles and pops". Looking like a mixture between an oversized computer mouse and a mobile phone, Love is claimed to "read vinyl records with a traditional stylus", connect to speakers via Bluetooth or wi-fi, is able to skip or repeat tracks and all of this can be controlled by an app so that you don't have to leave the comfort of your sofa. Love comes with two platters onto which you place your vinyl and the 'handset' then sits on top of this and spins anti-clockwise on the record (which remains still throughout).

Costing \$329 (just under £270), Love – as so many of these 'zany' products invariably are – was crowd funded on the Indiegogo website, having raised an astonishing \$898,171 as we go to press in mid-March.

And it's not alone. Other Heath Robinson solutions to the 'problem' of the traditional record spinner being far too much hassle include the RokBlok (a gold box that sits on your record and spins around it, has built-in speakers and can send audio via Bluetooth), which has raised \$351,816 on Kickstarter and the Wheel. This is an upside down player that has the stylus in the base, so that all you see is your vinyl spinning as it plays your music from the flip side.

If these developments are the result of vinyl's popularity, let's go back to it being a niche concern if it's alright with you...



AVM in the UK

German brand to be distributed by PMC

PRICE: £3,995 – £11,695 **AVAILABLE:** NOW **CONTACT:** 01767 686300 **WEB:** PMC-SPEAKERS.COM

GERMAN AUDIO SPECIALIST AVM (Audio Video Manufaktur) has been around for 30 years, and has established a considerable lineup of components spread across three key ranges called Inspiration, Evolution and Ovation. The new brand to the UK got its first outing at the Bristol Sound & Vision show in February and carries a comprehensive range of models including integrated, pre and power amplifiers, receivers, CD player/DACs and all-in-one solutions like the £11,695 Ovation CS 6.2 and 8.2 flagship models (pictured middle and bottom). Rated at a hefty 2x 500W with streaming capabilities and support for up to 32/384 and DSD128 files, the CS 8.2 also offers a Tube Line Stage claiming a warmer sound. The MP 6.2 (top) is a digital media player and DAC and costs £7,830.



IN BRIEF CHASING THE DRAGON ONLINE CHASING THE DRAGON ONLINE CHASING THE DRAGON STREET SHELTER - CONTRICATED LINE OF SH

recording method and back in the October 2016 issue (HFC 415) we ran an Insider Feature on the extraordinary process run by Mike Valentine's specialist Chasing The Dragon record label that followed a direct-cut recording of Clare Teal and The Syd Lawrence Orchestra performing a tribute to Ella Fitzgerald at Air Studios. 180g vinyl pressings of its one-take recordings can be purchased from the website, but in moving with the times the label has announced that it has added a high-resolution download area where fans can access all of the label's recordings in their native resolution from 24/88.2 to DSD128. Download prices start from £18. chasingthedragon.co.uk

DS Audio optical pick-up

PRICE: £4,800 AVAILABLE: NOW CONTACT: 0118 9814238 WEB: SOUNDFOWNDATIONS.CO.UK

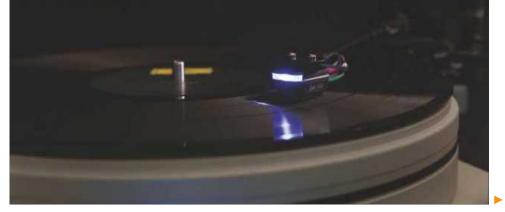
Following the launch of the DS-W1 optical cartridge from DS Audio, the Japanese company has announced the introduction of its most affordable optical pick-up to date in the form of the DS 002. Drawing on its experience with developing the original DS-W1 optical cartridge that arrived in the UK in 2015 and quickly followed by the Master 1 design released here in 2016, the DS 002 sports an aluminium chassis, aluminium cantilever and classic Shibata stylus with the same enhanced

optical-mechanical system and wire-suspended cantilever, and claims to deliver a similar output to the Master 1 with 500mV and 25dB of separation.

The DS 002 optical cartridge also comes packaged with a more compact and lightweight phono stage/equaliser unit, in which a newly updated power supply features 10 33,000uF capacitors delivering what the maker claims is effortless power and superlative sound quality. It uses a special shielding that is 1.5mm thick and

covers the entire transformer to isolate internal noise from the power supply while also blocking external RF and other environmental interference. On the rear panel is a RCA stereo input and 2x RCA stereo outputs along with a ground socket.

The DS Audio DS 002 optical phono cartridge with phono stage/equaliser is available now priced at £4,800, and can be mixed and matched with any of the company's accompanying phono stages/equalisers.





Close your eyes and see

We've included the ultra-pure, ultra-clear, ultra-sweet-sounding Esotar² silk soft-dome tweeter. Mated to innovative new Dynaudio MSP woofers with varying diaphragm thickness that offer a higher level of sonic refinement and extraordinary dynamic range. Integrated into a new multi-layer curved cabinet and sleek-but-solid aluminum baffle to provide your music with a robust, defined acoustic foundation. Visit www.dynaudio.com to find your nearest authorised Dynaudio retailer.



Powerful, controlled, remarkable.

This is Contour 30.



Bristol Show 2017

As the Sound & Vision Bristol Show celebrates its 30th anniversary, **HFC** heads South West to hear what's new at the UK's longest-running audio event

THE BRISTOL SHOW is arguably the main event in the hi-fi calendar for music fans and the audio industry alike, and if the number of brands, hi-fi press and music lovers in attendance at this year's gathering were anything to go by it's more popular than ever. Once again, audience numbers exceeded all expectations over the course of the three-day February event, as an impressive number of audio fans headed South West to the Bristol Marriott Hotel City Centre eager to experience the latest products and trends geared for discerning audio fans.

This year the show celebrated its 30th anniversary, and with many brands occupying the same space that they did when it first started in 1987, it was business as usual with over 170 brands jostling to get their hardware seen and heard. Visitors got to experience the usual huge range of products with everything from active and wireless

loudspeaker designs to an upright wall-mountable turntable along with compact audio components on display for those seeking hi-fi capabilities and credentials, but from more room-friendly products.

With more product launches than ever at this year's show, highlights included Acoustic Energy's AE1 Active standmount loudspeaker – unveiled to celebrate the speaker company's own 30th anniversary, which got its world-first review in HFC 421. Dynaudio's new Contour series made its UK demo debut too, with the £7,500 Contour 60 floorstander and the brand's 'heroic' room designed by the UK distributor (see main inset pic) received the Clarity Award for Best Dressed Room. But what the show really drove home was how the industry is adapting to music fans of all types, highlighting just how much more exciting hi-fi there is still to come in 2017.

SHOWREPORT



















soundfowndations.co.uk

- 2 KEF's LS50 Wireless takes the original standmount design (HFC 384) and turns it into an active model with built-in 200+30W amps to bass and tweeter drivers, offering wi-fi, S/PDIF and USB connectivity, **uk.kef.com**
- 3 Visitors to the Musical Fidelity room get to experience a heroic range of kit with its updated £4,399 M6 Encore 225 system (see p46) joined by £7,149 Nu-Vista CD player and £5,499 Nu-Vista 600 integrated. **musicalfidelity.co.uk**
- Sub bass systems aren't just for home cinema setups, and REL's No. 25 celebrates the company's 25 years with this £6,500 flagship that's fitted with a claimed 1,000W amp driving a 380mm long-throw, carbon fibre cone. rel.net
- **5** Exposure shows its new half-width XM series with the £1,200 XM5 integrated rated at 2x 60W (8ohm), £660 XM3 phono stage, £1,200 XM7 preamp and XM9 at £1,400 per pair. A fifth model will be unveiled soon. **exposurehifi.com**
- 6 Showing off the glossy red finish that's available on its latest Planar 2 and Planar 3 turntables, Rega also debuts its new £498 Ania moving-coil cartridge and Fono MC phono stage with full details to be announced shortly. rega.co.uk
- ? Speaker designer Russell Kauffman proudly shows *HFC* the Russell K Red 50 standmount speaker (see p35) with a new luxury finish, plus visitors got to hear the £2,700 Red 120 2.5-way floorstander for the very first time. **russellk.co.uk**
- (3) There are golden sounds in the SCV room as Questyle's UK distributor shows its £899 QP1R DAP (*HFC* 413), £3,299 CMA800PG preamp, £2,799 CAS192DG DAC and a pair of CMA800RG headphone amplifiers. **scvdistribution.co.uk**



SHOWREPORT



- (2) Icon Audio draws crowds to its rooms thanks to its range of valve amplifiers designed by David Shaw, but by far the star attraction for many visitors is its £10,000 MFV15H 15in single-unit horn loudspeaker. iconaudio.com
- ™ Music storage system maker Melco shows mkll versions of its NAS drives the N1ZS20, N1ZH60 and N1AH60, priced at £7,700, £4,299 and £2,099 respectively. Each model carries metadata support from SongKong. melco-audio.com
- i) Iconic turntable design from Michell Engineering showing its £3,090 Orbe SE and £775 TecnoDec with Trichord Diablo phono stage and Sugden A21 SE amp into £2,800 ProAc Response D20 Ribbon speakers. michell-engineering.co.uk
- 12 The £13k Titan 707 is a two-way design with Kudos-modified SEAS mid/bass and treble drivers. The cabinet uses isobaric bass reflex loading and active variants for Devialet and Linn Exact systems will also be available. **kudosuadio.com**
- 13 Pro-Ject's gravity-defying £379 VT-E BT vertical turntable turns heads in distributor Henley Designs' room. The innovative upright and wall-mountable design is fitted with an Ortofon OM5e MM cartridge and has a built-in phono stage and Bluetooth. henleydesigns.co.uk
- 2 Steve Reichert proudly shows off the Q Acoustics £3,600 Concept 500 flagship. A two-way design, it has a 28mm fabric dome tweeter with 165mm mid/bass driver. It introduces a Dual Gelcore cabinet construction and is sat on a cast aluminium plinth. **gacoustics.co.uk**
- 15 Technics unveils its new £1,200 SL-1200GR turntable (left) alongside its flagship £3,000 SL-1200G model to enable visitors to easily identify the differences between the two. The GR version uses a lighter alloy platter and has a modified motor. technics.com/uk
- (b) Unveiling its UK launch at the Bristol Show, distributor PMC showcases German audio specialist AVM's extensive range of electronic components turn to p8 for the full news story. pmc-speakers.com



















exposure



exposure

Exposure Electronics LimitedUnit 18, Winston Business Centre, 43 Chartwell Road Lancing, West Sussex, BN15 8TU, United Kingdom

www.exposurehifi.com

Websites, social media and online content to fuel your passion for sound



Clean up your act

Properly cleaning loudspeakers isn't as simple as you might imagine. Fortunately Dynaudio's Customer Care Manager, Otto Jørgensen is on hand to explain all, including how to turn a pushed in tweeter out again: bit.ly/2mAJryt



MQA Q&A

One of the most recognisable faces in the hi-fi industry, few people are better placed to talk about the merits of Master Quality Audio (MQA) than its creator Bob Stuart. The Bob Talks site sees the man behind the music format answer questions on every aspect of MQA: bobtalks.co.uk



Cash in the attic

The picture disc single of Madonna's Erotica featuring Madge sucking on some toes was hastily withdrawn by her record label in 1992, making copies of the record now worth a cool £2,500. Find out which other singles are worth the most. Might be time to have a check in your attic: win.gs/2lCQFx1



World Music

With a record collection consisting of over 6,000 records, it's probably fair to say that record stall owner James Rugami is one of Nairobi's biggest vinyl enthusiasts. This wonderful short from the BBC highlights a passion we can all relate to: bit.ly/2mTVlzq



Ashes to ashes

What better way to pay tribute to the deceased vinyl lover in your life than by having their ashes pressed into a piece of vinyl featuring audio of them talking and a personalised sleeve? Poor-taste gimmick or tender way to remember a loved one? Decide for yourself: bit.ly/2m3bX8J



Staying relevant

Opened in 1958 Top Ten Records has become Dallas' oldest record store. In an effort to keep the store running, the owners came up with the brilliant idea of inviting fans to subscribe and become members of what's now a non-profit archive. Let's hope other stores follow its lead: bit.ly/2mj6tJ9

FOLLOW US: @HIFICHOICEMAG

CHOICE TWEETS

AEDLE @AEDLE_LIVE
Our new welcome space at #aedle #workshop. Opening soon every Friday to try our #ods1 and

#vk1.... https://www.instagram.com/p/BPp_ o8Pgbhh/

BOWERS & WILKINS @BOWERSWILKINS 800 Series Diamond and new DB1D subwoofers shine at Bristol Sound & Vision 2017 http://b-w.social/mM06

TECHNICS @TECHNICS UK's 1st chance to see & hear the new #Technics SL-1210GR @SvBristolShow @MarriottBristol Rm 302 from Friday. #TheLegendReturns#BackInBlack

DYNAUDIO @DYNAUDIO Our team is at the **#BristolShow**. They brought the Contour 60 with them, so swing by, if you are close, and experience it for yourself.

AKG BY HARMAN @AKGAUDIO
The AKG #N90Q - the only headphones that adjust to the shape of your ear. Inspired by @QuincyDJones #PersonalizedSound

ACOUSTIC ENERGY @ACOUSTIC_ENERGY
The first, exclusive, review of the AE1 Active is now out from @HiFiChoiceMag. Did they like

GRADO@GRADO Introducing our new limited edition GH2, Introducing our new limited edition Gheather the first Grado built from cocobolo:

http://gradolabs.com/headphones/limitededitions/item/65-gh2...

RHA @RHA #DacampL1: Hear what you've been missing. Discover the Dacamp L1: http://goo.gl/DuVGP7

FOCAL UK @FOCAL UK

Come & experience our award-winning new range of high-end headphones this weekend in Bristol @SvBristolShow! #Focal

MUSAIC@MUSAICHIFI Musaic **#Kickstarter** Backer comment: "...smooth and detailed high-fidelity sound." Tim, UK. See more: http://musaic.com/kickstarter

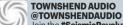
BLUESOUND @BLUESOUNDHIFI
Just in time for the #Oscars here are the
7 Best Film Scores of the Last 10 Years

http://ow.ly/5Vxb309jWfu#Oscars2017

HENLEY DESIGNS LTD. @HENLEYDESIGNS1 The @roksan TR-5 S2 speakers made their debut at the @SvBristolShow last year and they're back in room 422 for 2017!

EXERTIS UNLIMITED @EXERTISUNLIMIT

And the incredible **@astell_kern** AK380 Stainless Steel high-res player & amp package makes its UK debut in #bristolshow Bristol Suite



Join the #SeismicRevolution@SVBristolshow.
Upgrades for the discerning + new pre-amp DC47 & new F1 Speaker Cable. http://goo.gl/TlKuy0



Save ££'s with our fantastic Easter offers and get your magazine delivered straight to your door. Why not treat a loved one to a gift subscription — it will last longer than an Easter Egg!

Home Cinema Choice

6 issues for £19.99

Saving 33%

Eull price £29.94

Hi-Fi Choice

6 issues for £19.99

Saving 26%

Full price £27.00

Hi-Fi News

6 issues for £19.99

Saving 33%

Full price £29.94

Subscribe securely online: http://mymagazineoffers.co.uk/EA39

Call: 0344 243 9023** and Quote EA39 By Post: Please complete the form and return it to the address provided. Quote Ref: EA39

YOUR DETAILS: (This section must be completed)	GIFT SUBSCRIPTION: (Complete 'YOUR DETAILS' first)
Mr/Mrs/Miss/Ms Name	Mr/Mrs/Miss/Ms Name
Surname	Surname
Address	Address
Postcode	Postcode
Country	Country
Tel/Mob	Tel/Mob
Email	Email
D.O.B(Complete if the subscription is for yourself)	D.O.B(Complete if gift recipient is under 18)

PAYMENT DETAILS

Cardholder's name ..

Please make cheques payable to MyTimeMedia Ltd and write code EA39 and magazine title on the back.

□ Postal Order/Cheque □ Visa/MasterCard □ Maestro

Card no:

(Maestro)

Valid from Expiry date Maestro issue no
Signature Date

SEND TO:

MyTimeMedia Ltd, 3 Queensbridge, The Lakes, Northampton, NN4 7BF

TERMS & CONDITIONS: Offer ends 5th May 2017. *UK offer only. Subscriptions will start with the next available issue. For full terms & conditions wish thtp://www.mytimemedia.couk/terms. From time to time, your chosen magazine & MyTimeMedia Ltd may contact you regarding your subscription, or with details of its products and services. Your details will be processed in full accordance with all relevant Uf. and EU data protection [legislation. If you DO NOT wish to be contacted by MyTimeMedia Ltd & your magazine please tick here: □ Email □ Post □ Phone. If you DO NOT wish to be contacted by carefully chosen 3rd parties, please tick here: □ Email □ Post □ Phone. If you DO wish to be contacted by carefully chosen 3rd parties, please tick here: □ Email

Magazine

..... Price

DETAILS

VPI Prime Scout

USA

Belt-drive turntable

24.5kg

(WxHxD) 495 x 177 x 350mm

- 33 & 45rpm
- 9in unipivot tonearm with ional anti-skate
- Aluminium platter

Renaissance Audio

01315553922

renaissanceaudio.





Prime cut

The Prime Scout claims to take the features of VPI's 'affordable super deck' to a lower price point. **Ed Selley** listens in to see what's been achieved

IN-DEPTH



ometimes, a change in policy at a company can see even very capable products fall by the wayside. Around a year ago, I enthusiastically reviewed the VPI Scout Jr (*HFC* 410) and felt it was a strong candidate in the sub-£2,000 sector. Capable or not, the Scout Jr is now no more, but this is not a reflection on any failings of the

product itself. Simply put, the VPI range had become rather large and required a revamp, leaving the Prime Scout as the new entry point.

The name should give at least a partial clue to it origins and VPI's intentions for it. It represents a collaboration of components and design practises from the costlier Prime turntable and the outgoing Scout range. The inclusion of selected components and thinking from the Prime is a very positive sign as it has been extremely well received. Good as it is, the Prime is large and now costs more than £4,000 so VPI has blended a little Scout into the mix, resulting in a smaller, more affordable turntable.

The Prime influence is most immediately visible in the plinth

The JWM tonearm provides a sound that is open, airy and very natural

design. This is a piece of vinyl-coated MDF that is bonded to a sheet of 12-gauge steel. The result is a plinth that is largely resistant to resonance by comprising materials with different resonant points. It is shaped with a distinctive concave curve between each corner point, which gives it a family resemblance to the larger Prime model. Underneath, four hefty cone-shaped feet provide a reasonable degree of isolation.

On the left side there's a cut out that disappears under the platter. This allows for the motor to be placed where it can act on the platter without an overly long belt. The motor is from the UK-specification Prime and differs considerably from US models. Built by Hurst in Indiana, the UK unit is a 500rpm 50Hz type in contrast to the 300rpm 60Hz unit used overseas.

The platter and tonearm are much more in keeping with the outgoing Scout. The platter is made from 35mm-thick 6061-specification aluminium and the tonearm is 9in long and made from metal sections rather than the one-piece 3D printed 10in 'wand' that the larger model uses.



It's a true unipivot and might be seen to be one of the purest examples of the breed (see In Sight).

This is a handsome, well-proportioned turntable that is unmistakably a VPI. Compared with something like the Technics SL-1200G (HFC 418), it feels less exquisitely finished but still extremely solid and well thought out. This attention to detail extends to the equipment supplied in the box. Everything you need to set it up correctly is bundled, including a high-quality digital scale to set the tracking weight and a protractor that makes alignment simplicity itself.

Excellent build, well thought-out design and an impressive selection of tools

Although smaller than the Prime, it is still a fairly hefty design that needs to be supported by a solid stand or shelf. As with a number of close rivals, there is no lid or dust protection and the design of the arm makes covering it with a soft cover tricky. The supplied platter mat is unattractive and there are likely to be a few people who find the unipivot arm a little unsettling to use – although for me this is one of the most user-friendly incarnations I've tested and I spend very little time getting the balance and azimuth set correctly. There's an anti-skate system if you are nervous about using the tonearm without one, although the looped wire to the terminal block exerts sufficient force.

Mounting a Golding Legacy moving-coil cartridge and connected to a Cyrus Phono Signature (*HFC* 408) and the Musical Fidelity Encore 225 (p46) running a pair of Neat Momentum 4i floorstanders, it sounds very much like its big brother.

Sound quality

There is a sense of the considerable mass inherent in the design with everything that you play. The distinctive bassline of Peter Gabriel's *Don't Give Up* has an effortless weight to it – the slightest sense of it tipping over into subsonic and being felt as much as heard.

At the same time, there is a delicacy that sets it apart from many high-mass rivals. Kate Bush's vocals flow effortlessly with no sense of there being a mechanical interface between the record and speakers. This makes for a consistently pleasant listening experience as there is always a sense of the timing and rhythmic structure to the music you play, regardless of tempo.

Listening to Wild Beast's *Boy King*, the opening track of side B, *2BU* has a curious time signature that changes emphasis over the opening bars. With some turntables this can sound extremely disjointed, but the VPI resolves it beautifully.

Give it a bigger and more spacious recording like *Live At The Royal Albert Hall* by the Cinematic Orchestra and it shows off an effortless three-dimensionality. The opening bars of *All That You Give* are confident, weighty and tonally believable with the massed



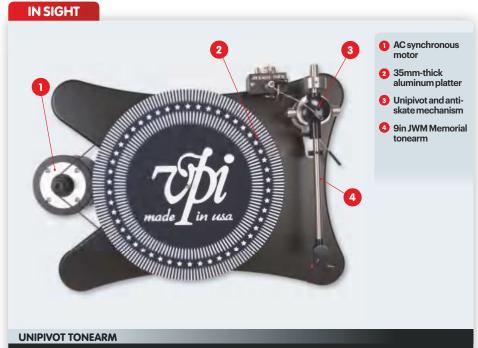
The VPI finds itself entering a sector now occupied by the relaunched and rejuvenated Technics SL-1200G (HFC 418). The Prime Scout is £350 cheaper than the Technics and while it feels a little different. the build quality is also extremely good. The two turntables demonstrate two differing presentational styles that you will need to choose between. The space and airiness of the VPI is something that the Technics will struggle to match and the belt-driven design has a delicacy that the SL-1200 won't easily rival. The Technics hits back with its fearsome bass response and exceptional timing that makes uptempo and electronic music a joy it also comes with a lid, which is a greatly underrated object.

The distinctive design has a familiar look to the larger Prime instrumentation having a real sense of scale. The presence of the audience and its position relative to the various different performers is something that is perfectly tangible and woven into the performance itself. When the vocals start, they integrate seamlessly into the presentation – defined and distinct, but not detached from the rest of the mix.

There is a sense that some fine detail that I know to be present in the mix is not as apparent as it is using the same Goldring cartridge and Cyrus phono stage with my resident Avid Ingenium turntable (HFC 379) with SME M2-9 arm. The Prime Scout might be best seen as a 'big picture' device that gives an impressive overview, but won't always fill in the tiny details. The instrumentation in the Cinematic Orchestra album is weighty and tonally real, but there isn't quite the same sense of individual musicians that the Avid deck manages to convey with the same material.

If you accept this, the VPI is still a tremendously enjoyable turntable to listen to. The JWM tonearm might be a slightly curious device to use, but it sounds extremely uncongested. The removal of points of contact in the arm seems to deliver on the unipivot design promise and gives a sound that is open, airy and very natural. Used in conjunction with the physical heft of the Prime Scout means that bass definition is extremely good and everything starts and stops with real speed and assurance, and avoids the





The Prime Scout uses the latest version of the longrunning JWM 'Memorial' tonearm that has featured on most VPIs built in recent years. This is a true unipivot design where the arm 'wand' balances on a hardened metal spike with no other point of contact on the underside. The arm can move freely in any direction and can even be completely removed from the turntable. This creates some unique challenges. In order to ensure that the azimuth - the vertical alignment of the cartridge in the groove - is correct, the arm is fitted with a pair of

adjustable stub weights on either side of the pivot point that can be used to 'trim' the arm correctly. As it is not possible for the cable to pass through the spike, it instead loops out of the top of the arm housing and connects to a terminal block at the back of the plinth.

This setup does have some interesting benefits in that you can simply lift additional wands on and off the spike, allowing you to run different cartridges with ease. As the counterweight is part of the wand, it will be set accurately as soon as it is balancing correctly on the spike.

leaden sensation that can sometimes affect high-mass designs.

This speed and innate agility also ensures that the Prime Scout is consistently good fun. The 180g repress of Dig Your Own Hole by The Chemical Brothers is absolutely outstanding. The crunching low end of Block Rockin' Beats is delivered with a real thwack to the chest and an infectious sense of speed and energy. This is not a recording for the ages it's loud and rather congested, but the effect of playing it on the VPI is akin to fixing some of the track's more significant flaws. The big electronic riffs open out into an immersive and visceral listening experience. At the same time, the hard top-end of the recording is handled well, the Prime Scout retaining the required sense of bite and attack but managing to keep things civilised as it does so.

Conclusion

If your vinyl collection has a few recordings that have you turning the volume down before the needle even hits the groove in anticipation of what comes next, this is one attribute you might do well to seek out. Even if it is full of flawless recordings, the way that the VPI makes music is likely to win it a lot of loyal customers. This

turntable brings many of the good attributes of the Prime - namely a spaciousness and sort of 'powerful delicacy' to the business of making music - that is not commonly seen elsewhere and that has proven very easy to listen to. The Prime Scout is also an extremely easy turntable to live with thanks to the combination of excellent build, well thought-out design and the impressive selection of supplied tools in the box. It's a shame that VPI's rationalisation process has

seen off the likeable Scout Jr, but if this is the calibre of turntable that is being launched to replace it, I'm sure we'll survive Choice **OUR VERDICT** SOUND QUALITY

LIKE: Refined sound; soundstage; build and accessories **** VALUE FOR MONEY **DISLIKE:** Slight lack **** of fine detail

WESAY: Brings many of the outstanding **** qualities of VPI's Prime deck to a more terrestrial price point ****

OVERALL

BUILD QUALITY

FEATURES



Q&A John Carroll Head of Renaissance Audio



ES: Is the Prime Scout better viewed as a simplified Prime or a beefed-up Scout?

JC: VPI has past history of beefing up models to extract further performance. This time round it has reset the range with the Prime series. So in essence this is a 'mini Prime' with all the key elements built to the same high standard as the Prime, but scaled down.

Is the anti-skate mechanism included to help newcomers acclimatise to the JWM arm or does it bring performance benefits?

A little of both really. A VPI newbie will be able to try with and without and make the move away from the standard anti-skate setup if they agree that it is not needed. We also note that some extremely heavy cartridges do benefit from a little anti-skate as does 45rpm playback.

Is there any upgrade path planned for the Scout Prime?

The deck does not at first glance want for anything, but we can always improve with more budget available. For now, the addition of the ADS (Analogue Drive System) or the Classic platter will give a stepped improvement and we are looking at a 9in 3D arm as I write this.

Currently, the Scout Prime is the entry-level model, is this likely to remain the case?

We need to offer a lower entry point to the world of VPI. There will be a new budget VPI before the end of 2017. Unlike the preceding Nomad, we want the deck to have a VPI upgrade path to allow the user to stay with it for many years without compromise.



DECENTAUDIO.CO.UK



TEL: 05602 054669

EMAIL: INFO@DECENTAUDIO.CO.UK



DECENT AUDIO SOUND DISTRIBUTION

USHER







van den Hul

How we te

Hi-Fi Choice employs the most rigorous test and measurement regime in the business. Here's how we do it...

Unique group tests

Our Group Tests are supported by rigorous and exhaustive listening tests carried out by experts

STANDMOUNT LOUDSPEAKERS GROUP TEST

NO SPEAKER PERFORMS optimally fresh from the box. All six standmount models here are treated to a couple of days running with varied source material to acclimatise in situ. Additionally, each pair of speakers and the system electronics are thoroughly warmed up before critical listening commences. Auditioning is done in the smaller of my listening rooms, which is L-shaped and furnished and carpeted to give a quite dry and well-damped acoustic. Over the course of a week, positioning and support types are experimented with, though in the majority of cases heavyweight 24in Slate Audio stands are used. The listening position is adjusted so the tweeter is roughly at ear height,

and the speaker is initially placed close to the rear wall then moved out into the room until the bass response is judged to be even. In the case of models that come supplied with foam bungs for their reflex ports, these are tried both in and out to get the best balance. Toe-in is also experimented with; generally a few degrees is applied, which snaps the stereo image into focus and opens up the treble.

With the set-up completed, each speaker system is auditioned with other designs reinstated for cross referencing. Levels are carefully matched and a wide variety of CD, vinyl and hi-res music is used, although four key CD tracks are focused on.



BLIND LISTENING TESTS

This crucial process is very carefully controlled so that we get reliable and consistent results in a relaxed and friendly atmosphere. Our listeners must not feel that they're being tested, despite being unaware of the brand or price of the products they are auditioning.

The session begins by setting the volume level to an agreed point, one that all three panellists feel comfortable with, yet that is

high enough to make differences easily discernible. Then the choice of music is agreed - it needs to be familiar, but also well recorded and of sufficient variety to give meaningful listening comparisons. The chosen selection of music is played, and the panellists are encouraged to discuss their impressions of the sound of the product. This is then repeated, and periodically the panel listens to earlier products for reference purposes. The

consensus, or otherwise then forms the basis of our sound quality section.

At the end of the session, there's a final debrief when panellists discuss their findings. It's an exhaustive process, but carried out in this way is free from prejudices based on brand, price or appearance, while the different sensitivities of the listeners help to round out the analysis in order to make it more widely applicable.

□ REFERENCE SYSTEM

CD TRANSPORT Cyrus CD Xt Signature

Chord Electronics Hugo

AMPLIFIER Rega Elex-R

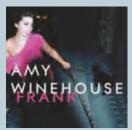
CABLES

Speaker: Nordost Red Dawn Interconnects: Nordost Heimdall. Nordost Blue Heaven

TEST MUSIC

AMY WINEHOUSE

Take The Box



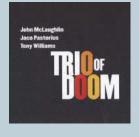
MARCUS MILLER Tightrope



ROBBIE ROBERTSON Testimony Somewhere Down The Crazy River



Trio Of Doom **Drum Improvisation**











GAIA

THE GAIA RANGE USE THE AWARD WINNING ISOACOUSTICS DESIGN TO OFFER ENHANCED ISOLATION FOR FLOOR STANDING SPEAKERS.

Revealing the true depth of each recording, GAIA effectively removes unwanted resonances and vibrations, greatly improving bass definition, midrange clarity and sound stage.

The GAIA range consists of 3 sizes with 32kg, 54kg and 100kg capacities. Each 4-piece set contains a tailored combination of M12, M8, M6 and ¼-20 thread types.

B&W adaptor plates, Sopra caps and carpet spikes are available separately.



Distributed exclusively in the UK by SCV Distribution Please call for your nearest dealer on 03301 222500

www.scvdistribution.co.uk

Grouptest

STANDMOUNT LOUDSPEAKERS £700-£1,000

The unusual suspects

David Vivian tries six quality speakers that set out to prove you don't have to be a household name to hit the right notes



ONE OF THE joys of being a hi-fi enthusiast is investing in the stone-cold certainty that you will never, ever be bored. It's hard to think of another source of pleasure and fulfilment that offers so much sheer choice. Take classy standmount speakers. The good news for even the most casual of browsers is that there's no actual need to venture beyond the serried ranks of products offered by

the big names. Even if you restricted your search to the better-known British brands – say B&W, KEF, Monitor Audio and Wharfedale – your requirements would be nailed to the letter in short order. Job done – albeit via a time-honoured set of rules.

The beauty of this business is the deeper you go, the harder you look, the more diverse and fascinating things become. Ideas fizzing off at

unlikely tangents aren't rare. That's what we have here – a generous smattering of left-field thinking in a group where German manufacturer Heco and Switzerland's Piega are the only remotely mainstream representatives. Standmount designs are now so good, these sub-£1k contenders have to run mighty hard to impress and some rely on mere ingenuity in a bid to win the day.



0

Acoustic Insight Vivide £950 p27

The fluttering noise you can hear is the rule book falling from an open window. Apart from its classic-trad cabinet, nothing about the Vivide conforms to the norm, including its sound.



Arcaydis EB2S £799 p29

Now with an 'S' suffix, the EB2 is back in production after a break and intends to take up where its well-regarded predecessor left off. It's a large, heavy box but does it have the sonic clout to match?



Heco Elementa 300 £700 p31

This is as close as we get to a by-the-numbers two-way standmount from a long-established mainstream player in this group. Its performance, on the other hand, is anything but.



Piega Classic 3.0 £900 p33

Swiss, suave, highly sophisticated and owner of the only ribbon tweeter in the group, Piega's entry-level standmount is a class act, but there's more to this dark horse than a posh box and silky treble.



Russell K Red 50 £999 p35

Surely a cult speaker in the making, the Red 50 is being touted by some as a Linn Kan for the modern age. That could be a mixed blessing, but its aim is straight and true: the musical bull's eye.



Totem Mite £900 p37

The Mite is truly titchy and it isn't even the smallest speaker the Canadian brand sells. Be sure of this, though. Never try to guess a Totem's sound by the size and weight of the cabinet. You'll fail.







OPPO UDP-203



sets a new home cinema standard ""



66 easily one of the best Blu-ray players money can buy 33



66 You certainly won't find a better Ultra HD Blu-ray player on the market **11**



44 AK Blu-rays look more beautiful than they've ever looked before ??



ff image quality excels ""



Acoustic Insight Vivide £950

It looks unassuming enough, but this speaker isn't quite the conservative design it might at first appear to be

DETAILS

PRODUCT Acoustic Insight Vivide

ORIGIN UK

TYPE 2-driver, full-range standmount

WEIGHT

7kg **DIMENSIONS** (WxHxD)

205 x 360 x 270mm

FEATURES

- 19mm silkpolymer dome tweeter
- 100mm Ted Jordan full-range driver
- Quoted sensitivity:
 87dB/1W/1m

DISTRIBUTORAcoustic Insight Ltd

TELEPHONE 07971292940

WEBSITE acousticinsight. co.uk ith the grille fixed in place, there's nothing too out of the ordinary about the Vivide. But appearances, as we know, can be deceiving. Fact is, this modestly sized standmount from the British firm is the most radical and sonically ambitious loudspeaker

design in the group.

You have to remove the grille to see why. Even then the reasons aren't immediately obvious, though, the small under-slung soft dome tweeter almost touching the distinctive metal main driver above is a clue. The Vivide is a transducer-led design developed in conjunction with veteran driver guru Ted Jordan, and its Jordan's latest full-range, foil-coned driver that's key to the Vivide's extraordinary sonic claims. Its principal advantages are roughly summarised as efficiency, speed, linearity over a wide frequency band and bass weight and extension when properly aligned with the front-firing bass reflex port of the 11.5-litre cabinet (down to 34Hz at -6dB).

Because the Jordan driver does so much over such a broad spectrum there's no need for even the simplest crossover network. Instead, a small polymer and silk dome tweeter, which has a neodymium magnet and is ferrofluid cooled and damped, is used to supplement the highest frequencies, its output adjusted manually via a small rotary control on the binding post panel to mesh with room acoustics and your preference.

Sound quality

Amy's opening "The neighbours were screaming..." as she launches into *Take The Box* seems ironically apt. There's simply too much treble energy sitting on the finely honed leading edge of the Winehouse vocal. I wind the knobs back to 10 micro clicks off zero – about 25 to the hour. And yes, a hint of spatial magic.

The immaculately produced and recorded up-tempo Marcus Miller workout with world-class mutterer Dr John is more enjoyable: beautifully crisp and pacey, hugely articulate (apart from Dr John) and very, very fast. With Tony Williams' gloriously unshowy, two-minute Drum Improvisation from The Trio Of Doom album - all delicate polyrhythms, musically tuned toms-toms and richly harmonic cymbals crashes - the cymbals do sound a little splashy, but there's a vividly tactile sense of stick on skin and fabulous dynamic subtlety. And the normally slightly sleepy-sounding Robbie Robertson seems to have necked a couple of double espressos on Somewhere Down The Crazy River. Whether this is how it should sound is debatable, but there can be no denying the outstandingly expansive soundstage and pinpoint imaging. Or the almost spooky rendition of ambient detail. As Robertson intones at one point: "No, I like it, I like it, it's good". Whether the female riposte: "You like it now, but you'll learn to love it later" holds true remains to be seen .

CONEHEAD

Key to Acoustic Insight's HD claims is the use of a full-range driver developed by Ted Jordan, the man who wrote arquably the definitive text on loudspeaker driver design. This, combined with being able to jettison the crossover, is what gives AI the confidence to assert "unrivalled detail resolution and clarity throughout the frequency range and realistic reproduction of voices, rhythms and complex music with full dynamics" for the Vivide. Eschewing the 'pure piston' effect sought by most speaker makers. Jordan's take is that natural cone flexure is an important part of diaphragm function. To this end, Al uses innovative, advanced profiled, light metal foil technology to create an infinitely variable effective diaphragm area that complements the natural behaviour of the speaker cone. The long-throw/ ultra-thin cone is also said to give impeccable dynamics and resolution.



HHI Choice OUR VERDICT

SOUND QUALITY

VALUE FOR MONEY

BUILD QUALITY

**

LIKE: Soundstage imaging; resolution, timing and speed

DISLIKE: Can sound tonally bright and brash

WESAY: An uneven performer, but where it's good it's great

★★★★★ OVERALL

FASE OF DRIVE





"We wanted to create something beautiful... beautiful in sound, looks and connectivity. The Röst is all that. It is the sum of everything we have learned. A true one-stop amplifier. Something you would want to have on the top shelf."

- Hegel Music System AS -





HEGEL RÖST - Integrated amplifier with AirPlay and IP-control

Imagine a small, good looking, and incredibly versatile piece of audio kit that can power some of the most difficult loudspeakers you would ever want.

Imagine a true high fidelity solution you can use with your iPhone, integrate in your "smart home" and that plays all your favourite music the way it was intended.

No distortion of the original music signal. No distortion to the looks of your living room... you have just imagined the Röst.



Derby: Musicraft

Edinburgh: Loud & Clear

Kent: Igloo Audio

Hegel: www.hegel.com





Arcaydis **EB2S** £799

If size and a sealed box can make a difference, this speaker has all the right ingredients to succeed

ack on the scene after an

DETAILS

PRODUCT Arcaydis EB2S ORIGIN UK

TYPF

2-way standmount loudspeaker

WEIGHT 9.5kg

DIMENSIONS (WxHxD) 225 x 450 x 310mm

FEATURES

- 25mm fabric dome tweeter • 170mm mid/ bass driver
- Quoted sensitivity:

 87dB/1W/1m

DISTRIBUTOR Arcaydis Audio Ltd

TELEPHONE 0114 3990199 WEBSITE arcaydis.com absence of a little over three years, Sheffield-based Arcaydis is under new ownership and has resumed selling the speakers that made a name for the brand back in 2010, the EB1 and EB2. The new company, Arcaydis Audio Ltd, has acquired the production rights and also enlisted technical help from the original designers and component suppliers

are virtually carbon copies of their predecessors, right down to the screws used.

It flat out wins the size-for-price prize, and the EB2S looks and feels as if it's a lot of well-built speaker for the money. I like the silk white finish as supplied – it has a kind of wine-down

to ensure that the new 'S' models

if it's a lot of well-built speaker for the money. I like the silk white finish as supplied – it has a kind of wipe-down cleanliness. The original oak and black oak veneers are also available as well as others to special order.

The cabinet itself is sealed and

constructed from a laminate Arcaydis calls Arcolam – for the EB2S, a 12mm plywood carcase dressed in a further 6mm of MDF beneath the veneer. Internally, there's bituminous pad panel damping. The claimed upshot is low levels of cabinet resonance which, together with the large 20-litre internal volume of the infinite baffle design, should result in a neutral sound with low colouration and a taut, well-controlled, gently rolled-off bass. The flush-mounted Visaton 170mm mid/bass driver is paired with a 25mm fabric dome tweeter

sourced from Monacor. Thin and nasty metal links between the bi-wire binding posts are the only things about the EB2S that look cheap.

Sound quality

The cool, calm and composed presentation is unmistakable from the opening bars of *Take The Box*, Amy Winehouse's sometimes wincingly wiry delivery tamed to a high degree of listenability without diminishing the scale and body of her voice or mollifying its power and passion. Great subtlety and sympathetically resolved detail at work here.

This isn't the last word in transient attack or crispness, though. Dr John's largely unintelligible raspings over Marcus Miller's whipcrack bass stylings on *Tightrope* notwithstanding, this intensely rhythmic track lacks the impetus that the Red 50 and Vivide in particular bring to proceedings. This despite an almost studio monitor-like even handedness and transparency.

Robbie Robertson's classic *Somewhere Down The Crazy River* is treated to an effortlessly inclusive portrayal of sultry, swampy atmos and, as Robertson himself puts it: "A guy with a deep voice telling you about steaming nights in Arkansas". The sheer spaciousness and depth of Daniel Lanois' production is convincingly captured, too.

Overall, the EB2S is unerringly smooth, truthful and tuneful. A great speaker that sounds balanced and even handed with all styles of music •

INSIDE THE BOX

Arcaydis is proud of its crossovers, which are built inhouse from elements constructed by hand in Britain. Capacitors are chosen after extensive tests and built to the specific values required by the design and inductors are wound on the company's own coil winder. Arcaydis claims years of experience winding inductors for the pro-audio market and has produced thousands of coils to very precise standards. Each inductor is inspected and its value checked and adjusted to meet the design values. The crossover components are mounted by hand on a custom-made circuit board, gold plated to minimise losses due to skin effect. Lead-free solder is used throughout. Wire terminations are added and the finished unit is computer-tested to ensure the result falls within the specified tight specifications. Only then is the crossover ready to be mated with the drivers and the cabinet.





OVERALL



The Classic



An Instant **Classic**

The Classic was released to celebrate Pro-Ject Audio Systems' 25th Anniversary. This retro-inspired turntable has been designed from the ground-up to combine timeless aesthetics with modern technology and audiophile sound performance.

The striking frame design is available in three wood finishes, and provides clever decoupling between the acoustically treated aluminium platter and the motor. The new motor is powered by a built-in generator, for a consistent performance, and drives a sub-platter that sits atop a precision-engineered main bearing.

The all-new 9" Classic Tonearm is made of aluminium and carbon fibre, for unrivalled rigidity while retaining a low mass. The arm benefits from a new bearing system for completely free movement and is supplied as standard with an Ortofon 2M Silver cartridge.

Available Now for £799.00 (UK SRP)





Heco

Elementa 300 £700

Germany's contender may seem a little straight laced in this company, but sometimes experience counts

DETAILS

PRODUCT Heco Elementa 300

ORIGIN Germany

2-way standmount loudspeaker

WEIGHT 7.5kg

DIMENSIONS (WxHxD) 266 x 368 x 325mm

FEATURES

- 28mm fabric dome tweeter • 170mm mid/
- bass driver Quoted sensitivity: 90dB/1W/1m

DISTRIBUTOR Puresound

01822 612449 WEBSITE puresound.info

ou'd never guess it, but priced at £700, this is the least expensive speaker in the group. The satin white finish applied to the sturdy, multibraced, MDF cabinet looks and feels a cut above the EB2S' similar and perfectly acceptable treatment. The rear-firing reflex-ported box also has proper curves (rather than just rounded edges) to disrupt internal standing waves. As for the chunky twin binding posts, they wouldn't look out of place on a speaker costing three times as much. It goes without saying, reassuring first impressions aren't to be underestimated.

The appearance of the drivers, with their shiny aluminium base plates, provides further positive reinforcement. A little larger than usual, the 28mm silk dome tweeter has a ferrofluid-cooled and damped double magnet assembly for high power handling and a wave guide to optimise coupling with the air. The equally handsome mid/bass driver uses a solid aluminium die-cast chassis with a diamond polish finish and light, woven, long fibre paper cones mounted in long-throw surrounds to the benefit of precision and efficiency according to Heco.

Sound quality

Precision and efficiency. You can add scale, bass, vivacity and generosity of spirit to that. In fact, the Heco is a bit of a blast from the off. On the stunningly soulful Take The Box, we

have a beautifully judged Amy vocal with body and emotion - even a little warmth - and just enough raw edge to convince, but minus the sometimes accompanying teeth-troubling sting. The Sarah Vaughan and Diana Washington influences are easy to hear and track through the song. This loudspeaker is transparent and tonally bang on the money.

Rhythmically secure, too. With Marcus Miller's Tightrope, things are super snappy and fun. It's even possible to make out the odd word from Dr John's mystifyingly indistinct, but nevertheless highly enjoyable, monologue. Marcus is on fire and the Elementa locks onto the groove with a kind of canine tenacity and doesn't let go. The way it focuses so sharply when delivering the bigger picture with colour, texture and verve is quite simply ioyous.

The speaker's excellent bass weight and extension lends Somewhere Down The Crazy River a far richer, more full blooded and organic feel, and Robertson's part-spoken vocal is pure, finely graded gravel. It also makes Tony Williams' drum kit on The Trio Of Doom's Drum Improvisation cut sound bigger and more urgent, the kick drum in particular gaining depth and muscle. All told, the Heco Elementa 300 proves that there's plenty of life and potential left in the time-honoured traditions of loudspeaker design and production methods. It's a remarkably fine, multi-talented all-rounder •

THE METHOD

There's nothing complex about the way Heco sets its goals. In fact, there is only one. It's the result that counts. The company's objective is to produce a perfectly balanced, transparent and dynamic sound and it claims to spare no expense if it discovers there's a potential for improvement. This goes for development, material quality and the use of technology and has resulted in the emergence of new concepts over the decades that have made their mark in the speaker industry. Heco admits to reinventing itself time and again over more than 60 years of its history. But it sees this as a testament to the strength and innovative power of the brand. Heco continues to develop products that seek to achieve an unrivalled price-to-performance ratio and, with an enduringly loyal band of customers, it certainly appears to be doing something right.



Choice

OUR VERDICT



LIKE: Big vibrant sound, full of life and colour; build and finish

DISLIKE: Not quite the last word in speed and subtlety

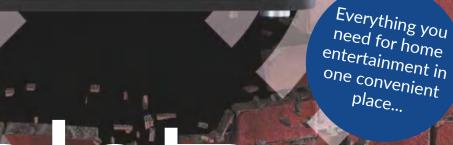
WESAY: A fine. entertaining speaker that ticks a lot of boxes

OVERALL

FASE OF DRIVE



BREAKING THROUGH WALLS MULTIMEDIA STREAMING YOU CAN RELY ON



Plao

What does the PLATO system do?

- ✓ Automated vinyl recording
- ✓ High-Res audio & video output
- ✓ Simple & reliable streaming capability
- ✓ Android & iOS control application
- ✓ Large storage & backup system
- ✓ Powerful amplification

FIND YOUR LOCAL DEALER AT: www.convert-av.com CONVERT



Piega

Classic 3.0 £900

This entry-level standmount looks like other brands' premium offerings, and that's only the start of it

DETAILS

PRODUCT
Piega Classic 3.0

ORIGIN Switzerland

TYDE

2-way standmount loudspeaker

WEIGHT 7.7kg

DIMENSIONS (WxHxD) 210 x 340 x 280mm

FEATURES

- Air Motion
 Transformer HF unit
 180mm MDS
 mid/bass driver
- mid/bass driver
 Quoted sensitivity:
 89dB/1W/1m

DISTRIBUTORPiega Loudspeakers
(UK) Ltd

TELEPHONE 01344 893932

WEBSITE piega.co.uk ig in Switzerland, this
Zurich-based speaker
manufacturer has only
recently come to the UK,
enlisting a number of specialist audio
retailers to demonstrate its wares.
The company certainly has form
when it comes to ribbon tweeter
technology. Its Linear Drive Ribbon
(LDR) coaxial tweeter was the first
unit to reach low enough to handle
some midrange duties, obviating

the need for a dome/ribbon hybrid.

Like the Classic 5.0 (HFC 417), the 3.0 uses a hefty but conventionally square-cornered wood and fibreboard enclosure with a rear-firing reflex port and a single pair of good-quality binding posts. It shares its Air Motion Transformer (the AMT-1) highfrequency unit, which employs an extremely thin pleated and partially embossed foil diaphragm and combines the advantages of a traditional ribbon with the costeffective production of a dome tweeter. The mid/bass band is handled by Piega's long-throw 180mm MDS driver.

The Classic 3.0 is chunky, but it looks classy and expensive, finished in a piano black deep gloss lacquer. Piano white and polished Macassar ebony are also available.

Sound quality

My assumption that the Classic 3.0 would sound a lot like the Classic 5.0 without the fulsome bass couldn't be further from the truth. Yes, high

frequencies are just as silky, open and richly textured. And yes, levels of colouration and distortion are as low as the resolution of fine detail is impressively high. But the overall top-to-bottom balance is quite different. Put simply, the Classic 3.0 has a revved-up bass response and slightly subdued and recessed midband and, therefore, a significant realigned presentation.

The prescriptive balance has a fairly dramatic effect on Amy Winehouse's voice, which sounds sweeter but smaller than usual against the pumped and rather sumptuous lower frequencies previously only hinted at by the Acoustic Insight. True, the female backing vocals are almost heavenly, yet it all ends up coming over a bit candle-lit dinner.

Bass, again, tends to dominate the tautly propulsive Marcus Miller/Dr John outing. Its weighty presence is welcome enough, but the shape, definition and agility exhibited by most of the other speakers here is rather lacking. It's a shame because what's going on upstairs is clear, clean, organised, well timed and beautifully resolved - an open window on Miller's immaculate production values. And the tweeter is very easy on the ear. Intricacy isn't the problem here, but dynamic expression could be better. Interestingly, this doesn't really hurt Tony Williams' artful cymbal bashing, which seems scintillatingly real. But the tom-toms, strangely, sound a tad synthetic •

A KEEN TWEETER

Piega is the Italian word for folded. So it's no surprise that when the company came to hi-fi in 1986 with a box of fresh initiatives and materials. its big idea was a new type of ribbon tweeter - called the Linear Drive Ribbon - that, over the next 14 years evolved first into a treble/midrange ribbon system and then into what is claimed to be "the world's first coaxial ribbon system". The practical upshot was a large ribbon panel that reached down far lower than conventional ribbon tweeters, allowing easier integration with dynamic drivers that could be freed to do what they do best (bass and lower midrange). What seems particularly Swiss, however, is the intricate, painstaking labour that's poured into making every ribbon. The work is so precise and exacting, it can only be carried out in a room with carefully maintained climatic conditions at Piega's factory.



HFICholce

OUR VERDICT



LIKE: Smooth, sophisticated sound; fine tweeter; superior build and finish

DISLIKE: Prominent bass balance

WESAY: A sumptuoussounding speaker with great insight, but heavy-handed bass

OVERALL

EASE OF DRIVE



Bowers & Wilkins

Designed for listening

The new CM Series loudspeakers are undoubtedly beautiful, capable of gracing any room with their clean lines and high-quality finishes. But as with all Bowers & Wilkins loudspeakers form must follow function, and thanks to our Decoupled Double Domes and tweeter-on-top technology you won't believe how beautiful your music can sound.

bowers-wilkins.com



Decoupled Double Dome tweeter





Russell K Red 50 £999



Almost everything you think you know about how a speaker works is challenged by this rule bender

DETAILS

PRODUCT Russell K Red 50

ORIGIN UK/Poland

TYPE

2-way standmount loudspeaker

WEIGHT 6kg

DIMENSIONS

(WxHxD) 205 x 310 x 200mm

FEATURES • 25mm soft

dome tweeter
• 130mm doped
paper mid/
bass driver

Quoted sensitivity: 85dB/1W/1m

DISTRIBUTOR Kog Audio

02477 220650 WEBSITE kogaudio.com s p p the thick the trial and a record to th

he smallest model to emerge from industry stalwart Russell Kauffman's fledgling speaker operation, the Red 50 prosecutes the controversial ideas that have made the brand such a hot ticket among critics and customers alike. Russell's radical solution to a problem many were inclined to regard as an acceptable compromise was initially exposed by its Red 100 standmount, and the scepticism that ensued is understandable. In a nutshell, with the Red 100 Russell posited the notion that instead of regarding a speaker cabinet chiefly as a necessary inconvenience to hold the drive units in place, it could actually be a synergistic component in the system, effectively singing along with the drivers, starting and stopping precisely when they do.

The Polish-built Red 50, like the 100, has no fluffy internal damping. Instead, its thin-walled cabinet vibrates and breathes in time with the main driver, working with it rather than against it and shedding distortion as a result. A bracing shelf with multiple apertures mounted just above the 130mm doped paper mid/ bass driver is used to control cabinet flex while a minimalist 12dB roll-off crossover network and rear-firing bass reflex port tuned to 55Hz also contribute towards the integration of the drivers and cabinet dynamics. Far fetched? The proof, of course, is in the listening.

Sound quality

Start and stop. That's what the Red 50 does. On a pin head. It's quite remarkable, an ability none of the other speakers in the group possess. A little warmth has been injected to the upper bass to mask the absence of genuine extension, but it makes everything it plays sound utterly natural and irresistibly engaging. Think of a perfectly focused and exposed photograph taken on an expensive camera compared with a slightly inferior image digitally sharpened on a computer. Removing the sense of artifice that sometimes afflicts even high-end transducers is where this little speaker excels.

Truly nailing the passion and power of Amy Winehouse without edgy emphasis has proved a tough call for all the speakers thus far, but the Red 50 pulls it off in glorious style. Marcus Miller's *Tightrope*, a naturally infectious funk fest executed at a breakneck lick I'm inclined to think the mumbling, meandering Dr John is simply ignoring, is up on its toes – springy, rhythmically loose and lucid. And Tony Williams' improvised percussive exertions finally acquire a mesmerising delicacy that warrants repeated hearing.

This speaker has the performance gene. Its reactive energy is concentrated in the music you hear – there's no fat, no waste, no temporal blur, no tonal bloom. Somewhere Down The Crazy River? I swear it raised the temperature in the listening room •

GOOD VIBRATIONS

Russell K's remarkable claim is that speaker cabinet walls that flex in time with the music ensure crystal clear sound without boxy artefacts. It stems from the belief that the cabinet is a source of much colouration due to stored energy. And that's, in part, based of research that the BBC conducted into cabinet design several years ago. The corporation's technicians found that rigid heavy enclosures coloured the sound making the spoken word sound unnatural. The solution was to use thin walls with heavy bitumen pads attached for damping - ref the LS3/5 et al. Russell K's own research found that the heavily damped thin wall cabinet works well for the midrange, but that too much cabinet flex softens the bass response. The solution deployed by all Russell K's speakers is to keep the cabinet walls thin and to use internal bracing shelves to control cabinet flex.



H-FIChoice

OUR VERDICT



LIKE: Musicality; believability; engagement; fun

DISLIKE: Nothing

WE SAY: A small speaker that's so good it will make you fall in love with music all over again

★★★★★ OVERALL

EASE OF DRIVE







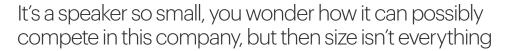
When music matters, Rotel delivers.

There is nothing 'entry level' about Rotel's new 14 Series... except the price of admission. Built with critically selected electronic components used throughout the audio path, the 14 Series features a sleek design with simple and intuitive controls. There are six models to choose from – three integrated amplifiers, two tuners and a CD player.



Totem

Mite £900



DETAILS

PRODUCT Totem Mite

ORIGIN Canada

2-way standmount loudspeaker

WEIGHT 4kg

DIMENSIONS

(WxHxD)

152 x 274 x 213mm

FEATURES

• 25mm soft dome tweeter • 140mm doned paper mid/ bass driver

Quoted sensitivity:
87dB/1W/1m

DISTRIBUTOR Joenit Belaium

003215285585

WEBSITE totemacoustic.com

ell-named, the Totem Mite is the smallest speaker in the group by quite a comfortable margin, which

of course will be a major attraction for some prospective purchasers. If the £900 asking price isn't measured in MDF and veneer real estate, though, how is it justified?

This is the third Totem we've group tested in recent times and, if we've learned anything, it's that as far as soundstage scale and room-filling sound are concerned, the physical size of the box doing the business means little to Canadian specialist Totem, the company started by Vince Bruzzese in 1987 with the aim of "developing loudspeakers capable of reproducing a truly musical and moving performance". To the Mite, Totem attributes nothing less than 'gigantic imaging capacity', and precisely because it is so diminutive. It's a little more involved than that, of course, not least because although it's small enough to fit inside an Easter egg box, its cabinet still benefits from sparing Borosilicate damping and the rigidity and air-tight precision afforded it by Totem's signature cabinet construction where the joints between the panels are made using traditional interlocking mitering methods for superior fit, strength and sealing. The box is light rather than heavy to reduce energy storage. It all makes for a tautly tailored little number with a quality rear wood veneer finish and on which the 25mm

soft dome tweeter and 140mm mid/ bass driver eat up the vast majority of the baffle area.

Sound quality

I'm not sure I've ever witnessed such a dramatic disconnect between size and sound, Totem's so called 'micro monitor' emulating the feats of the comparatively larger Sttaf (HFC 417) floorstander by creating a wide, deep soundstage with a true sense of scale and structural cohesion and, perhaps most remarkably of all, a weight and depth of bass that puts some of the larger models in the group to shame.

It doesn't take long to realise that the Mite is pursuing a slightly prescriptive sonic agenda with a warmer tonal palette than its rivals. It's a benign effect that melts the icy edge to Amy Winehouse's voice while also sapping some of the snap from Marcus Miller's bass solos on the Tightrope track. Ultimately, it doesn't venture towards the upper limits of its volume envelope with quite the authority of the Heco and, with tweeter suitably attenuated, the Acoustic Insight. Like the Red 50, it will be at its best in small-to-medium-sized rooms.

That said, its best can be completely and utterly bewitching. The Michael McDonald classic recently covered by Sara Bareilles - I Can Let Go Now is treated to a gorgeous widescreen presentation with a beautifully judged vocal, lush strings, great tonality and unfettered emotional expression. Simply fabulous •

SMALL WONDER

Vince Bruzzese founded Totem in 1987 with one thing on his mind: "To develop speakers capable of reproducing musical and moving performances - 'soul movers' for all music lovers". And without breaking the bank. It might be tiny, but to call the Mite a highly specialised labour of love is probably no exaggeration, either. According to the company, each one of its speaker models has its own "distinct scientifically selected internal wiring". Attention to detail is Totem's avowed guiding principle with the objective of building speakers that "exhibit the liveliness and spaciousness of sound, with all the qualities that make live music truly soul moving. Dynamics, transients, decay, harmonics, timbre and rhythm must all be realistically portrayed". Extensive listening tests, before a speaker design is signed off, are vital to the process. Like the man said, it's all about the music.



Choice

OUR VERDICT

SOUND QUALITY **** VALUE FOR MONEY ****

LIKE: Spatial scale and coherence; bass, warmth; tiny footprint

DISLIKE: Lacks a little snap, crackle and pop

WESAY: Another gem from Totem with huge **** musical charm

**** **OVERALL**

BUILD QUALITY

EASE OF DRIVE



Group test verdict

The week's flown by in a blur of good, great and outstanding performances, but now it's time for **David Vivian** to reveal the final verdict

THIS IS A group that looked fun on paper and turned out to be an utterly fascinating battle of styles, technologies and methodologies that, once again, kept me up way too late most nights during the review period. The group quickly split into two quite distinct camps, the Arcaydis EB2S and Piega Classic 3.0 proffering a controlled and composed version of musical reality that majored on fine midband finesse and neutrality, the remainder grabbing the notion of musical communication and entertainment with both drivers and running with it.

With an adjusted tonal balance, I've no doubt the Piega wouldn't be collecting the wooden spoon, but its bass is just too prominent in relation to the mid and treble to convince. While not quite as transparent as the Swiss model through the midband and treble, the fifth-place Arcaydis sounds more even and all of a piece, but nowhere near vital or energetic enough to compete with the hyperactive and at times ridiculously enjoyable Acoustic Insight. It's something of a rough diamond that could do with a more consistent tonal character, but there are times when it

shines so brightly it almost sets the listening room alight.

And so to the podium places. It's a solid recommendation but no cigar this time for Totem, the diminutive Mite throws out an almost unbelievably expansive soundstage and never fails to sing its heart out with fine warmth and expression and outstandingly good quality bass. But in the end it's the Heco's (almost) winning combination of sensitivity, power, dynamics, tonal colour, excellent build and keen price that secures it a well-deserved runner's-up spot.



It seems so wrong, but sounds so right. Almost out of nowhere the completely counter intuitive Russell K Red 50 conquers the stellar opposition with no internal damping whatsoever. It's not a big room, high dB kind of hi-fi speaker but, boy. does it do the music.













Make/mode	M	ake,	m	od	е
-----------	---	------	---	----	---

Price

Sound

Value

Acoustic Insight

Arcaydis

Elementa 300

Piega Classic 3.0

£900

£900	

Bulla	
Ease of drive	
Overall	
	•

You simply have to hear the Vivide to appreciate what it can do. A different

 $\star\star\star\star$

**** A meticulously engineered large sealed box that brings its own special qualities to the party

**** No tricks, no surprises - this is about as straight and conventional as standmounts come

As the only ribbon tweeter in the group, this Swiss export does smooth and refined in its sleep

The Russell K turns convention on its head, kicks sand in its face and does a little victory dance

The expectationdefying Mite kindly asks you to park your disbelief and get into the music and love

Kev features

Configuration	2-driver	2-way	2-way	2-way	2-way	2-way
Ribbon tweeter	No	No	No	AMT	No	No
Dome tweeter	Yes	Yes	Yes	No	Yes	Yes
Bi-wiring	No	Yes	Yes	No	No	Yes
Finishes	Wood satin gloss	Wood & satin	Satin	Wood & aloss	Wood & aloss	Wood & satin

TRY WITH THESE

INTEGRATED AMPLIFIER: Arcam FMJ-A19 £650 HFC 371

This great-value, mid-priced integrated is festooned with inputs and has a useful amount of power. It wowed us with its rich and engrossing sound and makes listening a great pleasure, whatever type of music you're into.



CD TRANSPORT:

Cambridge CXC £300 HFC 401

If you aren't ready to give up CD just yet, the CXC is a keenly priced transport that will extract the best from your DAC. Choose something like the Chord Hugo (HFC 386) or Rega DAC-R (HFC 405) and you'll have a source that'll do justice to any of these speakers.



INTEGRATED AMPLIFIER: Exposure 3010S2-D £1,700 HFC 397

The previous version of this integrated amp won a Blind Listening Test in HFC 373, and this is even better. Powerful enough to drive any speaker here, it has poise and pace and gives a very convincing all-round sound.



- STORES NATIONWIDE
- DEMONSTRATION ROOMS
- EXPERT IMPARTIAL ADVICE
- UNRIVALLED PRODUCT RANGE

SEVENOAKS

OFFERING THE VERY BEST SOUND, VISION AND SERVICE FOR OVER 45 YEARS







INSTORE

ONLINE www.ssav.com

SMARTHOME

www.ssav.com/smarthome







OPPO UDP-203

£649.00

4K UHD Blu-ray Player

The OPPO UDP-203 4K Ultra HD Blu-ray player provides an unmatched AV experience to home cinema enthusiasts. Drawing from over a decade's worth of experience in advanced imaging processing technology and high fidelity audio performance, the UDP-203 is the ideal source to complete the ultimate home cinema







SONOS PLAYBASE

£699.00

Wireless Soundbase for Home Cinema and Music Streaming

Your TV's got the video part nailed. But the audio? That leaves a lot to be desired. Especially when it's movie time. Game time. Music time. Come to think of it, any time The all new PLAYBASE adds pulse-pounding, full-cinema sound to all your movies, TV shows, sports and games-and it wirelessly streams your favourite music, too. Its slim, low profile design practically vanishes beneath your TV, yet it fills your entire viewing room with spectacular widescreen sound you just can't miss.







NAD C 338

£599.00

Integrated Amplifier with DAC

The C 338 adds big sound to your favourite music sources and brings incredible flexibility to any stereo system. With Spotify Connect, Bluetooth, and the firstever hi-fi amplifier to have Chromecast built-in, the C 338 allows you to stream and cast music directly from a mobile device or any music streaming app, letting you enjoy your music wirelessly. The C 338 even includes a special MM Phono input for connection of a turntable

SOME BRANDS/PRODUCTS ARE NOT AVAILABLE AT ALL STORES. SPECIAL OFFERS ARE NOT IN CONJUNCTION WITH ANY OTHER OFFER (NICWAOO)

ADVERT VALID UNTIL 03/05/2017, E&OE





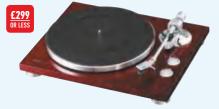
NAD • C 556 • TURNTABLE

 $\label{thm:continuous} \mbox{Time to enjoy vinyl collections with extraordinary quality!}$ With a minimalist design, the C 556 turntable offers accurate reproduction by using performance-focused parts and $% \left(\mathbf{r}\right) =\left(\mathbf{r}\right)$ components that put music first.



PRO-JECT • THE CLASSIC • TURNTABLE

Two-speed turntable with a radical new tonearm design supplied with an exclusively developed Ortofon 2M Silver MM cartridge.



TFAC • TN-300 • TURNTABLE

Belt-drive turntable with a stylish and luxurious chassis containing an MM Phono equalizer amplifier with USB output.



PRO-JECT • 1 XPRESSION CARBON UKX • TURNTABLE

With its Carbon armtube and supplied Ortofon 2m Silver cartridge, the 1 Xpression Carbon UKX sets new standards in its price range



SONY • PS-HX500 • USB TURNTABLE

The PS-HX500 is equipped with a high-quality A/D convertor. So just connect it to your PC with a USB cable and record your vinyl as High-Resolution Audio tracks. This is a great way to backup your precious vinyl collection



PRO-JECT • 2 XPRESSION DC ACRYL • TURNTABLE

Based on the 2 Xperience with upgraded motor control and a highend 9cc Evolution carbon fibre tonearm for improved performance.



ARCAM • SOLO MUSIC • CD/DAB STREAMING SYSTEM

Featuring a SACD/CD drive and 160W of amplification in a stylish, low-resonance enclosure, the Solo music provides high-quality room-filling sound.



NAIM • CD5 XS / SUPERNAIT 2 • CD / AMPLIFIER

CD5 XS uses developments from Naim's more costly CD players and when combined with the SUPERNAIT 2 it simply delivers dynamic, detailed and engaging music that can't fail to move you.



NAD • C 368 • AMPLIFIER/DAC

NAD's exclusive future-proof design allows you to customise your C 368. Its two MDC slots can accommodate a variety of optional modules including BluOS, one of the most advanced Hi-Res Audio multi-room wireless systems available.



NAD • M32 • DIRECTDIGITAL AMPLIFIER/DAC

An elegant, top-of-the-line, BluOS ready integrated amplifier with a host of features that offer maximum flexibility, excellent efficiency, and reduced noise and distortion.



ARCAM • FMJ CDS27 / FMJ A29 • CD / AMPLIFIER

Introducing Arcam's audiophile Class G integrated amplifier and SACD/CD player with Network streaming up to 192/24 for class leading sound quality.



ROTEL • CD14 / A14 • CD / AMPLIFIER/DAC

This 80 watt flagship amplifier features both analogue and digital inputs including PC/USB. The CD14 has been carefully engineered to ensure it resolves even the smallest musical details



TEAC • CR-H101DAB • MICRO CD/DAB RECEIVER

Features a USB DAC function that supports Hi-Res Audio playback and can handle a variety of sources, including CDs, Bluetooth and DAB/FM radio.



HI-RES WIRELESS MUSIC STREAMER

Easily connect the NODE 2 to any existing stereo or home cinema system, to unlock and discover a world full of music streaming services and Internet radio stations.





CHORD • MOJO • DAC/HEADPHONE AMP

Mojo stands for Mobile Joy and Chord is justifiably proud to say that Mojo is a true reference-quality mobile DAC and high-level headphone amplifier.













BOWERS & WILKINS CM10 S2

The flagship floorstanding speaker of the CM Series sets a new standard for performance It combines technologies taken from across B&W's ranges. The result simply sounds and looks beautiful.





KEF • LS50 WIRELESS

The beauty of the LS50 Wireless is its effortless combination of simplicity and elegance. It is easy to set up and use, yet offers sophisticated sound fit for audiophiles through inspired audio engineering and the Uni-Q driver.







MONITOR AUDIO SII VFR 6

2.5 way speaker system combining excellent dynamics with a naturally rhythmic sonic character and tight, controlled bass. The Silver 6 is an outstanding communicator of music and film audio





SONOS

MONITOR AUDIO **BRONZE 2**

The Bronze 2 builds on the strength of its predecessor's audiophile credibility with a neutral tonal balance and high detail resolution combined with high overall efficiency and power handling.





PMC • TWENTY5-23

Arguably the most elegant model in the range, the twenty5.23 takes the speed, transparency and sophistication of the twenty5.21 and adds greater bass extension and power. And yet its slim-line form doesn't mean it can't move you





PSB **IMAGINE X1T**

A deceptively slim and discreet floorstanding design, the Imagine X1T has wide bandwidth and high SPL output capabilities that defy its modest size. Features identical 5 1/4" woofers plus a one-inch







The smallest floorstanders in the R Series. Uses the latest generation Uni-Q driver array and two 5.25-inch aluminium bass drivers. Its slim proportions and sleek contemporary looks make it perfectly suited for any interior.

KEF • R500



Q ACOUSTICS 3020

Replacing the award-winning 2020i speakers, the 3020 incorporates numerous improvements including a revised cabinet with wool fibre damping plus new bespoke drive units



Standard finishes Premium finishes £279



BLUESOUND • PULSE MINI HI-RES WIRELESS SPEAKER SYSTEM

The PULSE MINI delivers true hi-fi to any nook and cranny of

your home. Includes digital and analogue inputs and supports files up to 24bit/192kHz. Bluetooth aptX capability is built-in.

Bluetooth Apply Audio



6YEAR



THE WIRELESS Hi-Fi SYSTEM

The Sonos Wireless HiFi System delivers

at any volume. Sonos can fill your home

with music by combining HiFi sound and

is easy to set-up, control and expand.

Take hi-fi to new heights with Features improved wi-fi performance, more digital and analog connectivity like Tidal and Spotify.

PRICES FROM £199





Bluesound's next generation. options and Bluetooth aptX along with support for premium music services

PRICES FROM £299



FOR THE LATEST PRICES AND OFFERS VISIT WWW.SSAV.COM OR CONTACT YOUR LOCAL STORE

Bishop's Stortford 01279 506576 Bristol® 0117 974 3727 Brighton 01273 733338 Bromley 020 8290 1988 Chalfont St Peter® 0845 5046364 Cambridge 01223 304770 Chelsea* 020 7352 9466 Cheltenham® 01242 241171 Epsom 01372 720720 Exeter 01392 218895

Guildford 01483 536666 Holborn 020 7837 7540 Kingston® 020 8547 0717 Leeds (Wetherby) 01937 586886 Loughton 020 8532 0770 Maidstone 01622 686366 Norwich 01603 767605 Oxford 01865 241773 Reading 0118 959 7768 Sevenoaks 01732 459555

Southampton 023 8033 7770 Tunbridge Wells 01892 531543 Witham (Essex) 01376 501733 Yeovil 01935 700078

CHORLEYWOOD - THIS STORE HAS RELOCATED TO CHAI FONT ST PETER VISIT WWW.SSAV.COM FOR ADDRESS DETAILS, OPENING HOURS AND BRANDS STOCKED

*THESE STORES ARE FRANCHISED AND OPERATE UNDER A LICENCE AGREEMENT TO SEVENOAKS SOUND & VISION



Choice EXOTICA LARSEN 8 £4,795



Glorious reflections

Most speakers are tuned for ideal acoustic conditions, but Larsen takes a real-world approach. **Chris Ward** takes a look

hese extraordinary,
Swedish speakers may
look highly futuristic, but
their design pays homage
to 'Sonab' designs of the seventies
from the legendary and lamented Stig
Carlsson. John Larsen and Carlsson
worked together for 16 years, refining
their core ethos around the 'orthoacoustics' of sound; appreciating the
perceived performance of speakers
in 'real-world' rooms. Almost every
'traditional' speaker is designed and
calibrated to deliver near-perfect
results in an anechoic chamber, but

The Larsen 8 is an unfussy load that's extremely forgiving in any listening room

this design helpfully recognises that we don't live in fathomless rooms without reflections. Smarter still, the design actually embraces the fact that they will be used in a domestic space. Larsen may have had a gifted partner back then, but these new speakers take the story forward considerably.

Part of the appeal of the speaker is that it is designed to be placed unobtrusively in the home. Available in white and black lacquer or a range of wood veneers, it strikes the perfect balance between 'look at me' and disappearing into your room's décor. Finish and build is simple and understated. A casual glance suggests this is a squarish-section, veneered MDF box, truncated in a curious way to house a fabric dome tweeter and 177mm midrange driver facing up and into the room at a jaunty angle. Further investigation reveals things are far more complex. The tweeter sits partially within a folded steel baffle and drivers are flanked by vertical and horizontal absorption pads. Below the horizontal pad, two

more tweeters fire vertically through the damping material. These are attenuated and out of phase with the primary drivers. Lastly, in the base of the discreetly side-ported cabinet is a further 177mm driver optimised for pure bass duties below 300Hz, claimed to reach down to 23Hz. Each speaker is distinctly left or right and can be fitted with an asymmetric speaker grille. Around the back, two pairs of sturdy speaker connectors enable bi-wiring if desired.

I place the Larsen 8 about 10cm from a solid rear wall, but away from room corners and hook up Black Rhodium Foxtrot speaker cable (*HFC* 412) to a Hegel Röst integrated amplifier (*HFC* 418) fed by a Shanling CD-T100 HDCD player via Chord Company Shawline RCA interconnects (*HFC* 412)

Sound quality

Opening with Ben Harper's *Gold To Me*, even the opening high hat is noteworthy. Some speakers struggle to reproduce cymbals without harshness or fatigue, but the Larsen 8 creates a very realistic metallic tone

Two drivers are on show, but each speaker

has no less than

five drivers

DETAILS

PRODUCT Larsen 8

ORIGIN Sweden

TYPE 2.5-way floorstanding loudspeaker

WEIGHT 25kg

(WxHxD) 278 x 916 x 328mm

FEATURES ● 3x 25mm

- ScanSpeak soft dome tweeters

 2x 177mm
- 2x 177mm ScanSpeak mid/bass drivers • Quoted sensitivity:
- 88dB/1W/1m (8ohm)

 DISTRIBUTOR

 Sound Fowndations

Sound Fowndati TELEPHONE 0118 9814238

WEBSITE soundfowndations.

that somehow has real airiness alongside plenty of body and richness. There is something about the way it propagates high frequencies that is extended, sweet and clean, yet very solid and rich at the same time. Similarly, Harper's vocals carry lots of tiny, expressive detail alongside a very human warmth, creating a truly lifelike presentation. The bass line kicks in with properly deep extension and surprising agility, yet absolutely no sense of fluster or strain from such a modest box. If you think you need a dedicated subwoofer or monster speakers to create quality bass, think again. As this funky, soulful song fills out with drums, hand chimes, guitars and tambourine, one appreciates that this is one extraordinary speaker.

Everything is in its place and supremely natural. Frequencies seamlessly flow without glare or flab, with timing that feels ultra fast, yet effortless and unhurried. The soundstage feels extremely wide and tall but relaxed, if slightly diffuse. Other speakers will create more pinpoint imaging at a small sweet spot listening position, but the Larsen 8 presents a sonic picture that feels larger and far more natural, more akin to live music and enjoyable from almost any position in the listening room.

Playing *The Grid* from *Koyaanisqatsi* by Philip Glass, the opening, sustained brass notes from trombone and tuba have a delightfully rich and mellifluous quality that sits underneath the more insistent staccato muted trumpets that repeat delicious rasps that cut through but never sound harsh. A synthesiser layers fast ostinato arpeggios of triangle-like highs alongside fast pulsing deep bass. Some speakers can fatigue you with grating treble while



Choice EXOTICA LARSEN

Q&AJohn Larsen Designer, Larsen



CW: Can you walk us through the speaker's unique design?

yes the Larsen 8 is basically a 2.5-way system with the two bass units in series in separate 23-litre chambers, tuned to 26Hz each. The lower driver is dedicated below 300Hz while the upper driver, tilting 36° backwards and turned 36° into the room meets the tweeter around 2.5kHz in the same phase. The two ambience tweeters are in series, but out of phase at a level around 10dB under the main speakers. The choice of drivers, materials and their specific configuration is clever but some of the magic is in the crossover unit.

Can you tell us more about your design philosophy?

This design builds on Carlsson's Ortho-Acoustic principles - using sound reflected off listening room boundary surfaces to enhance the quality of musical reproduction rather than degrading it. Basically, playing with the room not against it. The wall behind the speaker is integrated into the design to tune the bass reflex much lower than would be expected for such a small cabinet. Conversely, we employ special absorption techniques and materials to reduce higher frequencies reflecting in ways that could interfere with the sound. All manufacturing is undertaken by us in Sweden.

What do you recommend when it comes to room placement?

Simply place the Larsens against a wall, ideally 50cm or more from sidewalls. The long wall is preferable, but they are flexible. The soundstage from 'normal' speakers is often limited by the placement of the speakers, but our design philosophy means it is possible to create a bigger and more convincing soundstage across a wider range of music.

You can adjust the soundstage by increasing the distance between the speakers and you rarely need extra room treatments. I have played with Larsen 8 in a 15m² room and I have played with Larsen 6 in a 60m² space. Getting the perfect balance is possibly more about amplification.



HOW IT COMPARES

The Larsen 8 shares many of the qualities of the similarly unique German Physiks HRS-130 (HFC 418), but for a fraction of its £14,500 cost, and a far easier amplifier load. Sonically, the Larsen 8 reminds me strongly of the legendary Snell Acoustics Type A/III speakers that ceased production in the late eighties. You'll need good luck and deep pockets finding a good used pair of those outside the USA, but Audio Note's current AN-E/SPe speakers (circa £5.195) deliver a similar character of natural, room-loaded bass with very fast transient response and a lightness of touch around a highly musical and very expansive soundstage. slurring the deeper motif, but the Larsen 8 instead creates a cascade of cycling, sweet chimes while preserving deep leading edges, starting and stopping bass notes with real control. The choir joins the ensemble and the performance becomes even richer and more nuanced. This is a highly complex and challenging piece of music for speakers to convey and the Larsen 8 does an incredible job for such a compact design. Again the musical image is very compelling and large, but possibly not as deep as more traditional designs. What you lose in depth, you make up for in sheer top-to-bottom natural coherence without flat spots or nasty room mode aggravations. Playing the organ drones at the start of the piece, the Larsen reproduces the deepest notes with luscious power and substance that's rich in the detail that defines the acoustic space. Mighty impressive.

Conclusion

This is a masterpiece of design, rooted in understanding empirical sound qualities and refined from detailed listening in real-world rooms rather than simply nodding to the received wisdom around drivers beaming you the right notes in the right order. Aesthetics and finish are possibly

function before form, but build quality is decent and I have grown to love the understated 'Q-car' looks. Placed against a wall with sympathetic furniture it does an amazing job of disappearing, until it produces such sweet music that heads turn. Most speakers excel in doing many things well with ideal amplification, but will usually exhibit foibles when not in an ideal room position, be it setting off room modes or creating unwanted early reflections. The Larsen 8 is an unfussy load that's extremely forgiving in any room, delivering huge images and highly dynamic, musical sonics without ever being wrong footed •



icon Audio

100% Pure Valve Amplification





"King of Triodes" ST845pp 50wpch £6,495 Worlds first 845 PP integrated amplifier



ST60 IIIm with KT150 valves 80wpch, 50w Triode Outstanding performance £3,299



ST40 IIIm True "Hi End" Amplifier, Triode 25w, UL 45w many features from £1,899



Simplified ST40 30wpch UL, HQ Headphone socket, "Easy Bias" From £1.099 (EL34)



Stereo 30se KT150 Valves Pure Class A 18w Triode, 28w UL £1,999



Our extraordinarily good pure valve phono stage only £1,099 MM or £1299 MC/MM



100% Pure Valve Pure valve Phono Preamplifier £2,499



Pure Triode With Output Transformers matching 8-600 Ohms



New 15" Horn speaker now on demonstration

See our range of speakers specially designed for valve amplifiers

Icon Audio have a valve amplifier to suit all purposes. From 15 watts per channel to 80w integrated or 16w to 250w mono blocks. Immerse yourself in our warm easy listening detailed sound. David Shaw has been making innovative highly regarded amplifiers for 15 years which are all leaders in their class, some like the unique ST845 or HP8 have no equal, and others like the ST60 and ST40 are "outstanding" in performance and value for money. All our amplifiers are handmade, "point to point" with our own hand wound transformers in our own factory and finished in Leicester. Built to last and be easily serviced.

Various upgrades are available including capacitors and valves. As a UK company we offer rapid economical service on all our products both old and new. Come for a listen at our Leicester showroom or order from one of our appointed dealers. For more information see our website, ring or email us, or ask for our latest brochure printed on *real* paper! Buy direct from us or through one of dealers or worldwide distributors

UK only prices including 20% VAT and mainland delivery. Some models show upgraded valves. E&OE





One is fun

The Encore 225 has been designed to offer the convenience of streaming without the complexity. **Ed Selley** goes back to basics

n the deluge of extremely flexible and innovative network devices that turn up for review, it is easy to lose sight of the large number of audio enthusiasts still using physical media looking at this breathtakingly sophisticated armada of gear and thinking: "I've no idea what to do with that". For all the oft-repeated mantras about network audio being simpler than ever, it can still be intimidating to get up and running. Into this gap steps Musical Fidelity's Encore 225.

The Encore takes a rather different approach to the business of streaming material and accessing streaming content. There's an Ethernet port allowing access to a network that can be controlled via an app to access the world of streamed content – in this case Tidal and TuneIn internet radio. So far, so normal, but after this things work in a slightly different way.

What that Ethernet connection won't do is directly access stored content on a NAS or similar device. Musical Fidelity has instead fitted the Encore 225 with a 1TB internal hard drive (accessible via the back panel from a clearly marked drawer, allowing for future expansion), which you add playback content to. This can be done in two ways. Pop a CD into the slot-loading mechanism on the front and it will look up the content and rip it to the internal drive. Should you want to simply play the CD, you can do this too via a function in the menu. If you already have content that you've ripped, tagged and stored as music files elsewhere, you can add it to the hard drive by dragging and dropping. The Encore 225 will add the content and then check the metadata so that it reads it the same way as any other existing music that's on the hard drive.

DETAILS

PRODUCT Musical Fidelity Encore 225

ORIGIN UK

TYPE One-box music system WEIGHT

23kg

DIMENSIONS (WxHxD) 440 x 125 x 400mm

FEATURES Quoted power

output: 2x 225W (8ohm)

● 1TB HDD drive expandable to 2TB Digital inputs: 2x optical; 2x coaxial Analogue inputs:
 2x RCA; MM phono

DISTRIBUTOR Musical Fidelity

stage

TELEPHONE 0208 9002866

WEBSITE musicalfidelity.com

This is entirely straightforward to do and the software proves itself to be stable and reliable during testing, but I do think it is a little limited. If you already have a music library stored elsewhere, you'll need to add files to the Encore's drive before you can listen to it. This is done via a drag-and-drop process using Google's Chrome web browser, and is simple enough but frustratingly time consuming. The decision not to fit a wireless connection is also puzzling. It means that the Encore will need to be in tethering distance of your router to deliver the best results, although Musical Fidelity claims that having the content on the unit improves the latency of its performance.

Happily, the rest of the specification is very encouraging. There are three analogue inputs, four digital inputs (two coaxial, two optical), preamp and line outputs as well as a selection of USB connections for charging and reading content off of sticks and thumb drives (but not, at the time of writing, decoding incoming USB digital). One notable omission from the spec is Bluetooth, which although not yet within the realms of hi-fi acceptability is an integral part of the specification on many rivals.

These inputs are backed up by the amplification from the M6Si (HFC 400) integrated amplifier, which means that you have 225W at your



Classic Musical Fidelity elegance

disposal – a figure that comfortably eclipses most all-in-one rivals. In use, there is no shortage of power, but the volume gearing is a little odd in that the unit only really gets into its stride at about 60 percent volume or greater. Once past this point, however, the volume level grows swiftly and in a usefully linear way and it is hard to imagine any owners running out of power.

This functionality is built into a single large but elegant chassis that features prominent heatsinks to keep everything under the hood cool. Importantly for a device that contains a hard drive and supporting hardware, there is no audible

mechanical noise from the chassis and no sign of cooling fans or other noisy paraphernalia from a computer. The front panel mounts a full-colour display that you can use to navigate the menu system and bring up artist and album information. The menus are logical and easy to navigate using the left-hand rotary control and forward and back buttons - or indeed via the remote control or the app. The display is clear and easy to read and the Encore feels solid and well assembled. The remote handset works well and the downloadable control app is also fairly well thought out. Housekeeping can be a bit hit and miss and logging into Tidal, for example, is probably best done using your computer.

Sound quality

Whatever reservations I have about how the Encore 225 accesses content needs to be balanced against the sparkling sonic performance that it offers. Connected to a pair of Neat Momentum 4i floorstanders, it demonstrates an effortlessness and level of control that's not often associated with single-box devices. With the 16/44.1 download of Public Service Broadcasting's The Race For Space, the Encore 225 is superbly entertaining. The slow building The Other Side is involving and spacious, but underpinned by real low-end authority. When the climax of the track comes in, there is the sense of there being plenty of power in reserve to handle anything the recording is likely to throw at it.

Some tests with hi-res material are even more impressive. The 24/96 download of Craig Armstrong's *It's Nearly Tomorrow* has a fluidity and smoothness to it that is entirely free from anything you might attribute to a digital recording. Brett Anderson's vocals in *Crash* have all the weight, texture and outright realism that

gives the track its emotional content. There is a vast and unfettered sense of space to the presentation as well with the soundstage extending beyond the loudspeakers and having an unusual sense of front-to-back depth to it.

An initial listen might leave you thinking that the presentation is a little on the soft side, but stick with it and you begin to realise that while the upper registers are completely free from harshness or aggression, there's nothing missing or artificially rolled off. Even 'ordinary' 16/44.1 material has a refinement and

It will comfortably front a considerable system and have few problems doing so

smoothness to it that is somewhat unusual and this only improves as the sample rate increases. This refinement makes the Encore 225 supremely easy to listen to and a highly flexible partner across multiple musical genres.

The caveat to all of this is that if you really do want something to be delivered with a slightly ballistic edge, the Musical Fidelity can seem a little too polite for its own good. Pistol Of Fire by Kings of Leon should be a frenetic two-minute thrash with big crunchy guitar riffs and staccato vocals. Here it feels just a little too 'nice', as if this is the version that the band did for daytime television. The actual timing and rhythmic agility is commendably good, but it never quite has the sense of attack and bite that really quick and energetic material requires to sound at its very best. On the plus side, it does mean that even some very rough and ready recordings are entirely listenable and I can't see anything but the most



Q&AAntony Michaelson
Founder, Musical Fidelity



ES: What prompted the decision for Musical Fidelity to return to the all-in-one system market?

AM: All our products are effectively designed in consultation with our customers and our retailers. Plus, also from my personal observations of how people have changed the ways in which they consume and enjoy their music.

In the case of the Encore 225 we were asked to create a superb sounding but easy to live with solution that answered both the continued move away from physical media and the increasing demand for 'connected' products.

The fitment of an internal hard drive is relatively unusual, what is the thinking behind it?

There were a number of reasons. First was outright sound quality. The Encore 225 is independent of the quality of the network connection or the quality of other third-party equipment on the network.

Second was speed, and with the Encore 225 everything is available instantly, whether finding and playing music or for moving between sources. There are no silent pauses. Thirdly, we consulted with our customers and they wanted Musical Fidelity to build a solution, they didn't want to try and cobble together their own. We provide total quality control.

A number of features have recently been added to the Encore 225, are any more planned?

We have designed the Encore 225 to include a very large system memory and very fast processor so it is very easy for us to offer the potential of continuous upgrades to ensure that the product is never out of date. That extends to new features where we'll continue to respond to customer demand.



Onscreen menu navigation is handled by the left-hand dial wildly unsuitable loudspeakers pairing badly with it.

The considerable choice of inputs offers the same levels of performance as material played off the hard drive. The Encore 225 comfortably serves as the amplification for the bulk of the testing on the VPI Prime Scout (see p16) and a very fine job it does too. Some tests with the Musaic MPL (HFC 421) via its analogue and digital outputs suggest the Encore will give you a very faithful representation of what the device in question is capable of. Supporting as many inputs as it does, it will comfortably front a considerable system and have few problems with any of it.

Some quick tests of the internet radio and Tidal functionality are also

Even some very rough and ready recordings are entirely listenable

largely positive. The performance of albums streamed via the service compared with the same material stored on the hard drive is largely imperceptible and the considerable refinement that the Encore possesses is helpful at keeping even quite heavily compressed internet radio material listenable. Compared with something like the Simaudio Moon Neo ACE (HFC 420) (see How It Compares), the control interface can feel a little lacking in slickness, but it proves to be stable and easy to use throughout the review process. In a welcome piece of additional functionality, although the headphone socket can't match the spellbinding performance of some of the company's dedicated headphone

amplifiers, it is more than up to the job for some late-night listening from time to time. The noise floor is low and has the same easy flowing performance as with its loudspeaker outputs, as well as a decent level of power on tap.

Conclusion

Summing up the Encore 225 is tricky because I am some way down the streaming rabbit hole already so have to accept that certain things I take for granted are not applicable here. I cannot just point the device at my music library and access it - but Musical Fidelity is working on the principle you don't have one of those in place. I like to check the accuracy of my rips before I add them to the library, but also accept that the Encore's ripping and tagging system is hassle free and appears entirely effective. Where I might see limitations, many people will see a very clever and fuss-free device. The Encore 225 might be a slightly specialist proposition, but the convenience it offers combined with excellent audio performance is likely to win it many friends •



One of the more interesting rivals is the fractionally cheaper Moon Neo ACE (HFC 420). The Encore 225 has vastly more power, inputs and the option to store its own content to which the ACE can only really respond with a phono stage and Bluetooth. In flexibility terms, the ability of the ACE to access a network library is a big bonus. The big power output of the Encore means it has far better control over insensitive speakers and is more forgiving of poore recordings. The ACE hits back with a faster and more intense performance. As it is, the ACE narrowly ends up looking the more future-proof option.



twenty5

THE DEFINITION OF PERFORMANCE

A quarter of a century of research, obsessive design and craft has produced the **twenty5** series—loudspeakers that deliver all the passion of the original performance, conveying every nuance. The range refines our **ATL** bass-loading concept with new drivers, new materials, and **Laminair**, a revolution in audio dynamics. With its natural musicality, vivid audio picture and rich, enveloping bass at all levels, the **twenty5** series lets you feel the music, not simply hear it.



Book a demonstration

See our dealer listing online, or contact us

T+44 (0)1767 686300 www.pmc-speakers.com







Natural selection

As Rega's classic integrated continues along its evolutionary path, Chris Ward finds out if it has what it takes to be the best of breed

here has been a Brio amp in Rega's product lineup for 26 years and the inspiration for the original circuit dates back still further to 1970, so this latest integrated has serious heritage. Brio is defined as "liveliness or vivacity of spirit" and the sound qualities of the original 'clamshell Brio' version of 1991 turned many heads for its musical abilities. I own a clamshell Brio and regularly return to it for its joie de vivre. So, this latest 2017 version joins a long line of

evolutionary leaps, meaning that it may have become a very different animal from previous incarnations, or possibly there is something about the ethos and DNA of this entry-level integrated that is resolutely the same?

Its slim, half-width profile is sculptural but utterly unfussy. The dark, gently curved fascia is very understated, sporting a discrete red Rega logo, an on/off button, 6.35mm headphone output, input selector with bank of LEDs and a rotary volume control. The input selector

DETAILS

PRODUCT Rega Brio

Integrated amplifier

WEIGHT 5.1kg

DIMENSIONS (WxHxD) 216 x 78 x 345mm

- FEATURES

 Quoted power output: 2x 50W RMS (8ohm)
 • Inputs: 4x RCA
- MM phono stage
 Output: 1x RCA
- **DISTRIBUTOR**Rega Research Ltd TELEPHONE

01702333071 WEBSITE

rega.co.uk

button is small and I occasionally push the headphone jack fruitlessly, but all functions are replicated on the remote so this is a minor gripe. Around the back, the Brio caters for a moving-magnet phono input, four line-level inputs, a fixed gain 'record output' and a sturdy pair of speaker binding posts. A phono grounding point is located on the underside of the amp. The features meet the current trend for a rather 'old-school' spec, enabling the connection of a turntable and analogue line signals, but no digital inputs. The designer, Terry Bateman, confirms that Rega's mission was to maximise analogue sound at a sensible price. And while this may suggest a focus on internal qualities, the build and finish of the bodywork is better than ever, made from reassuringly thick, silky aluminium castings with no unsightly fixings. This amp is clearly built to last and a fine testament to the original vintage 'clamshell' Brio I still use today. The remote is simple and basic, but highly functional and better than most.

I connect some cherished Rega R5 floorstanding loudspeakers via Black



Rhodium Foxtrot speaker cables (*HFC* 412) and my reference Shanling CD-T100 player via Chord Company Shawline interconnects (*HFC* 412) along with a classic Rega Planar 3 turntable with RB300 tonearm featuring an Origin Live structural upgrade for vinyl spinning duties. From unpacking, the integrated seems to benefit from having a day of running in, after which time it comes on song within five minutes of switch on.

Sound quality

Playing Keb Mo's cover of For What It's Worth on CD is an ideal way to showcase the Brio's virtues. The opening organ, bass and drum groove is effortless and infectious. My feet are tapping within seconds and making notes will have to wait. This is a highly musical little amp. Everything is where it should be; rim shots crack and high hats shimmer with metallic zing, Keb's vocals are warm and rounded, but dripping with rich detail and the bass line is particularly phat and luscious. The soundstage has good width and depth, but it's the totally joined up,

transparent, but above all musical communication of the whole performance that really stands out. A Hammond organ gently ripples in the background as punchy stabs of brass cut through the lush, rhythmic wall of sound. This track may have started as a peace song, but this combo of Keb and Brio is as sultry as it gets.

The quality of the bass here is noteworthy and deserves more explanation. While many manufacturers increasingly seem to aim for a relatively taut, dry bass with the perception of added control, this presentation of the lowest registers feels far more organic and supple. This isn't a quality of reaching deeper, more that the Brio bass quality feels more visceral, with greater flow and a richer bloom. This doesn't mean it has less agility than a drier amp, just that it feels more fluid. By way of an analogy, this is very much a fruit-laden, new-world wine rather than a dry, flinty, French classic. Music is like a building and the foundations need to be just right. For some, this bass quality may feel a tad louche compared with other brands, but the more I listen to this track the more it sounds like real bass and a real band. Some hi-fi can make you feel you're in the crowd watching the band, this makes you feel like you're in the band.

Swapping to vinyl, I spin the Sheffield Lab direct cut of *I've Got The Music In Me* by Thelma Houston and Pressure Cooker. The track starts simply enough and the amp locks straight into the funky seventies groove. The phono stage is admirably quiet and retains all the qualities *I've* heard from the line-level input. For all its digital know-how, Rega is still a self-confessed analogue addict and I sense that it sets its own bar pretty high for a modestly priced integrated amp phono stage. Thelma's dynamic

voice presses forward out of the plane of the speakers as the piano gives a menacing dark growl while the cymbals and tambourine shine. Backing singers sit back in a deep soundscape and a wall of strident brass creates truly luscious texture. This classic recording gets richer and denser, but the little Brio is never wrong footed, able to tease out each performer, but never losing that sense of a single, joined-up piece of music. Treble is sweet and unfatiguing, the midband is lush but highly

This amp is clearly built to last and a fine testament to the original Brio

transparent and the bass has a glow and free-flowing, unforced quality. Equally, the amp exhibits valve-like qualities around the sonic picture it paints. The music feels like one performance, rather than a series of spotlit performers, yet you are able to follow any instrument in isolation. Terry Bateman confirms that he still uses a Leak Stereo 20 integrated valve amplifier as a benchmark to aim for, and from knowing that amp well, he has done a sterling job.

Playing the Largo movement from Shostakovich's *Cello Concerto No.2* is very informative. I had wondered whether the Brio's obvious flair for a tune and bassline was less suited to classical music, but far from it. If anything, its ability to portray big pictures and deliver lifelike, voluptuous and flowing bass is a revelation for classical music, doing a better job than many amps around this price (and above). The textures of the solo cello are superb. Tiny details from the drawn bow on strings



REVIEWS REGA BRIO £598

Q&A

Terry Bateman

Chief electronics engineer, Rega



CW: What changes have been made in the latest Brio design?

TB: Products continually evolve and I'm always looking at ideas to improve on the previous variant. That said, the Brio is a very synergistic design, which means you have to think carefully when improving the circuitry as you could make a technical improvement that upsets the sonic recipe. In the case of the latest Brio, I took ideas from earlier blueprint prototypes, which weren't used in the previous Brio-R, to create improvements to power supplies and operational amplifiers in the line and phono amplifier.

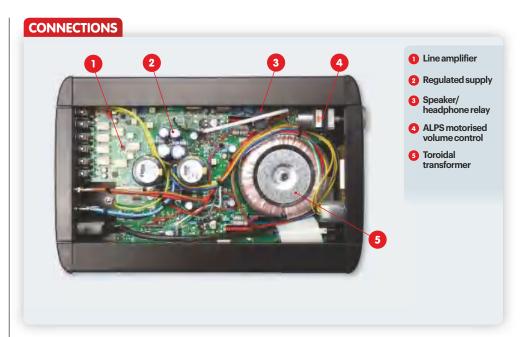
How did you go about incorporating the headphone and phono stages?

I took the approach that the best amplifier to drive a pair of headphones is the actual power amplifier in the Brio – so we used that. The problem is the switching/muting of the speakers when headphones are plugged in. In the Brio, the jack contacts activate a high-quality relay to disconnect the main speakers.

The phono stage is a two-stage design where the RIAA equalisation is split into two parts and incorporated into the two stages. Careful attention has been paid to low-frequency response, loading and the first stage operational amplifier to get the best performance from most cartridges. Rega has deep understanding of the synergy that exists between the tonearm, cartridge and phono amplifier and this phono stage helps squeeze the most from vinyl.

How did you achieve the Brio's musical sound?

It starts with choosing circuits that exhibit good technical and sonic capabilities. Sometimes I pull on ideas gathered building valve guitar amplifiers, where you have to understand how an electronic circuit interacts with an instrument. As for knowing when you've arrived at a musically finished product, it'll be a case of playing a favourite track, then playing another, then another, thinking "Yes, that's a cracking sound", but there's also a feeling you get when it hits the spot!



are clear, yet the notes bloom and sustain their rich tone in a very realistic manner. The movement develops with many deep, dark sweeps from the orchestra, which the Brio presents at full scale with proper brooding menace. The solo cello moves between melding with and jarring against the ensemble while rasping detail from deep bassoons is still distinct. The xylophone and plucked string notes have real cut through, but plenty of ambient air that helps position the instruments

This presentation of the lowest registers feels far more organic and supple

within the orchestra. Timpanis join the piece with aplomb. The drums have proper depth and impact, but never swamp other dynamic details. The Brio comes into its own and the densest sections just make sense. This is a stunning performance with real soul. Again, it's as though the amplifier just 'gets music', able to communicate much of the meaning of the piece, not just the right notes in the correct order. Orchestral works are conveyed superbly as cohesive, nuanced, total performances with the correct sense of scale, drama, light and shade; with deeper instruments and percussion sounding epic, yet properly balanced against the tone of other instruments.

From my experiments of listening to the amplifier with a few different loudspeakers the Brio seems well suited to driving designs that don't always impress for their bass credentials. Conversely speaker designs with overt bass pretensions could feel like too much of a good thing. Suffice to say, my Rega R5s work brilliantly with this Brio amp.

Conclusion

Some amplifiers tell you what music should sound like. The Brio helps you know what music should feel like. There are amp designs that are more forensic, transcribing greater detail from recordings, but few at this price will make as much musical sense with what they communicate. Equally some competitors may present more clinical sonic vignettes, but the Brio gets the big picture spot on. And don't pigeon hole it as a party animal that makes a bee line for a funky bassline. The Brio would be good value for its line-level amplification alone, but add in an excellent phono stage and headphone driving abilities and it becomes stunning value. Sensibly priced integrated amps are back in vogue, and this one is a cracker •



The Cyrus ONE (HFC 417) is a similarly small but mighty proposition for £699. The Brio majors on rhythm, swing and musicality. while the ONE has more direct presentation with tighter bass control, as well as Bluetooth for surprisingly effective digital playback. The style of the two are very different, you may well love one and dislike the other. The Creek Evolution 50A (HFC 377) at around £700 is also worth auditioning. It has similar specs, refined musical virtues and an OLED display in a very contemporary full-width case. Lastly, if you like the Brio, you might also consider spending a tad more on Rega's Elex-R (HFC 420), priced at £898.





PMC premier dealer with a wide range on demo!

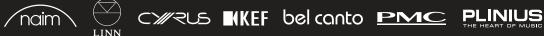
Winning award after award, PMC have a well-deserved reputation for producing loudspeakers that combine elegance with outstanding acoustic performance. That makes them one of our most popular ranges with both customers and staff. We carry wide range in stock including the latest twenty5 models. Please come and visit us at our Cambridge showroom where you can relax and listen in one of our purpose-built demo rooms.

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



































Talking Italian

David Vivian discovers that Rosso Fiorentino's affordable entry-level floorstander has plenty of high-end flair

o one should doubt that today's speaker designers, armed with cutting-edge, computer-aided tech, relish a challenge. The evidence is all around - small speakers that explode expectations with improbably forthright bass; large floorstanders that crave the speed and imaging specificity of small speakers; new tech, self-powered 'implosive' sound bombs that bring the SPLs of a Grateful Dead concert to your living room. It seems that nothing is off limits.

Which means that, from a reviewing standpoint, what follows is something of a nostalgic respite and so achingly Italian I'm fighting back the urge to scour the classic car ads for an original Fiat 500. I'll probably order

The midband is fabulously natural with a real sense of tactile presence

a pizza at the very least. If any name can set the scene, Rosso Fiorentino is surely it. Go to Google and the first thing you'll read is the biog for Giovan Battista di Jacopo (aka Rosso Fiorentino), a Florentine artist of the early 16th century with a penchant for strong colours, intricate detail and the ability to bestow his paintings with a certain luminosity.

I'm sure you can see where this is heading. If you're going to nail your colours (Rosso or otherwise) to the 'art' rather than 'science' mast, why not go the whole hog and name your company after a long dead but revered local artist from whom you can draw inspiration? That's exactly what Francesco Rubenni did and does. As well as being a native of Florence, he's a music guy, an acoustic instrument guy and, as founder and boss of Rosso Fiorentino, a young and

passionate loudspeaker guy of the old, traditional high-end school.

So pitch-perfect is the story of how RF came to be and operates today, you really couldn't make it up. Trained as a percussionist in Florence, Rubenni went on to complete a degree in electro-acoustical engineering at Salford University's Royal College of Advanced Technology in Manchester. The city was his home for the next five years while he studied transducers, acoustics and psycho acoustics. It's also where he developed a liking for high-efficiency horn speakers and, indeed, designed some for GEA. The reward wasn't enough. In 2006, collaborating with Florence-based driver and speaker manufacturer B&C Speakers, he formed Rosso Fiorentino – not to be just 'another' stylish Italian speaker brand, but a place where the Italian approach to sonics as espoused by Sonus faber, Diapason, Chario and others would dovetail with Rubenni's exposure to the likes B&W, KEF and Spendor. The fusion would, in turn, be informed by his knowledge and love of horn designs for the good of dynamics and loudness.

The real fairy story ending, however, has a specific location. It's called Bisarno's Castle, the walled villa just outside of Florence that hosts Rosso Fiorentino's famously idyllic listening room, La Sala del Rosso. It's a purpose-built performance space in every sense, as much home to regular jazz, acoustic rock and ensemble classical recitals as it is loudspeaker voicing sessions which, when you think about it, makes perfect sense. As Francesco Rubenni eloquently puts it: "The never-ending challenge of 'reproducing reality' is our constant ultimate guideline".

Being a relatively small speaker manufacturer, RF's core business is expensive, high-end models that allow more generous bottom line

DETAILS

PRODUCT Rosso Fiorentino Elba

Italy

floorstanding loudspeaker

VEIGHT 27kg

DIMENSIONS (WxHxD) 240 x 1,050 x 290mm

- FEATURES 25mm fabric dome tweeter
 • 2x 165mm glass fibre mid/bass
- drivers
 Quoted sensitivity 88dB/1W/1m

DISTRIBUTOR

TELEPHONE 01425 460760

ukd.co.uk

With its leather-

clad baffles and

those aluminium-

trimmed drivers.

the Elba is a feast

for the senses

margins. But in the Elba, a member of its Classic range, it claims to have made an affordable 2.5-way floorstander that nevertheless subscribes to the same lofty standards and 'family sound' as the rest of the RF lineup and, likewise, has been benchmarked against live music in La Sala del Rosso.

Classic is about right. The Elba is a straight ahead, zero-gimmick tower. Made and finished by hand to a very high standard - the leather-clad baffle and aluminium-trimmed drivers are especially tasteful – its strategically braced high-density fibreboard (HDF) enclosure feels weighty and solid and has two rear-firing bass reflex ports. The decoupled plinth – which opens up some breathing space between the bottom of the enclosure and the floor and houses the threads for some very substantial-looking spikes and locking nuts - promises a neater, tighter bass. All the drive units are manufactured to Rubenni's spec by ScanSpeak and consist of a wide surround 25mm soft dome tweeter joined by a brace of 165mm drivers with resin-treated glass fibre cones. The crossover employs high-quality Mundorf capacitors while van den Hul silver-coated OFC wiring is used throughout. The solid copper binding posts are made inhouse.

The Elba stands almost as tall as DALI's Rubicon 6 (HFC 399), the



Q&AFrancesco Rubenni Designer & MD, Rosso Fiorentino



DV: Tell me a little more about the Sala del Rosso. Do you benchmark your speakers against rival products in there or is it purely against live music?

FR: The Sala was originally designed for our listening space where we test and demonstrate our speakers. Given its acoustic qualities and spatial dimension, we decided to use it for live music from time to time. Thanks to movable acoustic panels (absorbers and diffusers) we can change the acoustics to suit the particular event, whether it's live music or a listening session of our systems.

We benchmark our models against rival products and we use our live music events to retune our ears and enjoy music together with others. This is a very important part of our design process and helps us to focus and stay in touch with music.

What are the sonic advantages of HDF over MDF?

HDF is a more rigid and dense version of fibreboard. Using HDF enables us to get a better performance in terms of vibration control, but it is not enough to make a reasonably inert cabinet so we use a sandwich of different materials to dampen the vibration inside the cabinet.

How have you managed to produce such a luxurious loudspeaker (the leather, the finish etc.) for such a reasonable price?

We have learned through experience how to design speakers in a smart way. From an engineering point of view, making a cheaper model that produces a beautiful sound is just as involved and challenging as it is designing a top-level loudspeaker system.



HOW IT COMPARES

As discussed in the main review, the Elba is by no means outclassed by the much pricier but materially only slightly larger - DALI Rubicon 6 (HFC 399). which is quite some feat considering the £800 price difference. The Rubicon sounds more muscular and assertive, but for sheer musical enjoyment it's the Italian model that has the edge. That said, there's no shortage of floorstanding musical talent at or around the Elba's price point, the recent Group Testwinning Totem Sttaf (HFC 417) perhaps staging the strongest challenge with its stunningly threedimensional, tonally accurate and rhythmically spry presentation.

floorstanding act that's usually in residence in my larger listening room. And as it's only a ribbon tweeter short of the Danish model's driver and reflex port count, the obvious substitution is hard to resist. A Musical Fidelity KW250S receiver/CD player connected via Townshend Audio Isolda DCT speaker cable provides the muscle, and plenty of it.

Sound quality

Settling down to a spot of Thomas Dolby, the most frequently occurring words on the first page of my note pad are "honest", "enjoyable", "accomplished" and "Dolby's nuts". That's musically honest, by the way. You wouldn't call the Elba monitor neutral, but then neither is the big DALI. What I'm not sensing after the swap is any shortfall of big-boned, room-filling entertainment. The Rubicon has more bass and goes louder (it's £800 more expensive), but that's not to decry the Elba's low-frequency chops. Its bass is relatively nimble and tuneful, yet goes all the way down with nicely judged weight and control.

Even more impressive, the midband is fabulously natural and unforced with fine focus, a real sense of tactile presence and large dynamic swings delivered without the slightest hint of

strain. Dr Magnus Pike's titular refrain "She blinded me with science" on the opening track from Dolby's *The Golden Age Of Wireless* is almost spooky, as if the windmill-armed old boy was back and in the room. Dolby's always immaculate production effortlessly shines through as well. The silk dome tweeter is a honey, too, lending treble a lovely quality of texture and harmonic richness.

The fullness and clarity of the Elba's presentation at modest gain also sets it apart from rivals that require hard driving to really get going. With no need to lean on the volume, Marc Almond's largely forgotten but nonetheless completely wonderful single, The Days Of Pearly Spencer, is elevated to new levels of scalptingling beauty in its final, almost unbearably plaintive moments. The lightness of touch and that grainless, almost romantic, treble are addictive. So too the effortlessly fluent and easy-breathing delivery of Thomas Dolby's most excessively complex and multi-layered mixing desk romps not the easiest of things to unravel at the best of times. No, the Elba isn't strictly neutral, but when the music is allowed to communicate this intimately, does it really matter?

Conclusion

There's something truly beguiling about the way the Rosso Fiorentino Elba sounds. Maybe it's that fusion of Italian and British sonic sensibilities. Maybe it's because it's a large, 2.5-way floorstander that's comfortable in its own skin and not trying to be something else. On top of which aesthetics, build and finish are superb and worthy of a speaker costing half as much again. Whatever, it combines ample resolution and bandwidth with natural tonality and addictive musicality. It's an astonishingly good speaker for the money and enthusiastically recommended •







HAS ARRIVED

Go to www.avm-audio-uk.com



REVIEWS RAUMFELD STEREO L £1,100



Power drive

This music streaming system may not be the most elegant around, but **Lee Dunkley** reckons there's more than meets the eve

n a world where modern living seems to require music system designs that are compact and perfectly formed, the chunky semi-active wireless Stereo L speaker system from Berlin-based brand Raumfeld appears to be rather at odds with current thinking. As with its three-way wireless Stereo M standmount sibling (HFC 399), the second-generation Stereo L floorstanding speaker system is unapologetically bulky, and towers above my resident Dynaudio X38 floorstanders as I manoeuvre the Raumfeld's 27.5kg and 24.2kg heft into position. This imposing speaker system means to be noticed and the brutal styling has no intention of blending into the background and

With lesser-quality material it makes almost everything sound smooth

integrating unobtrusively with my home décor. But it's not totally inelegant, and the matt white finish with brushed aluminium strip is nicely put together. The matt black speaker baffle behind the magnetic speaker grilles houses a true three-way driver arrangement, while a black plinth elevates the MDF cabinet to allow air to flow from the downward-firing bass reflex port.

Each driver is housed in its own enclosure and the recessed 28mm fabric dome tweeter with waveguide surround is positioned between the 130mm midrange cellulose-coated cone on top, and carbon-coated twin 170mm bass drivers placed below, and lacks some of the finesse of the driver and waveguide arrangement of its Stereo M sibling.

The 'active' speaker has a volume knob on the front and contains the Class D amplification rated at 2x 165W RMS and incorporates the same Cirrus Logic DAC found in the Connector 2 digital music hub (*HFC* 398), with support for 24/192 music

files. System control is taken care of via a free smartphone app and provides multi-room control of any other Raumfeld devices installed.

Setup is seamless using the easy to navigate app and connects swiftly to my home network router and enables me to designate the 'active' speaker to either the left or right side of the room, allowing a useful degree of flexibility to fit with specific room layouts. Connectivity options include wi-fi, Ethernet and one analogue input, while music stored on memory sticks finds a home with the USB slot. There's no Bluetooth connectivity. Format support is well catered for with WAV, ALAC, FLAC, OGG, MP3 and AAC music files, as well as access to Napster, Soundcloud, Spotify, Tidal and TuneIn streaming services.

Sound quality

The active speaker links to the passive 'slave' model via the supplied 5m

1 130mm cellulous-cone midrange
2 25mm fabric dome tweeter
3 Speaker binding posts
4 2x 165mm bass drivers

DETAILS

PRODUCT
Raumfeld Stereo L

ORIGIN Germany TYPE

3-way wireless floorstanding loudspeaker

WEIGHT Active: 27.5kg Slave: 24.2kg

(WxHxD) 220 x 1,145 x 320mm

- FEATURES

 28mm fabric
- dome tweeter

 130mm midrange
- driver
 2x 170mm bass
- Quoted power
- output: 2x 165W RMS • Inputs: Ethernet; 1x RCA; USB 2.0

DISTRIBUTOR Lautsprecher Teufel GmbH

TELEPHONE 03308 080489 WEBSITE raumfeld.com cable and there's a separate set of speaker binding posts should you want to use the Stereo L in passive mode with your own amplification. There are no floor spikes provided so I call upon a pair of Townshend Audio Seismic Isolation Podiums to aid stability and to decouple the speaker from the listening room floor.

First impressions are a bit of shock. There's a lack of upper-mid energy and HF sparkle to the Stereo L that seems at odds with the cabinet's proportions. I anticipate a lively sound, but this speaker doesn't initially grab my attention and sounds far too smooth and relaxed to be insightful. There's a lack a immediacy and although bass is as big and muscular as I expect from the design, the pounding beat of The xx's Dangerous – streamed via Tidal's hi-fi subscription tier - lacks resolution in the upper mid and treble bands, which prevents it from being a truly engaging experience.

Marc Cohn's vocal on *Maestro* sounds just as silky smooth as ever, but is set much further back in the mix than I am used to hearing and is missing a degree or two of its usual presence. Furthermore, the soundstage doesn't extend back behind the speaker, and instrument placements are vague. On the other hand, it creates an expansive soundstage across the speaker plane that stretches far wider than their 3m apart spacing in my listening room.

Conclusion

If you're less bothered by musical insight and simply require a set of room-filling speakers capable of pumping out a big sound, the Raumfeld's lack of neutrality pays dividends and with lesser recordings or lower-quality material it makes almost everything sound smooth. The Stereo L is big and beguiling, but neutrality and hi-fi credentials are left wanting at the price





Running in the family

It may be billed as an integrated amplifier, but as **Ed Selley** finds out the WXA-50 has so much more to offer

usicCast networked multi-room tech is supported across the majority of Yamaha's component range, and is successfully filling evolutionary niches with a growing number of products. The latest to join the family is the WXA-50 wireless streaming amplifier.

As a compact integrated amplifier that lends itself to being placed upright or horizontally depending on your preference, the WXA-50 packs a considerable amount of functionality into its neat form. There's a choice of a stereo RCA phono input, with matching looped output, an optical digital input and aptX-enabled Bluetooth wireless connectivity. This is additionally supported by a USB Type-A connection that can read the content of iOS devices and acts as a

handy charging point. This might not be the most comprehensive choice of connectivity, but it can easily support a small music system and things get more impressive when you consider what MusicCast brings to the party.

As a MusicCast product, the WXA-50 is completely network capable via both Ethernet and wireless options and comes with the full suite of multi-room networking capabilities that means you get AirPlay, internet radio and compatibility with Spotify (including Spotify Connect), Napster, Qobuz and Juke streaming services. Sample rates up to 24/192 are supported for FLAC, WAV and AIFF with additional support for DSD128.

Music can be shared among other MusicCast products on the same network and the WXA-50 can

DETAILS

PRODUCT Yamaha WXA-50 ORIGIN Malaysia

TYPE
Integrated amplifier
WEIGHT
1.94kg

DIMENSIONS (WxHxD) 215 x 52 x 251mm

FEATURES

● Quoted power output: 2x 70W

(6ohm)
• 24-bit/192kHz
PCM and DSD128-

capable DAC

Inputs: 1x RCA; 1x optical digital

Streaming service support: Qobuz;

Spotify; Napster; Juke; internet radio DISTRIBUTOR Yamaha UK

01908 366700 WEBSITE uk.yamaha.com conversely receive audio sent by other units – allowing you to listen to a TV show being sent by an AV receiver for example. Yamaha has rather neatly tied all this functionality together in a very well thought out and comprehensive control app that allows you to name the product and its location and switch easily between different devices. It isn't without a few glitches, though, and the Android version of the app proves difficult to set up – although iOS works perfectly well during the test.

The amplifier section is rated at 2x 70W into 60hm and there seems to be no shortage of power available for real-world situations. The decoding of digital inputs is carried out by an ESS Sabre DAC and volume control is handled in the digital domain with 48-bit processing ensuring that adjustment can be carried out without any loss of signal. This does mean that any analogue source connected via the RCA input will be promptly converted into a digital signal in order for this to work.

Aesthetically, the WXA-50 doesn't really look like any other Yamaha product that we've seen before. The almost square chassis is extremely solid and the wraparound metal fascia is an elegant design. In terms of front panel controls, you get a volume knob and a small selection of buttons that can attend to basic control of the unit. This is all backed up by a tiny plastic remote and the downloadable control app for smart devices.



The distinctive specification of the WXA-50 means that it isn't a like-for-like match with more conventional full-width amplifiers, but it is a close rival to the NAD D3020 (HFC386). which shares a similarly small footprint. Both are designed to support digital and analogue inputs, but in different ways. The Yamaha is fully network capable and supports streaming services and internet radio. The D 3020 lacks these functions, but has a USB input that works without a driver and allows for computer connection as well as having more digital inputs. The D 3020 is slightly livelier than the WXA-50 and it can sound a little more fun, but lacks the Yamaha's refinement and headroom and doesn't feel quite as solid to use.

Once installed on my network and connected to Mission's LX-2 standmount, the WXA-50 makes a positive impression from the off and it feels powerful with a sense of effortlessness to the presentation.

Sound quality

A 16/44 rip of Calexico's Algiers balances refinement and energy to excellent effect. Vocals are well presented and have a richness and realism that consistently impresses. It has a positive sense of drive and energy. With the driving beat of Hot Chip's Over And Over, it really delivers on the sense of fun and punch to the performance. The bass is impressively deep, but also starts and stops with sufficient speed to draw you into the performance and entertain, making itself felt across a variety of genres with a sense of liveliness without tipping over into sounding forced.

This is helpful because while the volume level appears to be admirably linear across the range, the amp does its best work when a reasonable listening level for my medium-sized listening room is selected. From here it can be pushed further if required without sounding strained or harsh, but listening at very low volumes robs the presentation of some of its space and three dimensionality. The good news is that the control itself has enough fine adjustment to ensure that you can get the exact listening level you desire, and not

Listen for an extended period and it soon becomes clear that the sonic attributes are admirably consistent across the many inputs that the Yamaha supports. Bluetooth pairing is straightforward and stable, while performance with Tidal streams is nearly as convincing as it is via the network. The overall tonal balance is sufficiently forgiving that it handles compressed material such as Spotify in a manner that means that it is consistently listenable. The only slight detractor to this is that the performance with high-resolution material doesn't really offer the leap

The WXA-50 feels powerful and makes a positive impression from the very start

forwards in performance levels that some other amplifiers can muster. As if to illustrate the point, an A/B test with Emily Barker & The Red Clay Halo's *Almanac* in 16/44 and 24/96 doesn't produce the stand out differences that I would expect.

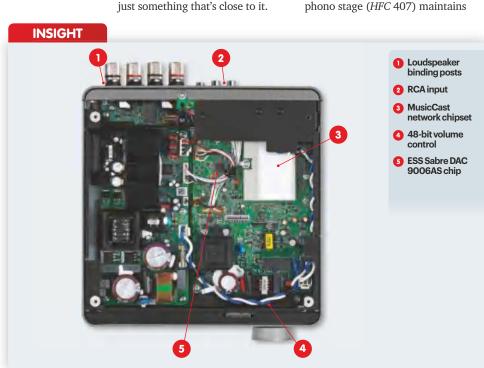
One of the most surprising aspects of the performance is that the analogue input manages to retain the character of the connected device, even though it's going through analogue-to-digital conversion to allow use of the volume control. Connecting a Pro-Ject Essential III A turntable (*HFC* 420) and Graham Slee Gram Amp 2 Communicator phono stage (*HFC* 407) maintains



a wonderfully fluid presentation associated with the combo and although the Yamaha is a network audio product, it's able to deliver most of its positive attributes with external sources too.

Conclusion

While the WXA-50 might initially look an unlikely addition to the MusicCast family, the more time I spend with it, the more sense it makes. This is a genuinely accomplished little amplifier that packs considerable functionality into a small chassis, but shows very few signs of compromise across its features. Connected to a capable pair of loudspeakers, it is a convincing one-stop solution that also offers impressive multi-room functionality should you desire it •







OUADRAL CHROMIUM STYLE 8



Award winning speaker of the year Chromium 8's can be seen and heard at the North West Audio Show.

RRP from £1900.00



For your nearest dealer call 0203 5442338 More fantastic products from NuNu Distribution Limited www.nunudistribution.co.uk

NuNu Distribution Ltd



NORTH WEST AUDIO SHOW 2017

The very best in Hifi and Audio in fabulous surroundings!

24 - 25th June **Cranage Hall, Cheshire**

Free parking and Free entry Live music www.audioshow.co.uk

Great deals on overnight stay *Quote "Audio" when booking

For your nearest dealer call 0203 5442338 More fantastic products from NuNu Distribution Limited

NuNu Distribution Ltd





Radio active

With FM, DAB and streaming, Rotel's new T14 is a veritable vision of versatility that has **David Price** going radio gaga

ollowing the release of Rotel's CD14 silver disc spinner and A14 integrated amplifier (HFC 421), here's the matching tuner. It's a pretty sophisticated bit of kit, sporting RDS FM radio tuner complete with DAB+ functionality and 30 presets to manage your listening favourites. Then there's the wireless audio streaming capability, courtesy of DTS Play-Fi, which needs the user to install a free Rotel control app. This comes in iOS and Android flavours, and for good measure offers access to Spotify, Pandora, Tidal, Rhapsody, Amazon Music, Deezer and more. In other words, it's more than just a radio.

This new tuner has the same crisp backlit LCD screen as its A14 and CD14 siblings. It looks good but isn't the world's easiest thing to read from a distance. One surprise is that you can't get into the unit's setup via the fascia controls - perhaps it's a way of making sure that you don't lose the supplied remote control with its precious 'Menu' button? Otherwise, the front panel is very comprehensive with the three main option buttons - Play-Fi, DAB and FM - mounted centrally under the display.

Around the back there are two aerial sockets for the wi-fi connection, but no Ethernet port. That's a strange omission because wireless is noisy, has limited throughput of data and is prone to dropouts. Still, as the company

offers the option of a USB/Ethernet adaptor, wired is possible if you're prepared to shell out. The supplied DAB antenna is one of the best I've seen, complete with a magnetic base mount. Of course, you can use your own roof-mounted aerial too and get better sound and lower noise. There's also a coaxial digital output, meaning you don't have to use the built-in Texas Instruments 32-bit/384kHz DAC. The rear also sports an RS232 port, USB socket and Rotel Link in/ out and 12v Trigger in/out for the matching A14 integrated amplifier.

Sound quality

Considering its £699 retail price, it is hard to fault the Rotel sonically. Even with DAB, famous for its poor sound, the T14 turns in a decent performance. We all know about the poor bit-rates of this format and ancient, MP3-era codec, but spoken voices on Radio 4's Today programme sound less anaemic than some other tuners at the price. Indeed, they lack the nasal tone that some possess, while Simply Red's Fairgound on Radio 2 is a gently pleasant experience, if not exactly thrilling. The music has a subtle rhythmic quality, with a fair degree of detail and a slightly sweeter tonality than expected from this source.

Switching to FM as expected gives a commensurate improvement, thanks to the greater fidelity that analogue VHF radio is capable of delivering. A

DETAILS

PRODUCT Rotel T14 ORIGIN Japan/China

TYPE Tuner/streamer

WEIGHT 5.1kg

DIMENSIONS (WxHxD) 430 x 93 x 334mm

- FEATURES

 32-bit/384kHz
- DAC RDS FM/DAB+
- radio
- Play-Fi streamingiOS/Android control app

DISTRIBUTOR

TELEPHONE 01903 221500

rotel.com

broadcast of Bohuslav Martinu's Concerto No. 1 for Cello is a joy. It gives a decently powerful rendition, with punchy dynamics and a fine sense of scale. String tone is impressively clean and well resolved. Whichever way of listening you choose, the T14 proves a mature and capable performer with nothing to criticise given its price.

While it's not the most charismatic performer, its hands-off approach makes for a smooth, lilting sound. With Primal Scream's Loaded, bass isn't the deepest, but the music is delivered in an accessible and easy-listening way. It has a pleasing, likeable character that neither amazes nor disappoints. Devoid of any particular nasties, the T14 remains unfailingly smooth, yet serves up enough spice to keep you engaged.

Conclusion

Making rivals look underdeveloped in terms of features, the T14 is a capable product that won't disappoint. Its greatest appeal will be for existing Rotel 14-series owners, but it's still good enough to be considered in its own right. The only caveat is that competition is very tough in this sector, so try before you buy •





History in the making



After half a century of manufacturing specialist hi-fi, Sugden is still going strong. **David Price** talks to Patrick Miller, MD of this uniquely British company

t might be an extremely popular way to listen to music, says Patrick Miller, but streaming is not for Sugden. "We've seen what has happened in the market, with other companies doing this. A few have been very successful at it, but there have also been a number who have struggled purely because they haven't quite got the software or interface right. It's a massive investment and also a moving target too. It's not Sugden's skill set – we're audio engineers. Computers aren't something that we're particularly interested in."

That's an honest appraisal from this unique British company – and a sensible one too. Take one look at Sugden's 50-year history and you'll see that it's all been about amplification. "Well we do still make CD players and, surprisingly, we've seen a really significant increase in their sales over the last eight months – they've trebled. That's something we weren't expecting at all. It seems that a lot of our customers are going back to something a bit more tangible. That's where vinyl comes in as well. There is something that's not as sexy with streaming."

Sugden, says Patrick, has always supported vinyl. "Oh yes – we have eight turntables in

our listening room right now and we've never given up on the format! I mean we've got a fair amount of vinyl in the factory, but I must admit that a lot of it is mine. When CD came out and there were people offloading vinyl at car boot sales, I was there buying it all. I've got boxes I've not been through yet, but we've got 13,000 square foot so we've got a lot of space for the vinyl we're yet to buy!"

In the beginning

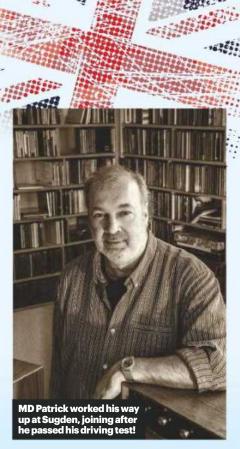
The company was started in 1967 by James Edward Sugden, an electronics graduate who worked with EMI and Granada Studios. "Actually," says Patrick, "his first company was called Research Electronics. It manufactured test equipment and scientific instruments for schools and colleges. It did stuff for the nuclear industry, and so on. But he was always interested in hi-fi and music, had a very creative mind. He was working with transistors - which of course weren't a popular device for audio back then - and devised a system to make them work like a valve. He developed the world's first commercial pure Class A solid-state amplifier in 1966, and by the next year had started manufacturing it for Richard Allen, which was a local loudspeaker manufacturer. That

was called the A21, a 12W pure Class A integrated amplifier. It had tremendous success and the press picked up on it, so it reverted back to J E Sugden and Company, which was a sort of offshoot of Research Electronics – and thus the Sugden A21 was born."

Patrick says that at the same time he was developing the C41 and A41 preamplifier/power amplifier combination. "That was, I think, 40W per channel – certainly a lot healthier than the integrated. Then back home, under the Sugden banner it was called the A51 and C51 with a slight increase in power to 25W. I think they were received very well. He did a lot of technical articles to back them up in – I think – (HFC sister mag) Hi-Fi News magazine. There was quite a lot of controversy over Class A operation to start with. It wasn't a cheap item then – from memory it cost something like 69 Guineas, a hell of a lot of money, real high-end stuff.

"Amazingly, we have a lot of original customers who still use the original A21", announces Patrick. "They have come into the factory and often say they chose the Sugden over a similarly priced Quad because we and they are from Yorkshire! The first factory, or the first place that Sugden was building

SUGDEN INSIDER FEATURE



equipment, was an end terraced house, quite a big one. It was there for a few years before it moved to a proper factory unit that was an old mill building in Cleckheaton. Then we moved here in 1981, which is roughly when I joined. Mr Anthony Miller – my father – took over from James Sugden. He came out of a corporate background and was looking for something to do. I had just finished my college engineering course and came in here for a summer job. I quite enjoyed it and at that time I was learning to drive. When I passed my driving test my dad told me to get in my car and go and work for Sugden, so I did!"

Times fly

"Things haven't really changed a lot since then," declares Patrick. "Back then the value of the product was lower and we were more about volume production. Saying that, the company has expanded. When I started at Sugden's there would have been about 15 people here and now we're 12, but we produce a lot more value. Instead of making amplifiers selling at £160 it's gone up quite a bit since then because we've moved up market. We're still using the same production methods we were using in 1967 - and this is one of the real sales points we have; each piece of equipment is hand made by one person. All the circuit boards, including populating them, is all done by hand. We have an engineering company downstairs that does a lot of the casework and all the fine finishing. It really is a self-contained unit and has been like that since 1967. I must admit it makes things very interesting when you are at the very beginning of the chain with the manufacturing and from bits of sheet metal to a finished product!"

The majority of Sugden products are exported. "We only sell a very small amount in the UK. I'd say up to 95 percent is for export. When you are selling things to the Far East and you can tell people exactly how the product is made it certainly adds an extra dimension to it. They can feel that

Sugden can restore and fettle practically any of its historic products, should a customer wish

people are involved and it is a hand-made product. We do a lot out there – Hong Kong, China, Taiwan – plus certain other new markets like Vietnam. We've started to do more in the United States as well now; we used to do a lot of sales to Russia, but that has slipped in the last two or three years. Europe has been very good for us, especially France and Germany. The biggest-selling product by volume is the A21 SE integrated amplifier, and by value it's the Master Class integrated."

It's interesting that technically, these are based very heavily on that original A21 from way back when. "But once you start going up in power output," says Patrick, "then that circuit becomes a lot more difficult to use. So



James Sugden was very interested in amplifier design, right at the time that the first solid-state products appeared. He thought those early Class AB amplifiers sounded harsh due to switching distortion, and devised a way to keep the output transistors powered up at all times. This made for high power consumption and low efficiency, allied to lower power output, but the sonic gains were thought worthwhile. First off the drawing board was the Si 402 Class A power amplifier, which produced 15W into a 15ohm load, and this was compared with a Class B version – the Si 403 – which gave far higher distortion at lower levels.

This proved his concept and he was soon making the A21 [pictured] for Richard Allen, rated at 10W into 60hm. The Series Two followed one year later, with an extra 2W rated power, now into 80hm. The third version was substantially improved and boasted 20W per side. The R21 matching tuner came out in 1967, and was very well regarded. The A48 of 1973 ran heavily biased towards Class A and had a lot more power (40W), and its Mark II replacement appeared in 1976 with 45W per side. The A21a resurfaced in 1989, and since then the amplifier has had periodic cosmetic changes but remains pretty faithful to the original design.

To celebrate the company's 50th anniversary, it is launching an ultra high-end mono block power amplifier retailing for around £24,000 this year, called the Grande. "As it is 50 years since Jim Sugden designed the world's first pure Class A solid-state amp, we thought we'd bring out something as shocking as this", says Patrick Miller.



you have to start looking at different ways to do it. Some of the bigger power amplifiers in the Sapphire range have what we call a 'floating bridge'. It has four pure Class A amplifiers in one chassis that is effectively like the original design, but bridged. You notice an improvement in performance because you end up with double the current - even if it is only rated at 40W, the current it produces is almost instantaneous and there is plenty of power in reserve. To go with this, we have VCV (voltage-current-voltage) circuits in our high-end preamps - and it's a way of putting a signal into the preamplifier without the signal actually going through the volume control.'

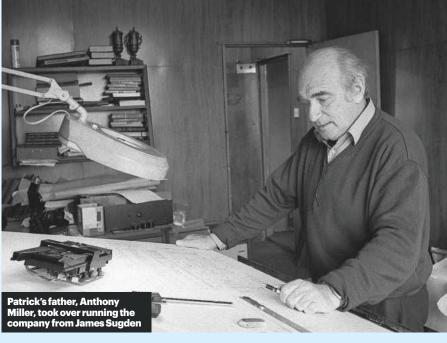
Back to the future

Patrick is proud about Sugden's servicing ability. The company can restore and fettle practically any of its historic products, should a customer wish. "We actually get people who come to us with their A21 that they bought in 1967 and haven't replaced the thing yet, and want it working like new again! Of course, we're happy to help and do our best for them. We've got an area of the factory where we do repairs and we have five or six in at the moment; someone added up the age of the products and it was, I



INSIDER FEATURE SUGDEN





think, 208 years! With a 40-year-old amplifier, we can go as close back to its original spec as possible. You've got to remember that there were some components made for those amplifiers and there are two or three items that we just can't get any more, but the majority of things we can. Because they were simpler, the parts in the really old ones seem to last longer; things were really made to last in those days."

Fascinatingly, a typical Sugden customer varies by market. Patrick says that many British buyers tend to be more mature, but

"When I passed my driving test my dad told me to go and work for Sugden, so I did!"

in China the age is a lot lower. "We're a handmade product and they are looking for that – it's a bit of a trendy thing to have. We tend to stick to tightly defined market niches – it's easy to sell the A21 at the price it's at, but a low power amplifier at 10 times its price would be tricky. That said, when we do bring out new products it tends to take a while to get established in the market, then things gradually pick up. After some initial launch sales the product goes out to the distributors and then gets out to the retailers, and sometimes we don't get anything back for a year."

A good example of this is the Masterclass DAC. "It goes against the grain because it's a 16-bit design. We actually came up with a 24-bit/192kHz DAC, but listened to it and decided it was no good with CD. We went back and redesigned it, but to no avail. We just couldn't get the sound that we wanted. So we invented our own non-oversampling

filterless DAC – well, filterless in the digital domain. We put an analogue filter in the output and I thought we're not going to sell this. It started very slowly indeed, but a year down the road and we're selling lots of them. Indeed, it has taken us by surprise, but if you're listening predominantly to CD – as most people do – it's actually really good. We do have quite strong opinions about hi-res digital; it has stimulated the market, but it's not all that it's cracked up to be and all kinds of fiddling around is often done with the downloads."

That's the way to do it

Sugden is an unusual way to run a hi-fi company in 2017. Go back 50 years ago and it was far more representative of how things were done. But in this era of global corporatism and outsourcing, the company seems very quaint and old fashioned. Patrick says the secret of its success has been knowing what to do, not over reaching itself and having the right people. "It is something that we are very proud of and we're especially proud of the people working here, many of whom have worked here for a very long time. Recently we had somebody retire

who has been with us over 40 years. She was actually involved with building the original A21. We've got other folks here who have been here 30 years, one who's been 40 years. Then we've got people who come in as well. Finding people to do what we do is not easy. It becomes fairly obvious that the most important part of JE Sugden and Co is the workforce – without a shadow of a doubt."

There are few companies like this, and it goes against all the established wisdom that modern management consultants spout. "You have to have a business plan, but actually making the hi-fi that we do is permanently a bit like a hobby. As long as you are financially sorted then it is one of the most enjoyable things you can do. The things that we develop here are the things that we want to develop. We don't really give a lot of thought to if it is going to sell – but fortunately it usually does. We only produce products when we get excited about something and think 'yes, we'll do this!' We're still very much a family business, so we've got no intention to stop doing what we're doing because we really enjoy it." Patrick Miller wryly adds, "Oh, and I can't do anything else!" •





CELEBRATING QUICKSTEP

HI-FI WORLD'S BEST LOUDSPEAKER CABLE AWARD 2016

Capture the Excitement, Emotion and Drama of your Music



EXCLUSIVE FEATURES

Balanced Sound

Musically Entertaining

Stunning Clarity

Sharp Definition

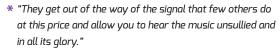
Authentic Imaging

Excellent Timing

Effortlessly Open

Read the reviews in full at www.backrhodium.com to discover how these reviewers describe the outstanding Quickstep sound quality.

"Quicksteps were surprisingly balanced in tonal terms while the design offered a naturalistic reflection of the music that was entertaining and extremely natural in its approach." Paul Rigby- theaudiophileman.com



Jon Myles, Hi-Fi World

"For sound per pound this is an excellent choice for the audiophile offering a detailed soundstage with exceptional speed, and a sound that was very open and effortless."

Janine Elliot, Hi-Fi Pig







Go buy your own Quickstep Cable NOW at your nearest Black Rhodium Dealer or via

www.blackrhodium.co.uk

Hear QUICKSTEP at these dealers



Unico Series



Hybrid hi-fi electronics from the masters of valve audio

The Unico range of hybrid electronics from Unison Research combine the warmth of valves with the power and the accuracy of solid-state systems. All Unico products are recognised by their thick sand-blasted aluminium fascias and solid, reliable build quality.

Unison Research are seen around the world as a leading manufacturer of high-end audio systems, and the quality shines through in the Unico range. First-class components, solid build and phenomenal sound; all designed and assembled in Italy.

www.unisonresearch.co.uk



YOUR LETTERS & QUESTIONS ANSWERED

THIS MONTH



ED SELLEY

EXPERTISE: REVIEWER Active in the industry since 1999. Ed's first record was Boss Drum by The Shamen. He splits his time between reviewing and protecting hi-fi

kit from toddler son Will.



NEVILLE ROBERTS

EXPERTISE: ENGINEER Neville has an eclectic taste for classical baroque and iazz. His wife was forced to marry his transmission line speakers in the eighties and he collects BBC test card music.



JASON KENNEDY

EXPERTISE: REVIEWER Editor of HFC from 1998 to 2001, Jason's first turntable was Rega's Planar 3 and Elvis' 40 Greatest Hits was his first vinyl, so don't go stepping on his blue suede shoes.



DAVID PRICE

EXPERTISE: REVIEWER DP two-finger typed his first hi-fi review 25 years ago. Since then he's edited Hi-Fi World and HFC. He describes himself as an "unreconstructed analogue addict".



CHRIS WARD

EXPERTISE: REVIEWER Like his first kiss, Chris will never forget the sound of his first amp - an Aura Evolution VA-100. War Of The Worlds and Fleetwood Mac's Rumours were his first records.

Email us at: letters@hifichoice.co.uk or write to: Hi-Fi Choice Letters, AVTech Media Ltd, Suite 25, Eden House, Enterprise Way, Edenbridge, Kent, TN8 6HF Your letters may be edited before publication and we cannot enter into personal correspondence



copy, owing to its signal

converters. I have also had

conflicting advice regarding

plugging in an external USB

soundcard; some say it will

improve the quality others say its

sample rate is restricted and will

stop me from getting a perfect

copy. Is there anything you can

tell me to help me get as near

to the original sound without

could take a few years, so I want

Keith White, by email

loss of quality or dynamic? This is a one-off project that

to get it right first time.

and will be adding a Naim NDX player/streamer in the near future. My question is about getting the best possible digital copies of vinyl to play on my system. I buy all my new music in WAV format, but my problem is that I am currently trying to make digital copies of a very large vinyl collection to play on the streamer.

I am doing this by playing a into my PC using software called

More ways to get in touch:

You can also send your questions to us via social media: twitter.com@HiFiChoiceMag facebook.com/hifichoice.co.uk

Going digital

I have a reasonable hi-fi setup

reasonable turntable/cartridge into a high-quality mixer then Wavepad. However it has now come to light that using my PC may restrict the quality of the

from Pro-Ject, Burmester and Leema Acoustics, but the Korg is sensibly priced and very capable.

NR: Your Wavepad software is certainly up to the job, but the soundcard in your PC is unlikely to be. Many PC soundcards can only record in CD quality of 16/44 or

What's the best way to retain quality when digitising my record collection?

thereabouts. To record at, say, studio master quality of 24/192 requires extra hardware and an additional software driver for Windows PCs. As Ed says, you need an analogue-to-digital converter plus a DAC to play back your recordings directly from your PC through your hi-fi. This will be useful for checking the final result before copying to your Naim NDX. These ADC/DAC devices connect through a USB port (preferably directly on your

WE ASKED...

What's the best music streaming service for you?

- Spotify Tidal Apple MusicOther
- 16% 38% 9% **37**%

Results from twitter.com/hificho Go online for more polling action

ES: Hi Keith, the most effective method is to give the computer as little to do as possible. Something like the Korg DS-DAC-10R (see p115) will connect directly to an MM cartridge or the output from your phono stage, perform the A-D conversion and simply ask your computer to store the file, which the software supplied with the Korg will let you edit and tag correctly. Other systems exist

Furutech's ADL GT40a DAC **ADC** should be just the ticket for Keith





Give your music a stage.



LETTERS

PC and not via an external USB hub) and bypass your computer's soundcard completely. One such device is Furutech's ADL GT40a DAC/ADC (HFC 399), costing just under £400. This also has a high-quality headphone output for monitoring during recording and editing using Wavepad.

➤ Moving forward

Hi, I could use a pointer on where to go next with my hi-fi setup. It currently consists of: Inspire Hi-Fi's Black Magic turntable/ Denon DL-160 cartridge, Monrio Nasdaq CD player, Auralic Aries Mini (2TB HDD), Rogue Audio Cronus Magnum (KT120) and Epos m22i speakers. My listening room is about 4.5 x 3.9 x 2.4m.

I listen to almost any kind of music, so by necessity what I have is all fairly neutral and 'uncoloured'. I wonder if I could improve the sound anywhere, though. I think that the speakers may now be a little behind in performance to the rest. With around £2,000 budget, what do you see as a way forward? Keep up the good work, great mag!

Dave Herd, Edinburgh

ES: Hi Dave, Spendor's A5R (HFC 413) might be the better candidate for you. It presents a forgiving load to an amplifier and is pretty much the textbook definition

Spendor's A5R is perfect for a neutral performance



of neutral and uncoloured. As a bonus, it's beautifully built, looks lovely and is pretty forgiving in terms of placement.

CW: Your setup looks good on paper Dave. I'm not familiar with the CD player, but the analogue and Auralic sources are sound and the meaty Rogue valve amp has some drive. The Epos speakers were great in their day, but as Ed suggests

Can you suggest some decent loudspeakers no deeper than 26cm?

maybe you'd benefit by auditioning some modern alternatives. Try Russell K's Red 100 on decent stands or designs from the likes of PMC or ATC. Prior to speaker replacement, it may also be worthwhile sampling some new mains leads, speaker cabling and interconnects in case this unlocks some of the qualities you seek. Some valve amps can be relatively finicky over speaker cabling and impedance matching to speakers. You may find a dealer that will allow you to sample cables before you buy or give you flexibility to return those that seem less suitable.

Space matters

I'd just like to say that without your magazine I wouldn't have as good a hi-fi as I currently have. Thanks for the good advice and reviews over the years! I have a budget of £2,000 to spend on speakers and would appreciate your expert advice.

My listening room measures 5 x 3m with my current speakers along the 5m wall. I need compact speakers due to the limited space I have for them. Speaker height isn't an issue, but the maximum speaker depth I could go to is around 26cm. Due to this, I've read reviews of the Neat Motive SX1, Kudos X2 and the Spendor A5R. These are appealing as they meet my size requirements and are apparently unfussy about being close to the back wall.

My current setup is a Technics 1210 Mk2 turntable (Origin Live modified with OL Encounter Mk3C tonearm, Ortofon 2M Black cartridge), Dynavector P-75 phono stage and Exposure 3010S2 amp. I also have an Innuos Zen and a Chord 2Qute2 DAC and high-end cables throughout the setup.

The music I play most is classic rock, such as Pink Floyd, Jethro Tull and Guns 'n' Roses.





Can a £39 insect make all your CD files sound better than Hi-Ros?

Yes and no: Using the same equipment and a quality DAC, a 24/96 file (for example) will always sound better than a CD 16/44.1 file ... but, even a single JitterBug will often allow a CD file to be more musical and more emotionally stimulating than a Hi-Res file without the benefit of a JitterBug.

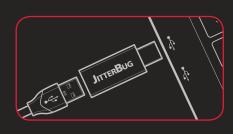
Noise is the problem. Real noise—the kind you can't hear directly. Most often, the word "noise" is used to describe tape hiss or a scratch on a record, but these sounds aren't noise; they are properly reproduced sounds that we wish weren't there.

Problem noise is essentially random, resonant or parasitic energy, which has no meaning. It can't be turned into discrete sounds, but it does compromise signal integrity and the performance of everything it touches.

JitterBug's dual-function line-conditioning circuitry greatly reduces the noise and ringing that plague *both* the data and power lines of USB ports, whether on a computer, streamer, home stereo or car audio front-panel USB input.

A single JitterBug is used in between devices (i.e., in series) as shown below. For an **additional "wow" experience**, try a second JitterBug into another USB port on the same device (such as a computer). Whether the second port is vacant, or is feeding a printer or charging a phone, JitterBug's noise-reduction ability is likely to surprise you. No, the printer won't be affected—only the audio!

While a JitterBug helps MP3s sound a lot more like music, high-sample-rate files have the most noise vulnerability. Try a JitterBug or two on all your equipment, but never more than two per USB bus. There is such a thing as too much of a good thing.





Loads and loads and loads of specials available...

www.pjhifi.co.uk



Call in to the shop, telephone or email now.

New boxed unopened, ex demo, second hand...

Too many to list here...

Anthem/Paradigm, Arcam, Audiolab, Audiovector, Bowers & Wilkins, Cyrus, Dyn Audio, Focal, ISOL-8, Linn, Neat, Naim, PMC, Quad, Rega, Rotel, Sennheiser, Spendor, Trichord, Van den Hul.

The Chord Company (Speaker cables/interconnects) and others.

LETTERS





Are there any speakers in addition to the ones I have mentioned that would meet my requirements? Also, which do you think would be best in my setup?

Arron Cooper; by email

JK: Nice system Arron. Of the speakers you have shortlisted I would favour the Neat or the Kudos, I suspect that they are better suited to your musical tastes than the Spendor. The only other option I would add to your list is the ATC SCM11, this standmount is small enough for your room and is happy to sit close to the wall, what's more it's capable of delivering the power and timing that benefits classic rock, yet it is subtle and revealing at the same time. The ATC is a little power hungry, but I suspect that your Exposure is up to the job.

ES: For me, it's got to be the PMC twenty5.21 (HFC 420). It's happy in confined spaces and delivers a truly sensational performance. It might be a bit tight on the depth measurement, but is one of the biggest-sounding small loudspeakers I've heard recently.

≥ Starting together

Hi there, my wife and I have been audiophiles for years although we have not invested in any very 'serious' equipment until now. In a nutshell we would like to get a basic setup, which we see as: a network player, DAC, amps and floorstanders. We have been reading your mag for a number of months, but still feel overwhelmed by the choice. Although our local high-end store has been very helpful, they suggest we choose

two sets of speakers based on reviews. They will then choose the other components, set up a demo and then we will be able to compare them and make a choice.

Aside from the obvious bias that could potentially be introduced by an unscrupulous or inexperienced vendor, does it really come down to a choice of two or should we be insisting on a comparison of five systems, 10 even?

In terms of budget, we would like to spend less than £15,000 on the entire system. Our room is around 11 x 16 feet and our music choices vary from electronic

Why is our dealer suggesting we only audition two sets of loudspeakers?

to classical. Any advice you can offer on how to go about choosing equipment and any suggestions on good choices to go for would be much appreciated.

As a side note, we currently have various devices playing into a Denon PMA-700AE, driving a pair of KEF Cresta 10 standmounts.

Paul, London

JK: Hi Paul, that sounds like a good problem! The issue with comparing lots of different options is it becomes confusing. Your dealer is probably right and will be able to offer you a second comparison once he has an idea of what you like. The other thing you need to try



"This, in vinyl terms, is revolutionary."

Paul Rigby, The Audiophile Man, Dec 16

"The most effective cleaning machine that I have ever encountered."

Jacob Heilbrunn, The Absolute Sound, 234

"It helps an LP become the vinyl it always wanted to be."

Alan Sircom, Hi-Fi Plus magazine, 117

Audio Desk Systeme GLÄSS Pro Vinyl Cleaner - £2,295



BUY NOW!

www.russandrews.com or call us on 01539 797300



NORSE 2 CABLES

SUPERIOR TECHNOLOGY, SUPERIOR PERFORMANCE

MONO-FILAMENT TECHNOLOGY MECHANICALLY TUNED LENGTHS ASYMMETRICAL GROUNDING SILVER-PLATED, OFC CONDUCTORS EXTRUDED FEP INSULATION



MAKING THE CONNECTION

LETTERS



is to hear the speakers in your room, this is the one thing that only a home demo can reveal and it's critical. I would recommend a Naim and PMC system consisting of a Naim NDX (£3,610) network streamer and DAC, Supernait 2 (£3,050) integrated amplifier and PMC fact.8 speakers (£6,495), combine this with an Innuos Zen (£1,499) network server and you will have a system capable of reproducing any type of music in an effortless and enthralling fashion.

ES: I agree with Jason and think that the dealer is on the right lines. Introducing a large number of choices will run the risk of creating a 'wood for the trees' moment and add to the slightly overwhelmed feeling you mention. If there is a third speaker that really stands out as a logical candidate, that would be a fair request to add but trying to listen to all of them is likely to lead to a greater sense of confusion than is ideal.

CW: Unless money is no object, I'd consider spending less initially, to avoid the feeling that this system needs to achieve perfection. For me, system matching is as much a journey as a destination. The key is hearing musical virtues on the way that really speak to you both. Imagine you were spending £500 on a bottle of wine. Tasting many options won't help unless you gain confidence in identifying the characteristics you personally favour, and you can start to weigh up those benefits vs cost. Starting with £20 bottles will help you lock down the things you are looking for with less risk of a big decision that doesn't truly satisfy.

Go to some hi-fi shows and visit dealers further afield until you hear speakers in a modest room that really grab you. Given the importance of the speaker decision, I'd be inclined to look for a dealer that will visit or allow you to borrow/return speakers. Alternatively, via forums, find

other audiophiles in your area that might be prepared to bring their speakers to your space to demonstrate their different sonic qualities. This may reveal some second-hand bargains and also result in some new friendships.

≥ Each to their own

Nigel Williamson's piece on the resurgence of tape (Has the world gone mad, HFC 417) got me thinking. Although he is horrified by the idea on audio quality grounds, for a lot of people the advantage is a big plus – even if the sound isn't audiophile grade. The same applies to CD, now being written off as lower quality than vinyl.

The revival of tape is a reaction against the overly complex jargon of hi-fi today

CD may not have the silky smoothness of 24/192 files, but for a lot of people, listening at non-headbanging volumes it's perfectly fine and doesn't need endless adjustment. Yes I understand the need to tweak/fiddle, but surely what matters is the ease of use, not how long it took to set up an arm for a different stylus/cartridge etc.

I recently bought the mono re-issue of *Sgt Pepper* on vinyl and have played it only once. Partly to preserve it and partly to digitise it to 24/96 for listening on my Fiio X3/Q-DAC/Fidelio X2 system. Even then, the occasional click annoyed me – I like my music to be click-free, so CD/hi-res suits me better. And no, hardcore vinyl



SPRING PROMOTIONS ONLINE NOW! at russandrews.com



Speaker Zapperators are designed specifically to absorb RF and reduce noise at the point of speaker cable termination.

"Frankly I was not expecting much, if anything at all, but - Ouch! - there was a difference and it was not small." Martin Colloms, HIFICRITIC

15% OFF in our Spring Promotion Speaker Zapperators per pair WAS £148 SAVE £22.20 NOW £125.80



60 DAY MONEY BACK GUARANTEE

We are so confident that you will love the Speaker Zapperators™ that we give you 60 Days to try them at home, in your own system - if you're not 100% satisfied we'll give you your money back.

BUY NOW!

www.russandrews.com or call us on 01539 797300 OFFERS END 19th April '17







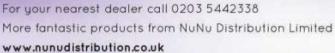


KENNERTON ODIN HEADPHONES





KENNERTON EGO HEAD AMPLIFIER





LETTERS



For many, the simplicity of the humble cassette takes some beating

fanboys, I'm not going to buy a new record deck just to play back one mono disc at optimum settings. And that's my point. Hi-fi has always had the 'endless search for the perfect sound' side to it and that's fine, but when people just want to bung on something for casual listening, the downside of complicated kit can work against educating the masses about the hobby I've been interested in for over 40 years.

The nostalgic revival of tape is in some ways a reaction against the complexity and incomprehensible terminology, which has always been a part of hi-fi and these days seems to be increasing and as a result is frightening people off.

John Malcolm, by email

DP: An excellent point, John. Being a hi-fi reviewer a generation ago was simply a matter of getting a product out of the box and plugging it into an amplifier, loading a CD, pressing play and sitting back to listen. The setup took minutes, and if you only got sound on one channel, it was usually clear why - you twiddled the connectors! Now, there is so much that needs setting up. You need passwords, apps, firmware updates and so on. Often it takes hours and even a call to the manufacturer to get it going. If it's bad for us, it must be hell for normal hi-fi buyers. In short, hi-fi is getting far more complex for 'civilians', in the name of functionality that not everyone wants or needs.

In this context, it's easy to see why many people still like cassette. I run several old classic cars, and they have cassette players and there's nothing easier than recording a radio programme on a C90 for a long drive. I've got an old Sony cassette deck I listen to in the bath and when I'm out in the garden I still use an old 'ghetto blaster'. My point is that cassette is hugely convenient when you've got the equipment, and never do you have a corrupted file or iTunes telling you it can't play FLAC. With a good, properly calibrated deck, it makes very good recordings. It is a great format; cheap, good sounding and universal. No wonder we took it to our hearts.

CW: Feeling a connection with recorded music has never been simply a function of bandwidth and decimal points, and we are possibly no closer to defining emotional engagement. I wonder, though, whether hi-fi is partly predicated on a listener applying sufficient attention and seeking a higher quality connection with their music? Food could be an interesting analogy here. If you just want to keep the wolf from the door, then the quality of your food isn't important. However, if you 'choose' to luxuriate in the full sensory feedback available, you'll get more satisfaction from higher quality food, provided you give it the time and attention it deserves. In this respect, maybe fans of hi-fi only ever get out what they put in? Thought-provoking thread you've started here John...





SPRING PROMOTIONS
ONLINE NOW!
at russandrews.com



SAVE £84

When you buy a 1m Russ Andrews PowerKord-300™ with WATTGATE™ 350 Rhodium EVO IEC

WAS £336 SAVE £84 NOW £252

Other lengths available: save £84 on each length. 25% discount applies to 1m cable length only.



60 DAY MONEY BACK GUARANTEE

We are so confident that you will love the PowerKord-300™ that we give you 60 Days to try it at home, in your own system - if you're not 100% satisfied we'll give you your money back.

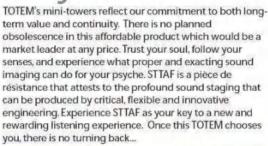
BUY NOW!

www.russandrews.com or call us on 01539 797300 OFFERS END 19th April '17

Discover yours

Totem's first floor standing speaker, STTAF, designed in 1997! The ultimate challenge was to provide a floor-standing mini-tower, which incorporates the elements of our mini-monitors yet eliminates all the flaws inherent in tall columnar designs. Uncompromising design engineering, microattention to every detail, lengthy critical listening tests -- the attributes long associated with all Totem products -- have resulted in a mini-tower worthy of the Totem nomenclature. Internally, the cabinet is built with two crossbars set at slightly different angles. One has only to listen in order to be convinced of their resulting success. The cabinet joints use a unique lock mitre system. The cabinet is finished with four different veneers: cherry, mahogany, walnut and black ash. The standard added plinth with four spikes can be mounted by our specialists, although optional, using the unique Totem "Claw" with ball bearing to floor system will give even better results. Bi-wireable through solid gold-plated binding posts. The cross-over uses sophisticated oil capacitors and teflon isolated wiring.

Totem STTAF £1,899/pair







HFC nov 2016 "The Totem Sttaf throws out the widest, deepest soundstage of all with the most convincing spatial perspectives and truly nailed cohesion." "During the Marcus Miller track I'm so captivated I forget to write any notes at all which, in the end, tells you all you need to know. An absolutely magical little speaker



London Area O'Brien Hifi, LONDON SW20 0TW Sonata Systems, LONDON, NW6 South East Rayleigh Hi Fi, RAYLEIGH Rayleigh Hi Fi, SOUTHEND Rayleigh Hi Fi, CHELMSFORD The Audio Barn, HARLOW South Hidden Systems, HARTLEY WINTNEY Norman Hobbs, HAYWARDS HEATH Summer House Sounds, ALTON Future Audio, EAST GRINSTEAD South West Audio Destination, TIVERTON Midlands Cymbiosis, LEICESTER Hifi Gear, HEREFORD Hidden Systems, KIDDERMINSTER Sound Academy, WALSALL Moorgate Acoustic, SHEFFIELD

Dough Brady, WARRINGTON Audiovation, HUDDERSFIELD Loud & Clear, EDINBURGH Loud & Clear, GLASGOW



Anything vinyl can do...

With DACs making the aged compact disc sound better than ever, **David Vivian** thinks there's life in the format yet and wonders whether we're on the brink of a CD revival

keen was I to be the early adopter with the sharpest elbows and the coolest kit, I got a friend who lived in Tokyo to airmail me a Sony D50 Discman as soon it hit Ginza's audio stores. Back then I wasn't so much concerned it didn't sound as good as vinyl played on a half-decent turntable. I had one of those and reasoned that so long as I didn't jettison my entire record collection in a moment of binary thinking, I couldn't possibly be any worse off for embracing CD with open arms and looking forward to how it might evolve

loved it when compact disc was invented. So

Some 33 years and many thousands of space-sucking plastic jewel cases on, I still get a kick from buying and playing the 12cm polycarbonate discs. Despite the statistical decline of the format that prematurely promised "perfect sound forever" (in fact, I'm inclined to think because of it), my listening habits are more CD-centric than ever – and for reasons I'll explain in a moment.

over the coming decades. It was a journey I had to take.

Meanwhile, the turntable I own these days – a Pro-Ject Debut Carbon – is considerably more modest and less needy than the Linn, Pink Triangle, Thorens and Michell that preceded it down the years. It doesn't get used as much either – certainly not to re-enact the regular rituals of my youth where the latest 12in sonic squeeze would be

99 percent of all recorded music in the world is Red Book standard

rushed home with reckless haste for a groovy date with a Decca London cartridge. Or, indeed, an all-nighter with

a Nagaoka. These days, I take the LP experience in smaller doses, partly as a trip down memory lane.

Like many of us, the story of my early musical loves is written in vinyl and a corner of one room in my house will be forever given over to its preservation. Occasionally, I'll be a bit revisionist and pop into my local secondhand vinyl emporium, Whitstable's iconic Rock Bottom Records, to buy a couple of once overlooked jazz fusion classics for a tenner. Very nice. But unlike the young people I see in HMV pawing through the ever-expanding racks of outrageously overpriced and poorly mastered/remastered mainstream vinyl, I haven't bought a new album in many, many years. Here's why. For 20 quid – by no means pricey for a new release – I can buy two five-CD boxsets. That's 10 CDs for the price of one LP. Vinyl has never been more expensive, CDs have never been cheaper. Go figure.

Of course, perhaps this quibbling over physical formats is wilfully missing the point. Streaming is where it's at for the masses while hi-res downloads cater for the audiophile fraternity. Against this the so-called vinyl revival is nothing more than a healthy (some might argue fashion-driven) blip and CDs are yesterday's tech barrelling towards legacy status and



During a chat with Chord Electronics boss John Franks last year, we agreed that the Red Book (16/44.1) format that gave life to the compact disc back in 1984 is only now approaching peak maturity and possibly on the verge of its own revival. As Franks points out, 99 percent of all recorded music in the world is Red Book standard.



Could David's beloved CD really be set for a revival like vinyl?

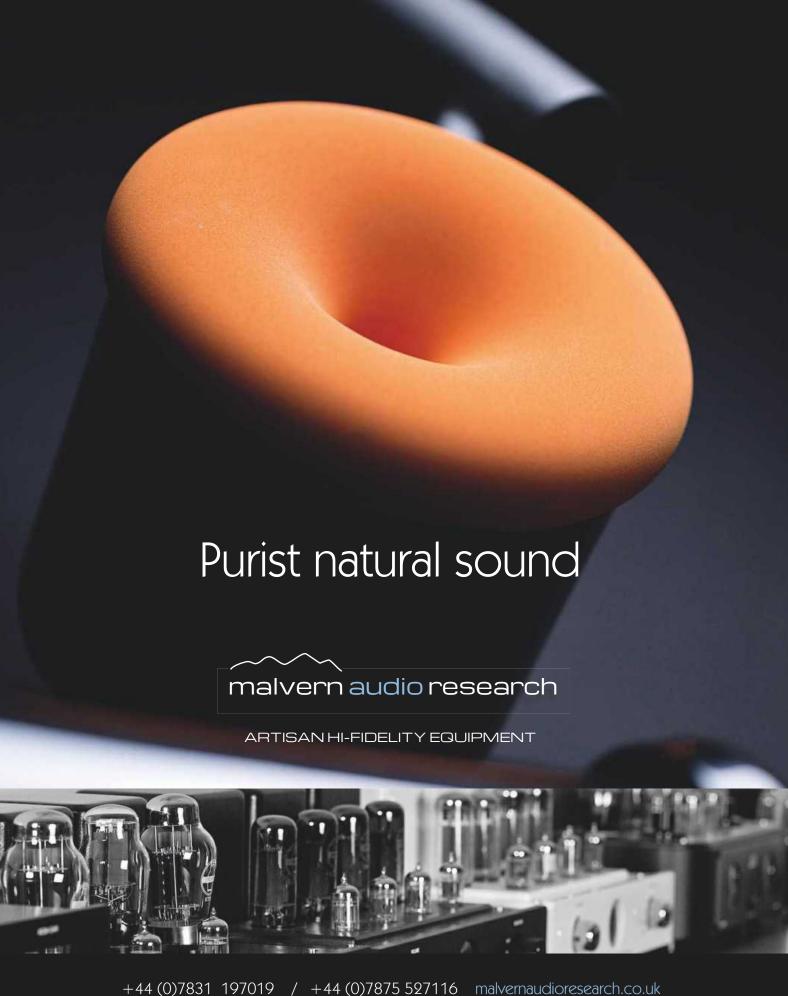
Take it as Red

"We're very interested in Red Book standard," he says. "If we can make RBS perform to the same standard as the very, very best hi-res, then everyone that has Red Book, and is still buying it, will be more than satisfied. That's our objective. I think a revival in CD is on the cards. I've downloaded albums that I really love, and every time I upgrade my phone's software I lose stuff. I think people are beginning to reconnect with the whole act of going out and buying music. People like to buy hardware. I mean, downloading is great and very useful and fun. But, nevertheless, you'll never be able to pass on your own music to your children. It's like leasing music.

"The thing is, the processing horsepower that Hugo and Mojo and DAVE are throwing at CD is between 500 and a few thousand times the processing power a normal DAC would have available to it. So really it's no wonder. People say 'I don't understand how this is at all possible, but Mojo seems to be outperforming my desktop DAC'. It's no real surprise because the parts that matter, the actual processing hardware, is so much more complex than would be available to the average desktop DAC maker."

And it's the Hugo that has accelerated my CD consumption, eclipsing not just my appetite for vinyl, but 'audiophile grade' downloads, too. Question is, can CD really sound as good as the best hi-res? It's something we intend to answer in a forthcoming feature. Stay tuned •





Class consciousness

As a wistful **David Price** looks back over his favourite amps, he considers the relative merits of Class A and Class AB models in this potted history of hits and misses

he first stereo amplifier I ever heard was a 1976 Sony TA-73 – a 10W RMS per channel Class AB design. From then on for a long while, my hi-fi journey consisted of Class AB amp after Class AB amp. The Sony was obviously limited in power and for

AB amp. The Sony was obviously limited in power and for me the name of the game was to leave this as far behind as I could. This meant that a 25W RMS per channel Trio KA-3700 followed – and golly, what a difference! By this point, I was 15 or so years old and had The Clash's *London Calling* permanently welded to the platter of my Garrard SP25. On *Brand New Cadillac*, I could hear the Trio thumping out the bass from my Wharfedale Chevin speakers in a way that the Sony just couldn't muster.

Glorious as all this was to a spotty adolescent with a burning desire for a moped and the ability to 'get served' at the local pub, something inside me said that actually, the little Sony amplifier was in some ways better. This shouldn't have been the case; the Trio was 10W more powerful and pretty much twice the price – so what could be going wrong? In my less punk rock moments, when I wanted to listen to more ballad-oriented music, the TA-73 seemed to have a nicer, more fluid nature to the way it went about making music.

This apparent tension between quality and quantity has pretty much underpinned my entire hi-fi life – and it has

No self-respecting early 20-something could live with just 10W per channel

been most marked with amplifiers. My next move was a big 80W bruiser of an amplifier from Pioneer and then I bought an early

NAD 3020, which had a meagre 20W per channel. You had to turn the volume control far further around, but the latter certainly sounded superior. Then came another powerful Japanese amplifier, followed by an NVA AP30 – the very epitome of eighties minimalism with just 30W per side, driving power-hungry Linn Kans. It ran right at the ragged edge and needed remedial surgery on more than one occasion, but boy did it sound sweet!

This pattern of 'repeat offending' – in hi-fi terms – meant that I was always going to embrace Class A at some point. Back in the mid eighties there weren't many Class A amplifiers around, because at that time the breed was terminally unfashionable. The rise of the MOSFET had made Class AB amplifiers sound more consistent and even relatively inexpensive ones could deliver fine sound and plenty of power. Myst's TMA3 was a case in point; despite being a 'cottage industry' British-built black box, it was extremely reliable (thanks to the Hitachi MOSFETs inside)



and had a gutsy sound for something so small. This was probably the hardest time to take a walk on hi-fi's wild side.

A chance encounter with an old, 1967 Sugden A21 really opened my eyes. To a young man in the late eighties, this was possibly the ugliest thing ever made – so I expected it to sound dire. Five minutes listening had me beguiled, and I was struck by the disparity between its styling and its sound. Beautifully open, spacious and musical, it made all the sharp-suited contemporary designs sound clunky, mechanical and crude. True, they had oodles more power, but with the Sugden singing as it did, who cared?

A touch of class

I no longer played The Clash every hour of the day; in its place were Smiths and Cocteau Twins long players which were far more enjoyable via the Sugden. Sadly though, I decided that a compromise was needed – no self-respecting early 20-something could live with just 10W per channel, given that parties were a more regular occurrence in my bedsit than the sight of me doing the washing up. And so I ended up with yet another audiophile anachronism – an early eighties Nytech CTA 302 receiver. It had some of the Sugden's sweet sound and a little more power, so fitted perfectly.

Since then, I've always vacillated between Class AB power and Class A poise. I used Sugden's IA4 integrated for several years − heavily Class A biased − and then Musical Fidelity's AMS35i, and loved both. I recently bought an early Musical Fidelity A1 and am still beguiled by its superb sound − even if it just cannot drive my Yamaha NS-1000M loudspeakers to any level. Right now, I'm running an Arcam P49 which is Class G, and sports a very clean and open sound not too dissimilar to the Sugden IA4, but with loads more grunt. Frankly, the only thing you can be sure about as far as amplifiers go, is that there's never one that's absolutely right for you − even if it's great fun searching ●



Class action: David's Class A Sugden IA4





Tackle these system assassins or your "upgrade" path will hit the buffers, and cost a fortune

COMPONENTS!

here are two pernicious, pervasive, unseen evils that lurk within all hifi systems, created by the system, and the damage they do is MASSIVE.

What are these assassins?

RF Interference: from mobile, TV and radio transmissions, also mains-borne - especially damaging in digital replay - that adds a hard, aggressive edge to treble and destroys imaging. It must be absorbed.

Vibration that's created within the system by the speakers and power supplies. Then it's carried everywhere by the metal cables, destroying detail, bloating bass and trashing timing.

Isolation is not the answer because it traps the vibration within the system. Instead it must be absorbed and drained away harmlessly.

Solution: a range of cables, mains blocks and wood-encased products from Vertex AQ, most of which absorb and drain both RFI and vibration.

Like carbon monoxide, you won't see, feel or smell them but hear them you will. Unless you defeat them all your efforts to "upgrade" will be sticking plasters on the symptoms, rarely dealing with the causes.



An ideal start is one of the three Taga distribution blocks. They filter RFI from the mains AND also absorb Your system is teetering on vibration, incoming from the wobbly foundations. mains and drained down the mains cables from equipment power supplies.

Why does that matter? because you will aim to match components that have their own mirror-image characteristics to cancel the audible problems.

So you're aiming to cure one set of problems with your choice of more problems?! Have you thought what happens to system "balance" when you change a component?

Examples: You play mostly CDs or stream from a hard drive but there's a hard, tiring edge to the sound and it becomes "too loud" if you turn up the volume. Imaging is also limited.

Classic RFI problems, because some of the RF is merging with the music data and it's all being decoded together. The signal is corrupted and information is lost.

RFI is very intrusive and hard to banish, even with shielded cables, BUT had you thought of the mains input to hard drives and switches, especially from "wall warts"?

Insert a Yushan and prepare to be shocked!

Both streaming and CD suffer from internal vibration that generates spurious signals. They add a "haze" and also interact with the music signal, destroying detail, imaging

and timing. Bass is bloated and boomy.

LeadingEdge platforms containing Vertex's vibration and RFI-absorbing labyrinth material work wonders in cleaning up these system assassins.

Yours is a mainly vinyl system (you don't like digital for the reasons above!) but you also suffer from a "fat", slow bass. You like valve amps for their "warm" sound.

Cartridges are naturally very sensitive to vibration but, think, they are connected mechanically directly to the speakers through the cabling!

A Moncayo block inserted between the speakers and the amplifier will absorb vibration, producing deeper, tighter bass, better timing and liberating your sound stage. Valve amps also thrive on LE platforms as they are very microphonic.

Try before you buy – we're delighted to lend items.

Customers say we make some of the best sounds 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.

You avoid expensive mistakes, enjoy music and save money in the long run. Just listen and you'll know

Vertex Yushan – an incredible RFI and vibration absorber





Digital: Aurender, Bel Canto, CEC, dCS, Vertex AQ dac. Vinyl: Graham, Spiral Groove, Transfiguration. Tuners: Magnum Dynalab. Amplifiers: Bel Canto, Sonneteer, Storm Audio, Vitus, VTL Loudspeakers: Avalon, Kawero!, NEAT, Totem. Cables: Chord Co., DNM, Nordost, Siltech, Tellurium, Vertex AQ. Mains: Aletheia, Vertex AQ. Supports: Arcici, Black Ravioli, Hi-Fi Racks, Leading Edge, Stands Unique, Vertex AQ. Room acoustics: Leading Edge

Keep on spinning

This year marks the 45th anniversary of Linn's legendary LP12 turntable. A recent run in with this timeless classic finds **Ed Selley** reflecting on this industry stalwart

here is a recurring theme across many interests, activities and pastimes that unless you have owned, driven, visited, eaten – delete as appropriate – a particular thing, you cannot claim to be a true devotee of it. In my time working in and around the hi-fi industry, a few products have been floated as the 'must own to classify as a true enthusiast' candidate, but one has cropped up more times than any other: the Linn LP12, which celebrates its 45th birthday this year.

During those 45 years, almost every aspect of this turntable has been altered, upgraded and fettled, but crucially the appearance hasn't. In a world of space-age materials, skeleton plinths and rivals that are as much statements of artistic intent as they are devices for audio replay, this is still a device of wood and metal and still the shape many people subconsciously expect a record player to be. Inside, it can be a deeply sophisticated device – in SE spec, you have a turntable that is a seriously impressive piece of packaging – but on the outside, it's business as usual.

With this comes the mythology that seems part and parcel of our perception. Interchangeable with the 'LP12' comes 'setup', 'bounce' and 'tweaking.' The Linn is not and never has been a plonk-and-play device. It needs a degree of care and attention put into the business of setting it up or it won't deliver any of the attributes that its acolytes will

The basic design of the LP12 still has more to give even after 45 years

tell you about. The process has become part of the LP12 itself – you can't have one without the other.

I've had a timely

reminder of all of this with the arrival of a Majik LP12 recently. At my urging, it was delivered partially knocked down and a quick perusal of the contents of the box brought me to the realisation that while I could probably have taken them and turned them into a convincing facsimile of an LP12, the result would probably not have been a fair representation of what the device was capable of. As such, I'm indebted to Peter Swain at Cymbiosis for offering to perform assembly and setup.

Watching Peter at work is fascinating. As he repeatedly stressed throughout the setup, there is nothing mythical or arcane about the process of turning a box of components into a functioning turntable. No prayers or incantations are uttered and the assembly can be carried out in all phases of the moon. Nonetheless, to the untrained eye at least, it has little in common with any other assembly I've been party to. It uses a selection of unique tools and varies slightly depending on the vintage and specification of the



LP12 undergoing the work. Often, the sight of a piece of equipment partially dissembled rather destroys the sense of mystique – it reminds you that for all the materials and design, the object in question is still just another collection of electronics. Here the reverse is true. What starts as a suspended belt-drive turntable is something possessed of its own identity by the time it has come together in front of your eyes. What is interesting, though, is that for all the talk of the delicacy of this process and of LP12s going 'out of tune', with some tactically placed polystyrene and kitchen roll, the Majik travelled back down the M1 to my rack and has installed perfectly level, enthusiastically bouncy and utterly free from unwanted noise.

It's a kind of Majik

For Peter, this demonstrates that behind some of the more inventive tales about the LP12, installed and used with any degree of pragmatism, this is a turntable that still offers exceptional performance at the huge variety of price points that it can be built to. For him, the reason that it has made it this far is not sentimentality or the curiously masochistic desire of many audiophiles to make life as tricky as possible for themselves, but because the Linn record player still delivers the goods.

What is also intriguing is that as far as he is concerned, the basic design of the LP12 still has more to give even after 45 years. Despite the range of alterations to the design in recent years being some of the most significant that have ever been made, Peter feels that there are still areas where alterations to both materials and processes can yield even more improvements. It seems faintly surreal to imagine that a product that was launched when the Apollo space program was ongoing still hasn't finished evolving, and we are still yet to see the ultimate version of this analogue icon ●

It might be getting on a bit, but the LP12 still has so much more to offer





"Should you be a cable skeptic, this is the one to try. The results are not subtle, with no change in

tonality or balance. Just more music everywhere is the word. The Silver Diamond cables impart less of a sonic signature than so many other, so much more expensive cables we've tried. Every cable skeptic we know has been bowled over by the Silver Diamond cables."

- Tone Audio products of the year 2016

"If you're looking for a major jump in your system's performance, I'd suggest buying a pair of these instead of considering a hardware upgrade. Before you write this advice off to cable delusion, expectation bias, or the recent Mercury retrograde phase, please take note: I have never said this in TONE's 11-year history"

- Jeff Dorgay, Tone Audio

"The Tellurium Q company has once again proved their products belong at the top of current cabling offerings. No matter how secretive or even mystic their approach may seem, the indisputable fact is their cables show a level of reproduction quality so far unheard of."

- Mono & Stereo, 2015





















facebook: facebook.com/telluriuma

web: telluriuma.com

fel: +44 (0) 1458 251 997



Hear your music come alive on the new improved Linn Klimax 350 exakt speakers at The Sound Gallery. Music Event April 25th - April 26th 2017 Free tickets are available on request.

ery.



65 Castle Street, High Wycombe, Bucks HP13 6RN

01494 531682 . www.soundgallery.co.uk/350

Active imagination

Once the domain of PC users looking to improve desktop sound, active speakers have recently appeared on the hi-fi scene. **Neville Roberts** wonders why it's taken so long

elf-powered active speakers eliminate the need for external amplification and provide a convenient all-in-one product that simply requires an audio input. That input may be

provided by a standard line-level RCA phono connection, by balanced XLR or wirelessly via Bluetooth. The main benefit, other than convenience and a reduction in the number of units in the system, is that the integrated amplifier can be matched to the loudspeaker drive units and enclosures and, so, get the best performance from them.

Active speakers have been around for years, but have been mainly aimed at the computer market. When people started using their PCs to play music it became apparent that the few watts of power that was available from the sound card couldn't do much to drive the speakers either side of the monitor, and the sound was certainly not up to hi-fi standards. Gradually, active speakers became popular, together with the option of an active subwoofer for some serious bass clout. This was aimed at users that wanted more from their computer's sound than the occasional 'ding' to indicate that they'd pressed the wrong button on their keyboard. Nowadays, active speakers are the norm for the PC market, but why has it taken so long to see active speakers for fans of quality audio?

As with many areas of business, the relatively few active

The association of active speakers with due to a perception PC audio is why hi-fi acceptance is slow

speakers in the market is probably that hi-fi listeners prefer separate amplification units so that they can

upgrade the speakers and amps separately. Nevertheless, active subs for surround sound and home cinema setups have certainly caught on. Subwoofers generally require a meaty amplifier appropriately designed to drive them.

Clearly, times are changing and Acoustic Energy's AE1 Active speakers (HFC 421) are a sign of the times. As we move towards an era where audio fans want fewer boxes cluttering up their living space, a speaker that makes use of built-in amplifiers designed to power each drive unit correctly seems a sensible way to go. So, it would seem logical that an active speaker would be the next step to take from an integrated amplifier. But wait, as people progress further up the hi-fi ladder don't they tend to move away from integrated amplifiers to having a separate preamp and power amplifier, and then change their power amplifier to a pair of monoblocks? This has certainly been the case in the past, and many would argue that this also allows for the individual components to be upgraded separately, as and

when funds permit. Having said that, this approach seems to be becoming increasingly limited to the more ardent audio fan, so it still doesn't explain why we have not seen a more integrated approach to audio equipment taking place over the last few years.



Acoustic Energy's AE1 Active (*HFC* 421) is a stunning hi-fi loudspeaker

Of course, one issue could be the classic 'chicken and egg' problem. Suppliers are not going to produce more active speakers if they don't feel that there is a market for them. Likewise, audio fans are not going to investigate active speakers as a possible upgrade path until they feel that there is a good range of suitable products on the market to choose from. I believe that the real problem stems from the association of active speakers with computer audio, and this is why the acceptance of active speakers in the hi-fi sector has been slow.

Active service

I spoke with Acoustic Energy to find out about the situation from a manufacturer's point of view. Its view is that potential customers have a perception that they have less control over their system with an active speaker as it doesn't allow them the option to upgrade components, interconnects, speaker leads and so on. It also agrees that active loudspeakers are generally associated with computer speakers and lo-fi systems. However, a highquality active speaker can offer a number of technical benefits that allow it to perform well above its price point. For example, the individual drivers of a quality active speaker are powered by their own amplifiers, meaning that the passive crossover – which can be a potential cause of distortion - can be done away with. Active speakers have their own level control, which effectively controls the balance and allows the user to set a sensible maximum level for their music. The normal listening volume can then be adjusted by the source equipment.

I think that active speakers will increasingly find a place in the home where a high-quality sound, coupled with a small footprint and ease of use are important. It might take a while for the public to fully embrace the concept for hi-fi, but I believe we will start seeing a growth in this area as it actively encourages a new breed of audio fan •



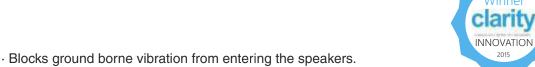
GROUND-BREAKING TOWNSHEND **SEISMIC PODIUM**

The Seismic Podium is designed to brake the acoustic connection between the floor and the speaker.

The Podium, together with the speaker, forms a low pass mechanical filter that prevents the passage of deleterious vibrations both to and from the speaker cabinet.

Break this link and the result is simply magical, the sound is transformed for every speaker, everywhere, every time.

The effect on the sound quality is outstanding. Everything sounds much cleaner and clearer, but for me the best improvement is the purity of tone of the strings when listening to classical music. Previously I couldn't enjoy listening to orchestral music because the violins sounded so 'dirty', and I have spent years trying to eliminate the problem by experimenting with different DACs, interconnects and speaker cables without any meaningful results. I only wish that I had bought them earlier! " RM





- · Blocks speaker generated vibration from entering the floor.
- · Neighbour friendly due to elimination of structure borne sound.
- · Huge reduction in bass boom.
- · Clearer and much more tuneful sound.
- · Far deeper and wider sound stage.
- · Suitable for wood, tile or carpeted floors. No more spikes!
- · Works on solid or suspended concrete and wood floors.
- · Eliminates resonance between speaker-cabinet mass and floor.





Watch the demonstration video showing the effect of vibration on loudspeakers with and without Seismic Podium.





(atv Perry image courtesy of Shutterstock/Everett Collection

Rage against the machine

As a new musical genre prepares to bring the masters of the universe to their knees, a perplexed **Nigel Williamson** wonders whatever happened to the protest song?

e are now entering a brave new era of "purposeful pop". At least, so tweeted the multi-million selling American singer Katy Perry last month when she released – sorry,

'dropped' – her latest single *Chained To The Rhythm*. Like any self-respecting, trend-spotting pop-picker, I love the wacky world of new-fangled musical genres. From hardstep to krunk and from emo to slowcore, there's nothing like putting a new name to a familiar sound in order to garner five minutes in the spotlight. *NME* used to invent a new genre almost every week.

So what is purposeful pop? Musically, *Chained To The Rhythm* sounds almost exactly like every other formulaic piece of 21st century manufactured pop. The beat is banal, the voice is anodyne and the arrangement is trite.

It seems that purposeful pop is intended to be the new incarnation of what we used to call the protest song. Unfortunately, *Chained To The Rhythm* is risibly feeble, conveying little more than a vague and nebulous sense of undefined alienation. As an expression of horror at man's inhumanity to man or an anthem of insurrection, it sure as hell isn't *Strange Fruit* or *The Times They Are A-Changin*'.

To be fair to Perry, she has impressive form as a supporter of liberal causes and as an LGBT rights activist. Her gesture toward waking up the pop-listening populace is no doubt well meaning, so why does it sound like little more

I guess we should applaud Katy Perry for taking a stand, however timid

than a muddled and cynical exercise in virtue signalling?

By contrast, I've been reading an advance copy of an inspiring book by

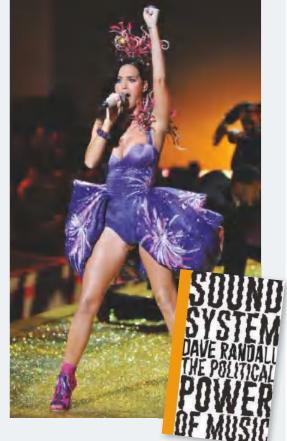
Dave Randall, former guitarist with Faithless. Titled *Sound System: The Political Power Of Music*, perhaps a more fitting title might have been *Purposeful Pop*.

Randall surveys the long history of those that have attempted to use their music as a platform to promote radical and progressive ideas, covering not only Western pop's insurrectionary tendencies but also music's role in African independence movements, the Arab Spring and other global struggles. It's a brave roll call.

But he also explores the notion that popular music can operate on behalf of powerful vested interests as a weapon of mass distraction. "As we swoon over Rhianna's new video and discuss Lady Gaga's latest fashion statement, politicians and their corporate clients discreetly get on with kicking us into the gutter," Randall notes acidly. At that point I confess that I couldn't help thinking of Katy Perry and *Chained To The Rhythm*.

Yet Randall's message is ultimately one of crusading optimism.
"If good music doesn't come easily, good explicitly political music can be even harder to get right," he admits.
"But hard is neither impossible nor undesirable. Those of us who want to change the world and are musicians should give it a go."

Cultural commentators are wont to bemoan the lack of contemporary protest songs. Indeed, I once wrote just such a piece in this very column. But if you look in the right places, there are plenty of contemporary musicians who – in Randall's phrase – are prepared to "give it a go" with considerably more purpose than Katy Perry.

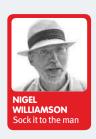


Fight the power

In a feature headlined 'Protest Now!', a recent issue of the monthly rock magazine *Uncut* compiled a list of "50 great modern songs of rage, revolt and inspiration". The criterion was that all the songs had to have been written in the last decade. Taken together they constituted a formidable catalogue of dissent by popular musicians using their art to confront police brutality, pointless wars, misogyny, racism, gun fetishism, financial iniquities, environmental calamities and much more.

The list ranges from black hip-hop acts such as A Tribe Called Quest and Kendrick Lamar to white rock artists including Ry Cooder and Radiohead. It also takes in Russia's Pussy Riot, who went to prison for their bravery in opposing Vladimir Putin. I guess we should be gracious and applaud Katy Perry for at least taking a stand, however timid. If she gets any bolder, Trump might yet find a jail cell for her ●

Sound System: The Political Power Of Music by Dave Randall is published by Pluto Press and is available now. Is this the face of political protest in 2017? Happily, there are others trying to get their message across





Take DAT

30 years ago, Sony launched the Digital Audio Tape format. **David Price** samples one of its best value consumer machines

t the time of its launch, pundits were predicting that Sony's Digital Audio Tape format would "wipe out" Compact Disc, and yet less than two decades later, Sony had quietly dropped it. Sometimes called R-DAT, the format used a 3.81mm magnetic tape inside what was effectively a miniaturised video cassette shell. DAT machines recorded and played uncompressed PCM digital at either 32, 44.1 or 48kHz at 12 or 16-bits; 16-bit/48kHz was the absolute cutting edge at the time it was introduced.

Unlike Compact Cassette, it worked in one direction only and was able to give up to 180 minutes per tape at 16-bit/48kHz – although as with C120 cassettes, the longer length DATs were less reliable due to the thinness of the tape itself. Running in Long Play (LP) mode at 12/32,

Sony effectively ended development of consumer DAT with the DTC-ZE700

it gave six hours of recording onto a DAT 180. Unlike Compact Cassette, DAT shells had a locking system that sealed out the outside world, when not in the machine. Respective tape speeds for SP and LP operation were 8.15mm/s and 4.075mm/s.

The format also had some provision for metadata, so track ID points could be stored, and there was an absolute time code. This meant you could use DAT as you would CD; there was a real and reliable track search function. The difference is that if you wanted to go from track 3 to track 15 on CD, it would take a second or two, whereas the DAT machine would have to wind through the tape – for up to 30 seconds or more. This seemed terrible to CD users, but back then most folk were used to cassette - and DAT was considerably faster searching than that. Now, watching a DAT machine

Digital audio tape: a brief history

1972

Denon uses PCM on its 2in Quadruplex tape as Pink Floyd debuts Dark Side Of The Moon live at The Dome, Brighton



100

Sony unveils its new DAT format, the same year it debuts the DTC-1000ES, meanwhile cellist Jacqueline du Pré dies



1996

Sony launches the DTC-ZE700 while Oasis breaks the record for most weeks in the singles chart (previously Adam and the Ants)



2005

It's the end of an era as Sony stops DAT machine production, while Motörhead celebrates its 30th anniversary with a special concert



spool through an album in track search mode is a chore. This is all the more remarkable when you consider just how much more complex DAT was, compared with regular cassettes. It used a rotating head and helical scan to record data, allowing a higher density of data to be stored – so its tolerances were extremely high.

Sony's DTC-ZE700 was launched in 1996 and to all intents and purposes was one of the last important DAT machines to come from the consumer electronics giant. Although DAT didn't spool its last reel until eight years later, Sony effectively ended development of its consumer machines with the ZE700; everything that followed was an adaptation of the same model.

You could say the ZE700 is just the right vintage, for it sports a refined version of the company's three-motor transport and the Anti-Resonant Midship Drive. Earlier machines had a more complex and bug-prone transport mounted to the left of the fascia. This mech allowed a 50 second rewind time, and reliable 200 or 400 times high-speed search. It also had

Sony ended DAT production in 2005, selling around 660,000 decks

Sony's 'Pulse' D/A converter; a good Bitstream device that's smooth and clean sounding, although wins no prizes by modern standards. There's an optical digital output, so it can be hooked up to a snazzy new DAC.

Unlike early DAT machines, it has a choice of recording at CD quality 16/44 or DAT's best 16/48 resolution (and the latter sounds surprisingly better); feed it a CD and it will automatically choose 16/44. It also has the 12/32 Long Play mode. The real gem is Super Bit Mapping; Sony's digital signal processing system which intelligently noise-shapes the digital input stream. Despite being a 16-bit format, the ZE700 has 24-bit analogue-to-digital converters and Sony's SBM system optimises how this extra audio data is discarded to make the remaining 16-bits sound as good as possible. It weaves out the least significant 8-bit information into the 16-bit filtered data. The company claimed that by reorienting quantisation noise to above 15kHz, Super Bit Mapping gave a sound that was almost comparable to 20-bit quality - yet it's

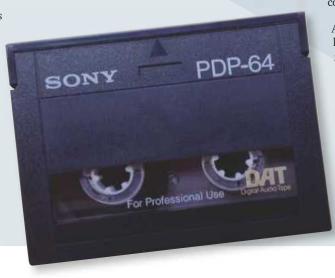
still accessible via any SBM-encoded DAT via any player. Only later Sony machines have this, and it's a valuable feature to have if you record a lot from an analogue source.

The look of love

Ergonomically, it is no masterpiece. Sony was fond of festooning its products with buttons in a rather matter of fact way, and it's no different with the ZE700. Still, all is pretty self explanatory and it has a fine-quality fluorescent display, which is highly informative. This is to the left of the fascia, alongside the track start ID controls; to the right of the central tape drive are the transport buttons and recording mode selection, alongside the rotary input level control. Unlike Sony's earlier DAT decks, this is largely duplicated on the supplied remote control.

It doesn't have the solid build of early DAT machines; it feels a little plasticky and insubstantial. However, in general operation it seems far less clunky than earlier, late eighties offerings. Sonically, it is also superior to earlier machines. The later DAC and digital filter help here, with a smooth sound that's peppered with detail and incision. By today's standards it's a little genteel perhaps, lacking real dynamic punch – but pipe the digital audio stream out to a modern DAC and you'll be very surprised. Better still, make an analogue recording with SBM switched in - at 48kHz - and you'll be amazed how good it can sound; it's in the realm of hi-res audio and a good bit better than standard CD. DAT might be old and decrepit, but it can still really make fine recordings if properly set up. The standard quoted frequency response is 2Hz-22kHz $(\pm 0.5 \text{ dB})$, or 2Hz-14.5kHz $(\pm 0.5 \text{ dB})$ in Long Play mode. It also has a better than 90dB dynamic range and less

In its day, DAT offered an exciting degree of flexibility



BEFORE DAT

DAT was not the first digital audio tape. Classical music fans will have come across Denon's PCM classical recordings, done as early as 1972. These used a 2in Quadruplex-format videotape recorder as a transport, and came from research dating back even earlier. In 1976, Soundstream developed a 1in reel-to-reel transport manufactured by Honeywell, using the company's own encoders and decoders running up to 16-bit, 50kHz sampling. The real heyday of tape-based digital recording was in the eighties. Consumer video tape formats such as Sony's Betamax were used in the EIAJ digital format, which sampled at 44.056kHz at 14-bit resolution. Sony's PCM-F1 became a popular system from its launch in 1981, running at 16/44.056 and offering excellent sound. Sony's DASH format and Mitsubishi's ProDigi format used conventional open reel tape, recording digitally, and these also became popular.

than 0.005 percent total harmonic distortion and effectively zero wow and flutter. Warp back to 1987, and that sort of specification from a tape format would have astounded people.

End of an era

In 2005, Sony ended DAT machine production, after around 660,000 decks had been sold since its launch. Although it failed as a replacement for Compact Cassette, it did gain a second wind in small professional recording studios - and almost every early nineties dance record was mastered on DAT. Sony also refocused it as a computer storage medium, which became Digital Data Storage. It still pops up in some film and TV recording, too. That's why it's still possible to pick up machines such as this, if you look around. Many machines were hammered by small studios and home recordists, so the physical condition is invariably a useful indicator. As with any old hi-fi equipment – especially anything that's tape-based - beware. Prices vary from £50 to £300; so check the

condition and try before you buy. 30 years old this year, Digital Audio Tape is now long gone and largely forgotten - consigned to the great hi-fi graveyard in the sky, where it can rest quietly with Sony's other glorious yesteryear formats; Elcaset and MiniDisc. DAT machines are still worth having if you do home recording - especially vinyl archiving - for this job get one of Sony's later SBM-equipped decks. In truth, though, it's an idea whose time has long since passed - and another sad demise from the ever brave and innovative Sony Corporation •

DEALER VISITSOUND CINERGY

Goyour own way

Sound Cinergy features some very well-known brands but **Ed Selley** finds how its uses them is a little different

he vast majority of the establishments featured in *Dealer Visit* have been founded by their current change in leadership at some point in the past. Sound Cinergy in Aldridge, just north of Birmingham is slightly different. Owner Clive Kirby bought the business 16 years ago when it was still called Musical Approach and in the ensuing period has seen the business evolve with the trends of the time – through the period where multi-channel had stereo firmly on the back foot to its resurgence with the introduction of streaming and the current vinyl boom. What is impressive is that many of Clive's

customers have made this journey with him from the beginning.

What also marks Sound Cinergy out from a number of notionally similar dealers is Clive's attitude toward his portfolio. With a compact premises, nothing gets shop space purely on the basis of its reputation and this in turn means that the systems that result can be subtly different from what you might find elsewhere as components that Clive feels offer an advantage are often substituted for what might be the three systems he has elected to show demonstrate this at various price points and system one is sat in the listening room warmed up and ready to go...



SOUND CINERGY



37 High Street Aldridge **West Midlands** WS98NL 01922 457926 soundcinergy.co.uk

rega.co.uk exposurehifi.com

naimaudio.com roksan.co.uk kudosaudio.com heedaudio.co.uk lehmannaudio.com linn.co.uk chord.co.uk nordost.com









Gneap Sunglas 16/44.1 FLAC



Live at Brixton

System 1 – Northern Exposure

FEW THINGS WARM the cockles of the heart more than seeing two of vour favourite brands combined in an affordable system. The pairing is not one that I've seen anywhere else, but I've got a fairly good feeling that it is going to work out just fine.

This is because Rega seems to be a brand that can do no wrong of late. Its turntables have always been strong, but the new Planar models are particularly adept pieces of design and Clive's decision to use a Planar 2 as a source makes perfect sense. This is classic Rega a belt-drive, unsuspended turntable that provides you with everything you need and nothing more. A pleasing by-product of this simplicity is that this remains one of the most effortlessly pretty turntables on the market. A Rega Fono MM phono stage provides the required jump in signal for amplification.

Partners in crime

Partnering the Planar 2 is a pairing of the Exposure 1010 CD player and integrated amplifier. Clive has been a long-standing Exposure supporter and rates the communication and musicality of its equipment very highly. The amp offers five inputs, a tape loop and 50W of power. The CD player outputs via RCA or Toslink. In their own way, the Exposures are as free of frippery as the Planar and very handsome in their titanium finish complete with obligatory blue LEDs, plus they offer enough potential to expand the system if you need to.

Completing the package is Rega's RX3 floorstander. This compact and gorgeous speaker has a secret weapon in the form of its side-firing bass drivers. It is handsome, beautifully finished, fuss free in terms of placement and fairly easy to drive, while being capable of filling a large space if you need it to.

The first minute of Pop Art Blue reveals that this system delivers the basics, but with a rather lovely twist. First the basics. The scale and space of the recording is perfectly judged. The music extends effortlessly beyond the

The music simply flows from the speakers with no sense of processing

speakers and is underpinned by enough bass weight to be felt as well as heard. Guest vocalist Martha Tilston is locked between the loudspeakers and her distinctive singing is captured with absolute believability and wonderful detail. Everything is where you expect to be and delivered in a way that leaves you confident it is precisely how it should sound.

More than this is a consistent sense of joy to the way these electronics combine to make music that moves them beyond their relatively terrestrial price point. Kings of Leon's Pistol Of Fire leaves you hanging on that first picosecond of the beat, head nodding and caught up in the frenetic pace of this musical sprint. It never sounds harsh or confused, just riotously good fun. Switch to the Planar 2 and the effect is to go from 10 to 11 on the joy scale. The live album of Public Service Broadcasting is sublimely recorded and the way the Planar 2 gets stuck into Go! is an absolute delight. The piece simply flows from the speakers with no sense of processing or amplification involved.

Slow it down

With something less frenetic like My Baby's Meet Me At the Wishing Well, there's no sense of unnecessary speed or unwanted energy, just the same effortless musicality that means you want to keep listening. There's nothing in this system that is inherently revolutionary or at the bleeding edge of what is technically possible, but listen to it for a few minutes and this won't matter. This is sheer musical pleasure with a volume control, and the other systems are going to have to go some to beat it.





- **REGA FONO MM**
- **EXPOSURE 1010 AMP**
- **REGA RX3 SPEAKERS** CHORD CO. CLEARWAY RCA **REGA COUPLE 2 RCA** CHORD CO. CLEARWAY SPEAKER CABLE 3M PAIR 260

DEALER VISITSOUND CINERGY

System 2 - Prince Caspian

DECEPTIVELY SIMPLE TO look at, the second setup offers incredible flexibility and in true Sound Cinergy style features a partnership that isn't commonly seen elsewhere. Naim's NDX has been with us for a number of years now, but the specification has effortlessly expanded in that time to keep it up to date and fearsomely capable. As well as 24/192 PCM and DSD capability, you also get digital inputs, internet radio and support for Spotify and Tidal all wrapped up in a sleek and relatively compact chassis. This is the sort of device that is a fit-andforget solution to your digital needs.

Protect and serve

Naim also takes care of the file delivery in the form of the brand new Uniti Core. This is the company's dedicated server, which builds on the highly regarded Unitisery by moving to a toroidal power supply and giving owners the option to choose the hard drive that they want when they take delivery of the unit. Wrapped in Naim's new Uniti casework, it manages to look elegant and attractive – which are not words you automatically reach for when describing a server. Tying the two units together is a revised version of Naim's control app that shows the content of the Uniti Core, but also allows you to follow up on an artist portfolio with streaming via Tidal. It's impressively slick and extremely intuitive.

More often than not in many dealer's hands, this pairing would stay with Naim for amplification, but as a long-standing Roksan dealer Clive has instead plumped for the Caspian integrated amp. This offers an unburstable 85W into 80hm and combines a seriously impressive amplifier stage with some extremely attractive casework. Those 85W are called upon to drive a pair of Kudos S10 standmounts. These beautifully proportioned and exceptionally well

The scale and impact the Kudos is capable of delivering is deeply impressive

finished two-way loudspeakers mate the higher-specification drivers from Kudos' flagship speakers with more affordable cabinets and in this case a pair of the company's own stands. There's no shortage of on-paper ability but does it work together?

Selecting a 16/44 rip of ZZ Top's Deguello and letting the system go to work on Cheap Sunglasses reveals a fair bit about what makes it tick. There is a sense of urgency to this presentation that eclipses even the first system. Linford Christie used to go on at length about going on the 'b' of the bang and this system modifies the saying slightly to go on the 'b' of the beat instead. This immediacy is addictive, transforming listening into

something that involves you both physically and emotionally.

If you can detach yourself from the music long enough to critique it, the news is entirely good. The scale and impact that the Kudos is capable of delivering is deeply impressive for a small speaker and the Caspian grips it in a way that sees it behave in a beautifully controlled fashion, which contributes to the sense of speed this system has in buckets. There's also some of that same tonal sweetness that is present in the first system. On the suggestion of the app (I am, it must be said, easily led), I switch to the Tidal stream of Wide Open by The Chemical Brothers. The slight warmth it brings to Beck's vulnerable vocals is gorgeous.

Get a grip

All the time, this is underpinned by the flawless timing and sheer grip of the Naim duo. The effect of servers on the performance of network audio is a rabbit hole I generally avoid going down, but there is no escaping just how talented and cohesive this duo sounds together. As a system, these are compact, attractive and capable components that enthral every time you turn them on. Where do we go from here?





- NAIM NDX STREAMER £3,69
- NAIM UNITI CORE 21,799 (EX. HDD)
- **3** ROKSAN M2 AMP **£2,000**
- 4 KUDOS SIO SPEAKERS £3,645 KUDOS STANDS £200 NORDOST BLUE HEAVEN RCA £310

NORDOST BLUE HEAVEN
3M PAIR SPEAKER CABLE 277

TOTAL £12,42:

DEALER VISIT SOUND CINERGY

System 3 – Kreative thinking

FRONTED BY ONE of the most iconic shapes in the industry and supported by an equally distinctive pair of loudspeakers, the final system can really only be Linn based. What goes between those points is not business as usual, however, and warrants further attention.

Best in breed

The Akurate-spec LP12 is a classic example of the breed, combining Akito tonearm with Krystal moving-coil cartridge and Lingo external power supply. Behind the timeless exterior, trickle-down technology from the flagship Klimax - like the Kore subchassis - keeps performance competitive. The Akurate 4200 power amplifier has four channels of amplification boasting 200W into 4ohm, controlled by the company's Dynamik power supply. The four channels of amplification allow for the Akubarik speakers to be bi-amped, which is how they are most effective.

After this, things go a little off piste. Instead of a Linn phono stage, Clive opts for a Lehmann Decade. This compact two-box unit - one containing the gain circuitry and the other the power supply - offers performance that he feels is superior

to the inhouse options. From here, the signal heads to a Heed Obelisk preamplifier with offboard PX PSU.

The Heed offers plenty of inputs and pairs with the Akurate 4200 very well. The result is a system that's different to the expected order of things.

Returning to Public Service Broadcasting, there is no question that this system retains a Linn fingerprint. The LP12 is 45 years old and this Akurate version has barely anything in common with

At no stage do the upper registers ever become harsh or forward

the original, but there's still an indefinable something to how music flows from it. The live performance of Gagarin complete with full brass section is so weighty and vast that it's hard not to be transported to the venue. Underpinning this is a low end that makes full use of the isobaric drivers in the Akubarik. There's nothing quite like the bass created by this setup; effortlessly powerful but free from any sense of

twist makes for a stunning performance



overhang or sluggishness. When I switch to Alabama 3's Woke Up This Morning, I'm treated to a full rib shaking impact. This is a system with an effortless understanding of scale.

Power and the glory

None of this power and authority comes at the expense of delicacy, though. The upper registers are detailed and exceptionally airy. At no stage does this ever become harsh or forward, even under provocation. Talk Talk's The Party's Over is delivered with all of the excitement and intensity it possesses intact, but without the worst excesses of its rather lean tonal balance coming to the fore.

Assessing what the non-Linn substitutions do for this system is tricky without a direct comparison, but there is a sense that they are responsible for some of this ability to resolve material while forgiving its vices. This is a collection of electronics that still flows like a Linn system, but seems happier to not sweat the small stuff. There is also no doubt in my mind that the Lehmann Decade slots in with an effortlessness that many one-make systems struggle to replicate. If you subscribe to the notion that a phono stage is there to add gain without imparting anything else of itself, this is a textbook example of how it should be done. The Heed is slightly more prominent, adding a degree of warmth that is sometimes absent, but it also gels with the amp and speakers beautifully. The result is better than the sum of its already impressive parts.





LINN AKURATE LP12 & PSU

HEED OBELISK PRE

HEED OBELISK PX PSU

LINN AKURATE 4200

LINN AKUBARIK - P **NORDOST FREY 2 RCA NORDOST HEIMDALL 2 RCA** CHORD CO. RUMOUR 2 3M PAIR CHORD CO. ODYSSEY 2 3M PAIR

TOTAL



It's important to be clear that Clive isn't trying to be different for the sake of it when assembling these systems. The equipment they comprise has earned its place based on sheer ability and his aim is to create setups that deliver on his premise of flexibility combined with

a way of making music that leaves you wanting more and he has succeeded. What ties these systems together more than any sense of the technologies used or formats employed is that they fundamentally sound right. Sound Cinergy has carefully collected a

portfolio that delivers this house sound at a useful spread of price points and with sensible footprints and decent aesthetics. Given that Clive has already steered through two significant changes to how we listen to music, I think his systems are ready for what comes next.



From selling LPs out of a pram to the world's largest catalogue of classical SACDs – **Geoff Green** charts the incredible growth of Sweden's BIS records

as kleine Label aus dem Norden" — "The little label from the north" — is how a German magazine recently described BIS Records, Scandinavia's largest classical record label. In the eighties such a description may have been fitting, but in the past 25 years it has grown into a fully fledged international label with major projects around the world.

BIS was formed in 1973 by Stockholmer Robert von Bahr. He was unable to find a record company willing to release an LP featuring his then wife, the flautist Gunilla von Bahr, so he decided to take the plunge and release it himself, and so the BIS label was born.

In the early years von Bahr worked tirelessly, attending to every aspect of running the label, from producing recordings to handling distribution, and steadily the catalogue grew. By the eighties BIS was recording the finest Nordic orchestras and soloists and naturally Nordic composers featured strongly in its output. But alongside Nielsen, Grieg and Sibelius, BIS took risks with a series of lesser-known composers. Editions of 20th century composers like Eduard Tubin and Alfred Schnittke were particularly notable.

BIS thrived in the CD boom years, and so by the nineties was well placed for more ambitious international recording plans. As well as working with prestigious orchestras around Europe, it began to record in Asia, Australia and the Americas, taking on some ambitiously large projects. In addition to the Sibelius and JS Bach ones opposite, the Hungarian keyboard player Miklós Spányi recorded the extensive and rare solo keyboard works and concertos of CPE Bach.

As BIS continued to develop, it attracted artists of greater international reputation allowing it to compete with the best in mainstream repertory. For example, its flagship artists, the Minnesota Orchestra conducted by Osmo Vänskä, first recorded the Beethoven and Sibelius symphonies, and is now recording Mahler. There

are artist-led releases, such as Rachmaninov and Beethoven from the label's leading pianist Yevgeny Sudbin. With some top artists, meticulous production techniques and high-quality sound, BIS is now able to compete with the majors.

The BIS catalogue contains over 2,200 recordings. In terms of the number of available titles, this makes it at least the seventh-largest classical label in the world. It has been committed to multi-channel SACD for many years, and with around 500 such titles, has more than any other classical label. BIS' hybrid SACD/CD releases offer SACD surround, SACD stereo and CD stereo and can be played back by both SACD and CD players.

Jean Sibelius, complete works

Finland's national composer in an exhaustively complete 13-volume edition

obert von Bahr is proud of his part-Finnish ancestry, so it is only natural that Sibelius has always played a major part in his plans for BIS. By the mid-eighties the label had the symphonies and much of the piano music in its catalogue and the idea of a complete edition was slowly evolving. After many years of planning, the first volume was released in 2007 – the 60th anniversary of Sibelius' death – and the series was completed four years later.

Sibelius is best known for his orchestral music, especially the symphonies, tone poems and the *Violin Concerto*. Other orchestral music includes cantatas, an opera, suites and theatre music. BIS also includes interesting original versions of the *Violin Concerto* and *Fifth Symphony*. The Lahti Symphony Orchestra conducted by Osmo Vänskä, acclaimed for its Sibelius interpretations, provides the majority of the recordings.

But what of his other music? Seven volumes in total are given to choral music, chamber music, solo piano and songs. Here, as with any complete edition of a composer's work, we find music of varying quality. The five discs of songs contain many delightful settings of mainly Swedish texts. Anne Sofie von Otter and Monica Groop among others perform

A complete Sibelius edition was only natural

beautifully. The solo piano music, performed by Folke Gräsbeck, runs to 10 discs in two volumes, being mainly suites of miniatures. There is also much to enjoy in the three volumes of chamber music. The string quartet *Voces intimae* is well known, but there are many other quartets, piano trios and music for violin and piano to explore. All in all, this edition is a remarkable achievement.

This 13-volume boxset consists of over 65 CDs and should be enough to keep any Sibelius completist happy



JS Bach, complete sacred cantatas

Two decades in the making, BIS's Bach cycle from Japan is now complete

To record the complete cantatas of JS Bach is one of the most ambitious projects that a record label can undertake. The 55-disc BIS edition of the almost 200 extant sacred cantatas runs to over 60 hours.

In 1995 BIS astonished the recording world by embarking on this monumental project not in Europe, but in Japan. The Japanese harpsichordist, conductor and Bach scholar Masaaki Suzuki directs his own Bach Collegium Japan (BCJ). Critical reception has been consistently favourable despite strong competition from both Gardiner and Koopman.

The Suzuki offering provides a contrasting experience to market leader Gardiner. While Gardiner's recordings are more intimate and personal, Suzuki's are grander, often more contemplative and spiritual. The BCJ orchestra and chorus are tonally full and blended in a deeply reverberant acoustic,

while Gardiner's offering is more immediate and detailed.

The BCJ orchestra's string playing is assured and stylish and the excellent baroque oboes deserve a special mention. Most of the principal vocal soloists are European, including Carolyn Sampson, Robin Blaze, Peter Kooij and Gerd Türk, but the remarkable

BIS astonished the world by recording the project in Japan

Japanese counter tenor Yoshikazu Mera also features.

Tonally beautiful, reverberant yet offering good clarity, the recorded sound offers a naturally deepening perspective on soloists, orchestra and chorus. One small caveat – the first half of the cycle was recorded for a stereo CD-only release. These recordings have been upsampled and remixed for the hybrid SACD boxset.

The only available complete set of the JS Bach cantatas on SACD, this hefty collection consists of 55 hybrid SACDs



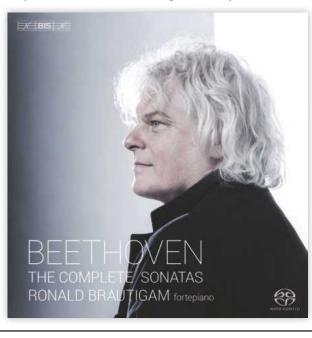
Beethoven, complete piano sonatas

An original instrument cycle from Ronald Brautigam

has recorded prolifically for BIS. Having already completed editions of the solo piano music of Haydn and Mozart, in recent years he's recorded Beethoven. A 16-disc set of the complete solo piano music is planned, but a nine-disc set of the sonatas alone is already available.

In addition to the main published cycle of 32 sonatas, a disc of earlier sonatas and sonata movements is also included. During Beethoven's lifetime the piano developed considerably as an instrument. For this collection Brautigam uses three different fortepianos, two for the main 32-sonata cycle and another for the early works. Each is a modern copy of a period instrument by Paul McNulty.

Brautigam convinces throughout both in terms of technique and interpretation: while never exaggerated, his approach to tempo and phrasing never feels uninspired or routine. The consistently well-recorded sound captures the broad, expressive range of dynamics and colours that Brautigam achieves. The church acoustic is reverberant and at times Beethoven's writing requires a sound with greater clarity and focus.



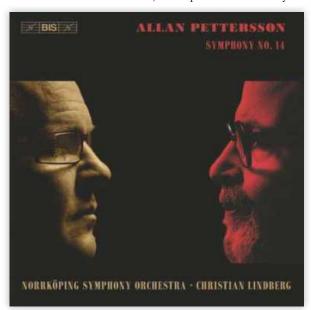
Allan Pettersson, symphonies

A complete edition of the uncompromising and enigmatic Swede

ot widely known outside of Sweden, Pettersson's highly individualistic style has gained him something of a cult following around the world. At the heart of his output lie his symphonies, of which 15 were completed. His challenging musical style is not for the faint hearted. Typically set in a single extended and freely evolving movement, a Pettersson symphony takes the listener on a journey ranging from brutal dissonance to lyrical solace. A step on from, say, Shostakovich, the music clings onto tonality yet the sound world is much more extreme and modern. His best-known and perhaps finest and most accessible symphony is the Seventh, which BIS first recorded in 1992, but intends to re-record for the final edition.

The Swedish Norrköping SO may not quite have the quality of leading European orchestras,

but the recordings benefit from meticulous rehearsal and production. Christian Lindberg and Leif Segerstam conduct. With excellent recorded sound, each symphony is a hi-fi spectacle in either stereo or surround. The cycle is now three-quarters complete, and BIS plans to release it by 2021.



SHOPPING LIST

Geoff dips his toes into the calming waters of BIS and selects eight classic discs well worth hunting down to get a true flavour of the label's wares



Scarlatti
18 Sonatas,
Yevgeny Sudbin
A Gramophone
award nomination
for this beautifully
recorded collection
of favourite
Scarlatti sonatas.



Mozart Great Mass in Cminor, Bach Collegium Japan/ Masaaki Suzuki A stylish recording of Mozart's unfinished masterpiece.



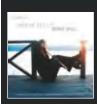
Beethoven String Trios, Op.9, Trio Zimmermann Some awardwinning early Beethoven from Zimmermann, Tamestit and Poltéra.



Bruch Violin Concerto No.1, Vadim Gluzman/Bergen Philharmonic Top reviews for both performance and sound for this favourite concerto



Mozart
Clarinet Concerto
& Quintet,
Martin Fröst
Fröst at his very
best with two of
the finest works
of the clarinet
repertoire.



Nordic Spell Concertos for Flute and Orchestra Sharon Bezaly Contemporary flute concertos performed by the Israeli flautist.



Garrett Fisher The Passion of St Thomas More A mesmerising chamber opera on the theme of More's refusal to compromise his religious beliefs.



La Spagna
Atrium Musicæ
de Madrid
A celebration
of baroque
instrumental
music in an SACD
remastering of the
classic recording.



FINE TWO CHANNEL AUDIO SYSTEMS

Audiodesksysteme PRO Ultrasonic Vinyl Cleaner











The new PRO version of this world renowned ultrasonic LP cleaner has improved mechanical designs. A better drive motor, ceramic bearing pump and additional drying process.

A deliberately low energy ultrasonic generator enables maximum cleaning efficiency without potential damage to the LP surface. This contactless cleaning action removes more dirt than machines that rely on conventional suction methods. Ultra clean grooves will extend stylus life.

Ultrasonically cleaned LPs have a much better sound, more than just the removal of noise. The sound has a larger soundstage, more detail, better tonal balance and greater dynamics. Used LPs, previously cleaned LPs, and brand new albums all benefit from ultrasonic cleaning.

A completely automatic cleaning and drying cycle of 6 minutes results in an ultraclean LP. More than a cleaning machine, an essential component.

4 colour options available: grey, black, white and red. £2295.

Please contact us for your nearest dealer.

Apart from the removal of loose particles, it's the *embedded* dirt that has, up until now, never been removed, and has proven resistant even to an expensive record cleaning machine. This is a true first for record cleaners. This, in vinyl terms, is revolutionary.

Paul Rigby - The Audiophile Man, Dec 16





blak integrated amplifier

Roksan Audio's **blak** series of high-end hi-fi electronics offer something different, both in terms of sound performance and visual appeal. Housed inside a robust, industrial chassis that still manages to look modern and elegant, **blak** products are high-performing, musically involving devices; earning their place at the top of Roksan's coveted range of analogue electronics.

The award-winning **blak** Integrated Amplifier combines a high-end amplifier with a USB DAC, a Bluetooth receiver, an MM phono stage and a dedicated headphone amplifier. The sophisticated internal design allows these complex tasks to work optimally, meaning the amp can still deliver ample power with plenty of headroom, to ensure accurate detail. Bass is quick, deep and exceptionally tight, ensuring a sense of speed and immediacy, which is combined with an ultra-spacious and detailed midrange and treble.

Available across the UK now.



blak Integrated 2016/17



blak System October 2016



blak Integrated Issue 413



Ó Ásgeir
Afterglow



O1 Son Volt
Notes Of Blue



101 Vaughan Williams Job; Symphony No.9

Musicreviews



CD Glitterbeat

2017 MARKS THE 30th anniversary of the invention of the term 'world music' when a bunch of industry professionals came together to create a marketing tag to describe records that came from beyond the confines of Anglo-American cultural domination and didn't fit easily into the pre-existing record store bins marked rock, jazz or folk.

The world music boom that followed was embraced enthusiastically and by the mid-eighties had concluded that western guitar-based rock music had run out of ideas and had begun to repeat itself. Whether the judgement that guitar rock had exhausted its creative possibilities was fair is an argument for another day, but what is undeniable is that in what came to be known as 'world music', jaded fans discovered to their delight that when mixed with exotic local rhythms and styles, rock and roll could still break new ground.

Over time, we grew accustomed to the sounds of soukous, salsa and other world beats being incorporated into our musical diet and even world music began to sound old hat. Yet every so often, an unfamiliar sound of deep and mysterious otherness emerges from some overlooked corner of the globe to show that the rich seam of guitar rock has not been exhausted after all.

A few years ago Tinariwen (see our review of the excellent *Eiwan* in *HFC* 421) emerged from the Sahara desert with a rebel yell and introduced their snaking, other-worldly rhythms to a mainstream audience. The sound was a revelation and they went on to win a Grammy and numerous other awards.

Since then several other Tuareg bands have followed them out of the desert sands and on to a world stage – and Tamikrest's fourth album might just represent the high tide of Tuareg rock and roll;

think of it as the Exile On Main Street or Dark Side Of The Moon of the genre.

The music sounds timelessly ancient and yet burns with an urgent modernity: as one fan smartly noted, Tamikrest is a cutting-edge 21st-century rock group that just happens to live in the middle of one of the world's most remote deserts. The massed guitars of the opener Mawarniba Tarttit twist and twine with a potency seldom heard in contemporary western rock music. Wainan Adobat sounds like the kind of spaced-out jam in the desert that Grateful Dead fans can only dream about. Mark Mulholland's production sparkles with luminous clarity and the entire record blazes with a righteous intensity born of the suffering and struggle of a people whose nomadic way of life is under constant threat. Kidal is a record about resistance, defiance and hope. And we all need that in our lives right now. NW

HOT PICK

Making Waves

Wren Records

ON HIS LANDMARK 1999 album Play, Moby sampled antique gospel field recordings and then set them in a contemporary sound bed to create something startlingly new and original. Luke Daniels sets out to do something similar for traditional folk music, taking more than 500 samples from archive recordings and then processing, detuning, warping and layering them into striking arrangements. To these he then adds modern day live recordings, including atonal fiddles, jagged guitars

and a button accordion from which he coaxes an extraordinary array of sounds.

Wispy strands of Scottish, Irish and American folk melodies weave in and out of the electronic bleeps and beats to create a hypnotic sonic journey. The result is folk music as you've never heard it before, retooled for a digital world with an ingenuity that is breathtaking. An obscure, but nonetheless delightful audiophile treat. NW

MUSICREVIEWS



6 CD boxset

Ron Sexsmith The Last Rider





Cooking Vinyl

SEXSMITH'S LATEST ALBUM in a 22 year career is another masterpiece, fusing the melodic and melancholic with a beauty that sounds effortless but is the result of consummate craftsmanship. combining McCartneyesque pop heaven with the troubadourisms of Jackson Browne and Carole King. The songs are alternately romantic, wistful, bittersweet, uplifting and sad, but always smart and graceful. Standouts include Breakfast Ethwereal, a gentle, string-laden rumination on childhood, the wry stomp of Radio, the sweetly soulful Worried Song and the yearning lament Man At The Gate (1913), which closes the album. NW



Spiral Stairs Doris And The Daggers



Domino

US INDIE BAND Pavement hold a special place in my heart - their early output was full of artful lyrics, playful arrangements and off-kilter melodies. So when anyone from the band releases a new album it piques the interest, whether it be frontman Stephen Malkmus or guitarist Spiral Stairs (aka Scott Kanberg). This is Spiral Stairs' second solo album, and it's frisky in places - the driving, electronics-imbued No Comparison and the late-era Pavement-sounding The Unconditional, complete with stabs of sax. The rest is, unfortunately, unremarkable: musically sound, solid production, but nothing that stays with you for very long. PH





Do you agree with our reviewers? Decide for yourself and listen to some of this month's tunes at www.hifichoice.co.uk

Asgeir Afterglow



One Little Indian

BURSTING ONTO THE scene with his first English-language album In The Silence, 24-year-old Icelandic songwriter Ásgeir Trausti Einersson's second album once again showcases those fragile falsettos with sparkling electronics and some soulfulness. Einersson has obviously been listening to James Blake because there's a real urban soul feel to some of the tracks, which are shot through with bursts of R&B and folktronica. With this bang up-to-date aesthetic firmly in place Afterglow sounds peachy on a top-notch system. Its epic synth sweeps, languorous rhythms and mournful pianos are all smoothly rendered. This could be the album that tips Einersson into the big time. PH

UDIOFILE VINYL





Van Morrison Astral Weeks

180g vinyl

Warner Bros



OFTEN CITED BY

those that are in the know as the best album ever made, Astral Weeks is one of the few that actually manages to live up to the hype. Its

combination of poetry, jazz and soul has rarely been matched. This much Morrison fans are aware of, or at least they should be, but what's equally important is the medium that it's played on. A very good digital system lets you know why it's so revered, but those are scarce things. Decent analogue systems, however, are a bit

easier to come by and with the right pressing will take you on a trip that transcends the years and transports the spirit.

I got this 2014 40th anniversary remaster in the hope that it might give me more than I get from my eighties copy, and it isn't bad given the vintage of the original tapes. It's quiet for a start and that makes up for a lot, but it lacks the openness, 3D imaging and sparkle of even a well-worn vintage copy. Such is often the way with old releases, time is not kind to master tapes and it's the treble that suffers. Astral Weeks is more than essential, but you might be better off with a good used pressing. The music warrants six stars, this pressing not so many. JK

MUSICREVIEWS

HIGH RESOLUTION DOWNLOADS



The Orwells Terrible Human Beings

CHANDOS

hdtracks.co.uk

THE CHICAGO-BASED QUINTET return for their third album, sticking to what they know - melodic, Weezer and Strokes-esque garage rock. What's more they keep up their penchant for faux offensive lyrics. And all this wannabe enfant terribleness leaves a bad taste in the mouth, which is a shame because the production gives the record a pleasing sheen and requires it to be played loud, including as it does some good sing-along moments. PH

VAUGHAN WILLIAMS

BERGEN PHILHARMONIC ORCHESTRA SIR ANDREW DAVIS

Coincidentally, the 1997 Teldec

CD offered the exact same

Vaughan Williams coupling

JOB · SYMPHONY NO.



Son Volt

Notes Of Blue

cries out for: melancholic steel guitar, lashings of folk guitar and a grizzly epic American voice singing plaintive, meaningful laments about the state of the nation. Jeff Farrer's band's ninth album sees Son Volt in full electric mode. reminiscent of Springsteen on tracks like Back Against The Wall, and then going full buzzsaw blues stomp on Static and Lost Souls. The production alone makes this a must-listen. PH

Vaughan Williams

Bergen Philharmonic Orchestra Sir Ändrew Davis



Hybrid SACD

Chandos

THE TRAGIC DEATH of Richard Hickox in 2008 left a number of Chandos projects incomplete - among them the cycle of Vaughan Williams symphonies, which lacked 7 and 9. Here, the enigmatic 9th Symphony is generously coupled with Job. Davis recorded a cycle of the symphonies with the BBC SO for Teldec in the nineties, and this new recording improves on it in terms of range and detail and the performances are impressive. At times one senses a slight lack of personality and involvement in Job, but the Symphony emerges with great power and dignity - making one realise

Job; Symphony No.9

what a much under-valued work it is. JH

CD

Mussorgsky/Ravel Pictures At An Exhibition

London Symphony Orchestra, Predrag Gosta



Edition Lilac

THIS NEW STUDIO recording (made at Abbey Road) is coupled with Rachmaninov's Symphonic Dances, and conducted by rising star Gosta. The LSO is in fine form. The playing is tight and clean, offering the sort of tonal brilliance and immediacv one used to get from this orchestra in the sixties and seventies. Gosta's performances are crisp and articulate, with the emphasis on detail rather than atmosphere. Precise playing and sharp attack are favoured and the result is vivid and exciting. The recording - close and dry - offers great clarity and definition. On some equipment, climaxes sound a

tad 'hard' tonally, but overall the sound is good. JH



CD

Esperanza Spalding Emilv's

HOT PICK



**** Concord

ESPERANZA SPALDING IS an American bass virtuoso that normally opts to play the acoustic double bass, but not here. This is all electric jazz rock with a touch of funk and a soupçon of Joni Mitchell in the vocals thrown in for good measure. It's a bold move for Spalding, but works a treat with her conscious lyrics and inspired compositions delivering a message that is both political and spiritual. Both the CD and the hi-res download bring out detail and nuance in a recording that makes up for its limited image depth with great tone and perfect grooves. Audiophile it ain't, essential it very much is. JK

DEMO DISCS



John Reddington, MD of Big Red Sales (Dual turntables and Piega speakers) reveals the music he uses to demo products



Led Zeppelin Kashmir

Quite simply Jimmy Page's finest moment, it's filled with power and passion that builds throughout. Bonham's drumming will test the timing and attack of any good system.



Best of deep south blues with infectious bass guitar and progressive timing changes. Should create a seventies Alabama rock bar in your room.



Dire Straits

Telegraph Road Oh so subtle keyboards to start off. then a fantastic kick of bass and steel guitar creates a track that builds into a true rock anthem. You just need to play it loud.



Taste Catfish

Deep and heavy with shades of Hendrix and Black Sabbath, and an acoustic section in the middle that begs for a high-resolution system to detail Rory Gallagher's guitar.



Uriah Heep

Live January 1973



2x 180g vinyl

BMG Records

URIAH HEEP IS currently enjoying something of a renaissance with a clutch of albums being re-released and the band touring later this year. and this Record Store Day exclusive is a must for fans. Like a Heep greatest hits, with tracks including Sweet Lorraine, Look At Yourself and Gypsy, it ticks all the boxes for hardcore fans. This being a live album, the quality isn't comparable with a studio recording, but it is nonetheless excellent for the era and captures the classic lineup of the band in all its majesty. This excellent package also includes a reproduction of the original 1973 tour brochure, sleeve notes and 'splatter coloured' vinyl. JDW



Nigel Williamson looks back on one of the world's best-selling bands, which also happened to have more bed-hopping and loving-and-loathing than the average soap opera

THE ALBUMS



FLEETWOOD MAC (1968)

A British blues classic spearheaded by Peter Green's sweet guitar on a set that balances covers of blues standards by Robert Johnson, Elmore James and Howlin' Wolf with a selection of sturdy original compositions.

1968



MR. WONDERFUL (1968)

More classic licks patented by Robert Johnson and Elmore James - a particular influence on Jeremy Spencer's slide playing. But Green started to come into his own both as a songwriter and a hauntingly understated vocalist.



THEN PLAY ON (1969)

The most accomplished of the three albums recorded with Green in the band. The US edition included the brilliant two-part single Oh Well, although it was oddly omitted from the UK release.



KILN HOUSE (1970)

Spencer and Kirwan valiantly attempted to maintain the blues-rock crunch of the Green era. but couldn't match his flair. Christine McVie drew the cover art, but her musical contribution was minimal.

MUSIC LEGENDS FLEETWOOD MAC

hen Mick Fleetwood rang Lindsey Buckingham and invited him to join Fleetwood Mac on New Year's Eve, 1974, it was the last throw of the dice. After early success as a British blues band, a series of disasters and a giddying revolving door of personnel meant that Fleetwood Mac had gone through nine different lineups in eight years.

Drummer Fleetwood and bassist John McVie remained from the original lineup while McVie's wife Christine had joined on keyboards and vocals. But the future looked bleak. They had no guitarist and the band's most recent album, *Heroes Are Hard To Find*, had barely sold enough copies "to pay the electric light bill", as Fleetwood put it.

Nobody could have guessed that the recruitment of Buckingham, who insisted on bringing with him his girlfriend Stevie Nicks, would turn Fleetwood Mac into one of the biggest-selling acts in rock history or, that against all the odds, the lineup would still be together more than 40 years later.

Along the way, Fleetwood Mac also became popular music's most infamous soap opera, a kind of rock and roll equivalent of *Dallas* or *Dynasty* in its bed-hopping, drug-snorting, loving-and-loathing, crazed self-indulgence.

Little lies

The band's extraordinary mix of melodic soft-rock and raging emotional turbulence was encapsulated memorably on *Rumours*, in a set of songs that sounded warm and uplifting on the outside, but which inside revealed lyrics wracked with anger and pain like a series of pages ripped from their most intimate private diaries.

Since its release in 1977, Rumours is reported to have sold an estimated 45 million copies, rivalling Michael Jackson's Thriller and Pink Floyd's Dark Side Of The Moon in the list of the biggest-selling albums of all time. But the story begins a decade earlier in 1967 when Fleetwood and John McVie team up with guitarist Peter Green in John Mayall's seminal Bluesbreakers band.

When Green and Fleetwood decide to leave and form a new band with slide guitarist Jeremy Spencer, McVie initially demurs. But they tempt him by incorporating part of his surname into their new moniker Fleetwood Mac and by the time the band's debut album appears in 1968, McVie has joined them. Shortly after a third guitarist is added in the 18-year-old Danny Kirwan.

Success was almost instant. By the end of 1968 they had hit the top of the singles chart with Green's haunting instrumental *Albatross*. Further top 10 hits follow with *Man Of The World*, *Oh Well* and *The Green Manilishi (With The Two Prong Crown)*.

But after three top 10 albums, the group was rocked by three crippling blows that by rights should've destroyed the group forever.

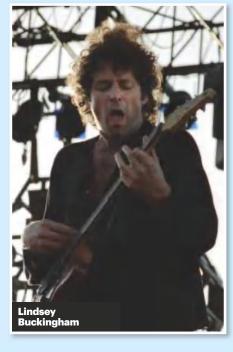
Fuelled by copious amounts of LSD, Green – whose skill as a blues guitarist rivalled

To say Rumours was recorded under extreme personal duress would be an understatement

Clapton but was also the group's main songwriter – had a schizophrenic breakdown, quit the band and drifted into a wilderness of mental illness

Christine Perfect, keyboard player with the Birmingham-based blues band Chicken Shack, came in to replace him as a songwriter. But there was a further bodyblow when Spencer left to join the Children of God cult while the group were on tour in America. After announcing one morning that he was going out to buy a newspaper, he never returned.

Bob Welch was recruited in his place, but the trauma continued when Kirwan was sacked after smashing his guitar in a drunken rage and refusing to go on stage. Somehow, Fleetwood Mac had contrived to lose not one but three guitarists, all in the space of less than two years.



They lost a fourth when Bob Weston, recruited to replace Kirwan, had an affair with Fleetwood's wife and was fired.

When a court battle with the group's former manager over the rights to the name Fleetwood Mac prevented them touring or recording for a year, it seemed that they had hit the buffers.

Yet Fleetwood and the McVies stubbornly refused to accept defeat. They won back the right to the band's name and at the urging of their new American guitarist Bob Welch, in 1974 moved to Los Angeles, where they recorded a new album – only for Welch to quit three months after its release.

Meanwhile Lindsay Buckingham and Stevie Nicks were in the throes of their own career breakdown. After recording a debut album under the name Buckingham Nicks which had sold pitifully, Nicks had been reduced to waitressing in a Beverly Hills singles bar and was on the point of returning to her parents'

1971



FUTURE GAMES (1971)

A softer, almost folk-rock sound, led by Christine McVie's lovely ballad Shoe Me A Smile and new guitarist Bob Welch's haunting eight-minute title track. They sounded like a band in transition, but with a renewed sense of purpose.

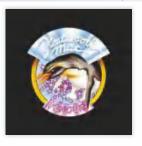
1972



BARE TREES (1972)

Kirwan had five melodic songs on his final album with the group, including a setting of a Rupert Brooke poem. Other highlights included Christine McVie's soulful Spare Me A Little Of Your Love and Welch's lovely Sentimental Lady.

1973



PENGUIN (1973)

The last blues traces disappeared with Kirwan as Christine McVie and Welch dominated on a set of pleasing, midtempo pop-rock, with even a touch of country on The Derelict and Caribbean steel drums on Did You Ever Love Me.

1973



MYSTERY TO ME (1973)

Another album dominated by Welch and Christine McVie, emphasising that the middle Mac period, sandwiched between the early blues albums and the Buckingham-Nicks era, is very much underrated.

MUSIC LEGENDS FLEETWOOD MAC



home in Phoenix and going back to college. It was at this point that Fleetwood made his fateful call and invited Buckingham to join the band. Loyally, he insisted that he and Nicks came together as a package. Fleetwood was reluctant as the group already had one female singer; but the need for a guitarist was so great that he agreed to the demand.

Within weeks what was now the group's tenth lineup was in the studio recording a set of new compositions, including Nicks' *Rhiannon*, a dreamy, bewitching song that swiftly came to define the sound of the 'new' Fleetwood Mac. Inspired by the arrival of the newcomers, Christine McVie also contributed two of her most enduring compositions in *Say You Love* Me and *Over My Head*.

The album, simply titled Fleetwood Mac, was released in 1975 and initially sold modestly. By the time it reached the top of the US charts some 15 months later, the group was already at work on the follow up that was to be their masterpiece.

To say *Rumours* was recorded under extreme personal duress would be an understatement.

Mick Fleetwood lost himself in a blur of drink and drugs while Nicks ended up in rehab

The Buckingham-Nicks relationship had disintegrated, and the McVies were in the middle of divorce proceedings.

"The emotional rollercoaster was in full motion and we were all in a ditch. It was all weird and twisted and that's how we made the album," Fleetwood told me years later.

It might have made more sense to quit. Yet instead, the warring parties began writing songs to each other. "One thing I think you should know, I ain't gonna miss you when you go", Buckingham told Nicks on the album's opener, Second Hand News. "Now here you go again, you say you want your freedom", Nicks responded on Dreams.

Buckingham hit back with *Never Going Back Again* and the cathartic *Go Your Own Way* on which he screamed "Loving you isn't the right

thing to do, before Nicks responded once more with *I Don't Want To Know*.

In the McVie camp, Christine was saying goodbye to John with *Don't Stop*, while *The Chain* was about the tangled web in which the entire band was trapped.

The album closed with Nicks' cocaine anthem, *Gold Dust Woman* for throughout the *Rumours* sessions, a black velvet bag of cocaine held pride of place under the mixing desk, members of the band refreshing themselves from it at frequent intervals. The drugs went with the territory, according to Buckingham: "If you were making records you had to function on a certain level and it was music through chemistry".

You make loving fun

"We weren't just singing to each other but screaming and everything was enlarged by the intake of illegal substances," Christine McVie admitted. "It was John who suggested the title *Rumours* because we were all writing journals and diaries about each other. If we'd all been getting on like a house on fire, the songs wouldn't have been nearly as good." Seldom can music with such a highly polished veneer have been so dramatically juxtaposed with such a scalding cauldron of simmering tensions and seething passions.

"You can look at *Rumours* and say, 'well, the album is bright and it's clean and it's sunny," Buckingham noted, "But everything underneath is so dark and murky. The built-in drama cannot be underplayed as a springboard to that album's success."

Released in February 1977, Rumours topped the US album charts for six months. It was punk's 'year zero' but that didn't stop it topping the charts in Britain, where it stayed in the Top 100 for the next eight years.

And once the album started flying, the group found itself bound together by a commercial impetus that trumped emotional dysfunction. "The band was at the pinnacle of its career and we had a responsibility not to break that up for anything as trivial as a divorce," Christine McVie later noted.

1974



HEROES ARE HARD TO FIND (1974)

Welch did most of the heavy lifting on his final appearance, providing seven of the 11 songs on the band's most American-sounding album yet. You can hear why they feared the worst when he quit. Fortunately, help was at hand...

1975



FLEETWOOD MAC (1975)

Buckingham and Nicks made an immediate impact, writing six of the 11 songs, including classics Rhiannon and Landslide, while a re-energised Christine McVie contributed Say You Love Me and Over My Head.

1977



RUMOURS (1977)

The band's new slick and commercial sound reached its apogee. But underneath there were deep and dark emotions on songs such as Don't Stop, Dreams, Go Your Own Way and Gold Dust Woman.

1979



TUSK (1979)

Over the top it may have been – but the uneasy balance of sweet balladry and soft-rock (Sara and Over And Over) and Buckingham's ambitiously maverick sonic experiments probably sounds smarter today than it did at the time.

MUSIC LEGENDS FLEETWOOD MAC

To support the release of *Rumours*, Fleetwood Mac embarked on an eight-month US tour that became a debauched, cocaine-and-champagne-fuelled odyssey, which cemented the band's legendary reputation for excess. And the heady cocktail of success, drugs and more money than they knew how to spend left little space for reflection or time to slow down, as Nicks and Fleetwood then embarked upon an affair that further jeopardised the band's emotional instability.

Don't stop

Somewhere in the middle of the madness, the group managed to record further albums. Released in November 1979, *Tusk* took over a year to record and cost a million dollars – an unprecedented amount of money at the time.

The title track employed a 112-piece marching band. And the excess was equally gargantuan on a non-musical level. "Recording *Tusk* was quite absurd," Christine McVie later admitted. "The studio contract rider for refreshments was like a telephone directory. Somebody once said that with the money we spent on champagne on one night, they could have made an entire album. And it's probably true."

Tusk failed to replicate the numbers Rumours had achieved and although it rose to No 2 in Britain, it only made No 18 in the far more lucrative US market. Ultimately, it went on to sell eight million copies – impressive for a double album – but in comparison to what had preceded it, it was a relative failure.

Other band members were not slow to blame Buckingham, who had steered the album in a more adventurous direction and had been determined not merely to make "Rumours Part Two".

The band was put on hiatus as members recharged their depleted batteries. Nicks, Buckingham and Fleetwood all made solo albums. But when only the former was successful, accountants and record company executives were soon agitating for another



Fleetwood Mac album, and the band reconvened to make *Mirage*. Released in 1982, it lacked either the raw emotion of *Rumours* or the runaway ambition which Buckingham had injected into *Tusk*.

It would be five more years before the band would release another album – and, being Fleetwood Mac, there was plenty more trauma in the intervening years. Fleetwood lost himself in a blur of drink and drugs and Nicks ended up in rehab.

Somehow, Fleetwood Mac had lost not one but three guitarists in less than two years

With both effectively hors de combat, it was left to Buckingham to pull together the album that became Tango In The Night. "It was a very difficult record to make," he recalled. "Half the time Mick was falling asleep. We spent a year on the record, but we only saw Stevie for a few weeks."

Thanks to Buckingham's efforts, the result was a return to form, adversity once again seeming to bring the best out of Fleetwood Mac. Yet Buckingham was deeply distressed by the experience, and particularly disturbed by the condition of his former girlfriend.

"The way people were conducting their lives made it difficult to get serious work done," he noted. "And Stevie was the worst she's ever been. I didn't recognise her. She wasn't the person I had once known."

It led to a traumatic showdown as Buckingham allegedly attacked her and had to be pulled away by other members of the band. It resulted in him walking out on Fleetwood Mac, seemingly for good. "When I was done with the record, I said, "That was the worst experience of my life'," he later told me. "I needed to pull out of the machine and try to maintain a level of integrity for the work that wasn't about the scale or the sales."

Never go back again

To replace Buckingham, the band recruited not one but two guitarists in Rick Vito and Billy Burnette. The new six-piece lineup recorded 1990's forgettable *Behind The Mask* before Nicks and McVie also left.

Doggedly, the rhythm section of Fleetwood and McVie – who retain legal ownership of the band name – vowed to soldier on. The resulting album, 1995's *Time* – with Bekka Bramlett, daughter of Delaney and Bonnie, and former Traffic man Dave Mason added to the lineup – was even less satisfying.

Yet the flame refused to die. After Bill Clinton had adopted *Don't Stop* as his presidential campaign song in 1992, Buckingham, Nicks and Christine McVie all rejoined Fleetwood and John McVie to perform at the new President's inaugural ball. Five years later, on the 20th anniversary of *Rumours*, came a full reunion tour and a live album.

Christine McVie left for a while, but eventually returned and is about to release a new duets album with Buckingham, on which both Fleetwood and John McVie also reportedly play. Asked what keeps them together, Buckingham answered: "Just the fact that we've survived". On the 40th anniversary of *Rumours*, rock music's longest running soap opera still isn't over yet ●

1982



MIRAGE (1982)

A kickback against Tusk's pretensions and a return to straightforward songcraft. Love In Store, Can't Go Back and Gypsy were great songs, but the drama of Rumours was lacking.

1987



TANGO IN THE NIGHT (1987)

A triumph for Buckingham's production skills. He also contributed some of the best songs (Big Love, Family Man and the title track), but McVie stole the show with Little Lies.

1990



BEHIND THE MASK (1990)

With Buckingham gone, it was evident how much the band relied on him. New members Rick Vito and Billy Burnette did their best, but the results were ultimately anodyne.

1995



TIME (1995)

The first album in 20 years to feature neither Buckingham nor Nicks, with a predictable decline in quality. Christine McVie did her best with five new songs, but it just wasn't enough.

2003



SAY YOU WILL (2003)

Buckingham and Nicks returned and between them wrote all 18 songs, the potency of which surprised critics who thought Fleetwood Mac had become just a money-spinning touring act.

Let's get digital

Enjoying the benefits of digital music files involves more than just investing in a decent DAC, here's everything you need to know, but were afraid to ask

ou may not realise it, but any music that you have stored digitally – whether it be on CD, SACD, Blu-ray, computer, portable player, hard drive or even if it is streamed or downloaded – requires a DAC to play it. A digital-to-analogue converter is the vital component that makes it possible for digital music files to be converted into an analogue signal so that we can hear it - without a DAC, your music is little more than a series of ones and zeros. With analogue formats like vinyl and compact cassette, there was never any need for a converter, but the advent of digital music formats – starting with the compact disc – changed all of that.

Digital music files generally (except DSD) appear in the shape of Pulse Code Modulation (PCM), measuring the amplitude of the analogue music signal at regular intervals, which is more commonly known as the sampling rate. The value of the amplitude, meanwhile, is a number that is represented by a series of ones and zeros and the length of each is what's known as the bit depth. The greater the bit depth, the more accurately the amplitude is represented. Hence 44.1kHz/ 16-bit. Similarly, a typical hi-res track has a sample rate of 192,000 times per second at a bit depth of 24-bit, or 24-bit/192kHz. Digital audio is stored at a variety of bit depths and differing sample rates (while compression formats and encoding also have a part to play), resulting in a number of different file types capable of storing music in various qualities. The one constant regardless of file type is that a DAC is necessary to translate the ones and zeros into a sound that's as close to the original recording as possible.

Timing is everything

DACs are built into just about every digital component capable of playing music - from mobile phones to laptops and tablets to CD players - but not all DACs are created equal. One of the things that separates a great one from a not so great one is the DAC's ability to correct jitter. Best described as the result of digital timing errors, where the clock in a component that is responsible for the frequency of the sampling rate is not stable and accurate enough, the signal can degrade and suffer from distortion. Standalone, dedicated converters have more stable and accurate clocks - unlike the cheap ones in smartphones, PCs etc - resulting in a superior performance.



There are two ways to enjoy digital audio: either by streaming it digitally from remote storage via a network or sending it digitally to a compatible DAC via your computer's USB socket. There are pros and cons to both, but there are key differences. The USB approach is simple and cheap, requiring the purchase of a quality USB cable to reach between your computer and DAC. The streaming approach can potentially offer

Invest in a software player that turns off all the processing that goes on in the computer

better quality but can be more expensive as you need a streamer, a wireless router and ideally a NAS drive to store your music.

It's important to think about the file format you'll be storing music in. We recommend Free Lossless Audio Codec (FLAC) or Apple Lossless Audio Codec (ALAC), because unlike the computer file equivalent of CD music -WAV - FLAC and ALAC files allow the use of 'metadata'. Embedded inside every file along with the music is a string of data with information about the song, such as the artist, name and cover art.

Arguments rage in computer audio circles about whether uncompacted WAV files sound better than FLAC. Regardless, it is important

to take two things into account. The first is that all FLAC files can be restored to their original file size and type - the only difference is that increasing the compression will increase the effort it takes to restore the file. The second is that some software now rips to uncompressed FLAC - ie exactly the same data rate as WAV, which should result in an identical performance with easier tagging.

There are two ways to create music files ripping (or 'recording') your existing CD or vinyl collection, or downloading new music. The first can be tedious, but there are plenty of software packages available from the likes of Exact Audio Copy for PC, dBpoweramp for PC and Mac and X Lossless Decoder for Mac OS X, all of which ensure you get accurate rips, and will even reread parts of the disc so the copy is perfect. This slows ripping speeds down, and if you own thousands of discs could be a time-heavy process.

Once you have your files, you have a choice between a USB-capable DAC or a streamer with a built-in DAC. The former is the most straightforward, but to get the best out of it you need to think about the software you use. It's best to invest in a player that turns off all the extraneous processing, allowing your DAC to do all the audio conversion, bypassing the computer's internal processing.

A number of options are available, but JRiver (jriver.com) for the PC or Audirvana Plus (audirvana.com) for the Mac are excellent starting points. Windows and OS X



are set by default to up or downsample the audio output, and/or mix system sounds into it, whereas these applications will give you 'bit-perfect' playback where what comes out is exactly the same as what went in.

Next comes the hard disk. It's a good idea to buy a bespoke hard drive to store your music on. A simple portable drive will suffice for those playing their music out from their computer via USB, although solid-state (SSD) drives generally have faster access and fewer read errors, which helps sound reproduction.

Stream lover

Those that want to stream music via a network should consider investing in a dedicated Network Attached Storage (NAS) drive. The beauty of this is that it's very easy to use with any networked music streamer, thanks to its built-in media server software. Many drives are 'bay' types that allow you to select your drive size and use one as a RAID-type backup, but nothing is more effective than a second drive that is connected only for backing up if you want true peace of mind.

If you're using a Windows PC and a USB DAC, you'll need to install the USB audio driver for the DAC. This is supplied by the manufacturer and can be downloadable from its website. Never connect the USB DAC to

STREAM OF CONSCIOUSNESS

Music streaming services have very quickly risen from an affordable way to listen to new music, to -in some cases - a viable alternative to a CD or record collection. The improvements in speeds and stability of broadband in the UK has revolutionised the way that we can now access and listen to music - meaning that millions of tracks are a mere tap of - meaning that millions of tracks are a mere tap of a keyboard or touchscreen away. Perhaps the most exciting thing about these on-demand services is that some (most notably Tidal and Qobuz) offer lossless music files that have the potential to sound every bit as good as your compact discs. Check out the *Group Test* in *HFC* 414 to see which services sound the best.



the PC before installing the driver. If you're using a Mac, there's usually no need to install a driver. It is also possible to use specialised NAS drives that have adaptive USB outputs to connect directly to a USB DAC without the need for a driver. This has the added bonus of impressive stability and very low noise levels compared with most PCs or Macs.

Set up often just involves inputting your home wi-fi details to access music across your network. The best results are normally achieved with wired networks - not so much because the performance of wireless is inferior, but because some of the variables that can affect performance are removed. Some NAS drives allow for direct connection via Ethernet, so invest in a good-quality Ethernet cable like Supra Cables Cat 8 (HFC 415). The most effective way of connecting drive and streamer together is via your router as this will make the drive available to more than one streamer in your home and allow for use of a control app via a phone or tablet.

Once all of this is done, you'll have the makings of a serious system. Both the USB DAC and the streamer-based approach will give you access to hi-res files of very high

The DAC is the vital component that makes it possible for digital files to be played on a hi-fi

quality, and if you've only ever used CD you're likely to be blown away by the performance that some files offer in comparison. Take care to get the basics right and you'll have a system that allows for a very happy combination of performance and convenience so that you can experience more music from more places than ever before - there's never been a better time to make the switch.

If you want to turn your computer into a serious music source, don't use iTunes or Windows Media Centre. These are fine for chart music, but in sonic terms they send the music through all manner of processing before arriving at your speakers.

That's why it is essential to invest in serious music playback software, and the good news is that there are numerous options available, all of which have a slightly different presentation, both visually and sonically. Don't forget to download the demo versions to try for yourself first, then you can buy the one that best suits your needs •

A NAS drive provides the ideal way to store your music files

KNOW YOUR FORMATS

There are numerous file types to chose from. Here's a handy summary of what's what

Advanced Audio Coding (AAC) is a lossy audio codec designed as the successor to MP3, claiming better sound quality at similar bit-rates.

Audio Interchange File Format (AIFF) was developed by Apple in 1988 and use uncompressed pulse-code modulation (PCM). There's also a compressed variant of AIFF known as AIFF-C or AIFC, which can sometimes be recognised by an .aifc file extension, although these can also appear with the standard .aiff or aif extension, so check for higher bit-rates to know you're playing uncompressed files. Being uncompressed means AIFF files will demand more space than lossy and lossless equivalents

ALAC

Apple Lossless Audio Codec data is stored within an MP4 container, but it employs different encoding in a lossless (not lossy) format that uses a linear prediction method, similar to FLAC. Many music sites now offer ALAC files up to 24-bit/192kHz levels. Because of its lossless compression, ALAC claims to give the same audio quality as WAV/ AIFF equivalents, while requiring less hard drive space.

DSD Direct-Stream Digital uses pulse-density modulation encoding to store audio signals on SACDs. The signal has a sampling rate of 2.8224MHz that is 64 times that which is used by compact disc. Higher sampling rates are also available at twice, four times or even eight times as much data as a DSD disc.

Free Lossless Audio Codec uses a lossless compression, which will not change the quality of the compressed audio. This makes it suitable as an archive format for owners of CDs that wish to preserve audio quality. The technical strengths of FLAC compared with other lossless formats lie in its ability to be streamed and decoded quickly.

MP3 coding employs lossy data compression based on an algorithm designed to reduce the amount of data needed to 'represent' an audio recording while sounding like a faithful reproduction of the original file, allowing for much smaller file sizes. The compression reduces parts of sound considered to be beyond the hearing of most people, although in reality hearing MP3 files on any half-decent hi-fi quickly reveals their sonic shortcomings.

Master Quality Authenticated is developed by Meridian to provide studio quality at high resolution while reducing the download streaming bandwidth and the amount of file storage space required by using an 'audio origami' process to pack and unfold digital content.

Waveform Audio File Format is the main format used on Windows systems for raw, usually uncompressed audio encoded in the linear pulsecode modulation (LPCM) format. LPCM is also the standard format for audio CDs, which store two-channel LPCM audio at 16-bit/44.1kHz, so ripping CDs as WAVs arguably gives you the most faithful reproduction, although many audiophiles also argue that there is no difference in sound quality between WAV and ALAC/FLAC files.



DIGITAL-TO-ANALOGUE CONVERTERS £495-£1,998

I ime to convert

If you're serious about getting the very best from your digital music collection you need to invest in a standalone DAC. Here are six of the very best



Arcam **irDACII**

PRICE: £495 WEB: arcam.co.uk REVIEWED: HFC 412

Back in the eighties Arcam released the UK's first standalone DAC in the shape of the £299 Delta Black Box. Jump forward to 2012 and the small black box had become a small silver box, in the perfectly formed rDAC (HFC 357), which was the first DAC to offer asynchronous USB connectivity. The headline news with the irDACII is the addition of a headphone amplifier stage (from Arcam's flagship A49 integrated amplifier, no less), a Bluetooth aptX input and the adoption of the ESS ES9016K2M Sabre DAC chip. Flavour of the month, this chipset will play out 24-bit/192kHz PCM and DSD128. Connectivity, meanwhile, includes two optical and coaxial inputs, alongside a USB port and the aforementioned headphone output.

Sound quality

Although tonality isn't quite as warm as the rDAC, there's so much more information coming through, making the original sound distinctly opaque compared with the forensic precision of the irDACII. Whether hooked up via USB, optical or coaxial, it has more focus and is livelier with an impressively propulsive gait. Capturing the power of the music well and framing it with architectural precision. Things are propelled along further by a crisp, well-defined midband with instruments perfectly located in the mix.

WE SAY: A fully rounded offering that is quite superb at reproducing a myriad of sources and formats





Audiolab

M-DAC+

PRICE: £800 TELEPHONE: 01480 447700 WEB: audiolab.co.uk REVIEWED: HFC 410

When the original M-DAC (HFC 359) was unveiled it had no real rivals at its £600 price point. Considerably larger than its older sibling - thanks to the fact that the power supply has been brought back inside the chassis - the M-DAC+ has more digital inputs than ever and now runs PCM right up to 32-bit/384kHz alongside DSD file support (that's DSD64, DSD128 and DSD256). The M-DAC's twin coaxial and twin optical digital inputs, optical and coaxial digital outputs, single-ended RCA and balanced XLR analogue outputs are now joined by an AES/EBU socket and a USB Type-B connection.

Sound quality

The M-DAC+ delivers worthwhile improvements to just about every aspect of the M-DAC's performance. The only real criticism levelled at the original was the slight sense of musical constraint. Now the sound is more natural and organic, with a less electronic and mechanical feel that just lets the music flow. The result is that the listener is better able to immerse themselves in the music. This is further aided by the vast size of the soundstage and subtle details. Music appears to fall back to a deeper, darker silence while the rhythm section seems less crisp and better resolved. This means it's more nuanced and doesn't just hit you in a blunt fashion. The power is still there as before, but it's delivered in a more finessed and natural way.

WE SAY: Superb in pretty much every respect for the price, the M-DAC+ is quite simply an essential audition





Copland

PRICE: £1,998 TELEPHONE: 0208 9713909 WEB: copland.dk REVIEWED: HFC 418

Coming from Denmark, Copland's output has the same cool, sleek, sophisticated design for which the country is known. Combining the styling of a fifties radio with the red glow of Michael Hasselhoff's 1982 Pontiac Trans Am in TV show Knightrider, the laterally perforated DAC215 gets the balance between functional and stylish just right. It can handle PCM files up to 32-bit/384kHz alongside DSD64 and DSD128, thanks to the ESS Sabre ES9018 Reference chip. Connections include two optical, a coaxial, RCA line-level and USB Type-B inputs, along with line-level DAC and amplifier outputs and a 6.35mm headphone out on the front.

Sound quality

From the off, the DAC215 stands out as an entirely captivating performer, allowing the music to flow easily and freely. The soundstage seems to come alive with a big, warm sound, while instruments appear to have plentiful space around them. On occasions, the sound is a little fattened up with vocals taking on an almost creamy quality, while the densely textured soundstage behind conveys energy and force without falling foul of harshness.

WE SAY: An excellent and truly soulful DAC that seems to be equally comfortable working as a preamp



THEKNOWLEDGE





Digital-to-analogue converters come in all shapes and sizes and if space is a premium a USB DAC is an excellent space-saving solution. More often than not they use the power from your computer, meaning that there's no need for an external power source. Connections are usually limited to just a headphone socket and sometimes a line-level output for connecting the DAC up to powered speakers or your system.

If you require more connectivity options and are not bothered about being able to carry your DAC around with you when out and about, a desktop USB option might be more suitable. These are invariably bigger and require their own power source, but usually offer additional analogue and digital audio inputs.



Mytek Brooklyn

PRICE: £1,520 TELEPHONE: 01484 540561 WEB: mcru.co.uk REVIEWED: HFC 416

US manufacturer Mytek's DAC prototypes are typically farmed out to New York recording engineers for field testing, which might explain why MQA (Master Quality Authenticated) compatibility is included. But that's just the tip of the iceberg. This USB-capable DAC boasts 384kHz PCM and DSD256 capability. There's also a preamplifier with line/MM/MC inputs and a headphone stage. It sports USB Class 2 and AES/EBU digital inputs, plus two S/PDIF coaxial digital ins, one Toslink optical input and one SDIF-3. Analogue connections include RCA and balanced XLR outputs as well as dual 6.35mm headphone sockets. Balanced operation comes via the 6.35mm four-pin XLR adapter. An ESS Sabre 9018 chip does all the hard work under the hood.

Sound quality

The Brooklyn has a highly animated and expressive sound with lots of life and action. That's not to suggest it's in any way coarse or in your face as it boasts smoothness and impeccable sonic manners. Poor recordings sound highly listenable, clean and natural with all signs of harshness replaced with a wealth of fine detail. There's powerful and expressive bass accompanied by a midband that's blessed with great clarity, while the treble is crisp, clean and incisive without grating. Meanwhile, the soundstage conjures a massive recorded acoustic that's full of air with instruments perfectly located with room to breathe.

WE SAY: The Brooklyn is so capable and versatile that it makes more established rivals appear ordinary in comparison





Roksan

K3 DAC

PRICE: £1,250 TELEPHONE: 01235 5111666 WEB: roksan.co.uk REVIEWED: HFC 415

While many DACs are half-width sized (or smaller), the K3 DAC is a proper, full-size product that's as chunky as Roksan's other K3 components. This means that there's plenty of room for its impressive selection of inputs (since you're asking, this includes an XLR AES/EBU, RCA coaxial S/PDIF, Toslink optical and a USB Type-B - plus there's an additional USB Type-B on the front). One of the most intriguing features is the K-Link wireless functionality. The K3 DAC comes supplied with a K-Link transmitter dongle, which enables any computer that it is plugged into to output music to the DAC. This effectively means that it sets up a wireless network, which works at up to 30m away. Powering the K3 DAC is a Texas Instruments DSD1794A chipset capable of playing 24-bit/192kHz PCM along with DSD128.

Sound quality

The K3 DAC's soundstaging is exceptional at the price; conjuring up a great big acoustic space inside of which all of the different elements of the mix are able to thrive. There's never any sense of them being squashed or subdued by one another. Performances are further enhanced by a mixture of lowdown punch and fine midband clarity. The bottom end is notably stronger than rivals, suggesting a robust analogue output stage which really helps to propel music along.

WE SAY: Across all genres, file types and resolutions this highly impressive, full-size DAC comes up with the goods





Simaudio

Moon Neo 230HAD

PRICE: £1,150 TELEPHONE: 0131 5553922 /EB: renaissanceaudio.co.uk REVIEWED: HFC 411

Built around the ever-popular ESS Sabre chipset, the Moon Neo 230HAD boasts precisely the sort of file and sample rate handling that you'd reasonably expect of a converter at this price point. The USB input decodes PCM at sample rates up to 32-bit/384kHz and DSD256. This is partnered by a brace of coaxial and a single optical input that are all 24-bit/192kHz capable. The Simaudio stands out from the crowd, however, by adding an analogue input as its fourth input. This is truly analogue in that at no stage does the Moon Neo 230HAD perform any sort of digital processing on the incoming signal.

Sound quality

Used as a fixed-level DAC, the Simaudio has a presentation that it completely unforced that effortlessly opens up the soundstage in front of the listener. The performance drips with detail and nuance while being delivered without any noticeable sense of strain or indication that parts of the recording are being given any undue prominence. Meanwhile more intimate music is laden with emotion, without the Moon falling into the trap of over cooking things. There's still the same impressive show of detail and space, while vocals are rendered with magnificent texture and body, while it all comes together in a way that is endlessly enjoyable.

WE SAY: A delightful DAC, the Moon Neo 230HAD delivers the digital goods in an effortlessly enjoyable manner



DAC's the way to do it

Having taken the time to find your perfect digital-to-analogue match, here's a selection of add-ons to help you to maximise its potential



A beautifully produced digital optical cable, which reproduces music with clarity, accuracy and no hint of edginess

Annual Clearance

criterion audio

	Retail	Clearance		Retail	Clearance
ATC SCM-11 (cherry)	£1,200	£1,019	Linn Akurate 212 (Rosenut)	£4,380	£3,299
Bel Canto REF500M power amplifier (pair)	£3,998	£2,199	Linn Akurate 4200 (Silver)	£5,270	£3,849
Bel Canto REF1000M Mk2 power amplifier (pair)	£7,000	£2,499	Linn LP12 Akurate (Walnut, no cartridge)	£5,270	£4,449
Burson Audio Timekeeper	£1,950	£1,199	Linn Majik 4100 (Black)	£2,410	£1,899
Burson Audio Conductor SL9018	£1,199	£999	Moon 180 MiND streamer	£799	£499
Burson Audio Soloist	£799	£679	Moon 380D MiND DAC streamer	£4,500	£2,999
Chord Chordette Maxx amplifier	£989	£799	Naim CDS3	£6,795	£2,295
Chord Sarum speaker cable (3.5m pair)	£3,850	£2,999	Nordost Valhalla XLR-XLR cable (3m pair)	£5,199	£3,499
Clearaudio Performance DC turntable	£2,495	£1,999	Pass Labs XP-25 phono stage	£12,000	£6,499
Cyrus 8 ₂ DAC QX (Quartz Silver)	£1,970	£1,549	Plinius SA-Reference power amplifier	£17,000	£13,599
Denon AVP-A1HD processor	£6,799	£1,499	PMC Fact 12 (Tiger Ebony)	£12,995	£9,749
Denon DVD-A1UD universal player	£4,500	£1,199	Proac D30R (Cherry)	£4,750	£3,749
Devialet 200	£5,490	£4,399	Quad PA One headphone amplifier	£1,200	£999
Devialet 250 Pro	£12,490	£9,999	Raidho D1 + stands (Walnut Burl)	£15,125	£10,599
Devialet 400	£9,890	£6,999	Sennheiser HD800 headphones	£1,099	£799
Focal Diablo Utopia + stands (White Carrara)	£9,898	£6,499	Sim2 HT5000 projector	£42,500	£7,499
Focal Scala Utopia V2 (Black Lacquer)	£21,399	£12,749	Sonus Faber Olympica II (Graphite)	£6,398	£5,049
Grace M903 headphone amplifier	£2,150	£1,599	Sonus Faber Olympica III (Walnut)	£8,998	£6,799
KEF Reference 3 (Walnut)	£7,500	£6,399	Sonus Faber Venere 1.5 + stands (Gloss Black)	£1,298	£999
KEF Reference 5 (Gloss Black)	£10,500	£8,899	Spendor A5R (Walnut)	£1,995	£1,399
KEF R500 (Walnut)	£1,500	£1,149	Torus RM16 power conditioner	£7,900	£1,999
KEF R700 (Rosewood)	£2,000	£1,549	Vitus RCD-101 (Black)	£9,700	£7,249
Lavry AD122-96 MKIII (a to d converter)	£6,360	£3,199	Vitus RI-100 (Black)	£9,900	£6,999
Lavry 3000S (sample rate/bit depth converter)	£4,248	£2,099	YG Acoustics Carmel (Silver)	£20,000	£14,999

Welcome to Criterion Audio's annual clearance, where we have great prices on ex-demo and customer trade-in stock from the last year. You can help us make space for the amazing new models and brands we are bringing in. Please contact us if you are interested in more information, or come to our Cambridge showroom

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







Presenting high class, award winning UK built, Belt drive, Direct drive & Idler drive turntables and turntable upgrades



Photo above:

Our multi award winning Monarch turntable Visit our website to see our ever expanding range of turntables and turntable upgrades







WINNER! HI-FI NEWS Ultimate Hi Fi Finest Product Award 2012 WINNER! HI-FI WORLD AWARDS 2012 Best Turntable NOW FEATURED IN HI FI WORLD'S WORLD STANDARDS



With Direct Sales from us the manufacturer, there is NO retail mark up saving you between 40% and 50% compared to other similar products.

Part Exchange Deals given against your current turntable. Call for an instant quote...Superb Demonstration facilities

Contact us for all your turntable and hi-fi requirements 01246 268887

Unit 1 / Westwick Park / Broombank Rd / Broombank Industrial Est. / Chesterfield S41 9QJ E: robert@inspirehifi.co.uk . www.inspirehifi.co.uk





Super Size Sound

End user's experience with Maximum Supertweeters in his system.

For me the best placement was dead center top, in line with my tweeters, and at a level depth, flush with the front baffle of the main speakers.

With cables, connections and positioning all satisfied I spun my first critical tune and sat down for a listen..

..Wow.. The sound had changed, and not a tiny change either, quite a discernible change. The sound stage has grown, the whole sound has matured not just at the high frequency range but across the whole range! Vocals sound fuller and more correct, breaths on wind instruments were real, violin and strings in general sounds as real as I've heard on my system to date and atmosphere on live recordings were more perceptible. Without exception one of the best purchases I have made within Hi-Fi. If I could compare Hi-Fi to food it would be like adding a little bit of salt to the food, the flavour was always there, but the salt just makes the flavours stand out more and adds a further dimension to the complete flavour.

That's what the Maximum Supertweeters have done for my set up. Just as a well set up subwoofer adds to the fullness and roundness of the sound, the Supertweeter does the same also, just tailor the level to your preference and system matching and away you go.

Removing them after a few days has made the sound dull, flat and even two dimensional. Was that really what I was calling decent quality Hi-Fi a couple of weeks ago?! What I had thought was a pretty good sound was now without the Supertweeters only mediocre in terms of sound quality. The difference was a night and day one. So obviously they were welcomed with open arms and re-instated into the system once I had established there was a "gap" without them. On first play the smile returned to my face and I earnestly started to rummage through my

music collection to get another playlist together.

At which point I should also tell you that I found the effect was still there even at night time listening levels, but it does need a few decibels to be "magical".

My 15W per channel Leak valve amps had no problems with the load on top of my speakers and when using full range "horn" speakers, these Supertweeters are simply a must have item and being quite minimal in operation they don't seem to destroy the single driver sound of a good Lowther or Fostex, rather adding to it to give a fuller sound so long as you are careful with the volume level. Discretion is the key, and blending without over exuberance or understatement is a must and worth taking the time to tune in and get right because when you do, the sound is simply stunning...

...In conclusion, my humble opinion can only be used as a guide because we all hear differently and we all like a different sound. The Townsend Maximum Supertweeters are well executed, well made, capable, very discrete super tweeters. In my opinion in terms of user friendliness and sound they are the best passive super tweeters I have heard on the market today and the fact I have purchased a pair with my own hard earned money is testament to how good they are and the impact they have had on the sound of my system. I am not going to get into the "snake oil" debate because they work within my hearing range and with all of the formats I use. Lossless on the MacBook, DAB, Cd and analogue, vinyl and tape cassette all benefit from a fuller more emotional sound.



Engineering Hi-Fi since 1975



I'm sure my hearing doesn't extend much above 16kHz or so and yet the super tweeters work and work well for me.

I think transients, atmosphere, detail, attack and sustain all benefit as does timbre between instruments, sounds and especially vocals within the hearing range due to less distortion, less smearing and better definition at frequency extremes. Definitely not snake oil in my opinion..

..A worthwhile investment and I will not be returning them or selling them on.

Many Thanks and keep the music musical..
Patrick Thomas.



For more information and best advice on all Townshend products, please WWW.TOWNSHENDAUDIO.COM Email mail@townshendaudio.com or phone on +44 (0) 20 8979 2155

Master & Dynamic

MW50 wireless on-ear headphone

DESCRIBING THE MW50 as

'mobile thinking caps' designed to focus the mind and enhance creativity, Master & Dynamic doesn't actually use the word "artisan", but it's clear that it's aiming for the sort of Greenwich Village hipsters – or their UK equivalents – that like to dangle headphones around their neck while running their burgeoning internet startups or cereal cafés.

However, all is forgiven as it actually sounds great. It's certainly not cheap, but the classy design makes a good impression right from the start. The soft leather covering both the earpieces and adjustable headband looks very smart – and is available in either black or brown – while the stainless steel used on the hinges and other moving parts ensures the headphone is sturdy enough for life on the move.

The metal components push the weight up to 240g, but the earpieces are padded with memory foam and are soft and comfortable enough to wear for long periods. They also fold flat so that you can quickly slide them into the bundled pouch.

Wireless wonder

The MW50 is primarily designed for wireless streaming via Bluetooth, with support for the aptX codec and twin microphones built into the left earpiece so that you can take calls when you're on the move. Master & Dynamic claims the internal battery should last for 16 hours when fully charged. Repeated use over a rainy weekend suggests the figure is closer to 15 hours, but I tend to listen at fairly high volume. If the battery runs out you can simply switch to passive mode by plugging in the 3.5mm cable that's provided.

One other key feature is the use of Beryllium diaphragms in the drivers. Beryllium is an expensive material – which partly accounts for the high price – but it's light and extremely rigid, and those properties help to deliver impressive clarity and detail. My iPhone doesn't support aptX, but

S L o

when listening to a 256kbps AAC version of Queen's *Somebody To Love* via Bluetooth, the MW50 manages to maintain excellent balance and separation across the multiple layers of harmonies.

The real standout track, though, proves to be *Eskimo* by Damien Rice. The operatic finale often degenerates into high-frequency fuzz on lesser headphones, yet the MW50 is able to isolate the soaring soprano and strings and render each with a clarity that I've seldom heard before.

The bass isn't massively strong, but the MW50 digs down to follow the sinuous bassline on The Orb's *Prime Evil* without overwhelming the percussion that surrounds it. It's this ability to balance the sound across the entire spectrum that really stands out. It's an attractively warm sound too, rendering more delicate tracks such as REM's *Everybody Hurts* with a wistfulness that really tugs at the heart strings. However, the results aren't quite so good when switching to the 160kbps streaming via Spotify, which sounds rather more restrained

and perhaps less forgiving of lower bit-rates than it could be.

There's one other detail that causes me some concern. Although the MW50 has a closed-back design, the earpieces don't form much of a seal around the ears. Background noise isn't too intrusive while I'm listening to music, but a noticeable amount of sound does leak out, and I'd worry about annoying fellow passengers if I was wearing the MW50 on a long journey on a train or plane.

Rhapsody in Bluetooth

Although the MW50 is pretty expensive, its combination of clarity, balance and warmth makes it one of the better Bluetooth headphones that I've had the pleasure of listening to. The headphone is also very comfortable to wear for longer periods of time, with good battery life to see you through prolonged journeys. However, the porous earpieces and risk of sound leakage could be a problem and might force you to tone the sound down from time to time when travelling. **CJ**















KorgDS-DAC-10R 1-bit USB DAC/ADC



A NEW ADDITION to Korg's range of USB headphone DACs, the DS-DAC-10R's elegant diecast silver body is a departure from many compact USB-powered designs and the sleek styling means it should fit in well visually with most audio setups. It also has an impressive raft of features. Starting with the outside, it has a 6.35mm headphone socket and an illuminated volume control on the front. The colour that's lit up indicates the format being used - a nice feature. The light is green when playing back PCM files up to 24/48, purple with up to 24/96, white with up to 24/192, light blue with DSD64 and dark blue with DSD128. When it's in record-standby mode, the sampling rate colour illuminates alternately with red and during recording is permanently red.



The copper-plated rear panel carries a pair of gold-plated RCA phono sockets to cater for either a line input or phono input for a moving-magnetic cartridge. A grounding post is also present. Another pair of gold-plated phono sockets provide a line-level output. Finally, there is a USB Type-B socket for digital input and output and for providing power for the unit from a PC. This is a nicely made unit, measuring 185 x 49 x 155mm (WxHxD) and weighing 1.2kg.

Under the bonnet, it supports PCM formats up to 24/192 and 1-bit DSD64 and DSD128 native playback on a PC running Windows 7 through to Windows 10 or Mac OS X 10.8 to 10.11. It also supports DSD64 and DSD128 digital recording and PCM formats up to 24/192, thanks to the built-in analogue-to-digital-converter. These features are unlocked via Korg's AudioGate 4 audio playback, record and format conversion software.

The AudioGate 4 software is different from other proprietary playback and recording software in



that it undertakes much of the digital processing itself, rather than using the hardware. This allows for great flexibility in the use of the device. For example, the phono equalisation can be applied during recording or when playing back an unequalised DSD recording made from a vinyl source.

The interface displays a wealth of information about the audio file being played. My first observation is that the volume control illumination remains at dark blue (DSD128) regardless of the format of the input file. However, this is due to the upsampling nature of the AudioGate software, and the upsampling frequency is easily changed via a menu in the software. I first connect the line output to the input of my preamp and play a 24/192 FLAC file of Beethoven's Piano Concerto No.3 by the Scottish Chamber Orchestra. The orchestra is full and luscious with a wide soundstage, and the top end is clear and open. The piano has real presence and its sparkling clarity remains consistent throughout the dynamics of the concerto.

I switch to listening on Sennheiser HD 600 headphones (*HFC* 300). As a headphone amplifier, the quality is very good indeed with a sound that I don't tire of over long periods. The music is open and clear, with a good firm bass response.

Spot the difference

The last thing to test is the recording ability. I first try recording an LP of the first movement of Rimsky-Korsakov's *Scheherazade* in DSD128. I compare the source and the recording through the DS-DAC-10R and discover that there is no obvious difference between the two. I then record it in 24/192 PCM format and again find no real noticeable differences between the two when both are played through the device, making this an excellent choice for digitising your LP collection.

The DS-DAC-10R sounds excellent from all input sources and its ADC capabilities along with AudioGate 4 software means it will have even greater appeal for those looking to digitise analogue recordings. **NR**

Leema Acoustics

Reference 1 digital RCA cable

ALTHOUGH ANALOGUE AND

digital interconnects look similar and are fitted with RCA connectors that resemble one another, they are designed for two very different purposes. Analogue cables need to protect their delicate signals from the effects of external interference, such as RFI. While also needing to keep out RFI, digital cables need to transmit binary data at very high frequencies and actually have more characteristics in common with video cables.

Jitter bug

The frequency response of the cable is required to be well in excess of 1MHz in order to preserve the digital waveform. Any degradation of this can result in jitter that the DAC then has to correct. Therefore, using a low-grade digital cable can result in poor spatial positioning of

instruments and other subtle effects that can influence the performance, making the sound less realistic.

The Reference 1 is the correct 750hm impedance that is required to perfectly match my equipment and minimise unwanted signal reflections within the cable. It employs silverplated copper (SPC) conductors, which are double shielded with Mylar foil and braided copper. The cable is finished off in an 8mm diameter outer PVC jacket with a blue protective mesh sleeve. At each end it is terminated with RCA plugs with gold-plated connections and all-metal bodies. Internally, the plugs are fitted with Teflon insulation.

I opt to use a PrimaLuna ProLogue Eight Mk 2 CD player as a source and connect the player's coaxial digital output to the coaxial digital input of a Cambridge Audio Stream Magic v2 (HFC 393) acting as an external DAC



with the Reference 1 cable. Playing a great recording of a *Concerto Grosso No.10* in D major by Charles Avison, I am treated to a sound that is both musical and compelling. The double basses are well controlled while the top end remains clear and precise. The Reference 1 is a beautifully made digital coaxial cable that communicates music signals well. **NR**

PRICE £150 for a 1m cable TELEPHONE 01938 559021 WEBSITE

WEBSITE leema-acoustics. com

OUR VERDICT



MCRU

Optimus in line mains filter

MAINS-BORN INTERFERENCE IS

one of the many enemies of an audio system. Noise that is generated by household electrical equipment, such as refrigerators and washing machines, can cause annoying clicks, pops and in extreme cases buzzes to be heard from your system.

Friends of the earth

Making use of a sophisticated IEC inlet mains filter unit, the Optimus has an aluminium casing, which is earthed internally. The filter is fitted with a silver-plated mains cable that is terminated in a Martin Kaiser silver-plated IEC connector. It can be used with CD players, amps, streamers and even Blu-ray players and TVs. The filter is tailored to the needs of the equipment and is available in 3A, 5A, 10A or 13A (on test here) variants. It can also be fitted with a Furutech filter for an extra cost. Other

RECOMMENDE

upgrade options at an additional cost include Furutech FI-11 IEC connectors with different plating options on the connections and Furutech FI-8N 'figure of eight' connectors.

I remove the standard lead plugged into my preamp power supply and plug it into the Optimus. I then plug the IEC connector of the Optimus into my preamp. This eliminates a click

that I could previously hear when my fridge switches on and off. I also sense that the noise floor has been pushed right down, resulting in a cleaner and purer sound, something that is particularly apparent with vocals and solo violins. I can also detect an improvement in dynamics. This is a great device that offers clearly audible improvements. **NR**



Supra Cables

Limited Edition LoRad 2.5 SPC shielded mains cable

MANY CONSIDER SCREENING

to be vital, particularly when it comes to using a mains cable with sensitive equipment. Screening can help reduce the interference injected via the mains supply. It can also help to reduce the radiated 50Hz field generated by the mains lead itself. This can be very useful if the cable is, for example, in close proximity to a phono stage and powering a more meaty piece of equipment, such as a power amplifier.

This cable is a special version of Supra's LoRad 2.5 and has silver-plated multi-stranded OFC conductors instead of the standard tin-plated conductors, hence the 'SPC' in the designation. In addition to the standard three silver-plated copper conductors, there is a tin-plated drain wire to provide an

earth connection for the semiconductive nylon and carbon shielding. The shielding fits over a Mylar mesh to protect inner cores from drain wire. The cable is finished off with a very flexible anthracite grey outer jacket, which also differentiates it from the standard LoRad cable.

Silver screen

The 11mm diameter cable is rated at 16A and is terminated with a fused UK mains plug at one end and a SWF-10S 10 Amp IEC connector at the other. A version fitted with a Supra SWF-16 IEC 16 Amp IEC connector is also available for the same price.

Using the LoRad 2.5 SPC to power my preamp and phono stage power supply and comparing it with a standard 'kettle' lead, I certainly



perceive a very noticeable improvement to the imaging and clarity when listening to a guitar concerto by Giuliani (Op.30 played by Karl Scheit with the Chamber Orchestra of Vienna). I also get the impression that the music is lifted further from the background silences that are between tracks.

This is a superb-value, silver-plated and screened mains cable that is very flexible and well made. It delivers significant audible improvements over a standard lead and so an audition is highly recommended. **NR**

PRICE £62.50 for 1m cable TELEPHONE 07711 939519 WEBSITE supracables.co.uk

OUR VERDICT

Russ Andrews

Mini Purifier Superclamp

I AM SURE that we are all aware of the clicks and pops and other mains-born noise that can find their way into the audio chain. This is caused by the switching on and off of pieces of electrical equipment, especially those that have electric motors, such as refrigerators and washing machines. In addition to this, there is also RF noise that comes from other devices and can interfere with the sound from your system. Apart from devices like mobile phones that generate all sorts of RFI that can be picked up by your house wiring, some computer networking products are designed to inject a digital signal into your house mains circuit in order to transmit computer data from one room to another. Added to this, low-quality switched-mode power supplies that are often supplied with electrical equipment, such as chargers and other devices powered by a

low-voltage DC supply, can generate high-frequency noise that can be injected back into your ring main and further pollute the sound from your hi-fi.

It's oh so quiet

To help combat this, Russ Andrews produces a range of mains noise suppression devices, including the Mini Purifier Superclamp. It measures 60 x 104 x 58mm (WxHxD) - about the size of a wall-wart power supply - and is a plug that is inserted into unused mains sockets close to your audio system to create a quiet zone in its vicinity. It can also be used elsewhere in the house next to potential sources of noise to reduce the interference that comes from the device at source. Apart from filtering out mains noise, it also provides protection from mains-borne spikes and surges.



Not having any noise suppression devices fitted around my home, I get occasional clicks through my speakers and this coincides with my refrigerator turning itself on. However, when I fit the Mini Purifier Superclamp in a spare mains socket next to my audio system, the clicks go away completely. There is also a noticeable subtle drop in background noise with a corresponding improvement in detail. **NR**

PRICE £151
TELEPHONE 01539 797300
WEBSITE russandrews.com
OUR VERDICT

SUDHANDHIEI.CO.UK

Guaranteed used and ex-demo audio equipment from HiFiSound - the UK's premier source

Call: 0845 6019390 Email: choice@2ndhandhifi.co.uk

The UK's biggest and best used audio SALE NOW ON!

			3			D: :: /					•
Analogue			Amplifiers			Digital			Loudspeakers		
Acos Lustre GST1 Tonearm, near mint boxed	used	299	Abrahamsen V2.0, excellent boxed	used	779	Arcam CDP92, vgc boxed	used	299	Art Audio Expression Precision Monitor/Subs	used	1949
Audio Research LP1 Phono stage nr mint	x/d	999	Aesthetix Atlas stereo power, superb and mint	x/d	4899	Arcam UDP411, superb boxed	used	549	Aspara Acoustics HL6 in Oak, REDUCED	new	1699
Avid Acutus Ref power supply	x/d	2399	Arcam P75 Power amplifier	used	199	Audio Analogue Vivace USB DAC, with Pre out	x/d	999	B&W 802D3, near mint	used	
Bakoon EQA11r phonostage, boxed with stand	used	1399	Arcam A19 Integrated amplifier, excellent boxed	used	379	-			Celestion A2 nr mint boxed	used	
Bel Canto Phono 3 Phono stage, excellent in black	used	699	Art Audio Jota 520b, excellent REDUCED	used	3499	Auralic Vega DAC, superb boxed	used	1599	Dali Zensor 7, excellent boxed	used	
Clearaudio Emotion, Satisfy arm	used	599	Audia Flight Pre and Flight 50 Class A power Audio Analogue Maestro Settanta, in black	x/d used		Bel Canto PL1 mutiformat player, good condition boxed	used	1199	Dynaudio Contour 1.8, excellent boxed	used	
Clearaudio Champion, Unify arm, cover, clamp	used	1199	Audio Research Ref 610 Monos, boxed REDUCED	used		Cambridge Audio 351c CD player	used	99	Dynaudio 42C centre Focal Aria 948, excellent in gloss black	used	
Dynavector DVXX2/2, vgc boxed	used	999	Audio Research D250, excellent serviced boxed	used	Call	Chord Chordette Qute HD DAC mint boxed	used	599	Focal Electra 1008, mint boxed REDUCED	x/d	
Dynavector DV20X2L, vgc boxed	used	399	Audio Research LS17se, near mint boxed £4.5k new	x/d		Consonance CD2.2, new sealed	new	649	Focal Electra 1028, mint boxed	x/d	
Fidelity Research FR64S boxed, excellent	used	1449	BAT VK50se Preamplifier, factory service 2016	used	2399			349	Gallo A'Diva Micros plus 150 Sub	used	379
Graham Phantom Supreme 12", SME cut	x/d	3199	Bel Canto Pre6 multi channel preamp, remote, boxed	used	999	Creek desting CD, fair cosmetics only	used		Kef X300A Active monitors	x/d	549
Linn Arkiv cartridge	used	399	Bel Canto Pre6 multi channel Power amp, boxed	used	1999	Cyrus CD8X, vgc	used	399	Kef Q500 walnut nr mint	x/d	Call
Linn LP12, Cirkus, Ekos, Lingo, Troika, boxed in black	used	2449	Cambridge Audio CXA60, excellent	used	349	Cyrus Stream XP, excellent condition, boxed	used	749	Kinergetics Research SW800 Subs and amplifier	used	999
Linn LP12, Basik Plus, Goldring 1006, valhalla, early	used	499	Chord Electronics Prima Preamplifier, mint	x/d	2199	DCS Puccini and Wordclock in black	used	6399	Kudos C10 with Super 10 drivers, cabinet damage	used	799
Linn LP12 Majik, Cirkus, Radikal PSU/motor, 9CC, Akiva	used	3999	Chord Electronics Mezzo 140 Power, mint	x/d	2199	EAR Acute 3, our demo unit near mint	x/d	Call	Kudos C30 excellent boxed in rosenut	used	1649
Linn LP12 Majik, Cirkus, Lingo 3, 9CC, Akiva	used	2999	Chord Electronics CPA3000, nr mint boxed	x/d	4995	Leema Antila IIS Eco, mint boxed	v/d	2749	Leema Zone, excellent	used	599
Lyra Skala, excellent boxed		2199	Croft Micro 25 Basic Preamplifier, black, excellent	used	299				Leema Xandia Mk1 in black,	new	1799
Lyra Argo, excellent boxed	used		Cyrus 6XP Integrated, black, excellent	used	449	M2Tech Young DSD DAC	used	Call	Magneplanar MG1.7 mint boxed	x/d	1399
Michell Focus One with Focus arm boxed excellent	used		Cyrus Pre XPD Preamplifier, black, excellent	used	649	Marantz CD6004, excellent	used	159	Martin Logan Quest, fair cosmetics, superb sound	used	999
Michell HR DC psu	used		Devialet 400 combo, mint boxed ex demo	x/d		Meridian Sooloos Control 15 and Twinstore NAS	used	1899	Martin Logan Prodigy, excellent	used	3399
			Devialet 120, mint boxed, our demo unit		2699	Musical Fidelity V link Dac, excellent	used	89	Martin Logan Ethos, near mint boxed	used	
Michell Hydraulic Reference, Fluid arm	used .		Devialet 250, mint boxed, our demo unit		7249	NAIM In Face of CCD available based			Martin Logan Electromotion, excellent boxed	used	
NAD 533, excellent	used		Esoteric C03/A03, pre/power ex demo boxed	used	8499 1849	NAIM Unitiserve SSD, excellent boxed		1749	Monitor Audio Silver 10, gloss black excellent	x/d	
Nottingham Analogue DAIS, near mint, ex demo	x/d		Gato Audio DIA 250, superb Heed Obelisk PM Monoblock pair	used	1279	NAIM N172XS Streamer/Preamp, radio module	x/d	1299	Monitor Audio Silver 6, nr mint boxed	x/d	
Ortofon Kontrapunkt B, vgc boxed	used		Jeff Rowland 501 Monoblock pair, boxed	used	2949	NAIM HDX - SSD, upgradeable, as new	used	2399	Monitor Radius range. various ex demo	x/d	
Ortofon Cadenza Black, mint boxed	x/d	1460	KR Audio VA320 Antares	used	1879	Oppo HA2 DAC and Headphone Amp	new	219	NAIM SBL, black ash	used	
Project Debut Carbon, near mint REDUCED	x/d	239	Krell KAV300i, excellent boxed	used	799	Prima Luna Prologue 8, ex dem boxed,	x/d	1099	NEAT Elite SX, near mint boxed NEAT Motive 3, excellent in black	used	
Project 2, excellent	used	179	Krell FPB400cx, excellent boxed	used	3249	-		349	PMC Twenty 24, walnut	used	
Project 2Xperience Acrylic with speedbox	used	649	Lector VFI 70L, 70watt Hybrid Integrated, excellent!	used	649	Project Streambox DS, excellent boxed	x/d		PMC Twenty 24, oak	new	
Rega RP6/Exact boxed in RED, near mint	x/d	649	Leema Libra Dac/Preamplifier, nr mint	x/d	3499	Rega Planet CD, excellent boxed	used	249	PMC Twenty 23,oak	new	
Rega Planar 3/RB300 tungsten, new carbon cartridge	used	369	Mark Levinson 532H Power amplifier	used	3749	Rega Apollo CD, excellent	used	349	PMC Twenty 22, walnut	new	
Rotel RP830 excellent starter deck	used	149	McIntosh MC275 Power Amp, near mint boxed	used	3499	Rega Apollo-R CD, excellent boxed	used	449	PMC Twenty 21, walnut	new	/ 1099
Shelter 501/II, excellent boxed	used	499	Ming Da MC5S 5 channel Valve Power amp boxed	used	Call	Rega Saturn R, our demo unit nr mint	x/d	949	PMC Twenty 21, diamond black	new	999
SME 3009 excellent boxed	used	329	Moon W7RS, excellent	used	4299	Sansui WLD201 Streamer, sealed box	used	119	Proac Response 1sc, excellent boxed	used	699
Systemdek Ilx/RB250, good condition	used	249	Musical Fidelity M3Si Integrated	used	649				Proac D15, excellent boxed,	used	Call
Technics 1200, standard spec, near mint	used	549	NAD C315bee, excellent	used	99	Sugden Masterclass PDT4F CD newer version boxed	used	1749	Proac D20r, excellent boxed, ex dealer demo	x/d	1849
Technics 1210mk2, Hynes PSU, Mike New bearing etc	used	1449	NAIM NAC202, ex demo nr mint	x/d	1249	Unison Research Unico CDE, digital in, superb	x/d	1599	Quad ESL57, vgc	used	599
Thorens TD170 Auto excellent boxed REDUCED	x/d	219	NAIM NAC82, Napsc excellent boxed	used	899	Whest Audio DAP.9	used	279	Sonus Faber Concerto Home	used	799
Thorens TD209 turntable package REDUCED	x/d	599	NAIM NAC122X preamplifier, excellent boxed	used	449	YBA WD202 USB DAC, excellent boxed	used	449	Sonus Faber Venere 1.5 with matching stands	x/d	999
Thorens TD150, 2000 Plinth and 3009, superb	used	579	NAIM Supernait 2, near mint	x/d	1999		unod	00	Sonus Faber Venere 2.5 vgc+	x/d	1499
Townshend Elite Rock, Excalibur, cover	used		NAIM NAP250DR, near mint NAIM NAP200, 2008 excellent boxed	x/d	2999	Yamaha CDS300, vgc+	usea	99	Sonus Faber Venere Centre channel excellent	x/d	399
Transfiguration Pheonix S, excellent boxed	used	999	Nakamichi 410/420 Pre/Power near min retro!	used	899 499	Yamaha CD-S3000 SACD player nr mint boxed	used	2449	Sonus Faber Cremona Auditor M with stands	used	2249
VDH Colibri M/C cartridge, as new boxed, REDUCED			Pathos InPol Remix Hi Dac, ex dem,	x/d	1999	Accessories/Cables			Spendor BC1, near mint boxed	used	Due in
VDH Condor M/C cartridge as new boxed, REDUCED		1749	Pathos Logos Integrated, excellent,	used	1399				Tannoy Stirling GR sealed boxes	new	
Whest Audio 30RDT Phono stage, vqc+			Rega Mira 3, excellent boxed	used	379	Audeze EL8 Open back headphones	x/d	Call	Totem Mite in black, ex dealer demo	x/d	
	used	1049	Rega Elex R, excellent boxed	x/d	799	Audeze EL8 Closed back headphones	x/d	Call	Usher Mini Dancer 1, excellent boxed	x/d	
Radio/Recorders			Rega Brio R, excellent boxed	used	399	Audeze LCD 3 headphones,	x/d	999	Usher S520, excellent boxed Usher N Series. Various	x/d	
Arcam T61, excellent boxed Denon DRS810, 3 head cassette deck	used used		Roksan Caspian M2 Integrated, near mint boxed	x/d	1349	Elemental Audio speaker stands	x/d	449		x/d	
Fostex G16, 16 track Reel to Reel, amazing!	used	Call	Rotel RC970/2 & RB970 Pre/Power combo	used	349				Vandersteen Quattro, accessories, transformers Veritas H3 (Lowthers) gloss black, 100db,	used x/d	
Naim UnitiServe, near mint boxed	used	1279	Sugden Masterclass Monoblocks	used	3899	Grado headphones many models	x/d	Call	Wilson Benesch Square Two Mk2, boxed	used	
Nakamichi Cassette Deck 2, vgc serviced	used		Tag McLaren 60 iRv Integrated	used	299	Kimber KS1021 WBT	used	Call		useu	1040
Nakamichi DR3, vgc serviced Quad FM2, due in	used	249 249	Tag McLaren 100X3r 3 channel power	used	599	M2Tech Harley headphone amplifier	used	Call	Special system deals		
Quad FM3, vgc	used		Tandberg TPA3003 Power amplifier, excellent!	used	479	NAIM Supercap 2, vgc+ from 2002	used	1549	Arcam Solo , remote boxed Arcam Solo Neo, excllent boxed	used used	
Revox PR99, crated, REDUCED	used	729	Tube Technology Unisys Signature integrated	used	Call				Devialet 400 & Magneplanar MG3.7i speakers	used	
Revox A77, just serviced, great condition	used		Unison Research Unico preamplifier	x/d	1549	Oppo HA1 Headphone Amp excellent	used	729	Devialet 200 & Magneplanar MG1.7 speakers	used	
Revox B77, just serviced, great condition Rotel RT850, excellent	used	Call 29	Unison Research Preludio valve integrated	used	1199	Sennheiser HD800s	used	999	Linn Classik Music later version nr mint Naim Muso nr mint boxed	used x/d	
Sony STDB900 DAB/AM/FM Tuner, excellent	used		Unison Research S6 valve integrated	x/d	2499	Stax 404/006 system	used	Call	Naim Unitilite with Usher S520s	used	
Sony MDS JA20ES, excellent	used	299	Vincent SAVP200, superb and amazing value	used	749	Stax 4070 closed system, excellent RARE!	used	2399	Naim SuperUniti, nr mint boxed	x/d	
Technics RS-BX707 3 head cassette deck, serviced	used		XTC Pre 1 & Pow 2, Pre/Power combo, excellent	used	749	Sugden HA4, excellent	used	699	Scansonic USB100 Turntable & Active Speakers TEAC CRH255, vgc with remote	new	
Technics RS1500 in flightcase near mint	used		YBA WM202 Integrated receiver, excellent boxed	used	499				-		
Tel: 01642 26	57	01	12 or 0845 601	9:	39	0 Email: choic	:e () 2	Indhandhifi.co).u	k

JAYS

uJAYS on-ear headphone

IN LIGHT OF the design decisions taken by Apple with the iPhone 7, releasing a wired headphone with "optimised for Apple" emblazoned across the box might come across as having the same traction as "engineered for Betamax", but the uJAYS is far from alone in being wrong footed by recent decisions from Cupertino. It's been designed for use on the move with mobile devices and three versions are available, with remote cables for iOS, Android and Windows.

The headphone itself is the same for all models and is an on-ear design with drivers constructed from silk. The 40mm surface of the driver is perfectly ringed by the earpad and is otherwise directly adjacent to the ear with only a small plastic grille for protection. The ear cushion has viscoelastic properties and relatively deep but firm padding. It can unscrew completely from the rest of the headphone so it can be changed or cleaned.

Fit for action

The design is competent rather than spectacular. The headband is a little odd in that the 'padding' is pretty unyielding rubber wrapped around a single horseshoe section of headband with size adjustment provided by telescoping sections at the ends just above the driver housings. These can be adjusted independently of one another, which allows for a good fit.

The headband is set up so that the uJAYS is unlikely to go anywhere if you exercise with it on, but the force it exerts on the head is high and combined with the fairly unyielding padding means it's not especially comfortable for long sessions. The cable includes an iOS-compatible remote with volume, play/pause and track skip options as well as a microphone for calls.

Tested predominantly with an iPad Air, it is easy to drive to high levels via the output of a phone or tablet and – despite the fairly small size of





the earpads – is effective at keeping the outside world at bay and avoiding much noise leakage.

It also has a sonic presentation that is extremely consistent. Listening to the well-produced but compression friendly mix of Kaiser Chief's Stay Together via Tidal shows the uJAYS walks a good line between opening the mix out and finding the nuances and fine details that make the music believable while avoiding exposing the limitations of the piece. A lot of this is to do with the top end it produces. The upper registers are rich and smooth and never become bright or harsh even under provocation.

This smoothness carries over into the midrange, which lends the uJAYS a richness with vocals that is highly commendable for such a relatively affordable headphone. If you have to hear absolutely everything that is in the mix this might not be the first choice, but its ability to keep something aggressive like The Prodigy's Experience listenable is going to be worth the trade off for many potential buyers.

Where things are less assured is the bass response. It should be commended for avoiding the massively ramped up 'party' bass of some rivals but while the treble and midrange feels usefully open and pleasantly cohesive, the uJAYS struggles to sound as composed with lower frequencies. Such notes can blend into one another and lack definition and when you listen to something fairly up tempo like Depeche Mode's Precious it comes across as a little sluggish and lacking in energy. This is a shame because the sense of depth it is capable of is wholly convincing and impressive for a relatively compact design.

Jay-walking

Taken as a whole and taking into account its recent drop in price, this is a very competent headphone but one that perhaps lacks the last hint of greatness. The performance is generally good, but the lack of long-term comfort and sluggish bass response means you can do better for a slightly greater outlay. **ES**

HiriChoice SUBSCRIPTION ORDER FORM

DIRECT DEBIT SU	JBSCRIP	TIONS UK ONLY	
Yes, I would like to	subscribe	to Hi-Fi Choice	
Print + Digital: £13.0	5 quarterly		
Print subscription: £	210.99 quart	erly	
YOUR DETAILS M	UST RE CON	MPI ETED	
		Surname	
		Country	
		Mobile	
		D.O.B	
I WOULD LIKE TO	CEND A	OIET TO	
		Surname	
		0	
Postcode		Country	
INSTRUCTIONS	TO YOUR	BANK/BUILDING	SOCIETY
Originator's reference 422	562		DIRECT
Name of bank			
Address of bank			
		Postcode	
Account holder			
Signature		Date	
Sort code	Acc	ount number	
the account detailed in this in:	struction subject this instruction i	: Please pay MyTimeMedia Ltd. D tt to the safeguards assured by th may remain with MyTimeMedia L ling society.	ne Direct Debit
Reference Number (officia	al use only)		
Please note that banks and bu some types of account.	uilding societies	s may not accept Direct Debit ins	structions from
CARD	PAYMEI	NTS & OVERSEA	S
res, I would like to s	ubscribe t	o Hi-Fi Choice, for on	e year
(13 issues) with a one	e-off payn		
UK ONLY: □ Print + Digital: £53.30	.	EUROPE & ROW: EU Print + Digital:	£75.00
□ <i>Print + Digital</i> : £55.50 □ <i>Print</i> : £45.00		☐ EU Print: £67.00	
		ROW Print + Digita	
DAVAGENT DETAIL		☐ KOW FIIIIL: £07.00	
PAYMENT DETAIL	.S		
	ble to MyTime	terCard	090 on the back
Cardholder's name			(A.4
Card no:			(Maestro)
Valid from		te Maestro issu	e no
		Date	
J			

Offer ends 27th April 2017. MyTimeMedia Ltd & Hi-Fi Choice may contact you with information about our other products and services. If you DO NOT wish to be contacted by MyTimeMedia Ltd & Hi-Fi Choice please tick here: \(\to\) Email \(\to\) Post \(\to\) Phone. If you DO NOT wish to be contacted by carefully chosen 3rd parties, please tick here: \(\to\) Post \(\to\) Phone. If you wish to be contacted by email by carefully chosen 3rd parties, please tick here: \(\to\) Email

POST THIS FORM TO: HI-FI CHOICE SUBSCRIPTIONS, MY TIME MEDIA LTD, 3 QUEENSBRIDGE, THE LAKES, NORTHAMPTON, NN4 7BF.





PRINT + DIGITAL SUBSCRIPTION

13 Issues **delivered to your door**

Great savings on the shop price

Download each new issue to your device

A **75% discount** on your Digital subscription

Access your subscription on multiple devices

Access to the **Online Archive** dating back to September 2011



PRINT SUBSCRIPTION

13 Issues delivered to your door

Great savings on the shop price

Never miss an issue

SUBSCRIBE TODAY

Great savings

when you subscribe to Hi-Fi Choice today



IN EVERY ISSUE:

Reviews of all the latest turntables, amplifiers, loudspeakers, DACs, CD players, streamers and hi-fi accessories. Plus: group tests, music reviews, opinions, news and all your hi-fi woes answered

TERMS & CONDITIONS: Offer ends 27th April 2017. * This digital discount is only available when you subscribe to the 'Print+ Digital' package. You can still get a great discount on the digital package, please wist the URL stated below for more information. Please see www.hifichoice.co.uk/terms for full terms & conditions.

SUBSCRIBE SECURELY ONLINI

http://hfc.secureorder.co.uk/HFC/V1090

CALLOUR ORDER LINE Quote ref: V1090

(3) 0344 243 9023

Lines open Mon-Fri 8.00am - 8.00pm & Saturday 9.30am - 3.30pm

Hi-FiChoice

I assitie

Welcome to Hi-Fi Choice Reader Classified. a free private ads service for buying and selling second-hand hi-fi components.

These pages are a must-read if you're thinking about buying used kit, or if you have hi-fi you want to sell. It's free - simply submit your ad of up to 50 words (we will edit them if not), remembering to include your email, phone number and county.

The simplest way to send your ad is via email to: letters@hifichoice.co.uk or mail: Reader Classified, Hi-Fi Choice magazine, AVTech Media Ltd, Suite 25, Eden House, Enterprise Way, Edenbridge, Kent, TN8 6HF.

This service is open to private advertisers only. Just one ad per household. Images are for illustration only and do not represent what is for sale

FOR SALE

MONITOR AUDIO RX6

floorstanding speakers in oak finish, 12 months old. £200:

01273 500173 (Brighton) **AUDIOSYNTHESIS**

Ultimate Passion passive preamp with remote control. Excellent condition. £395. Fidelity Research FRT 5 phono cartridge transformer £449. Boxed: **02392453382** (Hants).

EXIMUS DP1. Original owner. Excellent condition. £1,000: 01743344136

oremail:denis_james@ yahoo.com (Shropshire).

GARRARD 401 serial number 20828. Unused, still in original box, original adaptor and oil still in sealed bags, also has the original template for making the plinth. £1,600:

01268777269 or email:

comprising G92 preamp/ processor, DVD, CD, FM/DAB DSP5000s and 5000c. All 24/96. M33 active rears, all in

mopar@Tesco.net(Essex). **MERIDIAN** system



AURALIC Aries Mini, with added extras: external Auralic linear power supply for optimum performance and internally fitted 500GB Samsung SSD HDD. Only a few months old. In excellent condition. In original boxes, p&p included. Cost £850 new, for sale at £625: 07549 603398 or email: dave.drew@talktalk. net(East Yorkshire).

black all VGC. Cost £11,000, offers over £2,800. Sorry can't split: 07771508444.

REGARP6 Exact turntable. Brand new, unused and boxed. £750. 01943 467859

(West Yorkshire)

GARRARD 401, Rega RB300, Goldring 1042 with plinth/cover, great sound and condition, £1,499 ono. Power supply for Class A amps, for amps of around 15-20W, £300 ono: **0207 4998729.**

NEAT Motive 1 floorstanding speakers, cherrywood veneer. excellent sound, can demo, cost £1,400, £600 ovno:

07957384795 (London).

AUDIOLAB 8200MB mono amplifiers (pair) 250W/channel, £999. Finished in silver and in immaculate condition with original boxes, manuals etc:

02380738935 or email: golf3385@hotmail.co.uk (Southampton).

LEEMA ACOUSTICS Pulse

II x2 (bi-amped), silver, factory modified by Leema. Manuals and boxes included, £995:

02920419226 or email:



SPENDOR SP2/2 loudspeakers. Carefully used by lady owner, excellent condition. £190. Buyer collects: 01275872777 (North Somerset).

frank8ush@ntlworld.com (South Glamorgan).

MERIDIAN G01 preamp/ tuner with moving coil phono stage, as new £875. Proac Studio 1 speakers with stands, sound great but grille cloth showing signs of wear and cabinets have minor damage £375: **07960** 550591 or email: losepete@ losepete.plus.com(Greater

AVI S2000 MC Reference CD player. Quality sound, excellent condition, new laser fitted, service warranty. £290 plus carriage: **01275 872777** (N. Somerset).

Manchester).

ROTEL RQ-970BX phono equaliser (MM/MC) in black VGC £20. Rega RP1 turntable in grey with performance pack and extra wool mat in yellow all in VGC: 07510

687880 (Luton, Beds) **TELLURIUM Q** XLR

Graphite 1m pair, as new, original box. £400. Upgraded hence sale, will post recorded delivery within UK for £8:

07769743646 or email: bergkamp1010@yahoo.

CHORD ELECTRONICS

QBD76 DAC, black, excellent condition, Bluetooth; USB; 2x coaxial; 2x balanced AES; 2x optical. RRP£3,600, want: £2,100: 01243528010

(West Sussex).

TOTEM Arro speakers. Cherry. Boxed. Original packaging. Receipts. Purchased 2008 Moorgate Acoustics. Coated and veneered inside with Borosilicate resin for stiffness. Can demo. Collection only, £700 (£1,299):

07855314593 or email: PEFGNO1@gmail.com (Sheffield).

JBL Studio 530 standmount speakers. As new. Black finish, original packaging, £199 (new £630): 01847892081 or email: michael665booth@ btinternet.com (Caithness).

CYRUS 8 DAC QX sounds great, but upgrading £750. Cyrus CDt transport boxes etc. £425: **07973 426291** (Birmingham).

VAN DEN HUL The Wind mark 2 speaker cable, 2m, (four lengths, R and L) £85. Nordost SPM balanced interconnect 1m boxed as new £375. KEF 200C centre speaker, mint condition £350: email: booning4@hotmail. com (County Wicklow).

CABASSE Stream Source purchased 2016, hardly used and in mint condition. original boxes and manuals. Was £300 when new, will accept £180 including UK postage: 01847890571 or email: james_mcleod789@ btinternet.com (Thurso).

TRANSPARENT

AUDIO MusicWave Plus speaker cables, 10 feet long terminated with 8mm spade terminals. Excellent condition, owned from new. £200: **01590 674669** (Hampshire).

THE CHORD COMPANY

Epic twin single wire cable terminated with BFA/4mm twin screw type plugs. 2x 3.5m, 1x 1m, 1x 2.5m. 1x Chord Prodac 1m digital cable. £27

BUYING TIPS BUYING SECOND-HAND can be a great way to pick up a bargain. A formerly expensive second-hand component might well prove a better long-term bet than a brand-new product if the price is right. **DO SOME RESEARCH** on which brands have a good service back up, so if something does go wrong, you can get it fixed. Unless you purchase from a dealer, you're unlikely to get any warranty, so it's up to you to ensure the fitness of any gear that you buy. **USUALLY** speakers should be less prone to breakdown than amps, and amps should be more reliable than CD players. But any abused component could be trouble – have a proper demo and judge the seller as well as the goods!

Reader Classified ads HI-F Choice

per metre, plus postage. Cable is in first class condition: 07810131947 (Norwich).

PIONEER A300R precision amplifier with copper binding posts, electrofluidics loudspeaker cable, Eikos interconnect: £550. Wharfedale E30 loudspeakers and Harman Kardon HK 630 original twin powered receiver: offers:

07432720033.

TRANSPARENTULTRA

mm2 balanced XLR interconnects. 1m length. Mint condition. Price new: £1,841. Sale price: £900 ono: email: yatestherapy@googlemail.

ISOTEK Sigma mains conditioner in black, Naim HiCap power supply chrome bumper. Please phone or email for prices: 02085242181 or email: bobjoangreen@gmail.com

(Chingford).

NAKAMICHI CR7 tape deck, recently serviced by classic Nakamichi, Original box, packaging and manual, remote control included, excellent condition £900. Purchaser to collect: 07837

540883 (Lincolnshire). **MUSICAL FIDELITY**

M6i amplifier in silver, mint condition with all packaging. Less than 50 hours use. Pix on request. £1.050:

01902884694 or email: jukey39@yahoo.co.uk (West Midlands).

AVI Duo speakers brand new build in original cabinets with extra special crossovers. Any demo: must be heard! Text your email for photos £600: 07793749178 (London).

NAIM FlatCap XS, boxed, manual and leads. Excellent condition now surplus due to upgraded system £250:

01275 462948 (North Somerset).



THORENS TD160 mkll turntable with TP16 II arm, fitted with Ortofon VMS20 II cartridge. Silver finished plinth with hinged acrylic dust cover, all in good condition. Demo on request to callers, photo via email if required. £200 (buyer to collect): 01494812519 or email: geoff-carter@supanet.com (High Wycombe, Bucks).

LAVARDIN IS Reference integrated amplifier as new condition, purchased June 2015 for £3,199, will sell for £1,800: 01256 461453 or email:vicsowerbutts@ hotmail.com (Basingstoke).

AVI S2000 MC Reference CD player. Very tidy. New laser fitted and service warranty. £300 + carriage: **01275** 872777 (North Somerset).

LINN Majik DS/2 Streamer. 2015 model. Current specification with Dynamik, Sound Optimisation, Exakt links. Excellent condition. Original box with accessories. £1.495: **01793728103**, or email:01793728103@

REGA Brio 3 amplifier, satin finish, excellent condition. Box and manual included £150:

07510687880 (Luton, Bedfordshire).

talktalk.net(Wiltshire).

LEHMANNAUDIO Black

Cube linear headphone amp. Mint and boxed. £295: **02392**

453382 (Hants).

HOVLAND G3

interconnects for sale. 2x1m pairs RCA-to-RCA little used. In original boxes. £150 per pair: 01625430510.

EMOTIVA Stealth DAC/ preamp/headphone amp. As new with original packaging and manual £199:

01847892081 or email: michael665booth@ btinternet.com(Glengolly)

Asimi Ultra Interconnect



YOUR DETAILS

Name Address **Email address** Daytime telephone number

YOUR ADVERTISEMENT

To submit your advert to us. please email letters@ hifichoice.co.uk or alternatively, use the postal form below. Please limit ads to a maximum of 50 words ensuring all details, model names, etc. are correctly stated. Kindly also include your email, telephone number and home county. We regret that we cannot take adverts over the telephone. One ad per household please.

SEND YOUR ADVERT TO

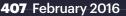
Hi-Fi Choice, AVTech Media Ltd, Suite 25, Eden House, Enterprise Way, Edenbridge, Kent, TN8 6HF



Missed an issue?

Have you missed a copy of your favourite hi-fi magazine? You can now order *Hi-Fi Choice* back issues online.







March 2016



April 2016



May 2016



June 2016



July 2016



August 2016



Sept 2016



Oct 2016



416 Nov 2016



417 Dec 2016



Jan 2017



Yearbook 2016



February 2017



March 2017

Order online: www.mags-uk.com





H-Fi Choice

Digital subscriptions available online



DIGITAL SUBSCRIPTION

Download each new issue to your device

A 75% discount on your Digital subscription

Access your subscription on multiple devices

Access to the **Online Archive** dating back to September 2011

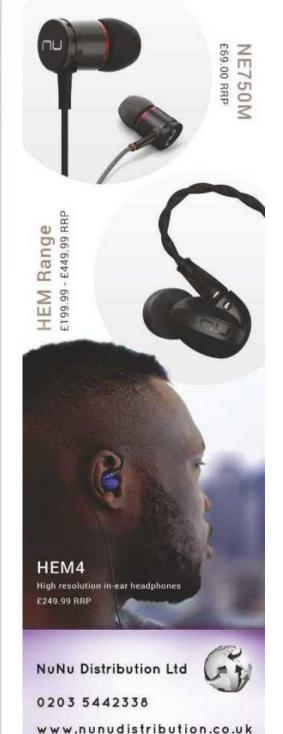
Makes an ideal gift

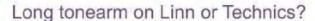
SUBSCRIBE TODAY











The new 10.3in The Wand Tonearm® is designed as the longest arm you can fit. With -20% reduction in distortion over a 9in arm. Even more musical magic!









HI-FI WORLD VERDICT 00000

The Wand certainly pulled something wonderful out of the hi-fi hat. It sounds completely out of its price class, letting you get lost in music. HiFi Choice # 363

What The Wand brings to the party is excited HiFi Plus #112 of speed and energy and zest to the LP."

"... the low end is a real strength of The Wand as it captures was lacking authority. I would say that it is almost impossible www.thewandtonearm.com

info@designbuildlisten.com

Retail and OEM enquires now welcome.

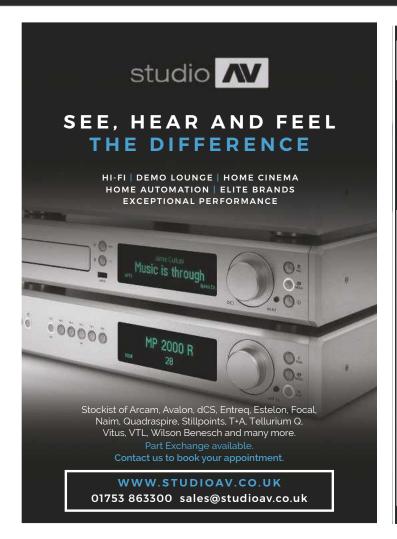
bass lines expertly and never seems to run out of puff or feel it. not to fall for The Wand's charms." HiFi World January 2012



divine audio

AnalogueWorks **Croft Acoustics** Graham Slee **KLE Innovations** London Lounge Audio Meridian Rogue Audio Trenner & Friedl

www.divineaudio.co.uk 01536 762211 tim@divineaudio.co.uk



AUDIO DESTINATION

Where Music Matters

Moon | VPI | Esoteric
Entreq | Stillpoints | REL
Audioquest | Totem and more....



01884 243584
info@audiodestination.co.uk
www.audiodestination.co.uk



Mark Levinson N°585. Distilled joy weighs 32.6 kilos



signals

hi-fi for grown-ups

ipswich (01473) 655171

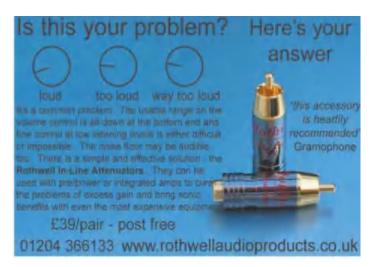
www.signals.uk.com













THE MANUFACTURERS' APPOINTED SERVICE COMPANY



Correct Revox Spare Parts Pricing 24 Hour Estimation procedure Manufacturer Upgrades and Advice Delivery and Collection Service Comprehensive Guarantees

Factory Trained Engineers Rapid Response Turnaround Full Revox range serviced Written Technical Reports Late Evening Opening

ECHNOLOGY

TTL House, Sheeptick End, Near Lidlington, Bedfordshire, MK43 0SF Telephone 01525 841999 Facsimile 01525 841009

IAN HARRISON HIFI

TEL: 01283 702875 ian.harrison@mercian.myzen.co.uk

AMPI IFIFRS

CREEK EAR/YOSHINO ICON AUDIO MARANTZ QUAD SUGDEN TOM EVANS

BLACK RHODIUM KUBALA-SOSNA PEERLESS PRO-JECT QED SUPRA TRANSPARENT WIREWORLD

CARTRIDGES

AIR TIGHT AUDIO TECHNICA BENZ MICRO CARTRIDGE MAN **DECCA LONDON** DENON GOLDRING KOETSU ORTOFON TECHDAS VAN DEN HUL

CD PLAYERS CREEK EAR/YOSHINO MARANTZ

AUDIO TECHNICA BEYER **ERGO**

QUAD

GOLDRING GRADO SENNHEISER **HEADPHONE AMPS**

CREEK FIDELITY AUDIO GRAHAM SLEE LEHMANN PRO-JECT SUGDEN

HIFI FURNITURE

ALPHASON ATACAMA CUSTOM DESIGN MUNARI NORSTONE QUADRASPHIRE SOUNDSTYLE TRACK AUDIO

EAR YOSHINO **GRAHAM SLEE** I FHMANN ICON AUDIO MUSICAL SURROUNDINGS PURE SOUND **PRO-JECT** QUAD ROTHWELL TRICHORD WHEST AUDIO

TONEARMS

SME*

AMG CARTRIDGE MAN GRAHAM HELIUS MICHELL MOERCH MOTH ORTOFON **PRO-JECT** REED REGA

SPECIAL

CREEK

TIIRNTARI FS

AMAZON AUDIO

AUDIO TECHNICA

QUAD

EAR

INSPIRE

MICHELL

PRO-JECT ROKSAN SRM TECH

THORENS

SPEAKERS

HARBETH

OPERA Q. ACOUSTICS

FDOS

QUAD

MUSIC HALL

OFFER!! VAN DEN HUL MC10S £875 MC1S £1000 ZYX R100 £600

AUDIO TECHNICA CARTRIDGES UP TO 25% OFF!!

SPEND £2000 OR MORE ON ANY TURNTABLE. TONEARM OR TURNTABLE AND ARM, AND GET A £500 CARTRIDGE FREE!

PLEASE PHONE TO CONFIRM PRICE & AVAILABILITY PRIOR TO ORDERING. ALL GOODS ARE BRAND NEW & BOXED WITH FULL U.K GUARANTEES. NO EX-DEM OR EX-DISPLAY GOODS. NO GREY IMPORTS. GOODS ARE NOT SUPPLIED ON APPROVAL. SORRY NO GENERAL CATALOGUES.

PLEASE PHONE OR WRITE FOR SPECIFIC REVIEWS, BROCHURES OR PRICES. *CALL FOR DETAILS ESTABLISHED 1986

MAIL ORDER ONLY FROM; IAN HARRISON, 7 MILL HILL, REPTON, DERBY, DE65 6GQ TEL: 01283 702875 9am-9pm INCLUDING SUNDAYS.

IAN HARRISON

ORTOFON CARTRIDGES

CADENZA BI ACK £1400 CADENZA BRONZE £1100 CADENZA BLUE £950 QUINTET BLACK £519 QUINTET BRONZE QUINTET BLUE £399 £268 QUINTET RED £180 2M BRONZE 2M RED

PLEASE PHONE FOR PRICES **OR PRODUCT DETAILS**

ian.harrison@mercian.myzen.co.uk EL: 01283 702875

IAN HARRISON HIFI

HARBETH LOUDSPEAKERS EAR/YOSHINO MICHELL ENGINEERING CREEK/EPOS, LEHMANN SUGDEN, PROJECT WHEST AUDIO, TRICHORD **NORSTONE, MUNARI, PEERLÉSS**

PLEASE PHONE FOR PRICES OR PRODUCT DETAILS

ian.harrison@mercian.myzen.co.uk TEL: 01283 702875





www.hifilounge.co.uk

01767 448121

www.highendheadphones.co.uk





Uk's only dedicated demo facility for high-end headphones



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 audio system to suit your budget and needs. Call us on 01223 233730 to arrange a demo.

www.criterionaudio.com info@criterionaudio.com

extmor QUAD'S **SUPER SYSTEM Stunning Z-4 floorstanders and Artera** components make sweet music together **PLUS: REVIEWS** Chord Hugo TT and TToby combo, **REGULARS** Destination, Music Legends, Arcam rPhono, Clearaudio TT5 tonearm, ELAC Audiofile news and all your hi-fi questions and

Uni-Fi 5 floorstander, plus portable DAC/amp GT

concerns answered by our team of experts

MAY ISSUE ON SALE 27 APRIL



Editor Lee Dunkley Production Editor Jake Day-Williams Art Editor Emily Hammond

CONTRIBUTORS
Geoff Green, Paul Hirons, James Hughes,
Cliff Joseph, Jason Kennedy, David Price,
Neville Roberts, Ed Selley, David Vivian, Chris Ward, Nigel Williamson

ADVERTISING

Sales Simon Dunn Tel: 01689 869853 Email: simon.dunn@hifichoice.co.uk

SUBSCRIPTIONS

UK - New, Renewals & Enquiries Tel: 0344 243 9023

Email: help@hfc.secureorder.co.uk

USA/CANADA - New, Renewals & Enquiries US Toll Free: 001 866 647 9191

REST OF WORLD - New, Renewals & Enquiries Tel: +44 (0) 1604 828 748

Website: mags-uk.com Contact: mags-uk.com/contacts/



If you don't want to miss an issue



MANAGEMENT TEAM

Group Editor Paul Miller Group Art Editor John Rook Group Advertising Manager Rhona Bolger Chief Executive Owen Davies

Chairman Peter Harkness Published by AVTech Media Ltd Suite 25, Eden House, Enterprise Way, Edenbridge, Kent, TN8 6HF

Phone: 0844 4122262 From outside the UK: +44 (0)1689 869840 www.hifichoice.co.uk

Distributed in the UK by Seymour Distribution Ltd.

Please reserve/deliver my copy of Hi-Fi Choice on a regular basis, starting with issue:

Title First name
Surname
Address
Postcode
Telephone number



BACK ISSUES



When you have finished with this magazine please recycle it.

If you can't always find a copy of this magazine, help is at hand! Complete this form and hand in at your local store, they'll arrange for a copy of each issue to be reserved for you. Some stores may even be able to arrange for it to be delivered to your home. Just ask!



Acoustic Signature Primus Turntable

a lifetime of musical enjoyment

PRIMUS was designed and engineered to achieve outstanding performance far beyond the expectations of an affordably priced turntable. Excellent build quality, reliability and a lifetime of musical enjoyment. No unnecessary gimmicks, Acoustic Signature concentrated the manufacturing costs on the high quality parts necessary for accurate LP reproduction. Comes fitted with a modified BB202 tonearm and MM1 cartridge which is a modified Ortofon 2M Red.

£1195



Acoustic Signature WOW Turntable

The WOW is one of the newest additions to the family of Acoustic Signature precisionengineered turntables. It comes with the same proprietary Tidorfolon Bearing design as used in all Acoustic Signature turntables, and with a 10-year warranty. Stunning design with touch sensor operation so no button is on the clear designed surface. Brand new fully digital motor with a 20Mhz Micro Processor results in perfect speed stability. 4.5kg heavy duty aluminium platter.

RB202 Tonearm and Audio Technica AT95e Cartridge included (image shown includes ta1000 arm)

£1390





Acoustic Signature Manfred Mk2 Turntable

The Manfred Mk2 turntable is manufactured using a choice of sumptuous real wood veneers, something you would expect on a high end speaker system rather than an entry level turntable or painted high gloss piano black or white. The solid wooden plinth carries the substantial high mass turntable platter bearing housing and tone arm mounting plate. The turntable motor unit is remotely sited, close to the plinth, and is the same motor as is used in Acoustic Signature high end turntables, powered from the S-Alpha regenerative power supply unit.

The Manfred MK2 is available in maple, cherry or piano black or white.

£2180

"...Its massy build and state-of-the-art electronics combine to give a sound that's expansive, rich with detail and effortlessly involving." HIFI NEWS



Acoustic Signature Thunder Turntable

Manufactured with the new revolutionary Silencer Platter 3 design, one of the most significant improvements in Acoustic Signature turntable designs. A 70mm solid aluminium chassis forms the base of the turntable, on which up to three arm attachments can be fitted for either 9" or 12" tone-arms of any make. The 50mm thick platter is driven by its remotely sited motor and AlphaDIG electronic control offers a perfect supply to the motor. The turntable base has been designed for optimum stability; the large footprint of the table generates more stability, to increase the weight concentration at the base of the turntable.

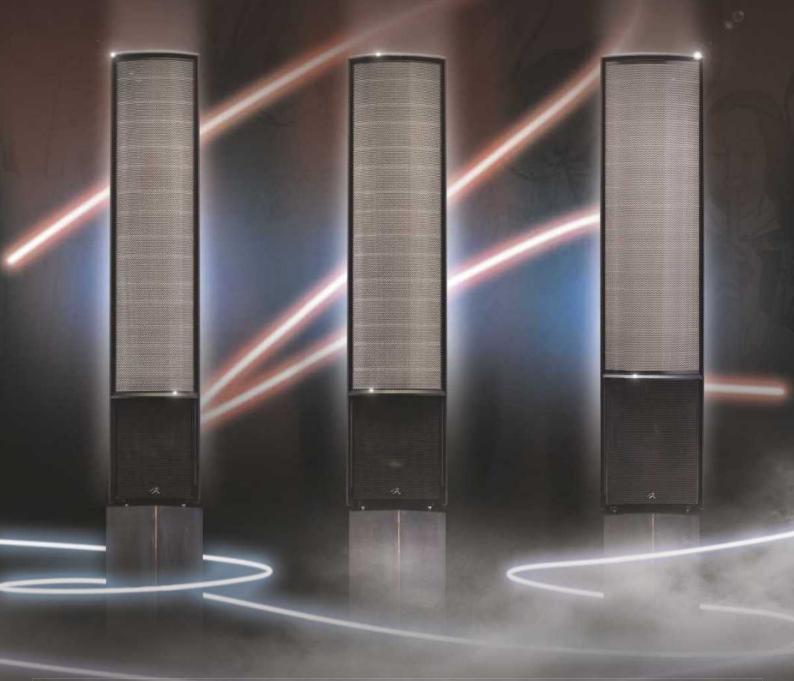
£7890



audioemotion

music is our passion

"...delivers the clearest sound with finest detail imaginable." - Noel Keywood - HiFi World - July 2016



IMPRESSION. EXPRESSION. RENAISSANCE.

THE NEW MASTERPIECE SERIES FROM MARTIN LOGAN



For Your Nearest Dealer Please Visit The Absolute Sounds Website

absolute sounds Itd.
International Distributors & Consultants of Specialised Hi-End Audio & Video Systems 58 Durham Road, London, SW20 OTW T: +44 (0)20 89 71 39 09 W: www.absolutesounds.com E: info@absolutesounds.com

