



**EXCLUSIVE**  
**Great start**  
 Audio-Technica deck packs  
 built-in phono stage & USB

**Mojo magic**  
 Chord's pocket-sized  
 headphone amp & DAC



# Hi-Fi Choice

**PASSION FOR SOUND**

Issue No. **405**

January 2016

## Play it smart

**Sonos multi-room speakers:  
 intelligent wireless audio**

**WIN!**  
 MunroSonic  
 EGG100,  
 DAC & cans  
 worth  
 £2,000

**Big Bang**  
 BeoLab 90 milestone

**Terrific tweaks**  
 Four easy upgrades

**28**

**PRODUCTS ON TEST:**

**Focal, Heed,  
 Marantz, Naim,  
 Pioneer & Rega**



**WALK  
 OF LIFE**

**Sony's versatile  
 hi-res Walkman**



**Silence  
 is golden**

**AKG's flagship N90Q  
 noise-cancelling cans**



**GROUP TEST**

**USB DACs**

**Six digital converters  
 for 24/192 & DSD audio**

# criterion audio



Criterion Audio is a new, 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. We have a wide range of carefully selected products: from familiar brands to amazing manufacturers you will not find anywhere else in the UK. Come visit us and listen in one of our purpose-built demo rooms or relax in our dedicated headphone lounge.

[www.criterionaudio.com](http://www.criterionaudio.com)   [info@criterionaudio.com](mailto:info@criterionaudio.com)   01223 233730



CYRUS

QUAD

KEF

PMC

FOCAL  
THE SPIRIT OF SOUND



Pro-Ject

YG ACOUSTICS

MOON

VA

DEVIALET

estelon

ProAc  
perfectly natural

MS

Boulder





**54**  
**Heed**  
Elixir

## Musicreviews



## BADGES EXPLAINED

### OUR AWARDS



**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!



Sonos may not be a brand that many readers will associate with what we as audio fans term 'high fidelity', so why is its latest Play:5 speaker on the cover of *Hi-Fi Choice* magazine? I am sure most of us would agree that streaming speakers are not something we'd swap our setup of carefully

considered hi-fi separates for, but I can easily see a place for this kind of streaming speaker system in other rooms around the house. Sonos is almost synonymous with multi-room audio and has captured the market thanks to its seamless control and integration, and has pretty much managed to set the benchmark for affordable music streaming around the home. Despite the company's resistance to hi-res audio, its newly launched Play:5 raises the sound quality bar and whether you're a newbie or hardcore quality-audio fan with a separates hi-fi setup, the Play:5 – reviewed on page 52 – sure makes the music sound sweet, thanks to its innovative room-tuning tech.

For those interested in a more traditional hi-fi brand, turn to page 64 where we visit hi-fi stalwart Bang & Olufsen in Denmark as it celebrates its 90th anniversary with the launch of its BeoLab 90 speaker that creates 360° sound. The distinctive-looking speaker breaks with design convention, and like the Sonos also utilises sophisticated sound-tuning tech to compensate for placement and room acoustics. It just goes to show that not all speakers are built the same.

**Lee Dunkley** Editor

Follow us:



[twitter.com/HiFiChoiceMag](https://twitter.com/HiFiChoiceMag) [facebook.com/hifichoice.co.uk](https://facebook.com/hifichoice.co.uk)



ENTERPRISE HOUSE, ENTERPRISE WAY,  
EDENBRIDGE, KENT TN8 6HF

# Hi-FiChoice Contents

hifichoice.co.uk Issue No. **405** January 2016

## NEWS & OPINION

### 6 Audiofile

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

### 18 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

### 124 Back Issues

Get your hands on old copies you missed

### 130 Next Issue

The sonic treats to look out for next month

## FEATURES

### 12 Show Report

See what you missed out on when The Hi-Fi Show Live opened its doors



### 64 Bang & Olufsen

We pay a visit to B&O's Danish HQ to find out all about the new BeoLab 90 speaker

### 90 Beautiful System

Naim and Focal combine for a setup that's both convenient and sounds amazing

### 94 Labelled With Love

Tune into the far-our frequencies of maverick Texan label International Artists

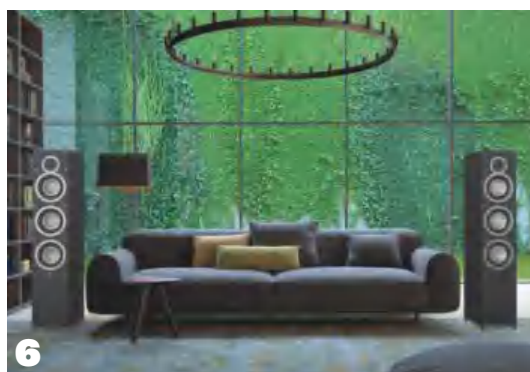
### 118 Jason Bradbury

The Gadget Show presenter talks about his passion for all things analogue

## GROUP TEST

**28**

**Six digital-to-analogue converters are put to the test to see which will reveal itself to be the next hi-res hero**



**6 Audiofile:** Elac Debut Series loudspeakers



**99 Music Reviews:** Bob Dylan



**109**

**IK Multimedia**  
iLoud speaker



"Placing a needle on a piece of vintage plastic is so real, it imbues music with a warmth and personality"

**Jason Bradbury Interview p118**

**TESTED THIS MONTH**



**22**

**Sony NW-ZX2 Digital Audio Player**



**58**

**Audio-Technica AT-LP5 turntable package**



**46**

**AKG N90Q noise-cancelling headphones**



**52**

**Sonos Play:5 wireless loudspeaker**

**REVIEWS**

Kit testing

**22 Sony**

NW-ZX2 Digital Audio Player

**46 AKG**

N90Q noise-cancelling headphones (Exotica)

**50 Chord Electronics**

Mojo headphone amplifier/DAC

**52 Sonos**

Play:5 wireless multi-room loudspeaker

**54 Heed**

Elixir integrated amplifier

**58 Audio-Technica**

AT-LP5 direct-drive turntable package

**60 Fostex**

PX-5HS active standmount loudspeaker

**88 JBE**

Series III turntable (Retro)

**GROUP TEST**

Home USB DACs  
£500-£800

**31 Marantz** HD-DAC1

**33 Musical Fidelity**

MX-DAC

**35 Optoma NuForce**

DAC80

**37 Pioneer** U-05

**39 Pro-Ject** DAC Box RS

**41 Rega** DAC-R

**MINI TEST**

Hi-fi upgrades £10-£195

**102 Analogue Studio**

Crystal Glass Turntable Platter Mat

**103 Lindy**

6-way AV Mains Conditioner Power Strip

**103 Blue Horizon**

Sanctum Isolation Platform

**104 Avid HiFi**

Sieveking Sound RCA End Caps

**CHOICE  
EXTRAS**

**107 BK Electronics**

P12-300SB subwoofer

**109 IK Multimedia**

iLoud Bluetooth desktop loudspeaker

**110 Analogue Studio**

Anti-static Record Cleaning Arm

**110 TCI**

Temple Constrictor Mains Powerlead

**113 Russ Andrews**

SilverStreak interconnect

**115 Radius**

NePlayer iOS hi-res player

**115 Chord Company**

Clearway Speaker Cable

**Never miss an issue – turn to p116 for our latest subs offer**



## Delightful Debut

Elac's all-new Debut loudspeaker series got its first UK showing at The Hi-Fi Show Live at the end of October, and it made a big impression on everyone that saw it...

**PRICE:** £250–£599 **AVAILABLE:** NOW **CONTACT:** 01285 643088 **WEB:** ELAC.COM

**GERMAN SPEAKER BRAND** Elac isn't usually associated with the affordable end of the speaker market, and is perhaps better known in the UK for its high-tech drive units – especially the celebrated and distinctive JET ribbon tweeter, now in fifth-generation spec – and its unique brand of *vorsprung durch technik*. But the Kiel-based company is embracing changing markets with its new Debut range and looks set to bring the much-respected speaker name to a whole new audience, and perhaps give itself a little more funk in the process.

At the price, this new range looks like an entry-level lineup, but there's

nothing entry-level about the sound of the B5 model we got to hear. The new range has eight models, three of which are aimed at stereo music listening – plus five models for home cinema including centre and Dolby Atmos add-on duties and three smartphone-controllable subwoofers for multi-channel setups.

Designer Andrew Jones told visitors attending his demos at the recent Hi-Fi Show Live event that the speaker has been built from a clean-sheet design, with custom-made key components and no-off-the-shelf parts. This might sound a little like marketing speak, but audience

reaction upon hearing the sound from the baby Debut B5 (shown right) was promising indeed, and even more so when listeners realised its £250 tag.

The small B5 standmount uses a 5.25in mid/bass driver while the larger B6 (£299) standmount employs a 6.6in mid/bass driver. Both are made of woven aramid fibre, that Elac says offers superior stiffness-to-weight ratio and damping over polypropylene or paper cones to achieve a smooth and extended frequency response. Both models have a 1in fabric dome tweeter and claim 60hm nominal impedance and sensitivity figures of 85dB and 87dB respectively.





## Designed with custom-made components and clean-sheet design

The £599 F5 floorstander (pictured above) is a 2.5-way design with braced cabinets to aid strength and stiffness, with the tweeter and top mid/bass drivers isolated from the rest of the cabinet. It employs the same 1in fabric dome tweeter with three 5.25in mid/bass drivers made of woven aramid fibre, and claims 87dB sensitivity and 6ohm nominal impedance.

All models in the Debut series are available now with a black finish.



The baby B5 is the entry-level model in the Debut range

## COMMENT

### HERE'S TO NEW

A quick glance through the *HFC* inbox reveals around 10 times more emails about upcoming music releases than we'd get during any other month. And what percentage would you imagine are pushing the work of new undiscovered artists? Yep that's right, about 0.00001. For some reason, the lead up to the yuletide season appears to be all about looking back when it comes to music.

The ironic thing about this unfortunate turn of events is that the music labels that push us to buy their wares are trying harder than ever to promote new talent. New artist deals signed by the UK's three big hitters – Sony Music, Universal Music and Warner Music – topped 156 in 2014, which is a 30 percent improvement on 2013, and the highest annual total since 2009, when 164 new deals were signed.

The revelations come as the BPI released the results of UK Music's Measuring Music Report in early November, which went on to reveal that the aforementioned three majors had spent a collective £178m on A&R in 2014, while publishers spent £162m on "investment in writers (advances etc.)" – that's more than has been spent on such things since records (excuse the pun) began back in 1992.

A quick glance at the charts makes for rather depressing reading as to how successful the efforts have been. As we write these words, it's mid-November (so we're not quite into Xmas silly season) and the midweek top 10 consists of: Little Mix, Elvis, Ellie Goulding, The Beatles, Rod Stewart, Alexander Armstrong (?!), Bob Dylan, Sam Smith, Anastasia and Ed Sheeran. To give you a quick overview of how 'new' these artists are, the average age of the group is 49 and three of them are dead. While we applaud the record labels' endeavour in trying to do the right thing, it's not working. None of the artists in the top 10 are new and it's difficult to think of any emerging talent enjoying commercial success without the help of a TV talent show in the last six months. Clearly, it's time for a rethink...



# Bose wireless speaker

New SoundTouch system with Bluetooth compatibility

**PRICE:** £169 **AVAILABLE:** NOW  
**CONTACT:** 0808 1688572 **WEB:** BOSE.CO.UK

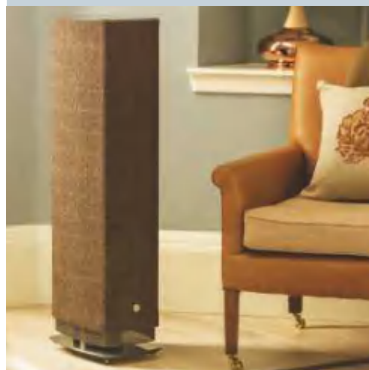
**BOSE INTRODUCES ITS** new next-generation SoundTouch 10 speaker system. With built-in Bluetooth and wi-fi, it connects directly to your portable devices straight from the box and is designed for instant music and multi-room listening. Using Bluetooth to stream any song, playlist or music service, you can then broadcast it via wi-fi to any number of SoundTouch 10 speakers. Alternatively, you can use the SoundTouch app (with music services Spotify and Deezer built in) to explore integrated music services, set up to six personalised presets to any music service playlist, artist or internet radio station and enjoy different music in multiple rooms.

The SoundTouch 10 combines Bose's proprietary digital signal processing with its new Unidome transducer. It's claimed that this 2.5in driver plays cleaner, deeper, and louder than any single speaker of its type. The SoundTouch 10 joins the new SoundTouch 20 and 30 Series III speaker systems, priced at £349 and £499 respectively.



## IN BRIEF

### CUSTOMISABLE LINN SYSTEMS



● Linn has announced its Series 5, 520 and 530 Exakt customisable music systems. The 530 speaker boasts 300W of power, while the smaller 520 boasts 200W. Both have jewel-cut glass stands and top plates in a choice of grey, white or black. The Akurate Exakt DSM has connections for all music sources, including streaming from online services. Series 5 also features new textile speaker coverings called Linn Fabrik. These are available in 11 colours. Prices start at £12,000 for the 530 and £9,250 for the 520.  
**LINN.CO.UK/MUSIC SYSTEMS/SERIES-5**

## Quad unleashes Artera

**PRICE:** ARTERA PLAY: £1,399; ARTERA STEREO: £1,499  
**AVAILABLE:** NOW **WEB:** QUAD-HIFI.CO.UK

Quad continues to mark its 79th anniversary with the launch of the new Artera range, which includes the Artera Play CD player DAC and preamp, alongside the Artera Stereo power amplifier, which is available in a choice of either black or silver finishes.

At the heart of the Artera Play, is the ESS Sabre32 9018 32-bit, eight-channel digital-to-analogue

converter. This is Quad's first component to utilise this hybrid multi-bit chipset and external digital sources can, claims Quad, benefit from its exceptional quality via a range of digital inputs. These include USB, with support for up to 32/384 PCM and also DSD64/128/256. The Artera Play's preamp boasts a balanced Class A output stage.

Two coaxial and two optical inputs cater for digital sources alongside the USB input, while a pair of RCA phono inputs is onhand for analogue ones.

The Artera Stereo power amp is rated at 140W per channel into 8ohm and connectivity options include single-ended RCA and balanced XLR inputs, a 12V trigger input and speaker binding posts.





---

# MUSICAL FIDELITY

---

## NU-VISTA 800 AMPLIFIER



### State of the art design for reference level reproduction

The Nu-Vista series is a passionate labour of love for all of us at Musical Fidelity.  
We hope that at least you get a chance to hear this combo because we  
consider it the ultimate expression of our art.

Experience it for yourself at your local Musical Fidelity dealer.

# Wireless DALI

New AX series loudspeakers

**PRICE:** £499-£799 **AVAILABLE:** NOW  
**CONTACT:** 0845 6443537 **WEB:** DALI-UK.CO.UK

**INTRODUCING DALI'S ZENSOR** AX series, which comprises two models – the floorstanding ZENSOR 5 AX (pictured) and the bookshelf ZENSOR 1 AX. Two 50W fully optimised digital Class D amplifiers have been integrated into the left-hand speaker, with a cable carrying the output to the partnering passive model. Both speakers have 5mm wood-fibre, soft dome tweeters partnered by a pair of 133mm low-frequency drivers on the ZENSOR 5 and just one on the ZENSOR 1.

Wireless connectivity comes via aptX Bluetooth and for a more traditional hookup, an optical Toslink (able to accept up to 24-bit/96kHz) and a pair of stereo analogue inputs are included, while a subwoofer output is on hand to give a little extra low-end grunt. Both the ZENSOR models are available in a choice of black, white or light walnut finishes and cost £499 for the bookshelf ZENSOR 1 AX and £799 for the floorstanding ZENSOR 5 AX.



## IN BRIEF

### NEW SPEAKERS FROM MERIDIAN

Meridian has unveiled its new DSP5200.2 and DSP7200.2 speakers with proprietary Digital Signal Processing (DSP) technology. Both new models house not only smart processing, but also three 75W amplifiers with a claimed maximum output level of 116dB at 1m. Just add a music source, such as a CD player or smartphone and both offer a

complete audio system in one. Also, connecting Meridian's optional Media Source 200 (£499), enables wireless control of networked music libraries. The speakers are available in black and white piano lacquer finishes with a wide selection of optional bespoke colours. The DSP5200.2 is £6,000 and the DSP7200.2 is £17,000  
**MERIDIAN-AUDIO.COM**



## TEAC releases hi-res duo

**PRICE:** UD-503 £700; NT-503 £950 **AVAILABLE:** NOW  
**CONTACT:** +49 (0)8142 4208141 **WEB:** TEAC-AUDIO.EU

TEAC has underlined its commitment to hi-res with the release of the UD-503 dual-monaural USB DAC/headphone amplifier and the NT-503DAB USB DAC/network player (pictured).

The UD-503 boasts support for 11.2MHz DSD and 32/384 PCM formats. With a set of analogue inputs also provided and a 256-step QVSC (Quad Volume Control System), it can act as a standalone preamp, either partnered with power amps or active speakers.

While most headphone amps opt to support conventional single-

ended headphone output, the UD-503's HCLD (High Current Line Driver) circuit goes further by supporting single-ended, balanced (BTL) and Active GND modes. The result of which – claims TEAC – is a lower noise floor and increased sonic insight.

The NT-503DAB network player employs the same pair of AK4490 DAC chips that are utilised by the UD-503 for hi-res compatibility with 11.2MHz DSD and 32-bit/384kHz PCM from a computer via USB cable, as well as 5.6MHz DSD and 24-bit/192kHz music streaming via LAN or USB Flash Memory. In order

to reproduce hi-res audio on both left and right channels precisely and independently, its dual-monaural circuit has a pair of toroidal-core power transformers, dual DAC chips and symmetrically laid out output stages.

It can stream music from portable devices, smartphones and tablets via LAN, Bluetooth (aptX) and USB. There's direct, built-in support for DAB/DAB+ digital radio broadcasts and paid-for music services such as Spotify and Deezer, and the free TuneIn internet radio portal. Both units are available in black or silver finishes.







# musicCast

Wireless Music System



FM / DAB+ App AirPlay Bluetooth Wi-Fi ECOmode High-Res Audio

## Natural Sound for your Music

Yamaha's new MusicCast system spans a huge variety of products, but at the root of all of them is superior sound and build quality. Offering second to none performance with the flexibility to listen anything, anywhere. Free all your audio and music all over your house with MusicCast

MusicCast Controller App



For more info visit [yamaha.com/musiccast](http://yamaha.com/musiccast)



Pictures by Andrew Simpson

# Windsor 2015

The Hi-Fi Show *Live* came to the Beaumont House Estate once again. If you didn't manage to make it along don't worry, because here's what you missed...

**THE LAST WEEKEND** in October saw the Hi-Fi Show *Live* return for a third consecutive year to the gorgeous grounds of the Beaumont Estate in Old Windsor. The two-day high-end extravaganza hosted by our sister title *Hi-Fi News & Record Review* and AVTech Media ran from Saturday 24th to Sunday 25th, and was the only place to be for any serious audio fan.

This year the Hi-Fi Show *Live* was expanded by a further set of demonstration suites at the Beaumont Conference Centre in Old Windsor. Hi-fi enthusiasts were offered the unique opportunity to experience some of the world's finest high-end audio. Iconic brands including JBL, Magico, KEF, Quad, dCS, Audio Alchemy, GamuT, Audio Research, D'Agostino and many others all revealed new products that had never been seen or heard in the UK before. The big Windsor, Wessex, Lancaster and

Buckingham suites provided the ideal environment for many unforgettable demos while the numerous *Hi-Fi News* workshops were often left with standing room only as Keith Howard, Matthias Böde, Tim Jarman and *Hi-Fi News & Record Review's* Paul Miller presented workshops on topics covering the differences between FLAC and WAV files, how loudspeaker time alignment affects imaging, the benefit of mains conditioning, USB filters or the difference between alternative LP releases. Visitors also got to audition the first-generation CD players from Philips and Sony to hear just how far the 16-bit silver disc has come.

But most of all, the show was all about enjoying music and the beautiful array of equipment that creates it. Whether you had money to spend or just wanted to window shop, there was plenty to see and hear. With plans for 2016 already under way, here's the 2015 highlights...





1 Designed by Andrew Jones, this is the first UK showing of ELAC's Debut loudspeaker range and its B5 standmount is the talk of the show at the price. Full news story on page 6.

**hifi-network.com**

2 Harman Consumer UK shows off a spectacular range of AKG headphones including the Quincy Jones-inspired N90Q noise-cancelling flagship model (shown here in black) that gets a full review on page 46.

**uk.akg.com**

3 Peter Madnick (left) joins Nigel Crump of Symmetry Systems to unveil Audio Alchemy's very latest designs, including a Class D amp, a DAC/preamp/headphone amplifier plus its optional power supply.

**symmetry-systems.co.uk**

4 Chord Electronics demonstrates its new DAVE DAC costing £7,995, which supports PCM, DXD and DSD, and is shown here in its £1,400 rack. Chord's Mojo DAC/headphone amp is reviewed on page 50.

**chordelectronics.co.uk**

5 Atlas Cables' Bryan McFarland demonstrates the company's new Transpose cold-solder connections, featuring top-quality quick-swap interchangeable banana and spade connectors.

**atlascables.com**

6 This beauty is the Turntable One from Analogue Works with black oak plinth in extended 12in guise costing £2,000, equipped with an SME M2-12 tonearm fitted with an Audio-Technica AT33Sa MC cartridge.

**divineaudio.co.uk**

7 Showing its flagship Epicon range, the DALI speaker line is available in exotic wood veneers, incorporating custom-made drive units with 6 and 8 model versions sporting hybrid ribbon/soft dome tweeters as shown.

**dali-uk.co.uk**

8 Throughout the show, Mike Valentine of Chasing The Dragon Records gives regular presentations on direct-cut LPs while also spinning his latest recording of the Syd Laurence Orchestra.

**gtaudio.com**



# The New Architecture for Preamps



The CP-800 stereo preamp/processor



Conventional high-end preamplifiers are the direct descendants of preamps that were conceived decades ago in a pre-digital world. The CP-800 stereo preamp/processor is something new. It combines the key circuit blocks of a high-end audio system in a unique way to improve and shorten the signal path. Analogue purity is preserved while digital sources acquire new processing features and higher performance than ever. For the first time, a CD ripped to a computer can sound better than it would if played in the world's best CD player.

Find out why.  
Download the white paper at  
[www.classeaudio.com/whitepaper](http://www.classeaudio.com/whitepaper).  
Then hear the CP-800 for yourself  
at your authorised Classé retailer.



1 Icon Audio chooses the show to launch its Stereo 30SE – the company's most powerful single-ended integrated amplifier yet – plus its FRM2 (Full Range Monitor) loudspeaker finished in a high-gloss red lacquer. **iconaudio.com**

2 Computer Audio Design's Scott Berry (pictured), joins forces for the show with Soundkaos seen here with its Wave 40 speakers with a side-exiting horn/transmission-line port. **soundkaos.com; computeraudiodesign.com**

3 Welsh hi-fi specialist Leema Acoustics, which is run by two ex-BBC engineers, showcases its flagship full-width Constellation range as well as its £3k Xen Elite micro monitors (not shown). **leema-acoustics.com**

4 New-look versions of Oppo's entry level PM-3 headphones (HFC 399) in eye-catching red or blue livery. Serving up the sound is its pocket-sized leather-clad HA-2 headphone amp/DAC (HFC 397). **oppodigital.co.uk**

5 Here's Daniel Marchant of Yamaha UK tickling the ivories of a Yamaha Disklavier Piano, ensuring that Hi-Fi Show Live lived up to its name. The brand also wowed guests with its latest MusicCast systems and £4k A-S3000 amp. **uk.yamaha.com**

6 This smart little Pro-Ject system is assembled by Henley Designs and comprises components from the Austrian company's compact Box Design series beneath an Xtension 9 Super Pack turntable. **henleydesigns.co.uk**

7 Primare's Siemen Algra gets up close to a BD32 universal player on top of an I32 integrated amp with optional streamer and aptX Bluetooth modules. Flagship PRE60/A60 pre/power amps are on the bottom two shelves. **primare.net**

8 Jack Oclew-Brown demonstrates KEF's revamped version of its iconic Muon flagship speaker. The £140k Muon has a revised Uni-Q mid/treble array with stiffened drivers and a new crossover said to give deeper bass. **kef.com**





GamuT®

Dynamic - energetic - alive

GamuT D3i/D200i

**"Sensitive yet powerful"**

*"This GamuT pre-power impresses the moment the music starts. It sounds clean, crisp and invitingly clear. Detail resolution is superb; we can't think of a rival that tells us more about the recording"*

What HiFi? January 2015

For further information about products and dealers, contact:



Sound Foundations  
0118 981 4238  
info@soundfoundations.co.uk  
www.soundfoundations.co.uk

www.gamutaudio.com



www.facebook.com/gamutaudio



www.twitter.com/gamutaudio

GamuT is Danish design in shape, sound and finish, manufacturing a complete range of amps, players, speakers and cables.



1 The retro-looking speaker is HECO's new Direkt model priced at £2,500, which boasts a 10in woofer and a horn-loaded tweeter seen here with the STST Motus II direct-drive turntable and Pure Sound 2A3 integrated amp. [puresound.info](http://puresound.info)

2 Chris Harris of Theme One Records has a vast selection of titles on offer, including recordings from specialist label Music On Vinyl alongside award-winning Chesky CDs. There is something here for every music fan.

3 IAG's Peter Comeau is on hand to sate the appetites of Quad fans eager to hear the new £4k Z-4 floorstander with its four-driver-and-ribbon-tweeter array pitched against Quad's own ESL-2912 electrostatics. [quad-hifi.co.uk](http://quad-hifi.co.uk)

4 PS Audio appears in two rooms at the show, with an epic setup joining DAL's Epicon speakers and compact Sprout amp/DAC (HFC 396) on display here with the all new NuWave DSD DAC priced at £949. [signaturesystems.co.uk](http://signaturesystems.co.uk)

5 Clearaudio's Master Innovation deck impresses with its DS Audio's DS-W1 cutting-edge optical cartridge, which uses an LED to detect stylus vibration. Visitors also hear its new £90k Statement TT1 V2. [soundfoundations.co.uk](http://soundfoundations.co.uk)

6 Dynaudio's Roland Hoffmann (left) and guest presenter Matthias Böde of Stereo magazine take a break from a workshop on loudspeaker positioning that uses Dynaudio's Contour S 3.4 LE priced at £4,750. [dynaudio.com](http://dynaudio.com)

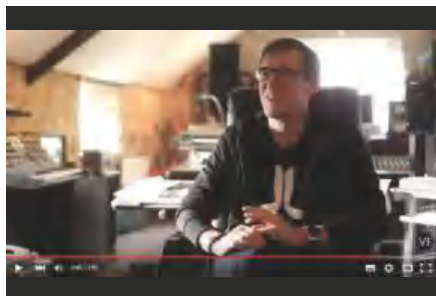
7 Hand built in the UK, Computer Audio Design shows its new 1543 DAC Mark II USB DAC paired with CAD's CAT (CAD Audio Transport), combining CD-ripper, music storage device, streamer and NAS drive. [computeraudiodesign.com](http://computeraudiodesign.com)

8 Nigel Finn demonstrates The Chord Company's new Sarum Super ARAY range to show eager visitors how it offers a welcome upgrade path from the company's Sarum Tuned ARAY predecessor. [chord.co.uk](http://chord.co.uk)



# Webwatch

**Andrew Simpson** checks out the best hi-fi websites, social media and online content



## Analogue trailer

This trailer for the Vinyl Factory's new analogue film series delves deep into our love affair with analogue sound and recording equipment, with clips from New Order's Stephen Morris, Trevor Jackson and more. [youtu.be/c2lzh4elvw0](https://youtu.be/c2lzh4elvw0)



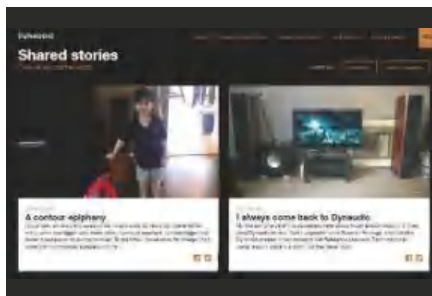
## Creepy cans

Lots of hi-fi co's got into the Halloween spirit last month, but top marks have to go to **@OPPOheadphones** on Twitter for pumping up the volume with this pumpkin. Judging by the smile on his face, he looks well chuffed to have bagged himself a pair of Oppo's PM-3 planar magnetic cans.



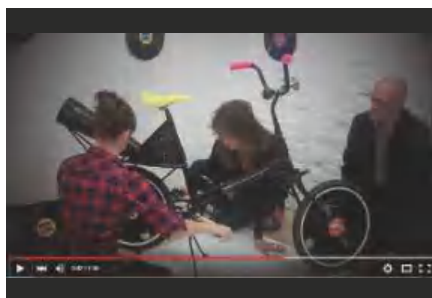
## Phono builder

Fancy saving yourself some cash by assembling your own phono stage? Then keep a close eye on Lucid Labs' Catalyst MM Phono Preamplifier project, which recently got backing via Kickstarter. The kit lets you specify your own settings, with the first units shipping early next year: [kck.st/1NaseOy](https://kck.st/1NaseOy)



## Telling stories

Launched in 1986, Dynaudio's Contour range has won many fans and the Danish brand is now inviting owners to share their **#ContourStory** to be in with a chance of winning a new pair of Contour speakers. Tell your story at [contourstory.com](http://contourstory.com)



## Pedal powered audio

Great to see this Youtube video recently resurface. It features a push bike that's built with vinyl records attached to its wheels, complete with a fixed tonearm and pick-up, allowing LP playback as you pedal. Just imagine those wow and flutter readings! [youtu.be/TCxylKYJ-xo](https://youtu.be/TCxylKYJ-xo)



## #HiFiShowLive look back

Missed the Hi-Fi Show Live last month hosted by our sister mag *Hi-Fi News*? See show highlights featuring the pick of world-class kit being demo'd alongside exclusive video interviews with leading industry ambassadors at [storify.com/HiFiNewsmag/hifishow-live-2015](http://storify.com/HiFiNewsmag/hifishow-live-2015)

**FOLLOW US: @HIFICHOICEMAG**

## CHOICE TWEETS

**DISCOGS (@DISCOGS)**  
The General Electric Show  
'N Tell record player  
**#TurntableTuesday**  
[t.co/Gw2ZUcdxUI](https://t.co/Gw2ZUcdxUI)

**TRON ELECTRIC (@TRON\_ELECTRIC)**  
TRON Atlantic - 8 watts of SET heaven... **pbs.**  
[twimg.com/media/CS3z1wwWIAAul5L.jpg](https://twimg.com/media/CS3z1wwWIAAul5L.jpg)

**AUDIO-TECHNICA USA (@USAUDIOTECHNICA)**  
**#MusicMonday:** Rediscover the warmth of **#vinyl** records with our line-up of **#turntables:**  
[buff.ly/1McIDtu](https://buff.ly/1McIDtu)

**CLASSICALBUMSUNDAYS (@CLASSICALBUMSUNDAY)**  
With purchase of A&R vinyl pressing plant, Josey Records isn't just a record store anymore  
[t.co/OEroY4Kr77](https://t.co/OEroY4Kr77)

**DAVE DENYER (@DAVEDENYER)**  
Thanks to **@HiFiNewsmag** for the greatest ever UK high end HiFi show

**OXFORD AUDIO (@OXFORDAUDIO)**  
"They returned from their week away and discovered to their horror, the Krell had been on the whole time!" **#hifihalloween**

**SUPERFI.CO.UK (@SUPERFIONLINE)**  
**#ThrowbackThursday** We found a 70's Superfi shirt today! What's the oldest clothing you still wear? **#HiFiSpecialists**

**STONEAUDIO.CO.UK (@STONEAUDIO)**  
Just in: Audiob's new 8300 series. Give us a call to arrange a demo.

**DAVE WATERS (@DAVEWATERSUK)**  
**@harrowaudio** listening to the new **@MF\_HiFi** M5si with **@MonitorAudio** speakers **#hifi**

**BOWERS & WILKINS (@BOWERSWILKINS)**  
Senior Product Manager, Andy Kerr shares his top ten demo tracks for the new range.  
[t.co/xAAVTRK3ey](https://t.co/xAAVTRK3ey)

**PS AUDIO (@PSAUDIO)**  
Paul's Post: Training and listening - [eepurl.com/bEtrr9](https://eepurl.com/bEtrr9)

**HENLEY DESIGNS LTD. (@HENLEYDESIGNS1)**  
NEW! The Pro-Ject Audio Systems RPM 9 Carbon has arrived! Find out more at [bit.ly/RPM-9-Carbon](https://bit.ly/RPM-9-Carbon)

**DAVID BROOK (@MCRULTD)**  
Sales generated from vinyl bring in more revenue than Youtube, Vevo and Spotify combined <https://t.co/lpuVCnfSMr>

**ARMOUR HOME (@ARMOURHOME)**  
Are you a record player owner? Check out the innovative products from Goldring **#vinyl #cartridges** [www.goldring.co.uk](http://www.goldring.co.uk)

**INSPIRE HI FI (@INSPIREHIFI)**  
Lots of Vivid upgraded Linn Sondek LP12's leaving Inspire HQ. Here is one of our Vivid X12 packages which left for... [fb.me/4VvH01v3D](https://fb.me/4VvH01v3D)





# A TREAT FOR THE FESTIVE SEASON



Buy a **gift subscription** to any of these titles this month and receive a free bottle of **Famous Grouse Whisky\***

■ Choose from a range of magazines ■ Great savings ■ Free bottle of Famous Grouse 70cl (over 18's only) ■ Free greetings card with gift subscriptions

## Home Cinema Choice

13 issues for £44.49  
**Saving 28%**  
~~Full price £61.75~~

## Hi-Fi Choice

13 issues for £41.49  
**Saving 29%**  
~~Full price £58.50~~

## Hi-Fi News

13 issues for £41.49  
**Saving 30%**  
~~Full price £58.99~~

**Subscribe securely online:** <http://mymagazineoffers.co.uk/X311>

**Call:** 0844 2439023 and Quote X311 **By Post:** Please complete the form below and post it to the address provided. Quote Ref: X311

### YOUR DETAILS: (This section must be completed)

Mr/Mrs/Miss/Ms ..... Name .....

Surname .....

Address .....

.....

.....

Postcode .....

Country .....

Tel/Mob .....

Email .....

D.O.B .....

(Complete if the subscription is for yourself)

Magazine ..... Price .....

### GIFT SUBSCRIPTION: (Complete 'YOUR DETAILS' first)

Mr/Mrs/Miss/Ms ..... Name .....

Surname .....

Address .....

.....

.....

Postcode .....

Country .....

Tel/Mob .....

Email .....

D.O.B .....

Magazine ..... Price .....

### PAYMENT DETAILS

Please make cheques payable to MyTimeMedia Ltd and write code X311 and magazine title on the back.

☐ Postal Order/Cheque ☐ Visa/MasterCard ☐ Maestro

Cardholder's name .....

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 15th January 2016. UK offer only. Gift subscriptions will begin with the first available issue of 2016 and personal subscriptions with the next available issue when order is placed. For full terms & conditions visit <http://www.mymagazineoffers.co.uk/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 UK 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: ☐ Post ☐ Phone. If you DO wish to be contacted by carefully chosen 3rd parties, please tick here: ☐ Email.

\*Free gift with UK 'Print' and 'Print + Digital' Subscription only. You must be over 18 for this offer.



# criterion audio

## DEVIALET EXPERT



## CRITERION EXPERTISE

Devialet technologies reinvent each step of the musical signal chain. At Criterion, our experts have been configuring Devialet solutions since 2011 and we have a unique understanding of the huge range of options available.

Whether you are simply curious to hear the next step in audio evolution or you want to discuss an Expert system tailored for your room and loudspeakers, we are here to help.

[www.criterionaudio.com](http://www.criterionaudio.com) | [info@criterionaudio.com](mailto:info@criterionaudio.com) | 01223 233730

EXPERT  
AUDIOPHILE EVOLUTIVE SYSTEM





## PHANTOM LAUNCH



CAMBRIDGE 05/DEC

Criterion Audio and Devialet invite you to our launch of Phantom on Saturday 5th December. Experience the full range of Phantom and Expert systems while meeting the technical experts from Devialet who made it all possible.

Join us between 11am and 5pm. Refreshments will be provided and there is plentiful parking. To register, please call 01223 233730 or email [events@criterionaudio.com](mailto:events@criterionaudio.com).

Criterion Audio, Criterion House, Oakington Road, Cambridge CB3 0QH

PHANTOM  
IMPLOSIVE SOUND





# Walk on the wild side

Having been driven almost to extinction by the iPod and smartphone, the Walkman is back. **Ed Selley** checks out Sony's flagship

**F**ew names in the industry have managed to possess as much standing with the general public as that of the Walkman. For many years, it was up there with Hoover as a term that's more or less interchangeable with the item it described. The advent of the iPod (which neatly usurped Walkman to become a catch-all term for the latest generation of personal audio players) very nearly destroyed the name for good. The move from physical media to stored files saw Sony wrongfooted and its initial offerings fell somewhat wide of the

## There's a smoothness and refinement to the way that it goes about making music

mark. The moment when Sony released an iPod dock was a fairly graphic indication that the Walkman had lost the fight rather emphatically.

Happily, the Walkman name is back in the spotlight and is attached to a product that is nothing if not ambitious. The NW-ZX2 is Sony's flagship personal audio player and the specification is rather enticing. Building on the earlier NW-ZX1 (HFC 384), this is an Android-based device that is supplied with 128GB of internal memory and bolstered by a micro SD card slot that supports an additional 128GB. This is enough to give the NW-ZX2 some clear capacity advantages over smartphones even if it still probably isn't enough to carry your entire music collection around.

There should be no limitations based on format, though. The NW-ZX2 supports pretty much every compressed and lossless sound format except WMA Lossless and will also playback DSD files as well, although these are converted to PCM for playback and then processed to

restore the 'DSD sound'. Additionally, as the Sony is Android based and comes with access to the Google Play Store, it supports playback of material via streaming services, which can be saved to run offline from the internal memory. These can be played via the headphone socket, NFC or Bluetooth using Sony's proprietary LDAC encoding, which promises a high-quality lossless-capable transmission. There is no digital output, however, so the Sony can't be easily employed in a conventional system although it is possible to use it as a storage device on a streamer.

The only difference between material played back via the embedded audio player and downloaded apps is that the ClearAudio+ software is not selectable when listening to installed apps. ClearAudio+ adjusts the settings to produce a more natural sound. Additionally the NW-ZX2 is fitted with DSEE HX upsampling software that is primarily aimed at compressed music, but as there is no means of switching it on or off it is applied to all files including apps and is intended to effortlessly restore lost data to them.

This software and the partnering S Master amplification is what really sets this portable player apart from smartphones. The amps operate exclusively in the digital domain and are a Class D-based design that incorporates digital-to-analogue conversion as part of the same process. Sony has also fitted clock twin oscillators – one for multiples of 44.1kHz and one for multiples of 48 – in a bid for a higher performance. This amplification also means that it is capable of driving headphones that are beyond most smartphones and there is plenty of headroom on offer, but efforts have been made to ensure that the output is quiet with more sensitive designs.

Sony has then wrapped all this in a very heavy duty piece of casework.

### DETAILS

**PRODUCT**  
Sony NW-ZX2

**ORIGIN**  
Japan/Malaysia

**TYPE**  
24-bit/192kHz & DSD Digital Audio Player

**WEIGHT**  
235g

**DIMENSIONS**  
(WxHxD)  
65 x 131 x 18mm

**FEATURES**

- Supports PCM 24/192, DSD64 & DSD128
- NFC Bluetooth with LDAC
- 128GB internal storage plus micro SD slot (max 128GB)

**DISTRIBUTOR**  
Sony UK

**TELEPHONE**  
0207 3652810

**WEBSITE**  
sony.co.uk

The NW-ZX2 is built around a single-piece metal chassis that feels immensely solid and is superbly finished. Little touches like the row of physical buttons to control track selection and volume and the hefty 235g weight combine to give it impressive presence when held in the hand. The black finish can leave it looking a little drab in pictures but this is a superbly executed piece of industrial design. There are some areas of weakness, though. The use of the older Android 4 operating system leaves it feeling a little slow and dated compared with most modern smartphones and the smaller display can be a little cramped to use some apps on. Another slight annoyance is it won't respond to inline remotes on headphones and earphones, which limits control to the device itself. Having spent some time with the NW-ZX2, I also suspect that the claimed 33 hour battery life will be hard to hit in reality.

### Sound quality

With a selection of lossless and hi-res material on the internal drive – a process that proves entirely painless – the good news is that the Sony delivers a very strong performance ▶

**With an interface that's more like a phone, operation is a real breeze**



with lossless and high-resolution material. Starting with a 16/44.1kHz FLAC of Fink's *Distance And Time*, it is extremely assured. There is a smoothness and refinement to the way that it goes about making music that is consistently likeable. The top end has an almost liquid quality that is often found with Japanese high-end electronics. There's no loss of fine detail or sense that the presentation is artificially smoothed over, just an overall refinement that's appealing.

### I'm a believer

The overall tonality is consistently believable. Greenhall's vocals are well defined and their relationship with his guitar is well judged and manages to have an appreciable sense of space even via the comparatively affordable Etymotic Research HF3 earphones (HFC 404). Switch to the rather more talented (and considerably more expensive) Noble 6 and it has a truly impressive soundstage. Moving to the hi-res 24/88.2kHz recording of Kraftwerk's phenomenal *Minimum Maximum*, the NW-ZX2 is perfectly capable of capturing these sizeable recordings without issue.

The huge reserve of power from the headphone socket is also extremely impressive. Not only does this allow it

to run devices like Oppo's PM-3 headphones (HFC 399) without breaking sweat – a tall order for most smartphones and even some rival players – but it also gives a sense of effortlessness to lower levels, which aids the refinement and makes this a tremendously easy device to listen to for long periods. Equally, when using more sensitive in-ear designs, there is little sense of noise or hiss although it has to give a little ground to Chord's impressive Mojo in this regard.

The Kraftwerk piece also goes on to demonstrate that the very refined top end is underpinned by deep and assured bass. There is a tremendous sense of drive and power to the NW-ZX2 even at lower listening levels and it manages to sound consistently agile and entertaining. This is something that does tend to suffer a little if the ClearAudio+ setting is engaged, however, as the bass response can become a little too much of a good thing and I find it a little overblown for normal use – although I appreciate that it works well in noisy environments on the move. Switching it off also means that the performance between the player software and apps like Tidal is very consistent.



The Sony makes for fascinating comparison with the Chord Mojo, which is intended to imbue smartphones with the same levels of performance as a dedicated audio player. With both units being almost unequivocally excellent in use, deciding between them will be as much a case of working out what you need. The Chord is smaller, but the shape in some ways makes it harder to accommodate and the battery life is shorter meaning that the Sony is the better travel companion. However, the Chord's incredible sonic performance gives it the edge for hi-res use and the fact that it can extract this exceptional performance from any smartphone is really quite an achievement.

While it is unlikely to be the main area of use for the NW-ZX2, the Bluetooth implementation is well thought out and easy to use. The player connects to every test device available and even the frequently temperamental NFC contact pairing system seems usefully reliable here. Given the relative weight and bulk of the Sony would limit its use when exercising, the ability to connect Bluetooth earphones to it at the gym and leave it in a bag is a handy one and the good news is that with the Optoma NuForce BE6 here at the same time, the paired range of the two devices easily reaches as far as eight to 10m, which would make for a more than flexible partnership in such circumstances.

Against all of these very positive attributes, there isn't really that much to complain about. There is a sense

### There's no loss of fine detail or sense that the presentation is smoothed over

with a wide selection of material that compared with something like Chord Electronics' scrupulously accurate Mojo (see box above) the Sony's presentation is slightly softer and more laid back, but this does make the NW-ZX2 very easy to listen to over time. Conversely, it is still revealing enough to make the limitations of compressed audio and streaming services like Spotify periodically sound a little on the thin side, despite the very best efforts of the DSEE HX software.

### Conclusion

The Sony faces a different market to that which its ancestors made their own, but the NW-ZX2 manages to do a great deal right. Compared with some other high-end portable rivals, the £950 asking price is not entirely unreasonable and it competes on an even footing in terms of specifications and build. The overall package feels more cohesive than bolting a DAC onto a smartphone interface. But where Sony has been particularly clever with the NW-ZX2 is that it has used its experience with phones and other mass-market devices – that is considerably more extensive than the bulk of its rivals – to ensure that it has the user friendliness and experience that we have come to expect from devices of this nature. The fact that it has then gone on to use its equally comprehensive audio engineering





**CONNECTIONS**

- 1 Power on button
- 2 Volume up/down controls
- 3 Rubberised grip
- 4 Transport controls

**RIP VERSUS STREAM**

As this is a fully functioning Android device with access to the Google Play store, it is capable of running streaming apps from Spotify and Tidal in the manner of a smartphone. Using Tidal in its offline mode with material stored on its hard drive, the Sony makes for an interesting comparison to my own ripped stored versions. As noted, the ClearAudio+ decoding option is not available for apps, but as most of my listening is done without it, comparisons between albums on Tidal and my lossless rips reveal very few differences.

Where Tidal really scores, though, is that updating your music doesn't require a physical connection between the Sony and a computer. As long as you have a decent wireless connection, simply selecting an album to be offline will add it to the ZX2. While Tidal doesn't offer any hi-res material (meaning you'd still most likely want to use those files where available), the sound quality of the lossless files, the ease of updating your library and Tidal's slick interface all combine to make it a great alternative.

skills to partner it with extremely high-quality hardware, has paid off.

Against this, there is the sense that the player could be even better still if it ran a more modern version of Android and tweaked some aspects of the interface and design for greater user friendliness. For many people, though, that 'want one' solidity and feel of the NW-ZX2 will be enough to tempt them over trying to boost the performance of a smartphone. One of the best names in the business is back doing what it does best, and the NW-ZX2 is a welcome return to form for the Walkman name ●

**HI-FIChoice****OUR VERDICT****SOUND QUALITY**

**LIKE:** Refined and powerful sound; excellent build; decent specification

**VALUE FOR MONEY**

**DISLIKE:** Interface is a little old fashioned; no digital output

**BUILD QUALITY****FEATURES**

**WE SAY:** It isn't cheap, but the NW-ZX2 is a desirable and very capable player

**OVERALL****WALKING ON SUNSHINE**

The Walkman is now 35 years old, here's a look at its ups and downs

As the original portable cassette player, the Walkman dominated the early years of the category and Sony remained a strong player until the decline of the tape. Having created one of the most iconic brand names in the business, Sony went on to undo some of its good work. The decision to brand CD products as 'Discmans' was a curious one and it would be the turn of the century before Sony's portable CD players were formally badged as 'CD Walkmans.'

On the flip side, the Japanese manufacturer was commendably quick to recognise that computer audio would have a considerable effect on the portable market, but the company's long history of doing things its own way had an adverse effect on the early products. The 'Net MD' MiniDisc Walkman was among the earliest products on the market to replay compressed audio files and the capacity compared favourably with solid-state rivals of the time. The fortunes of MiniDisc as a mainstream format had already begun to decline by this point, however, as attention switched to non physical media.

Here the company's fortunes were also mixed. Early 'Magic Gate' products were comparatively advanced for 1999, but Sony's insistence on using its proprietary ATRAC compression codec (developed for MiniDisc) and SonicStage software (which never evolved beyond a truly dismal user experience) meant that it was rather ill prepared to deal with the threat of the much more flexible iPod.

Thankfully, the lessons of these early experiences were learned – albeit slowly – and Sony added MP3 support and finally ditched SonicStage. While the Walkman name all but fizzled out towards the end of the decade, when Sony decided to commit to hi-res audio files, the relaunch of the Walkman was more successful. Using its experience of the Android operating system (gained from its phones), Sony has ensured that its latest generation of products is a whole lot more flexible.



**An early Sony Walkman that changed the way we listen to music forever**

# How we test

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

### USB DACS GROUP TEST

**THE PROCESS OF** reliably auditioning six USB digital-to-analogue converters isn't quite as straightforward as doing a single standalone review. Each DAC is connected with its supplied power lead and powered continuously to make sure it's fully warmed up. The DACs are then connected to a Melco N1A NAS drive (HFC 397). This allows a USB output that doesn't rely on any installed drivers for a quick and easy transfer between converters as well as excellent signal-to-noise performance on the USB connection itself. In practise, one DAC doesn't want to play nicely with the Melco and requires a Lenovo ThinkPad running Windows 7 and Foobar to run the test program.

The converters are then all connected to a Cambridge Audio 851A integrated amp (HFC 359) via six identical pairs of Chord C-Line interconnects (HFC 403). The Cambridge Audio amp offers a clear numerical display along with the ability to individually level trim inputs to ensure levels are matched – useful when only three of the six DACs have their own preamp volume control. The 851A is then connected to a pair of Kudos Super 10 standmount speakers via QED XT40 speaker cables (HFC 394). Listening sessions are conducted with a panel of three listeners and supported by individual sessions until a definitive picture of the DAC's sound quality is obtained.



### 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

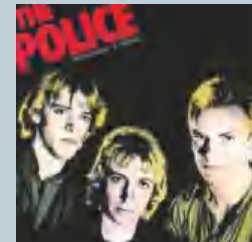
**SOURCE**  
Melco N1A NAS drive  
**AMPLIFIER**  
Cambridge Audio 851A  
**LOUDSPEAKER**  
Kudos Super 10  
standmount loudspeaker  
**CABLES**  
QED XT40 loudspeaker cable,  
Chord C-Line interconnect

### TEST MUSIC

**LONDON GRAMMAR**  
*If You Wait, Wasting My Young Years*  
16/44.1kHz FLAC



**THE POLICE**  
*Outlandos d'Amour, So Lonely*  
24/88.2kHz FLAC



**JOHANNES PRAMSOHLER & ENSEMBLE DIDEROT**  
*Largo II*, 24/96kHz FLAC



**ANTONIO FORCIONE & SABINA SCIUBBA**  
*Meet Me In London, Take Five*  
24/192kHz FLAC







## Everything you need. Nothing you don't.

*Balanced  
Design  
Concept.*

Music brings us so much joy. An audio system shouldn't reduce music's unique emotional satisfaction with unnecessary complication and superfluous, performance robbing features. Rotel's new RA-1570 Stereo Integrated Amplifier combines proven analog design with advanced digital circuits to bring all of your favorite artists to life with surpassing fidelity. It's a powerful 120 watts per channel Class A/B amplifier, highly refined preamplifier and 24/192 Digital to Analog convertor tucked behind a timeless brushed metal, user-friendly front panel. Whether you chose to listen to classic vinyl L.P.s, via your smart phone or tablet, or 192kHz/ 24 bit PC-USB digital streams, the RA-1570 takes you straight to the heart of a musical performance. Without compromise or complication.

Want to find out more about how we do it? Visit [www.rotel.com/UK](http://www.rotel.com/UK) to find your nearest authorised Rotel retailer.



ROTEL.COM



# Group test



HOME USB DACS £500-£800

## Conversion factor

A USB DAC is an essential part of any hi-fi system if you're looking to experience hi-res audio. **Ed Selley** checks out six of the best

**VINYL MAY BE** the format grabbing the headlines at the moment, and fuelling a desire for music fans to return to all things analogue, but there's still plenty of remarkable things happening in the digital audio format world. With the increasing number of better-than-CD downloadable formats available from music sites like HDtracks, Qobuz and highresaudio.com, hi-fi fans can quickly purchase high-resolution studio-quality recordings to play on their audio systems at home.

The six models on test here all offer hi-res file format decoding for 24-bit/96kHz or 192kHz music files, plus four of the models also cater for Direct-Stream Digital (DSD) music files, offering even greater audio resolution benefits.

But it's not all about hi-res, as adding a DAC is an effective upgrade to every bit of audio that comes out of a computer's USB socket. As many audio fans know, using a computer as your source breaks just about every rule in the high-fidelity audio book.

There are plenty of ways for a computer to degrade the audio signal, and taking the digital-to-analogue decoding process out of its hands makes a lot of sense for those looking to enjoy hi-res in its purest form.

Additionally all six models here are equipped with optical and coaxial digital inputs to act as effective upgrades to existing digital sources like a CD player or music streamer, with some adding preamp duties too. To see which models perform the best read on... ▶





#### ON TEST



**Marantz  
HD-DAC1**  
**£700 p31**

Despite the retro wooden side cheeks, the Marantz is a bang-up-to-date DAC with four line-level and variable inputs as well as sporting a headphone preamp.



**Musical Fidelity  
MX-DAC**  
**£700 p33**

The MX-DAC has five digital inputs including DSD-capable USB along with switchable digital filters. There's a choice of balanced and unbalanced outputs available too.



**Optoma NuForce  
DAC80**  
**£500 p35**

This compact and minimalist-looking DAC offers four digital inputs, remote control and preamp functionality as well as sample rate support to 24/192kHz.



**Pioneer  
U-05**  
**£700 p37**

The first Pioneer DAC for a very long time, the U-05 sports six digital inputs, preamp functionality along with a headphone amplifier and fully balanced connectivity.



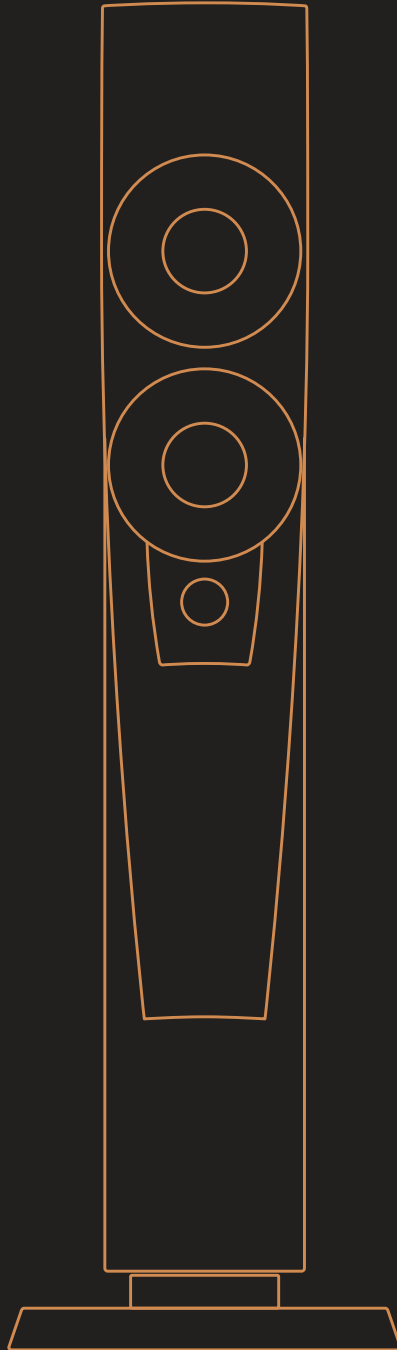
**Pro-Ject  
DAC Box RS**  
**£800 p39**

The Austrian brand's DAC has the most digital inputs with no less than nine on offer. You also get switchable filters and the option to choose between a solid state and valve output.



**Rega  
DAC-R**  
**£598 p41**

As one of the most affordable models in the test, this UK-made DAC sports five digital inputs up to 24-bit/192kHz with a choice of digital filters, wrapped up in substantial case.



## **Contour S 3.4 LE**

### **The legend continues.**

Dynaudio Contour – a magic name among audiophiles. And the living example of a true high-end loudspeaker. Consistently refined and further optimized since its launch in 1986 to this very day. Completely handmade in Denmark, the new Contour S 1.4 and S 3.4 Limited Edition models offer absolute refinement in design and finish, combined with a higher level of sound quality that is instantly audible. The legend continues. [www.dynaudio.com/contour](http://www.dynaudio.com/contour)

All there is. **DYNAUDIO**





# Marantz

## HD-DAC1 £700



The wood effect might not be to everyone's taste, but this converter still manages to do a great deal right

### DETAILS

**PRODUCT**  
Marantz HD-DAC1

**ORIGIN**  
Japan/China

**TYPE**  
DSD-capable DAC/  
headphone amp/  
preamplifier

**WEIGHT**  
5kg

**DIMENSIONS**  
(WxHxD)  
250 x 90 x 270mm

**FEATURES**  
• Format support:  
PCM 44.1-192kHz;  
DSD64 & DSD128  
• Inputs: USB-B  
port; coaxial; 2x  
optical  
• Outputs: fixed  
level stereo RCA  
phonos; variable  
output stereo RCAs

**DISTRIBUTOR**  
D&M Audiovisual,  
UK Ltd

**TELEPHONE**  
02890 279830

**WEBSITE**  
marantz.co.uk

**D**ACs have been part of the Marantz range in the past, but have been absent more recently until the HD-DAC1 arrived on the scene. Like two other models here, it is both a digital-to-analogue converter and a preamp, offering fixed and variable outputs to choose from rather than switching the same set. There's no XLR out, though.

In terms of other features it scores rather better. There are four digital inputs, one coaxial, two optical and a USB-B. The latter supports sample rates up to and including DSD128 and Marantz has opted to isolate the connection to keep noise levels to a minimum. Unique to the test, the HD-DAC1 also has an analogue connection via a 3.5mm socket, which gives some additional flexibility and it also supports direct connection of an iDevice via a USB socket on the front. Marantz has also designed it to work as a headphone amp and it is able to cope with loads of up to 600ohm.

Visually, the Marantz is something of a mixed bag. The circular display in the centre flanked by symmetrical controls is elegant and easy to use. Some of this good work is then undone by the 'wood' side cheeks, which while a feature on Marantz products of old, looks a little out of place here especially with the black

review sample. Equally, the build and finish is very good and it feels solid and well assembled with decently spaced and solid connections on the back and well-weighted controls on the front. A remote is also supplied.

### Sound quality

The listening panel's thoughts on the Marantz are generally positive if not universally full of praise. Across all the test material, the smoothness and refinement of the upper registers is something that all three panellists pick up on and appreciate. There is plenty of detail and space to the

## With some careful system matching the HD-DAC1 is a very strong performer

Marantz and it avoids becoming harsh or edgy. With the strings of the Montanari *Violin Concertos* it produces considerable treble energy and relays an impressive amount of detail, but never steps over into becoming too bright. This also allows the congested Police recording to sound punchy and upbeat.

Where the HD-DAC1 is slightly less assured is when you ask it to deliver in terms of rhythmic drive and engagement. None of the panel is especially convinced that it really wants to groove with either London Grammar or The Police. It doesn't sound slow or confused, but equally it never seems to want to get heads nodding in the way that some models here can do. There is more praise to be had for the HD-DAC1's sense of

### FULLY LOADED

The Marantz is DSD-capable over USB and displays no difficulty with the test material employed outside of the blind panel listening. It manages to keep the same qualities that it displays with PCM files and there is a real sense of the almost analogue quality that good DSD can bring to performances.

The way that the HD-DAC1 works with headphones is equally assured. As per Marantz's claims, a pair of relatively challenging Sennheiser HD650 (HFC 312) headphones doesn't represent any real problems for it and the same tonal balance that the Marantz exhibits via the fixed-level RCA phono outputs is also apparent and there is no shortage of volume on offer too.

The Marantz is more than capable of acting as a digital preamplifier too with a smooth and linear volume response when hooked up to the fixed input of the Cambridge 851A integrated to operate as a preamp. For all-round functionality, this is quite simply one of the best equipped models in the test.

scale and separation, though. It is very good at sounding big when scale is required and shrinking back down when it isn't.

The Marantz is flexible and well specified and there is plenty to like about the way it can make music. The headphone and preamp functions are potentially extremely useful in terms of building a system around it and the build and functionality is also commendably broad. While the appearance might be a matter of personal taste, it is unlikely to prove offensive. Ultimately, the HD-DAC1 lacks a little in the way of punch and excitement to top the test, but with some thoughtful system matching this is a very strong performer ●

### Hi-Fi Choice

#### OUR VERDICT

##### SOUND QUALITY

★★★★★

**LIKE:** Refined and detailed sound; sense of space and depth

##### VALUE FOR MONEY

★★★★★

**DISLIKE:** Lacks a little drive and excitement; 'wood' won't be to everyone's taste

##### BUILD QUALITY

★★★★★

##### FEATURES

★★★★★

**WE SAY:** Well specified DAC with impressive refinement, but not a true all-rounder

##### OVERALL

★★★★★





## groove definition.

Cyrus Audio consistently pushes the boundaries of audio technology.

Our new **Phono Signature** is arguably the most advanced phono pre amplifier available anywhere in the world today. With innovative circuit design to provide an extremely wide dynamic range **Phono Signature** brings the artist into your living space.

Designed to allow up to four turntables, arms or cartridges to be permanently connected; vinyl enthusiasts can enjoy different turntable configurations without changing connections.

The remote control supplied with the **Phono Signature** enables you to finely adjust gain and cartridge loading for MC cartridges from your listening chair.

For the ultimate phono performance simply add a **PSX-R<sub>2</sub>**.

**Build a better music experience.** Visit our website for more information:



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

**CYRUS**

**Hand built in the UK:** All Cyrus Audio components are designed, manufactured and assembled at our Cambridgeshire facility.  
**Model shown:** Cyrus Phono Signature.





# Musical Fidelity MX-DAC **£700**

With robust and elegant build, the MX-DAC also packs an impressive punch considering its petite size

## DETAILS

**PRODUCT**  
Musical Fidelity  
MX-DAC

**ORIGIN**  
UK/EU

**TYPE**  
DSD-capable DAC

**WEIGHT**  
1.9kg

**DIMENSIONS**  
(WxHxD)  
220 x 53 x 215mm

**FEATURES**  
• Format support:  
PCM 32-192kHz;  
DSD64; DSD128  
• Inputs: 2x coaxial;  
2x optical; 1x USB  
• Outputs: RCA  
phono; balanced  
XLR

**DISTRIBUTOR**  
Musical Fidelity Ltd

**TELEPHONE**  
0208 9002866

**WEBSITE**  
musicalfidelity.com

**D**ACs have been a consistent part of Musical Fidelity's range for many years and the MX-DAC is the latest arrival in a range that partially replaces the 1 Series. The spec takes Musical Fidelity to new performance areas too. This is its first USB DAC to offer DSD support – in this case up to DSD128. MF claims the DAC processes everything in the DSD domain, but doesn't specify what this entails.

In terms of features, this is one of the less heavily specified DACs in the roundup, but it is still hardly what you'd describe as minimalist. There are five digital inputs, two optical, a pair of coaxials and the all-important USB connection. The Musical Fidelity is a line-level-only device, but features both RCA and XLR outputs and there is also a choice of digital filters to allow you to tweak the performance to your personal taste.

If you are the sort of person that needs to know at a glance what their DAC is receiving, this is going to be an instantly appealing option. The MX-DAC clearly displays input, filter setting and sample rate through simple but effective use of blue LEDs. Where Musical Fidelity has been clever is that although this is a fair amount of information to display, the DAC still manages to look clean and

elegant. In fact, it is one of the best looking and best assembled models on test with slim but impressively solid-feeling aluminium casework. This is slightly undermined by the wall wart power supply, although it is at least silent in use.

## Sound quality

The MX-DAC rather divides the panel in terms of how it is perceived. All three listeners consider it to be one of the brighter models of the six, but only one feels that this is especially problematic. The top end is extremely detailed and very spacious. Vocals in

## An impressive DAC that should work well with a wide variety of music

particular have impressive texture and sound consistently realistic across all of the test material.

Where the Musical Fidelity is less happy is with the congested Police recording. One panellist feels this it is actively harsh, while the others feel that it doesn't effectively open out the performance in quite the way that some others do. Across the other, better recorded pieces, there is also the sense that it doesn't have quite the same front-to-back depth that some other rival models manage.

There are no such issues with the bass, however. The MX-DAC reveals plenty of low-end impact and it sounds fast and agile while it does so. While one listener feels that it lacks a little in the way of engagement, the majority view is that it can deliver a

## SPARKLE OR SMOOTH?

The Musical Fidelity boasts a two-position digital filter system and participates in blind listening with the first option selected. The difference between the two is not enormous, but the first filter lends the MX-DAC a little more sparkle and attack while the second is a little smoother but consequently robs the performance of some of its excitement. Outside of the very specific world of blind listening, you should be able to switch between the two to find the best match for the music you happen to be listening to at the time.

The MX-DAC has no problem playing back the DSD test material and switching between different sample rates is done without interruptions or any extraneous noise. The coaxial and optical connections are similarly well behaved. The MX-DAC is also consistent in performance between the RCA and XLR connections, but given that a number of amplifiers sound at their best over a balanced connection, having both options available is very useful indeed.

lively and energetic performance with a wide variety of material. With the assembled strings of the Pramschler *Largo*, for example, the performance is right up at the top of the pile with a real sense of life and vitality to it.

The MX-DAC is not without its vices and it lacks some of the bells and whistles of some rivals, but with a little thought given to system matching, there is a great deal to like about the way it makes music. Coupled to the excellent build quality and elegant design, this is a very impressive DAC that should work well with a wide variety of music although there are better all-round models in the test ●

## HIFIChoice

### OUR VERDICT

#### SOUND QUALITY

★★★★★

**LIKE:** Detailed, punchy performance; excellent build and aesthetics

#### VALUE FOR MONEY

★★★★★

**DISLIKE:** Can be overly bright; limited functionality compared with some rivals

#### BUILD QUALITY

★★★★★

**WE SAY:** It isn't a perfect all-rounder, but this is still a very capable and lively DAC

#### FEATURES

★★★★★

#### OVERALL

★★★★★



40 YEARS OF DESIGN INNOVATION DEDICATED TO YOU

# NEW GOLD: PURER BY DESIGN

Purer and more bewitching than ever, our latest Gold range refines the technology of its award-winning GX predecessor to set a new gold standard for our celebrated high-end speaker line.



**GOLD SERIES**  
monitoraudio.com



Gold 200 - Hi-Fi Choice Issue 401



Gold 300 - Hi-Fi News October 2015



Gold 300AV - Home Cinema Choice  
October 2015

 **MONITOR AUDIO**





## Optoma NuForce DAC80 £500

Opting for a more striped-back approach, the DAC80 is surprisingly quirky in both looks and performance

### DETAILS

**PRODUCT**  
Optoma NuForce  
DAC80

**ORIGIN**  
US/China

**TYPE**  
24-bit/192kHz PCM  
DAC/preamp

**WEIGHT**  
1.2kg

**DIMENSIONS**  
(WxHxD)  
229 x 51 x 216mm

**FEATURES**  
• Format support:  
PCM 32-192kHz  
• Inputs: 2x coaxial;  
1x optical; 1x USB  
• Outputs: RCA  
phono output with  
32-bit digital  
volume control

**DISTRIBUTOR**  
Optoma Europe Ltd

**TELEPHONE**  
01923 691800

**WEBSITE**  
optoma.co.uk

**H**aving been absorbed into Optoma's range, the NuForce lineup continues largely unchanged for the moment. The DAC80 combines both a DAC and digital preamp in the smallest casework in the test. Connections include two optical, one coaxial and one 24-bit/192kHz USB, meaning that this is one of two models here not to support DSD. Output is via an RCA phono and the volume control is permanently part of the circuit.

Internally, the NuForce uses a 24/192 DAC of unspecified origin. It doesn't upsample incoming frequencies, instead opting to process them at their native sample rate. Volume control is carried out in the digital domain at 32-bits to ensure there is no signal degradation. Optoma is at pains to stress this is a minimalist design with an extremely pared-back analogue output stage. Pared-back or not, with the volume at the highest level, the output is the highest here.

The minimalism extends to the outside too. There's no power switch and when switched off, there are few clues to how it works. Once powered up, inputs are shown by red LEDs with the first initial of the input along with a sample rate indicator the only pieces of information shown. Compared with some of the more

hefty DACS here, the DAC80 feels a little insubstantial. The build is acceptable, but lacks the elegance of some. When used as a preamp, the volume control is very effective.

### Sound quality

This is the only DAC that doesn't work consistently with the Melco, forcing me to instead use Foobar. The panel's opinion is consistent across the three listeners. The presentation of is for the most part slightly forward of neutral and this shows itself in a well-lit top end that gives London Grammar impressive presence and

### There is plenty of detail and plucked strings are very well reproduced

realism. At the other end of the frequency response, there is plenty of bass impact, but there are limits to the fine detail and definition. This doesn't prevent the DAC80 from sounding potent and lively with music of this nature.

Where the Optoma is less assured is in the midrange. The panel all comment that with The Police and Montanari pieces, it has difficulty resolving the information in a way that is completely convincing. This contributes to the soundstage coming across as a little flat and congested. Those upper registers are also less effective with the strings of the Ensemble Diderot, which sounds rather a little too thin and artificial. For one listener, this is sufficient to leave them entirely disenchanted with

### HELLO NAS-TY

For reasons that are not completely clear, the NuForce doesn't appear to want to work with the Melco N1A NAS drive. 44.1kHz sample rates are handled as you would expect, but everything above this results in a nasty bubbling distortion being clearly audible. As the vast majority of DAC80s will be connected to more conventional computers, this is unlikely to be that big an issue for most users. Happily the dedicated driver installs without incident and there are no such issues with hi-res material via Foobar. The optical and coaxial connections all function as you would expect and don't show any issues at higher sample rates.

As noted in the main review copy, the volume control of the DAC80 is very well implemented. It feels entirely analogue in terms of its response and ramp, all of which makes this a very effective preamp as a result. Arguably more importantly, as no degradation of the signal occurs when the volume is adjusted, the DAC80 performs consistently at all volume levels.

the converter, while the others are less concerned by the issue.

With the final 24-bit/192kHz recording, its behavioural traits are more clear. There is plenty of detail and plucked strings are very well reproduced, although the overall coherence of this relatively simple piece of music is slightly confused and the relationship between vocals and guitar isn't as well explained as it is with some of the other models in the test. The DAC80 is a capable performer in many areas, but it lacks consistency across all musical styles, which when coupled with the relatively pared-back specification, means that this is a product that will need to be auditioned carefully ● ▶

### HIFIChoice

#### OUR VERDICT

##### SOUND QUALITY

★★★★★

**LIKE:** Potent engaging performance; good volume control

##### VALUE FOR MONEY

★★★★★

**DISLIKE:** Can sound bright and a little confused; connectivity

##### BUILD QUALITY

★★★★★

**WE SAY:** An interesting DAC with some strong areas, although the performance is a little inconsistent

##### FEATURES

★★★★★

##### OVERALL

★★★★★



# AFFORDABLE HIGH-END

Revel Concerta2 loudspeakers combine elegant, sophisticated, modern design with the acoustical research and technical advances for which Revel is revered. Discover Affordable, High-End sound with the Concerta2 series.

## CONCERTA<sup>2</sup>



Learn more at [revelspeakers.com](http://revelspeakers.com)





## Pioneer U-05 £700

Boasting some rather unique connectivity options, the is an impressively specified digital converter

### DETAILS

**PRODUCT**  
Pioneer U-05

**ORIGIN**  
Japan/China

**TYPE**  
DSD-capable DAC/  
headphone amp/  
preamp

**WEIGHT**  
6.3kg

**DIMENSIONS**  
(WxHxD)  
296 x 101 x 271mm

**FEATURES**  
• Format support:  
PCM 32-384kHz;  
DSD64; DSD128  
• Inputs: 2x coaxial;  
2x optical; 1x USB  
• Outputs: RCA  
phono and XLR;  
balanced and  
unbalanced  
headphone

**DISTRIBUTOR**  
Pioneer Europe

**TELEPHONE**  
0208 8363500

**WEBSITE**  
pioneer-audiovisual.  
eu

**P**rior to the launch of the U-05, DACs were not part of Pioneer's range for a very long time, highlighting just how important this category has become. That said, this is far from a by-the-numbers product. It vies with the Pro-Ject for the accolade of best spec here. As well as a pair of optical and coaxial inputs and the obligatory USB port – able to support DSD up to 5.6MHz – the U-05 also features an AES digital input and headphone connections rarely seen under £1,000.

Internally it uses two ESS9016 DAC chips that upsample all incoming digital signals to 32-bit/384kHz. As a preamp, volume adjustment is performed in the digital domain and the analogue output is available over RCA and analogue connections. Unlike the Marantz, the U-05 only has one set of each socket but the volume control can be switched out of the circuit, which is how it is tested.

As the largest model here, the Pioneer is distinctive looking with some pleasing retro touches. The display is clear and easy to read and gives a range of useful information at a glance. The build is also impressive. It feels solid and well assembled. The 'screwless casework' is a recent Pioneer trademark and a nice touch, making the U-05 look elegant. There

are good solid connections on the back and slick and well laid-out controls at the front. The U-05 is also supplied with a remote handset that is easy to use.

### Sound quality

This is a very sophisticated device, although it doesn't always bring all of this technical firepower to bear. The panel is complimentary about the soundstage and overall presentation of the U-05. There is plenty of space and separation to voices and instruments and the London Grammar track has a scale and

### There is a believable relationship between the performers and the space they are in

airiness that is very impressive. The top end is extremely refined and the Pioneer manages to sound detailed and lively without tipping over into brightness.

Where the U-05 is a little less convincing is when you ask it to deliver the punch and excitement that some material requires. The frenetic Police recording sounds strangely languid and lacks the bite and attack that's required to really do it justice. One panellist labels the performance as "uninvolving", but this really hinges on the level of emphasis you place on timing and attack. With the strings of the Ensemble Diderot, the U-05 is a very elegant performer, sounding tonally convincing and extremely refined. However, with the Antonio Forcione & Sabina Sciubba

### GETTING AHEAD

The Pioneer faces stiff competition when used as a line-level digital-to-analogue converter, but as a headphone amplifier it is in a class all of its very own. Pioneer has fitted the U-05 with both balanced and unbalanced connections and unusually these are available via both single and twin plug connections as well as quarter-inch jack. The result of this effort is that the Pioneer is a genuinely impressive performer, able to drive almost any headphone to any level you could reasonably want to hear. Interestingly, via the Sennheiser HD650 (HFC 312), it doesn't show quite the same slightly languid timing that it does at line level.

The Pioneer shows no major issues with the DSD test material and that impressive top end provides further gains in detail and refinement. As a preamp, the U-05 is also highly convincing with a smooth and linear volume control that has no negative effects on the presentation. A little more excitement would see the Pioneer ranked much nearer the top of the pack.

track, the Pioneer's strengths and weaknesses are highlighted at the same time. The way that it portrays Sciubba's vocals and Forcione's guitar is extremely appealing and there is a believable relationship between the performers and an understanding of the space they are in. The unique time signature of the piece is something that the Pioneer never fully gets on top of, however, with that same slightly languid performance that affects it in other pieces. If you are not especially concerned by timing as a concept, this DAC offers up an impressive specification combined with some handsome aesthetics but it lacks the pace and sheer engagement of the best in the test.

### HIFIChoice

#### OUR VERDICT

**SOUND QUALITY**  
★★★★★ **LIKE:** Excellent spec; refined and spacious sound; excellent headphone amp

**VALUE FOR MONEY**  
★★★★★ **DISLIKE:** Lacks excitement and engagement

**BUILD QUALITY**  
★★★★★ **WE SAY:** Well thought out and appealing, but it struggles to deliver real excitement

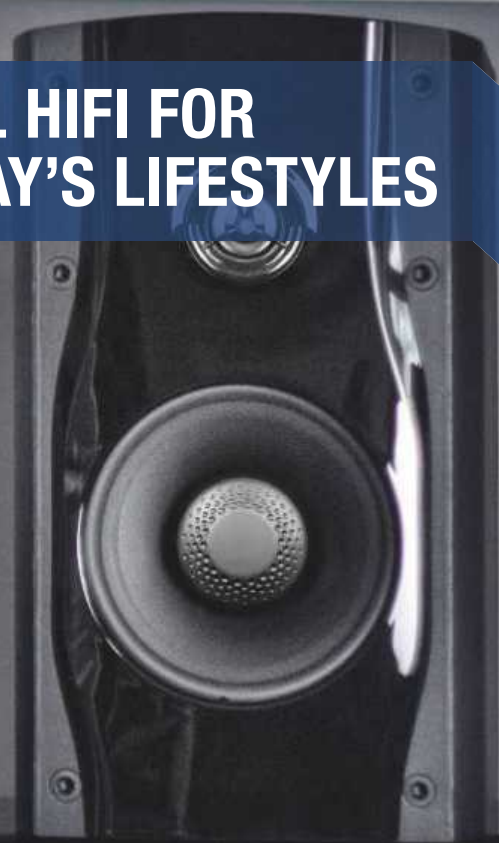
**FEATURES**  
★★★★★

#### OVERALL



# DENON®

## REAL HIFI FOR TODAY'S LIFESTYLES



## THE NEW DENON DESIGN SERIES

The stereo amplifier **PMA-50** and the CD player **DCD-50** form the prelude to the **Denon Design Series**. Through its unique combination of subtle design and the latest technology, the start of this new product range makes the hearts of demanding music lovers beat faster.

These first-class hi-fi models are very compact yet powerful at the same time. A special feature of the **Denon Design Series** is that they can be optionally set up horizontally or vertically, the clear-view OLED display automatically rotates with each position.

Experience unique Denon technologies such as the Advanced AL32 Processing and the DAC master clock design. Enjoy playing your favourite tracks, among other things CD or via Bluetooth with high quality CSR aptX Low Latency decoding - all this with the renowned Denon sound quality.



PMA-50



ADVANCED *AL32* PROCESSING



[www.denon.co.uk](http://www.denon.co.uk)





## Pro-Ject DAC Box RS £800



Here's a digital-to-analogue converter that does many other things besides – happily most of them well

### DETAILS

**PRODUCT**  
Pro-Ject DAC Box RS

**ORIGIN**  
Austria/Czech Republic/Slovakia

**TYPE**  
DSD-capable DAC

**WEIGHT**  
1.1kg

**DIMENSIONS**  
(WxHxD)  
206 x 72 x 210mm

**FEATURES**  
• Format support:  
PCM 32-192kHz;  
DSD64; DSD128  
• Inputs: 2x coaxial;  
4x optical; 1x USB;  
AES-EBU; clock-  
linked I2S for  
Pro-Ject CD Box RS  
• Outputs: RCA  
phono; XLR

**DISTRIBUTOR**  
Henley Designs

**TELEPHONE**  
01235 511166

**WEBSITE**  
henleydesigns.  
co.uk

**D**ACs have been an important part of the Pro-Ject range for some years now and the DAC Box RS sits in its flagship series. It is unusual to find a Pro-Ject product as the most expensive in a test, but it goes a fair way towards justifying the cost.

For starters, it is the unquestioned winner in terms of inputs. There are nine of them, including two coaxial and four optical. Like the Pioneer, there's an AES input and a proprietary I2S connection for attaching the matching CD player which then locks the clocks via a BNC connection. The USB input is DSD capable and supports up to DSD128. The RS adds a pair of switchable digital filters and the ability to switch between a solid state output and one that makes use of a 6922 valve. If you have a great many digital sources and you enjoy tweaking, look no further.

This is a line-level-only design and offers no volume preamp or headphone functionality, but does give the choice of RCA and XLR outputs. It is also upgradeable. As tested, it uses an external 20V 'block' type power supply but single output and a multiple output options in matching casework are also available. The casework is very impressive with the RS feeling solid and well thought

out. The control switches won't be to everyone's taste but are easy to use, and Pro-Ject does supply a remote to help choose between all those inputs.

### Sound quality

With the 'Optimum' filter selected and the solid state output in use, the Pro-Ject manages to please the panel without quite going that extra last step and wholeheartedly entrancing them. The general tone of the commentary is almost universally positive, however, with the London Grammar opener sounding big but deft and engaging. The DAC Box RS

### With *Take Five* the Pro-Ject is arguably at the very top of the group of DACs

manages to combine refinement and a sense of drive in a way that ensures that it doesn't become overly bright or fatiguing while also not being soporific. It lacks the truly toe-tapping delivery of the Rega, but it manages to keep everything ticking over nicely.

These traits give the Pro-Ject an assurance and consistency across the test material that somehow manages to elude much of the competition. While one panellist feels the DAC Box RS never truly engages, the consistently positive comments they make about the bass and the three dimensionality of the performance suggest that Pro-Ject is doing something right. There is a sense of proportion to the way that the DAC makes music – regardless of the scale of the recording – that makes it a very

### VACUUM PACKED

The switchable output on the DAC Box RS is fairly unusual, but in practise the difference that it makes to the performance is not really quite as dramatic as might be expected. The DAC Box RS could probably have participated in blind listening with the output switched into the circuit and not been fingered as a tube design. There are some slight gains in the scale and presence of the midrange but conversely a slight deadening of that well judged top end. Interestingly, the effect of the 'Steep' filter is often more pronounced resulting in the Pro-Ject sounding punchier and more aggressive with it selected.

Ultimately, it doesn't reveal any issues with the DSD test material and the clear sample rate indicator on the front panel makes it easy to see what it is that you've selected. The other digital inputs also perform as you would expect, although using that switch selector in order to flip between all of those nine sources is likely to become something of an arduous task.

satisfying partner. With *Take Five*, for example, the Pro-Ject is arguably at the very top of the pile. The skills it demonstrates with soundstage and presentation coupled to the refinement and detail give the track real presence and enjoyment. The balance between guitar and vocals is consistently well handled and it does a better job of handling the curiously left/right nature of the recording. The DAC Box RS might be the most expensive model in this test but the extremely strong performance coupled with its impressively extensive specification and the added promise of upgradeability further down the line is enough to ensure that it more than holds its own ●

### Hi-Fi Choice

#### OUR VERDICT

##### SOUND QUALITY

★★★★★

##### VALUE FOR MONEY

★★★★★

##### BUILD QUALITY

★★★★★

##### FEATURES

★★★★★

##### OVERALL

★★★★★

**LIKE:** Refined yet entertaining performance excellent spec and build

**DISLIKE:** Lacks a little trace of excitement; high price

**WE SAY:** A clever DAC that offers an extensive feature set and great performance



# Revolution XT



## Revolution in design. Revolution in sound.

Revolution XT lives up to its name, marking a major leap forward in loudspeaker design and the realisation of some of Tannoy's most radical and forward thinking technologies.

Retaining the classic trapezoid shape from its multi award-winning predecessor, the new Revolution XT cabinets now feature an ingenious reflex-coupled dual-cavity design. This optimises performance of the all-new Omnimagnet™ Dual Concentric™ driver across extremely low to mid-bass frequencies. The complex internal design is further perfected with an integrated plinth that provides a uniform and predictable low frequency interface to the listening environment, delivering the deepest bass notes with ease.

Dynamic, engaging and articulate, yet incredibly easy to set-up and place in any room, Tannoy's Revolution XT is a true revolution in sound. Find out more at [tannoy.com](http://tannoy.com)

# TANNOY



Best Floorstanding Speaker  
£600-£1200  
Revolution XT6F



May 2015  
Revolution XT6F



July 2015  
Revolution XT8F



August 2015  
Revolution XT6F



November 2015  
Revolution XT8F



## Rega DAC-R £598

No preamplifier, no headphone socket and no compatibility with DSD. No problem...



### DETAILS

**PRODUCT**  
Rega DAC-R

**ORIGIN**  
UK

**TYPE**  
24-bit/192kHz PCM DAC

**WEIGHT**  
4kg

**DIMENSIONS**  
(WxHxD)  
215 x 80 x 320mm

**FEATURES**  
• Format support:  
PCM 32-192kHz  
• Inputs: 2x coaxial;  
2x optical; 1x USB  
• Outputs: optical;  
coaxial; RCA phono

**DISTRIBUTOR**  
Rega Research

**TELEPHONE**  
01702 333071

**WEBSITE**  
rega.co.uk

In a test where DACs are preamps and headphone amplifiers, the Rega comes across as a little bare. It is an updated version of the earlier (and highly regarded) Rega DAC. This revision is almost identical to the earlier model, but incorporates a number of changes to the digital circuit and a fairly critical functionality upgrade.

The older DAC was limited to USB 1 and a 48kHz incoming sample rate. The DAC-R is capable of asynchronous 192kHz-capable operation – at the moment where DSD support is the order of the day. This is combined with a revised power supply and an increase in length to accommodate it. The digital filters can now also be selected via the remote control.

In specification terms, these filters are about the only area of note. The DAC-R has two optical and two coaxial connections in addition to the USB. Output is via RCA phono only, but the Rega is unusual in that it is fitted with both an optical and coaxial output as well. This simplicity helps the DAC-R, though. The controls are logical and well laid out, and the red LED indicators are easy to follow and understand. The build quality is also excellent with a solid and well-damped casework and well-weighted buttons.

The only slight oddity is that the DAC-R runs rather warm in use.

### Sound quality

With the first filter selected, if pushed to pick a single word to describe the Rega, it would be the one that crops up time and time again across the panel's listening notes – “engaging”. It consistently manages to entertain the panel in a way that other models struggle to do. From the moment the bass begins in the London Grammar track, the DAC-R has a drive and timing that elicits a consistently positive response. If timing is

### When it comes to the business of sound quality, it is very lavishly equipped

something that matters above everything else for your listening preferences, this DAC is head and shoulders above the other models here in its ability to deliver.

There is more than propulsive timing, though. The way that it unpicks *So Lonely* is effortless and keeps the speed and frenetic nature of the recording while delivering detail and information about the piece that other models miss. Neither is this something that requires the music to be high tempo. The delicacy of the Montanari *Largo* is also deeply impressive and the Rega manages to produce a realism and smoothness with the strings that impresses all three listeners. The relationship of the musicians to one another is clear and easy to follow and the DAC-R

### FILTER IT OUT

The DAC-R has three selectable filters – the most offered up by the six models in our test – and interestingly, Rega states that they each have a different effect depending on the incoming sample rate of the signal, effectively meaning that there are six settings. Rega notes that this is down to the different impact on greater sample rates.

In practise, the filters on the DAC-R don't fundamentally alter the presentation that significantly, but they do provide an interesting set of options. Rega recommends the first filter setting, so this is the one that is chosen for the blind listening. But if you are looking to further emphasise the sheer drive that the DAC-R is capable of exhibiting, the third setting – which implements a minimum phase filter – does this to good effect.

As well as the USB connection that works perfectly with the Melco, the other inputs on the Rega all work just fine, and the DAC-R is impressively fast and quiet at switching between different sample rates.

produces a wonderfully spacious and well-defined soundstage.

The final ribbon to an already compelling sonic bow is the way that it handles vocals. This is something that pleases all the panellists and further listening suggests that this is an area of real strength for the DAC-R with wonderful weight and texture to its presentation. The Rega might offer a limited specification in terms of bells and whistles, but when it comes to the business of sound quality it is very lavishly equipped indeed. Unless you absolutely must have a volume control or a headphone input or you feel that DSD is too important to ignore, the DAC-R's performance is the cream of the crop ●



### Hi-Fi Choice

#### OUR VERDICT

##### SOUND QUALITY

★★★★★

**LIKE:** Involving, lively performance; excellent build; good price

##### VALUE FOR MONEY

★★★★★

**DISLIKE:** No DSD support; runs a little warm

##### BUILD QUALITY

★★★★★

**WE SAY:** The Rega goes light on features to deliver a truly involving and highly engaging sound

##### FEATURES

★★★★★

##### OVERALL

★★★★★



# Group test verdict

He's gathered the thoughts of our listening panel, so before he's completely DAC'd out, it's over to **Ed Selley** to draw some conclusions

**AS THE ROLES** and functions these six DACs cover is extremely wide, it's difficult not to place greater emphasis on functionality over performance, but it's the sound performance that we're concentrating on here. Taking features into account as well as sound though, the Optoma NuForce DAC80 is the first to fall. This is a DAC that can sound punchy and exciting and is a very good preamp, but the issues it has running with the Melco NAS and the limitations of its midrange count against it. The limited spec and quirky interface are also issues. The Pioneer U-05 by contrast is brilliantly specified

and is an excellent headphone amp, but it never really shines when used as a line-level DAC.

Splitting Musical Fidelity's MX-DAC and Marantz's HD-DAC1 is a tougher business. Both have areas of strength but equally, they're also not quite the whole package. The MX-DAC is beautifully made, well equipped and can sound extremely exciting, but there are points where that exciting presentation is a little too forward and aggressive. The Marantz by contrast has a lovely liquid smooth top end and sounds consistently spacious. The spec is excellent and





the build is very solid. A lack of engagement counts against it.

The Pro-Ject is the most expensive DAC here, but the specification is extremely impressive as is the build quality. Where the DAC Box RS really scores, however, is in the sound quality. This is a confident and assured performer that works well across a variety of musical styles. Furthermore, the adjustable filters and the option to employ a valve in the output stage gives it impressive flexibility. Only a lack of engagement robs it of the top spot.



**WINNER**

Engagement is where the Rega rules the roost. The way that the DAC-R gets to the heart of the music is consistently top of the pack and although the spec is a little limited, the lower price in the test sweetens the deal and the Rega takes the test on sound quality.

						
Make/model	Marantz HD-DAC1	Musical Fidelity MX-DAC	Optoma NuForce DAC80	Pioneer U-05	Pro-Ject DAC Box RS	Rega DAC-R
Price	£700	£700	£500	£700	£800	£598
Sound	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★
Value	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★
Build	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★
Features	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★
Overall	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★
	Well-specified DAC with impressive refinement, but not a true all-rounder	Not quite a perfect all-rounder, but this is nonetheless a very capable and lively DAC	An interesting DAC with some strengths, but an inconsistent overall performance	Well thought out and appealing, but it struggles to deliver real excitement	A clever DAC that offers an extensive feature set and great performance	Light on features but this doesn't detract from the astonishing sound it makes

## Key features

Coaxial in	1	2	2	2	2	2
Optical in	2	2	1	2	4	2
24/192 USB	Yes	Yes	Yes	Yes	Yes	Yes
XLR out	No	Yes	No	Yes	Yes	No
DSD compatible	64, 128	64, 128	No	64, 128	64, 128	No

## TRY WITH THESE

### INTEGRATED AMPLIFIER:

Audiolab 8300A **£900 HFC 404**

Unlike a number of amps currently on sale, the Audiolab is exclusively analogue and its clean and powerful sound would be brilliantly complimented with the engagement of the Rega.



### FLOORSTANDING LOUDSPEAKER:

Tannoy Revolution XT 6 **£1,200 HFC 404**

The Tannoy delivers musicality and superb soundstaging thanks to the dual concentric drivers and fed with the sweet and cohesive performance of the Rega, it is only going to get better.



### CD PLAYER:

Cambridge CXC **£300 HFC 401**

If you aren't ready to give up on CD just yet, the CXC is a keenly priced transport that should work very effectively with the Rega DAC-R and avoids doubling up on decoding stages.



# THE NEXT GENERATION OF BLUESOUND



**WHAT HI-FI?  
AWARDS 2015**

**PRODUCT OF THE YEAR**

**Multi-room systems**  
Best multi-room system £500+  
**Bluesound Generation 2**

**NODE 2 • POWNODE 2 • VAULT 2 • PULSE • PULSE MINI • PULSE FLEX** Prices from £269

**NEW**

**£429  
OR LESS**



#### SONOS • PLAY:5 • WIRELESS SPEAKER SYSTEM

Step up to the all-new PLAY:5; the powerfully smart speaker that fine-tunes its sound to bring you all the energy and emotion the artist packed into the original recording. Music that's pure, ferocious, tasty and true.

**WHAT HI-FI?  
AWARDS 2015**

Wireless speakers  
Best multi-room system £500+  
**Bluesound Generation 2**

**£895  
OR LESS**



#### NAIM • MU-S0 • WIRELESS MUSIC SYSTEM

Combines Naim's expertise in streaming, amplification and loudspeaker technology. Mu-so is the stage your music deserves, bringing you closer to the songs that inspire your life.

**NEW**

**£499  
OR LESS**



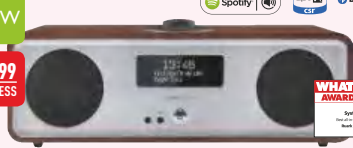
#### B&W • ZEPPELIN WIRELESS SPEAKER SYSTEM

Introducing the Zeppelin Wireless. The instantly recognisable silhouette may be the same, but every element of the speaker has been redesigned to deliver superlative audio performance; once again redefining what is possible from a single speaker system.

FOR THE LATEST PRICES AND OFFERS VISIT [WWW.SSAV.COM](http://WWW.SSAV.COM) OR CONTACT YOUR LOCAL STORE

**NEW**

**£399  
OR LESS**

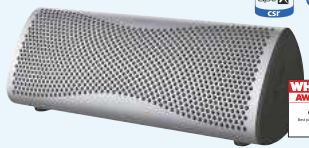


#### RUARK AUDIO • R2 MK3 WIRELESS SPEAKER SYSTEM WITH DAB/FM TUNER

Play your music and discover new music in a variety of convenient ways. Spotify Connect lets you select R2 as your player and then control playback using the controls on R2 itself.

**NEW**

**£299.95  
OR LESS**



#### KEF • MU0 • BLUETOOTH SPEAKER

Packed with innovative technologies to deliver uncompromised KEF quality sound when you're streaming music wirelessly from a computer or mobile device. MU0 packs a punch that is out of all proportion to its size.

**NEW**

**£349.95  
OR LESS**



#### KEF • EGG • BLUETOOTH SPEAKERS

Streaming tracks wirelessly over Bluetooth aptX or bringing your TV or computer to life, the new EGG Wireless Digital Music System delivers pure, clear KEF quality sound.



**NEW**

**£149  
OR LESS**

#### MONITOR AUDIO AIRSTREAM S150 BLUETOOTH SPEAKER

Monitor Audio has packed the delicious Airstream S150 Bluetooth speaker with the high energy sound of its award-winning audio technology for music lovers to savour from room-to-room.

**NEW**

**£299  
OR LESS**



#### B&W • T7 • BLUETOOTH SPEAKER SYSTEM

Introducing the pick-up-and-play hi-fi speaker. Perfectly sized for bedrooms, kitchens and gardens, T7 is B&W's most portable, versatile wireless system yet.

**NEW**

**£199  
OR LESS**



#### DENON HEOS 1

This to afford



Sign up today for our  
free digital magazine  
[www.ssav.com/select](http://www.ssav.com/select)

SOME BRANDS/PRODUCTS ARE NOT AVAILABLE AT ALL STORES. SPECIAL OFFERS ARE NOT IN CONJUNCTION WITH ANY OTHER OFFER (NICWAOO).  
ADVERT VALID UNTIL 16/12/2015. E&OE

**click &  
collect**  
NOW AVAILABLE

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

**SEVENoaks**  
SOUND & VISION



£249  
OR LESS

5 YEAR  
WARRANTY

#### NAD • C 556 • TURNTABLE

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 components that put music first.



£299  
OR LESS

#### FLEXSON • VINYLPLAY • DIGITAL TURNTABLE

Gives the best-of-both-worlds: an excellent record player that's easy to use and can be simply integrated into a streaming system.



£575  
OR LESS

#### 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.



ESSAV  
.COM

WHAT HI-FI?  
AWARDS 2015

#### PIONEER • N-50A • MUSIC STREAMER

Developed for the digital age, the N-50A Network Audio Player connects to many different sources and features Internet Radio and Music Streaming from compatible devices, a high quality DAC and Airplay and DLNA compatibility.



£2245

WHAT HI-FI?  
AWARDS 2015

#### NAIM • ND5 XS • MUSIC STREAMER

Stream at up to 24bit/192kHz resolution. ND5 XS features Spotify Connect and TIDAL support, USB/iPod playback, access to thousands of Internet radio stations, DAB/FM radio and digital inputs for external sources.

Available from selected stores. Visit [www.ssav.com](http://www.ssav.com) for details



£799  
OR LESS

NEW

£995  
OR LESS

#### 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.



NEW

£899  
OR LESS

NEW

£999  
OR LESS

#### AUDIOLAB • 8300CD / 8300A • CD / AMPLIFIER

The 8300CD improves upon its illustrious predecessor and delivers even better performance while the 8300A includes radically redesigned circuitry and a high-performance phono stage.



£249  
OR LESS

5 YEAR  
WARRANTY

#### NAD • C 516BEE / C 316BEE • CD / AMPLIFIER

Received an outstanding product award from Hi-Fi News magazine who described the C 316BEE is an "absolute barn-stormer of an amplifier". The C 516BEE is the perfect partner.



£399  
OR LESS

WHAT HI-FI?  
AWARDS 2015

aptX  
CSF

Bluetooth

#### NAD • D 3020 AMPLIFIER / DAC

Features digital and analogue inputs plus the convenience of wireless streaming with its Bluetooth capability.

5 YEAR  
WARRANTY



ESSAV  
.COM

WHAT HI-FI?  
AWARDS 2015

ESSAV  
.COM

WHAT HI-FI?  
AWARDS 2014

#### MARANTZ • CD6005 / PM6005 • CD / AMPLIFIER

Replacing the 6004 models, the 6005 amp gains digital inputs using the same 24-bit/192kHz DAC as the CD player which now features enhanced USB playback and improved performance.



NEW

£1299  
OR LESS

£1249  
OR LESS

#### ROKSAN • K3 • CD / AMPLIFIER

New integrated amplifier with aptX Bluetooth, a phono input plus five additional line inputs for other sources. The K3 CD Di player is the perfect match for the K3 amplifier. Three finish options available.



NEW

£249  
OR LESS

WHAT HI-FI?  
AWARDS 2015

#### DENON • D-M40DAB • CD/DAB SYSTEM (EX SPEAKERS)

With better connectivity, including an additional optical input, along with performance upgrades to its main components, the D-M40 improves on its award-winning predecessor.



NEW

£499  
OR LESS

#### MARANTZ • M-CR611 • CD/STREAMING SYSTEM

The M-CR611 is a superb performer, reproducing excellent CD-audio, FM, DAB/DAB+ and Network files. Supports 192kHz / 24-bit high-resolution files, 2.8MHz DSD files and Gapless playback.



£1295

WHAT HI-FI?  
AWARDS 2015

#### NAIM • UNITIQUETE 2 WITH BLUETOOTH ALL-IN-ONE STREAMING SYSTEM

All-in-one system featuring a 30W amplifier, FM/DAB/Internet radio and wired and wireless connections to play network digital audio. UnitiQute 2 can play USB-stored music files of up to 32bit/192kHz resolution.



£3050

#### NAIM • UNITI 2 WITH BLUETOOTH ALL-IN-ONE STREAMING SYSTEM

Combines an integrated amplifier, CD player, DAB/FM tuner, internet radio, iPod dock, digital-to-analogue converter and high-resolution 24bit/192kHz capable network stream player. Features Spotify Connect and Bluetooth (aptX) connectivity.



NEW

£329  
OR LESS

WHAT HI-FI?  
AWARDS 2015



£269  
OR LESS

WHAT HI-FI?  
AWARDS 2015



NEW

£169  
OR LESS



£379.95  
OR LESS

WHAT HI-FI?  
AWARDS 2015



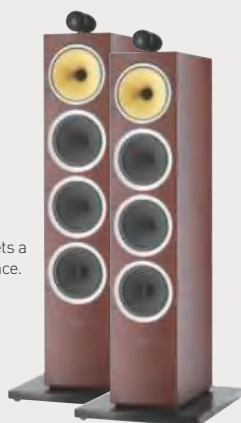


**BOWERS & WILKINS • 685 S2**  
At home on a stand, wall or bookshelf, the versatile 685 S2 is ideal for stereo and home theatre uses in most rooms. And performance is enhanced with the addition of a Decoupled Double Dome tweeter.

**£499**  
OR LESS

Price excludes stands

**WHAT HI-FI? AWARDS 2015**  
Best speakers  
Home Cinema  
November 2015



### 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.

**£2999**  
OR LESS



### KEF • LS50

An innovative concept derived from the legendary LS3/5a. Rarely the case in such a compact design, the LS50 monitor delivers a rich, multi-dimensional 'soundstage experience' that is out of all proportion to its size.

**£799**  
OR LESS

**WHAT HI-FI? AWARDS 2014**  
Best speaker  
November 2014

NEW Special edition finishes coming soon.  
Titanium Grey, Racing Red & Frosted Black



### PMC • TWENTY.23

The first and overwhelming impression of the Twenty.23 is an open, engaging and communicative speaker. Its size defies both the depth of bass and scale of presentation by taking any music or film material in its stride. The sound is vivid and dynamic and delivered with authoritative bass.

**£2425**  
OR LESS

### MONITOR AUDIO GOLD 200

Amazing scale and impressive dynamic control are available from this slender three-way design, comprising ribbon tweeters, twin 5.5" bass drivers and a 4" mid-range driver, which is housed in a dedicated enclosure.

NEW

**£2299**  
OR LESS



### 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.

NEW

**£279**  
OR LESS

**WHAT HI-FI? AWARDS 2015**  
Best multi-room system  
November 2015



### 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 pure titanium dome tweeter.

**£749**  
OR LESS

5 YEAR WARRANTY



### Q ACOUSTICS • 3050

The flagship 3050 is the perfect speaker for larger rooms, boasting ultra-low levels of distortion, typically found of speakers costing three or four times its price.

NEW

**£499**  
OR LESS

**WHAT HI-FI? AWARDS 2015**  
Best speakers  
November 2015

3050 Standard finishes • Premium finishes £649

### 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.

NEW

**£189**  
OR LESS

Standard finishes  
Premium finishes £249



NEW

**£249**  
OR LESS

GLOSS RED  
GLOSS BLACK  
GLOSS WHITE

### PODSPEAKERS • SMALLPOD • SPEAKERS

SmallPod does everything a great pair of hi-fi speakers should do, but all wrapped up in gorgeous curves and colours.



NEW

**£199**  
OR LESS

GLOSS RED  
GLOSS BLACK  
GLOSS WHITE

Bluetooth

### PODSPEAKERS • MICROPOD • BLUETOOTH SPEAKERS

Introducing the MicroPod Bluetooth. These stylish speakers are ideal for tablets and smartphones are as simple to connect without the need for unsightly wires.

**WHAT HI-FI? AWARDS 2015**  
Multi-room systems  
Best multi-room system under £200  
Series

NEW



## SONOS

### THE WIRELESS HI-FI SYSTEM

The Sonos Wireless HiFi System delivers all the music on earth, in every room, with warm, full-bodied sound that's crystal clear at any volume. Sonos can fill your home with music by combining HiFi sound and rock-solid wireless in a smart system that is easy to set-up, control and expand.

PRICES FROM £169

## BLUESOUND

HiFi for a wireless generation

Take hi-fi to even new heights with Bluesound's next generation. Features improved wi-fi performance, more digital and analog connectivity options and Bluetooth aptX along with support for premium music services like Tidal and Spotify. **PRICES FROM £269**

**WHAT HI-FI? AWARDS 2015**  
PRODUCT OF THE YEAR  
Multi-room systems  
Best multi-room system £200+  
Bluesound Generation 2



Spotify

Hi-Res AUDIO

5 YEAR WARRANTY

NEW

FOR THE LATEST PRICES AND OFFERS VISIT [WWW.SSAV.COM](http://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

Sheffield • 0114 255 5861  
Southampton • 023 8033 7770  
Tunbridge Wells 01892 531543  
Witham (Essex) 01376 501733  
Yeovil • 01935 700078

CHORLEYWOOD - THIS STORE HAS RELOCATED TO  
CHALFONT ST PETER  
VISIT [WWW.SSAV.COM](http://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



## SEVENOAKS SELECT

Sign up today for our  
free digital magazine  
[www.ssav.com/select](http://www.ssav.com/select)

Please Note: Some brands/products are not available at all stores. Special/added value offers are not in conjunction with any other offer (NICWAOO).

ADVERT VALID UNTIL 16/12/2015. E&OE

# SEVENOAKS

SOUND & VISION

**Choice EXOTICA** AKG N90Q  
NOISE-CANCELLING HEADPHONES £1,300



# Music to my ears

**Lee Dunkley** enters a world of his own with AKG's flagship noise-cancelling sound-optimising headphones

**I** was lucky enough to attend the launch of AKG's N90Q headphones back in June 2015, and am also privileged to be among the few to get their hands on one of the first batch of the flagship model. Regular readers will know that the luxury headphone market is big business for audio fans as more and more of us turn to a pair of high-quality cans as our transducer of choice for a good chunk of home listening. This isn't the first time we've looked at high-end headphones in these *Exotica* pages either, and the

## Manages to balance high-quality sound with effective noise-cancelling

AKG follows Final's Sonorous VIII £2,300 offering, reviewed back in issue 403. Although the AKG costs £1,000 less, there's plenty here to ensure it meets our *Exotica* review criteria as it is blessed with high-class credentials in its construction and tech that includes noise cancelling and sound tuning to tailor the output specifically to your ears.

Mention noise-cancelling cans to anyone on the street and there's a good chance most will respond with brands such as Bose or Sennheiser, which pretty much dominate the sector. But AKG is rapidly becoming a challenger, and we saw its entry-level N60NC (£230) noise-cancelling portable receive a pretty strong recommendation back in issue 401.

At the price, the N90Q is the flagship model and forms part of the Quincy Jones signature line. It's the result of a five-year collaboration with US parent company Harman and the iconic Grammy Award-winning music producer. Its design and styling is very much a family affair with Quincy's

daughter, Kidada Jones – a designer for Disney – instrumental in creating the distinct aesthetics of the N90Q to deliver a premium look and feel.

Weighing in at 460g, the luxury closed-back headphone has hinged earpieces and offers great comfort levels and passive sound isolation, thanks to the leather-clad headband and deep ear-cups filled with dual-density memory foam. It's comfortable to wear over long periods and feels surprisingly lightweight on my head despite the chunky earpieces, which make me look like a Cyberman from *Doctor Who*. The gold version pictured here is the N90Q LE version, the N90Q is actually black with subtler gold detailing.

Switch on the power button that's positioned on the right earpiece and the active noise cancellation circuitry reckons to achieve -20dB wideband noise reduction. The 52mm drivers are offset to allow improved alignment with the driver and ear canal and claim a frequency response ranging from 10Hz to 30kHz.

The N90Q claims to be the world's first headphone to be fitted with

### DETAILS

**PRODUCT**  
AKG N90Q

**ORIGIN**  
China

**TYPE**  
Noise-cancelling over-ear headphone

**WEIGHT**  
460g

**FEATURES**  
• Offset 52mm dynamic drivers  
• Quoted sensitivity: 115dB/mW  
• Quoted battery life: 12 hours  
• Detachable cables: 3m; 2x 1.2m for iOS and Android; USB charger cable and top-up battery pack

**DISTRIBUTOR**  
Harman UK

**TELEPHONE**  
01707 278113

**WEBSITE**  
uk.akg.com

unique auto-calibration technology designed to deliver sound that's specifically tailored to your ears. AKG's TruNote auto-calibration technology is touted as a revolutionary software solution for in-ear frequency response measurement, and uses two microphones in each ear cup to measure the characteristics of your ear canal while you are wearing the headphone. The measurement process takes just a second and is activated by pressing the calibration button on the right earpiece for five seconds, which generates an audio correction filter to optimise performance based on the acoustical characteristics of your lugholes.

Personalised ear tuning completed, there are still plenty of ways to tweak the AKG's sound to your particular taste. Volume level adjustment is provided via an outer ring on the right earcup while EQ alterations use a similar outer ring action on the opposite earpiece. Three soundstage settings can also be cycled through by pressing the calibration button.

The presentation case the N90Q is supplied in also acts as a charger and claims to reach full power in around four hours to give a claimed 12 hours of listening use. A good choice of cables is provided, catering for home listening as well as connectivity to iOS and Android mobile devices.

## Sound quality

Connecting the AKG N90Q via USB direct to a MacBook Pro laptop to try out the built-in DAC with some hi-res material, I kick off with a 24/96 version of Bob Marley's *Stir It Up* and things don't get off to the smoothest of starts. The track might not boast the greatest recording quality around, but even so the bass is rather more

**The gold trim of the N90Q LE has a blingy feel, but it also comes in a less showy black in the shape of the N90Q**





## Q&A

Mark Hockey

Harman Consumer UK



**LD: What's special about the drivers and materials used in the N90Q?**

**MH:** The N90Q uses novel pistonic-motion 52mm transducers. These transducers make use of a special Japanese paper membrane, which is positioned off centre to allow for maximising alignment between driver and ear canal.

The N90Q employs some of the finest materials available and mixes premium materials like leather and aluminium with dual-density ear cushions to provide a headphone that has exceptional levels of performance, comfort and style.

**How does the TruNote auto-calibration work and what are the benefits to the listener?**

The N90Q's built-in individual frequency response calibration test routine uses two microphones in each earcup to measure the frequency response while you are wearing the headphone, and generates an accurate correction filter, all within a second. This corrects for slight differences in the reflections pattern between ear and headphone speaker due to individual ear shapes and sizes, but also eliminates remaining production tolerances and changes due to material ageing, so that you will always hear the best possible sound without distortion.

**There are three soundstage settings, which do you recommend for true stereo listening?**

The mode button on the right earcup switches between the three different sound image settings: standard, stereo and surround. The stereo setting offers true stereo sound as if it is coming from two front speakers. This setting uses Harman-patented technology called LiveStage and is designed to give a more natural headphone listening experience, as the producer intended. This mode is optimised to correct for headphone imaging, without introducing any artefacts such as coloration or phase distortion.

## IN SIGHT



- 1 Leather-clad adjustable headband
- 2 Aluminium hinge
- 3 Dual-density ear cushion
- 4 Volume level control ring



The N90Q's high cost is unique among the noise-cancelling models we've seen, with the majority of models priced at considerably less and fitted with much less sophisticated tech. In the world of luxury headphones, Oppo's PM-1 at £1,100 is perhaps the closest sonic rival to the N90Q. Of course, the PM-1 isn't a noise-cancelling model, but its sound is ultra-clean with an open and seamless midband and the bass is tight and fluid – although not as sumptuous as the N90Q's. It's comfortable too and easily wearable at 395g, which is light compared with the AKG and many other high-end headphones. Both models are brilliant designs, but not cheap!

bloated than I am used to and the vocal has a slightly raspy edge and lacks the refinement I expect to hear from the 24-bit/96kHz Cirrus Logic DAC. Switching the cables over to the chunkier 3m hi-fi-quality lead and plugging the N90Q into an LH Labs Geek Out M headphone amp/DAC (HFC 393) connected to my MacBook's USB socket yields far smoother results. It's a much more together sounding performance that loses all the aforementioned edginess. The sound is big and with a good level of space and detail that means you don't get that shut-in feeling that can often be a trait of closed-back noise-cancelling headphone designs, and background noise levels from the active noise-cancelling circuitry is reassuringly low. The string sections in Craig Armstrong's *Tender* stretch wide of the earpieces with a rich involving sound that draws me deeper into the track.

If you like your sounds on the rockier side and enjoy big slabs of bass, the AKG doesn't disappoint. There's plenty of drive to deliver Muse's *Supermassive Black Hole* with the level of bass energy the track deserves, and although it's not the tightest bass line I've ever heard and can seem a tad sluggish at times, on balance everything is in good measure and the AKG serves up the track with gusto and in a very enjoyable way.

You'd expect a headphone at this price to handle delicacy well, and so

it proves. Adele's vocal on *Hello* sounds immensely detailed with the kind of intimacy behind the singer's outpouring of emotion on her latest recording. Kate Bush's *King Of The Mountain* provides a superb mix of thundering electronic bass, guitar, percussion with a haunting vocal all perfectly rendered and detailed and incredibly enjoyable, highlighting that this is where the AKG really shines.

## Conclusion

It's an impressive feat to balance high-quality sound with effective noise-cancelling technology, but the N90Q manages to pull it off with tremendous success in what is a stunningly luxurious headphone package. Internal DAC sound quality and some rather subtle EQ adjustments aside, only its high price really counts against it ●

## Hi-FiChoice

### OUR VERDICT

#### SOUND QUALITY

★★★★★

#### VALUE FOR MONEY

★★★★★

#### BUILD QUALITY

★★★★★

#### FEATURES

★★★★★

#### OVERALL

★★★★★

**LIKE:** Effective noise cancelling; sound tuning; luxury build

**DISLIKE:** DAC support for 24/96 only; no auto power off

**WE SAY:** Exceptional noise-cancelling tech delivers seriously impressive sound, but price is high





November 2014



## PRIMARE'S 60 SERIES – Balance. Harmony. *Lagom*.

It lies within us all, that sense of perfect balance, of all things in harmony. When things simply feel right. *Lagom* is the Swedish word for this. Not too much. Not too little. Just right.

Primare's most revealing products to date, the **60 Series** is the ultimate expression of Primare's ongoing pursuit of *lagom*. The **PRE60** is a supremely sophisticated control centre for sources analogue or digital, wired or wireless. The **A60** reference amplifier employs Primare's groundbreaking **UFPD™** amplification technology for unparalleled power and precision. Entirely designed and hand built in Sweden, they are resounding statements of exemplary quality and performance.

*Lagom* – you will know it when you see and hear Primare's 60 Series.

For more, see [primare.net](http://primare.net).

The sound and vision of Scandinavia



**karma**  
audio • visual

Authorised United Kingdom Distributor

01423 358846

[karma-av.co.uk](http://karma-av.co.uk)  
[info@karma-av.co.uk](mailto:info@karma-av.co.uk)



# Mojo working

Chord Electronics is making some big claims about its latest arrival, **Ed Selley** considers the evidence

**A**s two-channel audio might be seen to be a fairly mature category, moments of genuine innovation are pretty few and far between. That said, Chord Electronics' Hugo (*HFC 386*) has a reasonable claim to being of some significance. The combined preamp/DAC in a portable form factor impressed us and has been a significant sales success too.

At the same time, Chord hasn't been blind to some of the limitations of the Hugo as a portable device. While fairly small, it is hardly pocket friendly and the £1,400 asking price is a little on the high side for portable users. Even before the Hugo was launched, it appears that Chord was harbouring desires to make a smaller version, but limitations in the technology available hampered its efforts. Now, though, it has released the Mojo (an abbreviation of 'Mobile

Joy' should you be wondering), which aims to do much of what Hugo does only smaller and cheaper.

To this end, the Mojo is still built around an FPGA chip running Chord's bespoke decoding, filtering and preamp functions. The Mojo can decode material from 32kHz to a faintly unnecessary 768kHz and all flavours of DSD up to 512 (a rate at which almost nothing is commercially available). It also sports coaxial and optical inputs and a pair of 3.5mm outputs. By use of a new FPGA and board design that lays the battery across the top of it, the Mojo is a much more pocket-friendly option while still claiming a 10-hour battery life from a four-hour charge. Unlike the rival Oppo HA-2 (*HFC 397*), however, the Chord can't be used as a mobile charger for your phone.

This spec is then paired to some revisions that are intended to make

the Mojo a more forgiving partner for use with sensitive headphones and in-ear monitors. Efforts have been made to drop the noise levels still lower and ensure that the presentation is better tuned to their performance. As the Mojo can still produce the same half an amp of current that the Hugo can, it should still be able to handle more demanding loads as well.

As you might expect, the £1,000 reduction in price from Hugo to Mojo has meant that some features have had to be shed. The Mojo has no adjustable digital filters, RCA output or Bluetooth connection. A sneak reveal by Chord boss John Franks at the launch, though, suggests that the latter omission might have an add-on based solution in the future. This is hardly unexpected, though, and given that Chord is claiming that the Mojo offers Hugo's performance at less than one third of the price, the fact it has any features at all might be taken as a source of wonderment.

Externally, the Chord is relatively conventional looking – at least by the standards of the brand. A metal box roughly the size of a cigarette pack, it breaks with at least one Chord tradition from the off in that it names the inputs and outputs. Control comes via a trio of plastic balls embedded in the edge that operate the power and volume. Like the Hugo, volume and

## DETAILS

**PRODUCT**  
Chord Electronics  
Mojo

**ORIGIN**  
UK

**TYPE**  
Headphone  
amplifier/DAC

**WEIGHT**  
174g

**DIMENSIONS**  
(WxHxD)  
82 x 60 x 22mm

**FEATURES**  
• Supports: PCM to 32-bit/768kHz & DSD to 512  
• Optical, coaxial & Micro USB digital inputs  
• Twin 3.5mm headphone outputs  
• Custom decoding built around an FPGA chip

**DISTRIBUTOR**  
Chord Electronics

**TELEPHONE**  
01622 721444

**WEBSITE**  
chordelectronics.  
co.uk



sampling rate is indicated by the colour of these balls, which change depending on the volume selected and the type of incoming signal. Once you have learnt your colour shift, it all works really rather well, but the balls themselves are fingerprint magnets and feel a little odd.

The Mojo is able to select inputs automatically, which works well in practise and you can select a line-level output by holding down both volume buttons at the same time. The only slight peculiarity in terms of the connections is that there is a separate USB input for charging – presumably relating to the FPGA. For the moment, the Mojo is only available in black, but it looks smart enough and the fit and finish is excellent. Chord has managed to retain a little of the house style at this relatively affordable price and also make the Mojo perfectly understandable to newcomers.

The Mojo requires a driver for Windows (but otherwise works perfectly well without one), which is located on the Chord website. This installs quickly and painlessly and having done so, allows the DAC to talk to jRiver on a USB 2 connection with no fuss. While Chord's claims that the Mojo is the performance equal of the Hugo and at £400 stands comparison to a digital product that costs an enormous amount more might seem bold, they are certainly not without foundation.

## Sound quality

From the outset, the Mojo has a number of similarities with its big brother. It leaves very little trace of itself on the recording. The presentation of Jack White's *Lazaretto* is free of any traits that can easily be assigned to the Mojo and instead lets *Three Women* sound composed, detailed and as entertaining as it should. White's vocals are laden



The Chord's closest rival is Oppo's HA-2 (HFC 397), which is £140 cheaper and arguably a little more suited for life on the move. The HA-2 is more pocket friendly than the Mojo and the ability to act as a charger is handy. Sonically, however, the Mojo has the edge. The Oppo has a dark and punchy sound that is entertaining, but the absolute transparency of the Chord is superior and the Mojo's wider selection of digital inputs give it an advantage in flexibility that also helps justify the extra asking price.

with detail and their relationship to supporting instruments is entirely logical. The snap and drive to the percussion is also extremely appealing. Chord has long made the argument that it is timing errors in digital that affect our perception and enjoyment of music and listening to the immediacy of the Mojo, it may well have a point.

Switching to the 24-bit/96kHz remaster of Pink Floyd's *The Division Bell*, the Mojo retains the same compelling sense of neutrality, but the boost in performance is immediate and extremely impressive. *Keep Talking* is vast and almost liquid smooth while the layers of vocals and instruments are arranged perfectly. There is sufficient headroom to ensure that it can take most headphones louder than you would reasonably want to listen at.

## Chord has distilled the qualities of the Hugo into a device that costs much less

The only real limit to performance is the aforementioned headphones or earphones and with something talented like Oppo's PM-3 (HFC 399) or the Noble 6 earphone, the Mojo delivers a truly exceptional sound.

The way it works with the Noble is indicative that the tweaks made to it for IEM operation have been effective. While many rivals use a high and low-gain setting to reduce noise, the Mojo has a single volume ramp and it manages to be completely free of noise at low levels and able to let earphones show what they can really do. This means that bright and unrefined models tend to sound just that, but if you are going to spend out on it, it is unlikely you'd pair it with underperforming cans.



**The Mojo is very well made and truly portable**

Using the Mojo as a line-level DAC doesn't fundamentally alter the presentation, but it does at least give the Hugo a breathing space as the line-level setting appears to be a touch on the high side and it doesn't appear to have quite the same sense of scale when the two are compared side by side. Whether this is as simple as the Mojo relying on a 3.5mm socket instead of a pair of RCA phono connections is hard to say, but as a device to work in both home systems and more portable ones, the larger (and more expensive let's not forget) Hugo certainly has the edge.

## Conclusion

This should not distract from the truly sparkling performance that the Mojo offers, though. Chord has managed to distil many of the qualities of the Hugo into a device that costs less than a third as much and if you are a high-end earphone user, the Mojo is arguably a better choice. This is a remarkably neutral piece of digital decoding at a price that is firmly at the affordable end of the market and it is something that should have us all genuinely excited ●

## CONNECTIONS



- 1 Coaxial digital input
- 2 Optical digital input
- 3 USB charging port
- 4 USB digital input

## Hi-Fi Choice

### OUR VERDICT

**SOUND QUALITY** ★★★★★ **LIKE:** Outstanding sound; solid build

**VALUE FOR MONEY** ★★★★★ **DISLIKE:** Better through headphones than at line level; quirks to interface

**BUILD QUALITY** ★★★★★ **WE SAY:** Exceptional headphone amp and DAC that brings Hugo performance to a new lower price point

**FEATURES** ★★★★★

### OVERALL





# Play time

Sonos has captured the multi-room market but can its revamped Play:5 satisfy the ears of hi-fi enthusiasts? **Adrian Justins** finds out

**D**espite huge success in the wireless multi-room market, Sonos has not always been that warmly embraced by audiophiles. That's partly because for hi-fi kit to work with its networked wireless speakers you need its Connect box, which has optical and coaxial digital inputs, plus RCA stereo phono. And you'll need a phono preamp for your turntable. Then there's the matter of hi-res files, as it won't play anything over 16/48.

On balance, it could be said that Sonos is not especially hi-fi friendly, but as I revealed in our *Insider Feature* last issue, the company says it is serious about attracting discerning enthusiasts. It has even engaged the services of Abbey Road stalwart Giles Martin as its sound experience leader. The man behind the remastering of The Beatles' catalogue and producer of Paul McCartney's latest album has worked with Sonos' acoustic

engineers and designers on the new Play:5 to produce a product worthy of being described as a "Wireless Hi-Fi Speaker" (writ large on the box).

When I spoke to Giles he seemed under no illusions about the task that faced him. On the one hand he hates the term 'audiophile', saying that: "Everybody should be able to listen to great music," and on the other he knows that there is a generation now that has little idea what good speakers sound like. But he believes the Play:5 is a real game changer, having been completely redesigned from the ground up to offer the best audio quality so far from a Sonos speaker. In other respects the Play:5 is no different to the previous model; meaning that – 3.5mm aux line-in aside – it's wi-fi that transports your tunes from your network router to the speaker. It's also still controlled using either a smartphone/tablet app or with a desktop controller.

## DETAILS

**PRODUCT**  
Sonos Play:5

**ORIGIN**  
China

**TYPE**  
Wireless multi-room speaker system

**WEIGHT**  
6.4kg

**DIMENSIONS**  
(WxHxD)  
364 x 203 x 154mm

**FEATURES**  
• Supports: Spotify; Deezer; Qobuz; Soundcloud; Tidal music streaming services  
• Compatible formats: MP3; WMA; AAC; AAC+; Ogg Vorbis; ALAC; FLAC; WAV; AIFF  
• Supports up to 16-bit/48kHz  
• 3.5mm aux line in

**DISTRIBUTOR**  
Sonos

**TELEPHONE**  
0808 2346596

**WEBSITE**  
sonos.com

Using an app is more long winded than a handset, plus there is the danger of problems whenever Apple or Google updates the OS, to say nothing of the inconvenience of somebody using the device for something as mundane as making a phone call (although a capacitive UI on the top of the speaker offers some rudimentary control).

It doesn't have to be that way. In addition to app and desktop control, the Bose SoundTouch wireless range has a separate remote, which I love for its six preset buttons that let you listen to saved stations, albums, playlists, tracks or artists. Still, at least Sonos has a dedicated desktop controller as well as the app, and in terms of integration with music streaming services it is hard to fault, whereas many rival wireless speaker apps are non-integrated so you have to switch from the control app to say Spotify or Deezer, which can cause confusion and problems.

The Play:5 has six synchronised, custom-designed drivers comprised of three identical mid-woofers in a linear array. On top of them are three tweeters, the outer two of which are angled to produce a wider soundstage than you'd expect from a single speaker. For real stereo separation, though, I opt to try a pair of speakers. When working as a pair you can orientate them horizontally for a

more immersive room-filling sound, or vertically for a more intense sweet spot where two of the tweeters switch off and two are reduced. Everything is handled intelligently by the built-in DSP in conjunction with special orientation sensors that automatically initiate the adjustment.

The new speaker is much sleeker looking than the previous model, thanks in part to the edge-to-edge grille which has 60,000 holes in it. It's a sealed cabinet made from much stronger, thinner polycarbonate offering greater internal volume and better rigidity, which are required to handle the new model's greater power output (Sonos doesn't quote power figures, but designer Mieko Kusano told me it's three times more powerful than the previous model).

Gone are the external physical buttons of the original in favour of the aforementioned capacitive UI. You

## It's a shame hi-res isn't available as the Play:5 represents a huge leap forward

touch it to play or pause and change the volume. Swipe to skip through tracks. It's elegant looking and pleasingly responsive. The Play:5 certainly looks attractive in either the matt white or black variant and given its substantial dimensions it is both sturdy and nicely minimal.

Setting up the wireless system (you can still use Ethernet) is a dead simple process that is driven by the Sonos Controller app. All you do is plug each speaker into the power, press the set-up button on the rear when prompted and wait for the app to work its magic. Creating a stereo pair is a case of pressing the rear button of the left speaker when prompted. Now the fun begins, at

least for iOS users (Android is still in the works). To optimise the sound performance, Sonos has developed a room correction process called Trueplay that uses a sweep tone emitted by the speakers to analyse how sound reflects off all the surfaces in any given room. The smart bit is that it uses the microphone built-in to an iPhone or iPad rather than any extra bits of equipment. A short video within the app shows you how to hold and move the iPhone around the room, concentrating on the listening area. It takes about two minutes and when done, the app confirms the degree of variation from the default setting. You can manually adjust the EQ in terms of balance, bass and treble levels and there's also a loudness setting, but you can't deselect Trueplay to do an A-B comparison.

### Sound quality

Sonos isn't lying when it says the Play:5 is more powerful than the original. The benefit is that the system can effortlessly fill a typical UK living room at 50 percent of its output without even beginning to sound strained. Streamed from Spotify Premium, London Grammar's Hannah Reid's shimmering vocals on *Wasting My Young Years* sound mesmerising and deftly positioned against the drums and strings. There's a decent texture to the sound and although it's less clinical than the previous Play:5 it has a definite digital edge to it. Having said that, there's an openness to its sound and James Taylor's vocal on *Hello Old Friend* has plenty of detail and feeling. And this from a Spotify stream of middling quality.

Bass delivery is certainly impressive, although I find it a little too eager and have to tweak the EQ manually a smidgen. There's tremendous energy pumping out from bass-heavy material such as David Guetta's *Shot Me Down*, but given the right EQ setting the bass does exactly what's



Wireless streaming options include Pure's Jongo system, whose £250 flagship T6 speaker (HFC 385) is nearly half the price of the Play:5. The T6 – which is also a hi-res exclusion zone – is far less sonically polished than the Play:5, with over-emphasis on the bass and thin-sounding vocals.

A more realistic rival is Bluesound (HFC 402), which has greater versatility in its range. The speaker/streamer/amp Pulse (£599) and Duo (an £899 2.1 system) have similar features to the Play:5. Like Sonos, it eschews a remote in favour of an app, but it does offer 24-bit/192kHz hi-res playback.



needed to allow higher-frequency sounds to work their magic.

The speakers are highly adept at handling cacophonous pieces, orchestrated classical music for example or James Bay's *Hold Back The River*, where the vitality and sparkle of the vocals are positioned atop the clamour of the guitars and drums. This track illustrates in terms of the imaging how well Sonos has mastered steering the left and right channels according to your preferences (changing the orientation as required). When horizontal, the sound is more broadly spread and everything just seems to sound in the right place so you're not aware of the separation or direction of the source, just of a perfect sonic construction taking place in front of you.

### Conclusion

Hi-fi traditionalists may never be won over by the idea of streaming speaker systems like this, but more progressive audio enthusiasts might be tempted by the new Play:5. It's a real shame that hi-res audio isn't available because in terms of sound quality the Play:5 represents a huge leap forward in performance from Sonos ●

### CONNECTIONS



- 1 Mains power lead socket
- 2 Button for adding speaker to network
- 3 3.5mm headphone jack
- 4 Ethernet port

### Hi-FiChoice

#### OUR VERDICT

##### SOUND QUALITY



**LIKE:** Trueplay room correction; powerful, clean sound

##### VALUE FOR MONEY



**DISLIKE:** No remote control; incompatible with hi-res audio

##### BUILD QUALITY



**WE SAY:** A more than worthy successor to the original Play:5, and Sonos' best-sounding speaker ever

##### FEATURES



##### OVERALL







# Elixir of life

Heed's Elixir amplifier is firmly aimed at quenching hi-fi hungry newbies. So who better to test it than **Neville Roberts...**

Once you've been bitten by the hi-fi bug, there's no going back. The first step that most of us take is to put together an affordable system comprised of three main elements; source equipment, such as a CD player or music streamer, an integrated stereo amplifier (ie one that includes both preamp and power amplifier duties in a single box) and a pair of loudspeakers. Budapest-based Heed Audio's Elixir is a half-width line that's aimed at doing just that and this integrated amplifier is the first model in the new range.

Heed can trace its origins back to 1987 when Zsolt Audio was formed by the Hungarian brothers Zsolt (a loudspeaker designer) and Alpar (a marketing and sales expert) Huszti to import famous British hi-fi brands into Hungary. By 1991, the company had started working with Richard

Hay who was the legendary designer of Ion Systems' products. As a result, the company started to assemble Richard's unique 'shoebox-design' Obelisk amplifiers and consequently sales really took off in Hungary.

Sadly, Ion Systems went out of business, but Zsolt Audio decided to carry on the spirit of Ion and formed Heed Audio to develop a new amplifier called the Obelisk Pro. During 2000, Heed expanded its product line to include phono stages and high-quality turntable power supplies for Rega Planar turntables. Moving to the present time, the company has a larger team of people and continues to develop its impressive range of Obelisk audio equipment that currently includes a CD-transport, DAC, preamplifier, stereo power amp, monoblock power amplifier alongside a rather nifty headphone amplifier.

## DETAILS

**PRODUCT**  
Heed Audio Elixir  
**ORIGIN**  
Hungary  
**TYPE**  
Integrated amplifier  
**WEIGHT**  
6kg  
**DIMENSIONS**  
(WxHxD)  
220 x 87 x 345mm  
**FEATURES**  
• Quoted power:  
50W into 8ohm  
• Inputs: 4x line-  
level; 1x MM phono  
• Class A  
headphone  
amplifier  
**DISTRIBUTOR**  
RPD Distribution  
**TELEPHONE**  
01242 547663  
**WEBSITE**  
heedaudio.co.uk

As the first product in the Elixir range, this compact integrated amplifier looks the part and boasts 50W per channel into 8ohm or 65W into 4ohm providing plenty of oomph to drive a wide choice of domestic loudspeakers. It also has a good selection of features, sporting five inputs – including one for vinyl replay thanks to the built-in phono stage that is suitable for moving magnet cartridges. In addition to the loudspeaker outputs, the Elixir has a headphone output powered from an internal Class A amplifier, which operates independently from the main power amplifier. Many integrated amplifiers fitted with a headphone output simply take a feed from the main power amp to drive the connected headphone, and the dedicated amplifier approach taken here with the Elixir bodes well for good-quality sound.

The front panel incorporates the aforementioned headphone socket and a row of white LEDs to indicate the selected input and output. The input is selected via a button on the front panel that cycles through the choices. The output is selected by another button that cycles through speakers and headphone, headphones only or just the speakers. On the right is the rotary volume control, which has a white LED on the side to show the position of the volume knob



which flashes when the system is muted. Input selection, volume and mute can also be controlled via the remote control.

On the rear panel there is an earth binding post for the phono lead, an array of gold-plated phono sockets for the inputs, plus an additional pair for the preamp output, should you wish to use the Elixir with an external power amplifier, for example. The loudspeaker connectors are the usual combination of binding posts and banana sockets. The amplifier on/off switch is also situated on the rear above the IEC mains socket. A minor gripe is that you have to reach around to the back of the unit to turn it on. This does, however, have the added advantage of not requiring a long cable run of the mains power inside the amplifier that could cause hum pick-up by the sensitive electronics, especially the phono stage. Another small irritation is that the amp's output can only be selected by using the button on the front panel since the remote control only cycles through the inputs. Similarly, you have to cycle through all the inputs to select the one you want if using the button on the front. So if you are listening to input two for example, you have to step through inputs three, four and five to get back to one. However, you can go backwards or forwards using the remote control.

**A neat half-width design, input selection via remote control is a bit of a drag**

Before I connect the amplifier into my system, I break the habit of a lifetime and take a look at the instruction manual. The days of chunky manuals for this kind of product are long gone and the minimal document contains the most basic information for connecting up the amplifier to your system along with the usual warnings. In practice, the short manual is well judged as the Elixir is easy to operate with intuitive controls. The remote control only gets a brief mention in the context of selecting the input or muting the loudspeakers and, given this, I'm sure many people wouldn't bother to fit the supplied batteries and will simply opt to leave it in the box. However, this is a mistake as the amplifier is fitted with a high-quality remote controlled volume control. This is actually a motorised Alps Blue potentiometer, not a low-cost digital volume control but a proper audio-grade analogue volume control. With this type of control, the volume knob can also be turned using the remote that operates a motor attached to the shaft of the potentiometer, making it a really nice feature that is not often seen on an entry-level product of this kind.

As the Elixir's specification and features stack up rather well, I opt to connect it to my transmission line loudspeakers, a PrimaLuna ProLogue Eight Mark II CD player and my record deck fitted with a Goldring 2400 moving-magnet cartridge.

## Sound quality

First to spin is a lovely classic LP of CPE Bach's *Symphony No.2* played by George Malcolm on the harpsichord with Neville Marriner conducting the Academy of St Martin-in-the-Fields. I am greeted with a powerful performance that is both full and bright through the loudspeakers. George Malcolm's harpsichord

playing is tinkling and clear and is complemented by the orchestral accompaniment that adds authority to the performance. On the down side, I do rather find the strings a little harsh and perhaps a touch too edgy, but imaging is great and the instruments are well dispersed across the soundstage and each instrument has a good focus.

Switching to a pair of Sennheiser HD600 headphones plugged into the socket on the front panel, I select the 'headphones only' output on the Elixir. The fullness to the sound is still there and the crisp detail, but the edginess of the strings has completely vanished. This is most likely due to the Class A 'single-ended' operation of

## The loudspeaker performance impresses across a wide range of music

its headphone amplifier, making the performance altogether more refined and effortless.

Back to loudspeakers, it is the turn of Sophie Zelmani to take the stage with a CD recording of *How It Feels*. I tend to think that the Elixir is more at home with this sort of music – the percussion and drum hits are crystal clear and the bass line is extended and punchy. The rhythm of the music is well paced and propels you through the piece well. The female vocals have just a touch of sibilance at times, but this completely vanishes when listening on headphones where the sound is slightly better balanced with the bass sounding tighter and better controlled by the amplifier.

An unusual and beautiful CD recording of *Moonlight On Spring River* with Zhao Cong playing the ancient Chinese pipa (a four-stringed instrument sometimes referred to as

## CONNECTIONS



## Q&A

**Attila Olah**

Head of design, Heed Audio



**NR: It's great to see a moving-magnet phono stage built in, is there anything special about it?**

**AO:** We think that an entry-level analogue integrated amplifier should provide all the connectivity to make it a real one-box solution for a small hi-fi system. As the interest for vinyl increases, we decided to make the phono section more sophisticated than just an "acceptable" solution. Technically, it is very close to our standalone Questar MM phono stage. We hope that more people will find their way back to the analogue world and enjoy its sound.

**The headphone amplifier is a Class A design, what benefits does this bring to listeners?**

The Elixir – like Heed's Obelisk and Thesis amplifiers – sports our unique Transcap-technology power amplifier. It is a refined RC-coupled system, driven by a valve-like push-pull construction, built with complementary Darlington pairs, working in Class AB, driving the speakers by high-current coupling capacitors. This is the basic idea of the headphone amplifier in the Elixir, which benefits from the output coupling capacitor and the Darlington driving stage, but it's a pure Class A amp that is fed by a regulated power supply.

**How does the use of discrete components in the amplifier affect the sound quality?**

All of our devices are handmade, including the assembly of the PCBs. Every component of the Elixir amplifier has been fitted and inspected by our team to be sure it is top quality. Discrete THT components are more robust and often have better specifications in terms of usage, not to mention they are easier to handle and can be assembled to withstand greater external impact. This way we can build better-quality and more reliable devices.



**The compact Elixir range is available in both silver and black finishes**

the Chinese lute) is very clear and compelling to listen to. It has a lovely enchanting combination of modern sounds mixed with traditional Chinese music. The very low bass line during the opening sections is clearly discernible as notes, rather than being a 'bass thump', and each instrument occupies its own space within the soundstage.

For some jazz, I turn to a CD recording of the Jan Harbeck Quartet playing Cole Porter's *Too Darn Hot*. I

make a comparison. In fact, I find the two different media surprisingly comparable. However, even though my CD player is a fairly high-end model, I still prefer the sound of the LP recording. The vinyl is more three-dimensional and feels more expansive when compared with the CD and credit for this must go in part to the Elixir's built-in phono stage.

## Conclusion

There is no doubt that Heed's Elixir integrated amplifier is perfect for anyone who wants to take the first step into the world of hi-fi, perhaps having rediscovered vinyl, or indeed anyone looking for a quality integrated amplifier without the added bulk of full-size traditional components. It is really well made using high-end components, which is also reflected by its performance whether it's connected to a pair of loudspeakers or a set of headphones, and it comes at a realistic price. Its loudspeaker performance impresses across a wide spectrum of music and its headphone amplifier section is even more of a triumph, making the Elixir something a bit special in its class. I look forward to seeing more products from the Elixir line as and when they arrive ●

## The record is more three dimensional thanks to the Elixir's built-in phono stage

am carried through this fast-paced piece beautifully by the Heed, which swings into action right from the opening drum roll. The saxophone and piano take over in the impromptu sections with impressive energy and excitement. Once again, listening on cans to the same track reveals a touch more elegance to the performance and, in particular, the piano and drum solo segments sound that bit more realistic.

My listening session finishes off with a recording of Vivaldi's *The Four Seasons* that I have on both LP and CD, also played by the Academy of St Martin-in-the-Fields and conducted by Neville Marriner. This enables me to check out the performance of the phono stage. Of course, although both recordings were made from the original master tape, there will inevitably be some slight differences in the final balance due to the different mixing – the LP was produced in 1970 and the 'AAD' CD was produced in 1985. I choose the exciting first movement of *Winter* in both recordings and then switch between them repeatedly in order to



As well as the similarity in the name, the Elixir compares well with Rega's full-width Elex-R integrated amplifier with its similar range of features – the latter costing around £150 more. What you get for the extra money is more power from the Rega's claimed 72W output into 8ohm. Like the Heed, the Rega has five inputs, including a very respectable moving-magnet phono input and four line-level inputs. It also has a preamp output, a press-button input selector and a remote control. What the Rega doesn't have is a headphone output, which means the Heed is a formidable contender for audio fans looking for a multi-talented amplifier at a real-world price.

## Hi-Fi Choice

### OUR VERDICT

**SOUND QUALITY**



**LIKE:** Sound; great build quality; superb headphone amplifier

**VALUE FOR MONEY**



**DISLIKE:** Power switch on the rear panel; having to cycle through inputs

**BUILD QUALITY**



**FEATURES**



**WE SAY:** Great sounding compact integrated amp with plenty of flexibility

**OVERALL**





# KENNERTON

AUDIO EQUIPMENT



KENNERTON MAGISTER HEADPHONES



KENNERTON ODIN HEADPHONES



KENNERTON IKIZ  
IN EAR PHONES



KENNERTON EGO HEAD AMPLIFIER





# Quick start

Does this do-it-all deck have what it takes to wow new and returning vinyl fans?  
**Ed Selley** takes it for a spin to find out

**T**he rise and market share of music being purchased on vinyl appears to be pretty unstoppable. At a time when there's an abundance of some of the most capable digital media players available at terrestrial price points, it barely seems credible that new users are buying into a product that offers the bulkiness, fragility and potential expense of vinyl, but here we are.

Taking advantage of the growing interest in vinyl from newcomers and returning fans alike, the range of entry-level turntables has seen a considerable increase over the last few years. One of the defining features of numerous budget turntables, though (and indeed the great majority of premium models too), is that the majority are belt driven. The arguments in favour of belt-drive decks seems to have been

made with sufficient force that rival direct-drive models have almost completely fallen by the wayside, all of which makes the Audio-Technica AT-LP5 something to really take notice of. This is a direct-drive turntable, and it costs just £330.

This reasonable price tag doesn't tell the whole story either, as the AT-LP5 package comes with a tonearm, cartridge and built-in phono stage that can easily be bypassed if required. And if that's not enough, it also has a USB-B digital output connection to allow you to rip vinyl and store it as a digital file on a hard drive, and comes supplied with the Audacity computer software to help you carry this out successfully.

Surprisingly for a turntable at this end of the market it doesn't appear that component parts have simply been lifted from Audio-Technica's existing catalogue. The J-shaped arm

## DETAILS

**PRODUCT**  
Audio-Technica  
AT-LP5

**ORIGIN**  
Japan/China

**TYPE**  
Direct-drive  
turntable

**WEIGHT**  
7.4kg

**DIMENSIONS**  
(WxHxD)  
450 x 157 x 352mm

**FEATURES**  
● 33 & 45rpm  
● J-shaped arm  
with detachable  
headshell fitted with  
AT95Ex cartridge  
● Selectable MM  
phono stage

**DISTRIBUTOR**  
Audio-Technica Ltd

**TELEPHONE**  
0113 2771441

**WEBSITE**  
eu.audio-technica.  
com

doesn't have its own model number but clearly borrows technology and ideas from when A-T was building tonearms for use on other turntable models and even uses a detachable headshell to make cartridge swapping easy. The cartridge is bespoke to the AT-LP5, although it has a more recognisable origin. The AT95Ex is a hot-rodded version of the longstanding budget favourite with a revised stylus and some other detail tweaks to improve performance. It comes in a deep red housing, which is rather easier on the eye than its pea green ancestor and is pre-mounted in an AT-HS10 lightweight headshell for easy set up.

The deck itself uses a DC-powered direct-drive motor partnered to a weighty aluminium platter. The chassis has been designed in such a way to minimise resonance and ensure that the deck isn't susceptible to rumble – the arch enemy of designs of this nature. The platter is topped with a thick and weighty rubber mat. As you might expect from a direct drive, acceleration is impressive and the platter quickly gets up to speed within a single rotation.

Okay its not the prettiest deck at this price point – far from it some may say – but there is a sense of purpose to the AT-LP5 that gives it a level of charm. It feels faintly retro with the J-shaped arm and borrows some of

**Don't let the plain design fool you, this is one hell of a turntable**

the styling cues of older direct-drive designs. The plinth casework is plastic and doesn't feel as substantial as some of its belt-driven price rivals, but it's remarkably solid and well thought out. The only black mark in day-to-day usage and practicality terms is that there's no dust cover supplied as standard, but one can be purchased for £24 and it comes with hinges to mount it to the plinth.

More positively, there is a very real sense – thanks to features like the detachable headshell and non captive cabling – that the AT-LP5 has upgrade potential, and it would be interesting to see just how far the performance of its tonearm could be taken with a different cartridge or headshell.

There are some genuinely useful design details, too. The feet that are fitted to the plinth would shame many rival decks at £1,000, and the decision to equip the AT-LP5 with a three-pin IEC mains connection means that it doesn't seem to require any form of earth grounding to be employed, which is useful when you make use of the internal phono stage into an amp that doesn't have this connection already fitted. Setup is utterly painless, requiring you only to set the plinth on a level surface drop the platter and mat onto the spindle and attach the headshell and the counterweight.

### Sound quality

Having done so, the sound that the AT-LP5 produces is subtly different to its rivals. The vast majority of affordable belt-drive turntables on sale today are commendably pitch stable, but the A-T takes this idea and runs with it. The opening piano notes of Marvin Gaye's *Inner City Blues* are rock solid and this little detail has a surprising effect on the realism of the track. There is also no sign of any of the gremlins that can so often bedevil direct-drive turntable designs. The

Audio-Technica is entirely free of rumble or any other form of noise, and music rises out of a silent and utterly unobtrusive background. It achieves a pleasing three-dimensional performance too, with Talk Talk's *Happiness Is Easy* opening out and creating a believable relationship between voices and instruments.

Compared with the more costly Rega RP3 (HFC 351), the Audio-Technica never seems quite as spacious or effortless, but neither does it feel unnecessarily constrained. It is happiest with a rhythm to get behind and there is a propulsive force to the way it makes music that is different to most rivals. The bass response is usefully deep and has a detail and definition that can often elude some affordable rival turntables. Leftfield's positively

### There's no sign of the gremlins that bedevil direct-drive turntable designs

enormous sounding *Bad Radio* is delivered with much of the fury and drive intact and there is genuine impact to the bottom end.

It's fractionally less assured in the upper registers, but the AT95Ex cartridge sounds rather more grown up and refined than its stock cousin, although the AT-LP5 still hardens up a little at higher frequencies and at higher volumes. The effect is rarely so severe that it makes me want to stop listening or even turn the volume down by any measurable amount, but the package will respond well to a little care and attention to partnering with other components.

This requirement shouldn't automatically mean that you look to switch the phono stage out of the system, though. The unit built into

the AT-LP5 is extremely good and stands happy comparison with budget options available at the sort of price points you might be looking at. When you do remove it from the signal path – something that Audio-Technica claims is done by physically bypassing it rather than powering parts of it down – the audio signal still manages to possess a slight brightness, suggesting that the AT95Ex cartridge is the reason rather than any of the on-board electronics.

As a device for ripping your vinyl to music files on a hard drive, the AT-LP5's rapid start and stop characteristics – along with the easy to cue arm – make it a better partner for this sort of digitalisation work than some rivals. The bundled Audacity software will only encode at CD resolution (16-bit/44.1kHz) rather than hi-res, but a test of a vinyl track ripped to a Windows 7 laptop suggests that playback results are very favourable. Like many vinyl ripping systems, the process is a little fiddly and nowhere near as straightforward as physically playing the record but none of these issues are the fault of the AT-LP5, and this value-added functionality is likely to give the deck even greater appeal.

### Conclusion

Any minor quibbles about the AT-LP5 should not detract from what is a very fine package indeed. What stands out most is that it is not a by-the-numbers response from a company that wants to be in on the action in what has become a competitive product category. The AT-LP5 looks and feels different to its price rivals and comes across as a much clearer extension of Audio-Technica's philosophy. It manages to sound wonderfully composed and brings the delights of direct drive at an impressively low price and so has become one of our favourite decks under £500 ●

### CONNECTIONS



- 1 J-shaped tonearm and counterweight
- 2 Aluminium platter
- 3 IEC three-pin mains socket
- 4 USB-B digital output
- 5 Selectable phono stage output

### Hi-Fi Choice

#### OUR VERDICT

##### SOUND QUALITY

★★★★★

##### VALUE FOR MONEY

★★★★★

##### BUILD QUALITY

★★★★★

##### FEATURES

★★★★★

##### OVERALL

★★★★★

**LIKE:** Propulsive and engaging sound; impressive spec; good build

**DISLIKE:** Slightly bright top end; not the best-looking deck

**WE SAY:** A starter deck that delivers excellent performance at a competitive price





# Pro Plus

Fostex has tweaked its active PX-5 pro monitor to tempt audio fans away from their passive boxes. **David Vivian** takes a listen

**H**aving had a good time with the MunroSonic EGG100 near-field monitoring system (HFC 403), I was intrigued to try another affordable studio stalwart vying for wider acceptance in the domestic hi-fi market. Fostex's £649 active two-way PX-5HS standmount speaker fits the bill perfectly. Essentially it's the Japanese company's PX-5 pro monitor tweaked to ease out the optimum listening distance from strictly near field to a more accommodating 5-7 feet, making it a good fit for smaller

rooms. Fun-sized it may be at less than a foot tall, but the PX-5HS plays it straight down the middle when it comes to its pro roots. The mains socket, on/off rocker switch and dual-function volume/tone control on the metal back plate of each conventionally slab-sided enclosure drop a strong hint that its two drivers are powered by individual onboard amps served by an electronic crossover network. A true active design, then, rather than a powered setup with a stereo amp housed in one speaker, a market sector

## DETAILS

**PRODUCT**  
Fostex PX-5HS

**ORIGIN**  
Japan

**TYPE**  
2-way active  
standmount  
loudspeaker

**WEIGHT**  
5kg

**DIMENSIONS**  
(WxHxD)  
180 x 280 x 210mm

**FEATURES**  
• 25mm soft  
dome tweeter  
• 132mm aramid  
fibre mid/bass  
• Claimed 18W  
(treble), 35W  
(mid/bass) Class  
D amplifiers

**DISTRIBUTOR**  
SCV Distribution

**TELEPHONE**  
03301 222500

**WEBSITE**  
fostexinternational.  
com

proposition gaining favour among people who like to keep things simple, neat and tidy.

Despite its studio provenance, the MunroSonic EGG could easily have been mistaken for a lifestyle speakers. There's no danger of that here. The unapologetically business-like Fostex is unlikely to draw gasps of surprise and delight from guests, unless they're into a particularly understated variety of studio chic. The grille-less baffles have nicely contoured edges and the drive units concealed fixings, but the abiding aesthetic is starkly functional – to the extent that the small Fostex logo located low down between the two forward-firing reflex ports glows orange to indicate when the speaker is powered up. All right, that looks pretty cool. It certainly seems to be very sturdily put together and the real-wood veneer looks and feels rather classy.

There's nothing too sexy about the appearance of the drivers, though they're actually quite high-tech, comprising a 132mm aramid fibre

mid/bass unit and a 25mm urethane film-laminated polyester-fibre dome tweeter. Wholly synthetic, aramid (aromatic polyamide) fibres are heat resistant and extremely tough, hence their use in Kevlar and Nomex. In this case, the cones are impregnated with a resin to beef up rigidity. The HAL-2000-like crimson hue of the tweeter dome is due to the colour of the urethane film laminate. The claimed frequency range is a respectable 50Hz to a rather remarkable 40kHz (remarkable for a dome) with a 2.5kHz crossover point.

Round the back, each speaker's volume and tone setting is handled by a small rotary knob garlanded with tiny green indicator LEDs. Its active function is determined by a slider switch with three positions: volume, off and tone. The off position keeps the speaker permanently powered up, defeating the auto standby mode, which would otherwise kick in after four hours of non use. The volume position can be used either as the main way to adjust gain if the speaker is being fed by a line-level source or,

## It's hard to pinpoint any significant weaknesses in the performance

rather more conveniently, to set and forget if a preamp or other form of volume adjustment is used upstream. Flick the switch across to tone, and two more 'status' LEDs come into play. When the upper one is illuminated, high-frequency output can be adjusted to taste in steps corresponding to the lit encircling green LEDs. Pushing the rotary knob in towards the back plate lights up the lower LED and the process can be repeated for bass frequencies. It all sounds a bit complicated but, basically, we're talking about finely calibrated tone controls. True, you'll look in vain for the kind of connectivity niceties some more obviously home-friendly speaker-based systems offer such as a USB port, Bluetooth or AirPlay, likewise an internal DAC. But there's no denying the room-friendly, pro-standard tuning possibilities on offer.

Despite the all-inclusive build, the Fostex weighs a far-from wrist-wrenching 5kg apiece, thanks mainly to the compact and lightweight nature of the onboard Class-D amps. Those dedicated to the mid/bass drivers deliver 35W, while the tweeters receive 18W. Frequencies

are split between the drivers by a FIR (Finite Infinite Response) type digital dividing network teamed with DSP-based time alignment, the intended upshot being a clean signal path free from the kind of subtractions, artefacts and phase anomalies that passive crossover components can so often impose.

## Sound quality

There are two hook-up options: RCA phono or XLR balanced. For the sake of leaving high-quality source duties to Chord's Hugo DAC (HFC 386), I go with RCA and my longest lengths of Townshend F1 Fractal interconnects. As usual it's a Roksan Caspian M2 CD player spinning the discs as a transport and Slate Audio stands taking the supporting role.

Fresh from the box and with the tone controls set 'flat', the PX5-HS has a directness that's startling, and not in an entirely good way. I think 'explicit' may be putting it mildly. In a sense, what I'm hearing is exactly on point for a pro near-field monitor and much closer to the uncompromising mix-dissecting presentation that I suggested as a defining characteristic of studio-based kit in the MunroSonic review. The little EGG100, while incredibly resolute, manages to avoid sounding overly forensic but first impressions here suggest that the Fostex is precisely that.

But this is a cold take, and with a proper warm up still ongoing and

tone tailoring options yet to be explored, it's not such a bad starting point. Even now, there's much to admire. As is often the case with true active designs, there's a sense of control, order and image solidity that sounds inherently right if, at this stage, a little too matter of fact. Pushed right to the fore is intelligibility. This is great for hearing what's going on and being able to focus on individual elements in the mix and, to my relief, it all hangs together as a coherent entity with the copious amounts of detail on offer framed in a musical context rather than being fiercely spotlighted.

That said, the Fostex sounds rather 'digital' – a touch mechanical and tonally grey. But that changes. After a good hour of limbering up with some high octane Joe Satriani and the tone settings adjusted for my room (maximum treble cut, a little bass boost), the sound is warmer and more supple, allowing a more convincing rendition of instrument timbre without shedding that appealing clarity, speed and grip. Now the loudspeaker more easily nails the line between resolving detail while fully encompassing the bigger picture. It's still a very clean and unromantic kind of presentation, free of manipulative emphasis and quite dry, but very engaging all the same.

It's hard to pinpoint any significant weaknesses in the performance. Its ability to time is just as impressive as ▶

**It might not have the design chic of MunroSonic's, EGG100, but it sure can sing**



## Q&A

**Matt Esau**

SCV Electronics Ltd



**DV:** Active speakers are a pro staple. How does Fostex go about gaining a performance advantage?

**ME:** When constructing speakers Fostex is able to take a ground-up approach combining many years of cabinet, driver and electronics experience to produce active designs that are a finely tuned combination of carefully selected components.

**How have you developed the PX-5 to be more suitable for the home environment as the PX-5HS?**

The PX-5HS is not only re-designed with home use in mind, it is a superior model. Firstly, the wood grain cabinet, stainless steel back panel and internal damping materials are higher grade to improve acoustic performance, as well as aesthetics. Internally the PX-5HS uses a different Class-D amplifier with improved circuitry, which results in better S/N ratio and distortion figures. The improved electronics also increase the upper frequency response to 40kHz (20kHz on the PX5). Otherwise the woofer and tweeter are the same. The rotary encoder has been simplified for more straightforward consumer operation, and the front baffle has a 'mottled texture' to complement the overall look, which is not a feature of the PX5.

**What other Fostex components would you recommend to go with the PX-5HS speakers?**

The Fostex HP-A8C USB DAC is an excellent component to match with the PX-5HS. It offers a powerful preamp with +10dB extra gain, which is helpful in getting the most from the PX-5HS, with digital and analogue inputs so it can easily be integrated with existing equipment at the heart of the system. It features a high-end 32-bit DAC with support up to PCM 24-bit/192kHz and DSD 2.4MHz. It is also possible to play media directly from SD cards on the HP-A8C, so a PC is not even required – perfect for a second home or a remote room without PC access, for example.

## IN SIGHT



- 1 25mm soft dome tweeter
- 2 XLR & RCA phono inputs
- 3 Dual-function volume/tone control
- 4 132mm aramid fibre mid/bass driver
- 5 Twin bass reflex ports



This is tricky, of course, as you have to factor in the active amplification which takes a standalone component (and, indeed, speaker cable) out of the equation. All things considered, MunroSonic's EGG100 system (HFC 403) is more sympathetic to home listening with some truly high-end qualities, not least its wonderful holographic soundstaging. But it does cost over twice as much as the PX-5 HS and can't quite muster the duo's punch and bass performance. Quad's exquisite S-1 (HFC 404) must get a mention, especially now that its price has been revised down to £499. Passive it may be but, for transparency, poise and musicality, little else gets close.

its confidence at the frequency extremes. It combines drive, power and a wide dynamic range with body and tonal subtlety.

Yet it's the immediacy and attack, while comfortably keeping the right side of aggression, that's largely responsible for capturing your attention. Stevie Wonder's harmonica chops have seldom sounded more vital, possessing a stinging, tingling tangibility. And John Mayer's duet with Herbie Hancock on *Stitched Up* is imbued with rare verve and authority. Bass isn't the weightiest I've ever heard, but it is agile, taut and articulate. Add the ability to deliver effortless dynamic swings to the midrange presence and intelligibility, and you have an active speaker system that never fails to entertain.

Ultimately, the little Fostex delivers the musical message with impressive conviction. Its sound is highly detailed and insightful yet easy to listen to for long periods. It's expertly voiced and images precisely within a generous soundstage. It goes loud without complaint or any appreciable hardening of tone or compression of dynamics. It sounds fast and can rock. In short, it does what every good speaker system should and creates a sense of there being a wide open window on the recording that allows the listener to home in on the particular without losing sight of the whole. Some might wish for more conventional-looking kit with a shiny powerhouse amplifier sitting centre

stage. Or maybe something with a more recognisably 'hi-fi' badge. But if your bottom line is sonic ability, the Fostex makes a compelling case for a good pair of active speakers.

## Conclusion

That said, this little standmount isn't going to float everyone's boat. Despite the efforts to 'domesticate' the PX-5 Pro monitors on which it's based, it's a design that still wears its studio roots on its sleeve. Which isn't to say it's a just a tool for inspecting the nuts and bolts of a recording. Far from it. It may lack the finesse and immersive imaging of the best, but it certainly isn't short of musical tact and its combination of clarity, authority, sense of organisation and vitality is a rare commodity in similarly priced passive rivals. Audition it yourself and you might well be surprised ●

## Hi-Fi Choice

### OUR VERDICT

#### SOUND QUALITY

★★★★★

#### VALUE FOR MONEY

★★★★★

#### BUILD QUALITY

★★★★★

#### FEATURES

★★★★★

#### OVERALL

★★★★★

**LIKE:** Clear, explicit and detailed sound with fine grip and drive

**DISLIKE:** Might be a little too dry and upfront for some

**WE SAY:** A neat, well made and affordable active standmount with bags of insight and control

★★★★★





# Heritage and Innovation

## Introducing the Halo Integrated

Parasound has re-imagined what a totally modern integrated amplifier should be. Guided by our 34-year reputation for making the highest quality audio for the money, we've integrated time-proven analog design and the highest quality component parts with cutting-edge digital technology. Now you can enjoy all the performance of our Halo separates in a single compact unit.

Demo the Halo Integrated at an approved Parasound dealer and meet the new standard in high end audio.

*"If there was ever a product that personifies the modern integrated amplifier, this is it. There's nothing not to like about this great value mid-price integrated."*

—HiFi Choice  
December 2015

[www.parasound.com](http://www.parasound.com)  
In the UK: 01242 511133



PARASOUND



Also available in black



# In with a BANG



**B**ang & Olufsen's BeoLab 90 active loudspeaker is a hulking great beast of a thing, weighing 135kg and built from the highest quality materials. It has a 360° soundfield, created by discrete amplifiers delivering up to 8,200W to its 18 drivers (seven 300W tweeters, seven 300W midrange drivers and four 1kW woofers), which are custom made in Denmark by Scan-Speak. It also has a clever active room compensation process.

Priced at £26,995 per speaker, the BeoLab 90 is certainly a flagship product worth talking about, and I was lucky enough to be invited to its unveiling at B&O's HQ in Struer on Denmark's exposed Atlantic coast.

B&O is one of those brands like Sonos, Linn and Naim that doesn't seem to follow a trend, but is confident enough to furrow its own path, throwing up some innovations as it goes. Over the years it has made some highly distinctive products – New York's Museum of Modern Art has 11 B&O products in its Permanent Design Collection – such as the BeoLab 19 speaker that successfully blends cool design with attention to detail and performance-enhancing features such as the acoustic lens.

Prior to the BeoLab 90, the BeoLab 5 represented Bang & Olufsen's most advanced acoustic correction product, featuring

To mark its 90th anniversary Denmark's Bang & Olufsen has launched the BeoLab 90.

**Adrian Justins** goes behind the scenes to discover how it's made

Automatic Bass Calibration (ABC), which alters low-frequency output in response to a room's affect on the bass. Since it was launched 12 years ago ABC has found its way into over 15 products, while the aforementioned acoustic lens has formed the cornerstone of B&O's hugely successful foray into in-car audio.

## Simple as 1, 2, 3...

BeoLab 90 takes the concept of ABC to a new level with Active Room Compensation (ARC). Using an external microphone (supplied with the loudspeaker and most likely operated by an installer), it's possible to measure the effects of a room's acoustical behaviour in different zones in the room and subsequently select optimised compensation filters for different situations.

Tonmeister Geoff Martin (technology specialist for sound design and product creation) explains the benefit: "You can customise a filter for the sofa, and another for your dining area and in cases where you are moving between these locations, you can select a combination of both filters to create a single compensation filter that improves the sound experience in both locations."

The BeoLab 90 also offers another development in acoustical room compensation not found in ABC:

## Bang & Olufsen timeline



Bang & Olufsen moves production to a newly built factory in Struer. A new mains radio, the 3-lamper is launched.



The first Beolab radio is introduced and the first product using Bang & Olufsen's new Bakelite press for molding cabinets.



Slim, flat radios, based on the new technology of transistors, are developed in Struer, and marketed under the slogan "For those who discuss design and quality before price". The Beomaster 900 achieves immediate popularity.

1925

1927

1934

1939

1950

1964

Peter Bang and Svend Olufsen, begin a modest production of radios in the attic of the Olufsen family manor, Quistrup, near the town of Struer, North-West Denmark. The first commercially viable product to bear the Bang & Olufsen name is the Eliminator – a component inside the radio that made batteries unnecessary, allowing you to connect it directly to the mains.

Influenced by Bauhaus Functionalism, the Hyperbo is launched, a radio and gramophone in one with integrated loudspeaker. Bauhaus is not merely a style; it is also an attitude to quality, consumer-friendliness and aesthetics.



Bang & Olufsen introduces its first prototype television at an exhibition in Forum heralding the arrival of TV in Denmark in 1950. The first production TV was the 508 S launched in 1952.







**Geoff Martin –  
B&O's technology  
specialist for  
sound design**

frequency is different. At 400Hz the beam is wide, at 2.5kHz there is almost no width, while at 7kHz it widens again.

Geoff says: "If you listen to *Tom's Diner* by Suzanne Vega on an ordinary loudspeaker the low end sounds far away, her Ss and Ts sound close. It's a strange 3D effect. We want the same energy at all frequencies going towards the side-walls. Our target is constant directivity and we want a constant, narrow beam.

"We can change the shape of a speaker, but it only works for a specific sweet spot. This is not good when we have friends over." The solution is to put extra drivers in – many of them. "We have a normal three-way speaker consisting of a tweeter, midrange and a woofer but we also use a back woofer to absorb sound if necessary, or use a side tweeter to add. We can change the beam width to whatever we want," he concludes.

The BeoLab 90's app offers a number of variables including parameters such as latency, frequency tilt, sound enhancing, sound design and parametric equalisation. Latency for example controls the Beam Width of the sound radiating from the BeoLab 90, a customised Finite Impulse Response (FIR) audio filter is selected for each woofer, midrange and tweeter. These filters are applied to each of the DSP's 18 audio output channels.

However, in order to control the very low frequency bands, it is necessary for the woofers' FIR filters to be very long. One implication of this is that it takes some time between the moment an audio signal enters ▶

multi-channel processing. "The loudspeakers not only 'see' each other as having an effect on the room, they help each other to control the room's acoustical influence," says Geoff.

Once the speakers (for one would obviously need a stereo pair) are calibrated, the listener can select the desired filter from a list of presets that can be stored in a smartphone app, or if using a B&O TV screen, from the TV's remote.

### What makes it sing

Geoff describes how Bang & Olufsen's BeoLab 90 optimisation process works: "Your brain compares the amount of direct sound with reflected sounds, which enables it to calculate distance. You don't want a speaker to generate too much reflected sound or you can't calculate depth accurately. With most normal loudspeakers this is what happens, and at different frequencies."

Typically at 300Hz you have a very wide beam while conversely at higher frequencies it's a narrow beam. The result is that some higher frequencies sound closer. But every

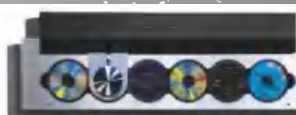
### Some 2,200kg of material is removed from the steel mould to create the 65kg cabinet

The app stores filter settings for three beam widths covering the sweet spot, broader listening and for parties (the latter called Omni mode).

Geoff admits that an unwanted side-effect of BeoLab 5's ABC was the possibility of worsening the sound in the place where it matters most. "Many algorithms correct the whole room, but this doesn't make sense for the sweet spot if I only sit on the couch. What happens is the room keeps singing for me," he says, explaining the unwanted effect of reflections. But this can be overcome by the process of noise cancellation. "If I'm clever I can take that signal and flip it upside down. We measure what the room does and deliver to the speaker the anti-room. You can decide what you want with the BeoLab 90."



Bang & Olufsen launches BeoSound 9000, a unique six-CD player with a built-in radio. It is a great sales success all over the world.



B&O PLAY sub-brand is revealed launching Beolit 12 as its first take on portable sound based on wireless streaming technologies.



1978

1995

2003

2012

2014

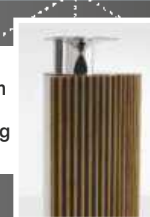
The Museum of Modern Art, New York holds a special exhibition of Bang & Olufsen products and now has 11 B&O products in its Permanent Design Collection.



BeoLab 5 is considered an acoustic breakthrough, thanks to the introduction of acoustic lens technology and adaptive bass construction.



First wireless loudspeakers based on the WiSA platform are launched, BeoLab 18 is one of the speakers carrying this technology.



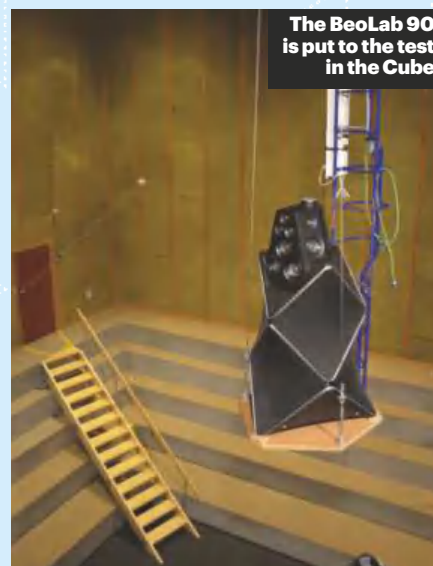




**The BeoLab 90's 65kg cabinet on the production line**



**Gertz Monk checks the performance of every speaker built**



**The BeoLab 90 is put to the test in the Cube**

the input of the loudspeaker and the moment it exits the loudspeaker as sound. The lower in frequency the Beam Width Control is extended, the longer the latency (or delay) of the loudspeaker and the longer the latency, the "tighter" the bass. Using filters to alter the output of so many separate drivers is fraught with difficulty and few but the bravest of B&O's typical customers are likely to mess with the advanced settings, leaving it to the professional installer to perfect the output.

### Size matters

Given the sheer size of the BeoLab 90 (it measures 73.5 x 123.5 x 74.7cm – wxhxd), a major challenge for a company known for its elegant designs has been achieving the speaker's appearance. The look of the model is inspired by a number of design elements found in such areas as architecture and motoring, although it was largely dictated simply by the voluminous stack of drivers and electronics. Each colossal speaker is hewn from a single block of aluminium. It is the largest single cabinet in Bang & Olufsen's history and the biggest aluminium part its supplier has ever made. Some 2,200kg of material is removed from the steel mould to create the cabinet, which alone weighs 65kg.

The loudspeaker driver positions and orientations are defined by the acoustical requirements and the placement of the electronics' cooling fins was chosen to ensure that the rising heat would have no impact on the sound. In a subtle contrast to the massiveness of the loudspeakers, the outer "skin" is made of acoustically transparent fabric stretched in the manner of sails hovering in front of the driver units. The base of the structure was originally designed to be open, but curved wooden panels were added to hide the 8kW worth of amplification, once it was added to the drive units.

To avoid the appearance of welded joints, each of the three aluminium crowns are cut out from a single solid block of aluminium,

which is then pulled to 3m in length and then bent into a wave pattern. Each one is polished for an hour by a special robot before being anodised, after which it is visually inspected by human eyes under special lights for defects.

Connectivity comprises B&O's Power Link, RCA, XLR (fully balanced), USB and S/PDIF (both 24-bit/192kHz) and an optical input (24-bit/96kHz). For now at least DSD is not supported and DXD is beyond the scope of the Burr-Brown chipset, which has a maximum sampling frequency of 216MHz.

Most of B&O's products are now assembled in Czech Republic aside from its in-car audio range and the new BeoLab 90, which are

### Once the speakers are calibrated, the listener selects the filter from a list of presets via an app

made in its Struer factory. Each speaker is built by hand and takes approximately five hours to complete. It is then tested in an anechoic chamber by Gertz Monk, technology specialist in electro-acoustics, who has been at B&O for 39 years. He showed me the purpose-built test box – a double-room, sealed, floating chamber 16m<sup>3</sup> big. "We are cloning the speakers to be exactly the same," he says. As such each one has to sound exactly like a reference model. All test samples have to be in the test environment for 24 hours to equalise the effect of temperature, and allowances are made for barometric pressure. An automated measurement is performed using 18 microphones (one for each loudspeaker driver) so that where small differences in the responses are found, custom correction filters are created and loaded into the Digital Signal Processing. This ensures that each loudspeaker's third-octave smoothed response matches that of the master

reference loudspeaker within 0.2dB between 20Hz and 20kHz.

The BeoLab 90 was acoustically tuned in B&O's enormous 12m-high Cube, which is not quite an anechoic chamber, "We have 20 milliseconds of reflection-free measurement time," explains Jakob Dyreby acoustic technology specialist. This is enough time to characterise the linear response of the speaker down to 100Hz, which is ordinarily more than sufficient. "But with BeoLab 90 we are controlling the directivity below 100Hz," he adds. The obvious solution but not one their budget stretched to, Jakob joked, is to build a chamber five times bigger. "So we developed methodology to measure credibly down to 10Hz." To calculate precisely the transfer function of 18 drivers they end up with around 1,700 measurements. One aspect of dealing with so much power is the danger of damaging the drivers. "We can fry a tweeter in 100 milliseconds. To prevent this we monitor the temperature of the voice coil and can turn it down if it gets too hot."

### Driving ambition

The bespoke Scan-speak drivers are unusually dynamically stable. They have a patented design that features multiple voice coils so that the electrical load is controlled to linearise the response. Copper is used to stabilise the inductance.

B&O's CEO Tue Mantonis admits to me that the BeoLab 90 is not for everybody, and I do wonder if function hasn't won over form. More Pavarotti than Carreras or Domingo. But the craftsmanship is undeniably impressive and the technology will certainly filter down into more affordable products ●



[bang-olufsen.com](http://bang-olufsen.com)  
[bang-olufsen.com/storelocator](http://bang-olufsen.com/storelocator)



## *Sinfonia*

The Sinfonia integrated amplifier from Unison Research boasts a dual-mono, single-ended, pure Class A valve design that performs to the highest audiophile standard.

Designed and manufactured in Italy, every part of the Sinfonia's stylish, yet sophisticated, design has been meticulously engineered.

The circuitry and purpose-designed bias settings of the amplifier's power stage have been tuned to perfectly accommodate the four 6550 valves. Equally, the ECC83 and ECC82 valves used in the pre- and power-drive stages have been selected due to their superior characteristics. The end-result is a rich valve sound that puts musical enjoyment first.

**Available across the UK now.**

### **Technical Information**

- Dual-mono stereo integrated amplifier
- Single-ended parallel Class A design
- 4 x 6550 valves (two per-channel)
- 2 x ECC82 valves (one per-channel)
- 2 x ECC83 valves (one per-channel)
- 25W Output
- Frequency Response: 20 - 30,000Hz
- Built-in power supply output for Simply Phono phono stage.
- System Remote included

*Sinfonia Anniversary, with Gold Lion valves (pictured), also available.*



# oppo



EUROPEAN HI-FI  
HEADPHONE  
OF THE YEAR  
2014-2015

hi-fi news  
OUTSTANDING  
PRODUCT

tech  
radar  
2015  
EDITOR'S CHOICE  
★★★★★

Planar Magnetic  
Headphones

Award-winning  
personal audio  
& home theatre  
innovation



hi-fi news  
OUTSTANDING  
PRODUCT

Headphone  
Amplifiers



avforums  
RECOMMENDED  
AWARD

HOME  
CINEMA  
Reference  
Status

Universal  
Blu-ray Players

EISA  
AWARD  
Best  
Product  
2015-2016  
USB DAC/HEADPHONE AMPLIFIER  
OPPO HA-2



[oppodigital.co.uk](http://oppodigital.co.uk)



## THIS MONTH



### NEVILLE ROBERTS

#### EXPERTISE: ENGINEER

Neville has an eclectic taste for classical baroque. 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.



### 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

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

## ➤ Speaker help

Hi there, I'm a long-time reader of the mag and wonder if you can help me with my search for some new floorstanders to replace my old ones. I like all sorts of music, but won't listen to an artist I like if the album is recorded badly.

I have auditioned a bunch of different speakers, but I found them to be lacking in the drum replay department. On track one of Muse's *Drones* for example, the floorstanders revealed some real deep base at the beginning of the track but then when the drummer kicked, in it was lean to non-existent. I understand there are the laws of diminishing returns in hi-fi but I left the demo feeling down hearted.

I don't want to mess the dealer around as he was great, but I can't justify spending if I don't hear a marked improvement. My hi-fi consists of: Rega Planet CD player, Audiolab 8000A amplifier, Acoustic Energy AE109 loudspeakers, Chord Cobra interconnects and QED Silver speaker cable. All of it is 18 to 20 years old. My room has a

concrete screed floor with carpet and 4.3 x 3.8 x 2.4m (lwxh) dimensions. The speakers are toed-in about 2-3° pointing across the room. They are not ideally positioned in alcoves about 190mm from the back wall and 50mm from front baffle to chimney breast.

The speakers I listened to were: Spondor D7, AR6, Proac D20R, Neat Momentum SX3 standmounts. I also tried out Naim's entry-level CD and Supernait amp, Rega's Elicit R and Saturn-R CD. I've also tried an Arcam amp with Rega Saturn.

Cheers Rob

**JK:** Hi Rob, if you want decent bass you need power and control, and the Audiolab 8000A for all its qualities is not especially renowned for this. I would, therefore, recommend using its preamplifier section and then partnering it with an ATC P1 power amplifier (£2,079), this will give you as much bass as you like with a speaker like the Spondor D7 or Proac D20R and many others. It's not cheap, but you get 150 of the grippiest Watts in the business and it really does kick ass.



The CYP AU-D4 Analogue Audio Converter holds the answer for Kerem

## ➤ Phantom menace

Hi HFC, love the mag. I have read your review and had an audition of Devialet's stunning Phantom loudspeakers (HFC 400) and was blown away by their performance. I have set my eyes, heart and wallet on getting a pair but my problem is how do I get to hook up my turntable? Seems like I need a preamp with an optical out. Any suggestions?

Kerem Zorlu

**JK:** Hi Kerem, you need an ADC, an analogue-to-digital converter, which are relatively rare beasts outside of the studio world. What would be really useful would be a phono stage with a digital output, but they usually have USB rather than optical outputs. The only suitable option I can find is the CYP AU-D4 Analogue Audio Converter, which is a budget ADC at a mere £55. The drawback is that output is limited to 48kHz and quality will inevitably be compromised by price. There seems to be nothing better than this until you get to pro devices like the Prism AD2, which comes in at an inconvenient £5,700 and even then stops at 96kHz.



ATC's P1 power amplifier should give Rob the bass he desires



### ➤ Listen without prejudice

I've read your magazine for a number of years and have often thought that sometimes the test music has been a little narrow in its leniency towards prog rock and the seventies. If it's not prog rock then it's classical.

One way for the press to shift more magazines would be to showcase how amazingly insightful, revealing and detailed modern music can sound. The market for people who love Madonna and Notorious BIG is huge and to hear their recordings on a high-quality system would undeniably be revelatory for them.

Secondly, I am upgrading an ageing budget hi-fi, which in part consists of a NAD C350 amp and Tannoy Revolution R2 speakers. Having ripped all of my CDs to FLAC (Vortexbox), I bought an Audiolab M-DAC and Logitech Squeezebox Touch streamer. The M-DAC was a big leap in sound quality compared with playing CDs on my Marantz CD6000 OSE CD player and now I'd like to upgrade my amplifier and speakers. I like a clean, open, neutral, detailed and warm sound that captures the characteristics of instruments and voices as they were recorded. My listening room is 14 x 16ft. I'm considering the Creek Evolution 100A, Arcam FMJ A39, Exposure 3010S2-D,

**DP** reckons Kalwant should audition his speakers with an Exposure 3010S2-D...

...and that ATC's SCM40 would be the most suitable match



Roksan Caspian M2, Naim Nait XS 2, Rega Elicit-R and a lesser known product on these shores, the Lyngdorf TDAI-2170 (which will make my M-DAC redundant). Speaker-wise, the ATC SCM40, Spendor D7 and PMC twenty.24 grab my attention. What are your thoughts on these?

*Kalwant Chaggar, Leeds*

**DP:** Music taste is, of course, intensely personal but I always try to run the gamut of genres. When I am reviewing, it's necessary to be disciplined. This means putting on a wide variety of different music and seeing how the equipment copes with it. It always amazes me that some equipment that can sound superb with rock suddenly struggles with classical, jazz or reggae.

For example, rock requires an incisive and detailed treble (hi-hat cymbals), midband clarity (vocals, electric guitars, snares) and a punchy bass that's reasonably tuneful (bass guitar). Classic reggae, such as some early UB40, is much more groove-based and needs better timing (rhythmic guitars, keyboards, rim shots, snare) and a very supple and rich bass (bass guitar). Classical music needs a less prodigious bass or silky treble, but you're into a wonderfully clean and smooth midband with real tonal colour (strings, brass, etc.), and fine timing, dynamics and spatial accuracy. Jazz needs a great, silky treble (ride cymbals, hi hats), a spacious and sweet midband (sax, flute, piano), and a warm and fluid bass (double

bass). I could go on, but my point is that reviewers and potential purchasers alike should make sure they try a wide range of music before giving their approval (or hard earned cash) to a product. The scary thing is that some products do brilliantly with some types of music, but really rather poorly with others.

As for your upgrade, you've just given me a superb and well-researched shortlist. In all honesty, you should start by auditioning all the aforementioned speakers with a neutral amplifier such as the Exposure 3010S2-D (HFC 397), and choose your favourite. Then buy the amp that best matches the speakers, and indeed your musical taste. My own personal preference would be the Exposure amp driving the ATC SCM40s (HFC 389), but again that's down to my taste. The good news is every single product you mention is excellent. When you've made your selections, come back to us and we'll suggest some cables and tweaks.

**JK:** You are not the first to express this opinion. At the recent National

### Why is so much seventies prog rock used as test music in your reviews?

Audio Show I found only one room where they played contemporary music and I stayed a lot longer as a result. It's a chicken and egg thing; many enthusiasts clearly like the music of the seventies because that's when they discovered great sound, but if the industry is to bring in new blood it needs to embrace a broader range of material.

Of your system upgrade choices, the pairing that has the most appeal to me is the Rega Elicit-R (HFC 374) and PMC twenty.24, both are fine pieces of kit that will synch together and produce better sound than you are currently enjoying. The other option that comes to mind is the ATC SCM40A, the active version. You could use your M-DAC to control volume and have a phenomenally powerful and revealing system that would do justice to any genre of music you care to think of.

**CW:** I find *Hi-Fi Choice* has the widest and most eclectic take on test tracks, but the point you make is interesting. If I had a pound for every time I've heard *Strong* by London Grammar at a demo I'd be a wealthy man...

# SLIM & SOPHISTICATED



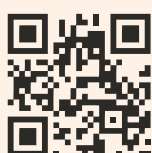
## The ground breaking new 40 from Blue Aura

Always striving to innovate, Blue Aura introduces a new loudspeaker category, Stereo Bluetooth tower speakers

Upgrade TV audio using digital optical connection, stream music wirelessly from Tablets, Smartphones and Laptops using Bluetooth. Connect CD players, Tuners and Radios using audio cable



Now being demonstrated at the following stores: Sevenoaks Sound & Vision Chelsea, Adams & Jarrett St Leonards on Sea, Home Media Maidstone Kent, Lintone Audio, Gateshead Sound Academy, Bloxwich



**BLUE AURA**

[www.blueaura.co.uk](http://www.blueaura.co.uk)







## *2 Xperience SB DC*



### *The Ultimate Xperience*

The 2 Xperience SB DC takes the core design principles from one of our most popular turntables of recent years, and adds a variety of enhancements to achieve a new performance standard.

The striking plinth, available in four stylish finishes, is accented by the thick vinyl-topped platter, which spins on a high-quality bearing and accommodates a light screw-on record clamp.

The new motor is powered by the built-in automatic speed control and finished with a precision-engineered exposed pulley.

The established 9CC Evolution carbon fibre tonearm, with advanced anti-resonance technology and pre-installed Ortofon 2M Silver cartridge, completes the package to a true audiophile standard.

**Available Now for £1,050.00 (UK SRP)**



Distributed by Henley Designs Ltd.

T: +44 (0)1235 511 166 | E: [sales@henleydesigns.co.uk](mailto:sales@henleydesigns.co.uk) | W: [www.henleydesigns.co.uk](http://www.henleydesigns.co.uk)

LETTER  
OF THE  
MONTH✎ **In the money**

Hi, I'm looking for a bit of advice. I've decided to ditch the CDs and stick with vinyl/streaming and Spotify/digital radio as my main sources. I've always had budget gear, low-end Rotel, Monitor Audio, Cambridge etc, but for the first time I have a bit of cash (not high-end cash!).

I'm looking to pair up an upgraded Thorens TD-160 with a suitable amp, streamer/radio and standmount speakers.

I was thinking maybe the Arcam FMJ A19, Cambridge Audio Stream Magic 6 V2 and B&W 685 S2. Any thoughts on my choices would be appreciated. Kind regards

Steve Gibson, by email

**JK:** Don't get rid of your CDs Steve, they sound better than you think, so put them in the attic until you can afford a Rega Saturn-R (HFC 384). As for a new system your choices look pretty sensible but could be bettered by a Rega Elicit-R (HFC 374) integrated amplifier, which has a decent phono input for the Thorens and would work well with the B&Ws. On the streamer front while the Cambridge is undoubtedly good, I'd encourage you to look at the Bluesound Node 2. This is a NAD product in disguise, quite an attractive disguise at that, and it's got a lot going for it on the sound-quality front.

✎ **Tape problems**

Dear HFC, while always singing the praises of your magazine for its generally insightful and

so-often useful reviews, tips and hints etc. are there any tips for getting help on tape cassette (and or reel-to-reel machine) repair(s) from your assembled experts? The one or two "major" suppliers offering repairs or "check-out fault-finding services" offer a degree of useful help at (often) modest costs, but are unable to source replacement spares if the manufacturer is either no longer in (full retail) business, or provides no further support for the product. They have often sold out to another concern or are simply (in my opinion) not interested in genuine customer service.

If amateurs/small repair businesses were willing to advertise in your magazine for, say a small fee, I don't doubt that they would profit greatly

### I'm looking for an amp and speakers to partner my Thorens turntable, any tips?

from the generated business interest from the frustrated hordes of audiophiles with non-functioning but otherwise serviceable hi-fi kit amongst us, and so would your own magazine from the wider interest it would surely drum up. Best wishes from an avid reader, keep up the good work.

Joe H White, Loughborough

**NR:** Hi Joe, hopefully our *Guide to reel-to-reel and cassette tape decks*



#### COMPETITION WINNERS

Way back in the October issue we ran a competition offering you the opportunity to win Blue Aura speaker systems. The first prize of an x40 floorstander alongside a xSub went to: C Dixon and Rosemary Walsh, while A Meakin-Scott and Peter Wallis won the second prize X30 bookshelf speakers. Runners up prizes of x10 speakers went to: LH Casling, D Priestley and Andrew Currie. Congratulations to you all, your prizes should be on their way to you soon.

**TOWER**

**AUDIO INTERCONNECT**

- Solid Copper Conductors • Oxygen-Free
- Superior Shielding • Polyimide Jacketing
- Proprietary Noise-Dissipation System

**audioquest**

## We've Got Your Back ... Your Front and Your Sides!



RCA plugs for the back



3.5mm plugs for portables and more



DIN plugs for the back



iPod plugs for underneath



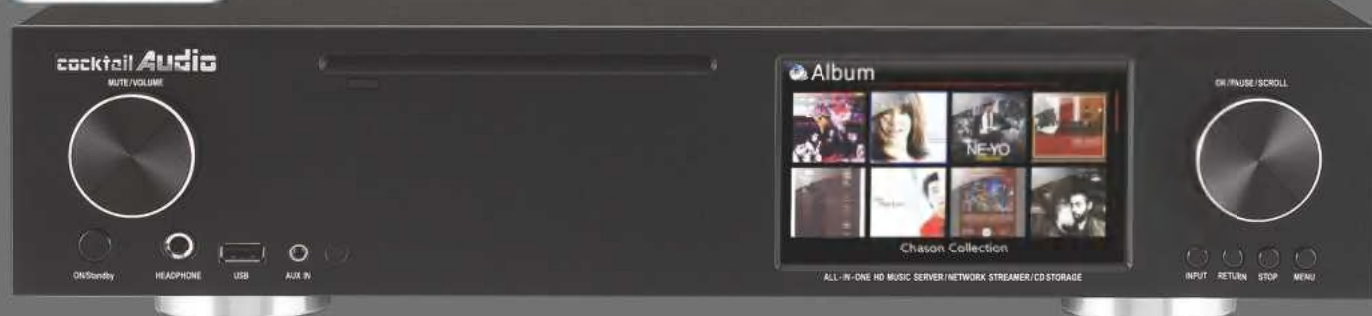
3.5mm socket for extension cables

From solid conductors, superior metals (conductors and plugs) and low-interaction insulation to AQ's Noise-Dissipation System and AQ's Dielectric-Bias System, all of AudioQuest's proven distortion-minimizing ingredients are used to ensure that all eight models of Bridges & Falls cables bring you beautiful music, clear dialogue and thunderous sound-effects.

**audioquest**



# NOVA FIDELITY X30



**HI-RES MUSIC SERVER | PLAYER | STREAMER**  
**CD RIPPER | UPNP MEDIA SERVER | RECORD VINYL IN HI-RES**  
**INTERNET\* & FM RADIO | SPOTIFY/QOBUZ and more...**

**Just add speakers!** The X30 needs nothing added, it's an all-in-one solution, great for space savers with an ear for quality sound. Or, **integrate it with your existing system** to rip, store & play your music collection / record & play iRadio stations.

**30 Day money back guarantee!** The X30 is a box full of tricks, you won't be disappointed, but we do offer a money back guarantee, so don't be shy, give it a try!

\*Wi-Fi dongle optional

**Superfi** **richerSOUNDS**

www.novafidelity.co.uk  
 T: 01732 765157 E: info@sygnifi.co.uk

"Tellurium Q have surpassed themselves here. It is often said that all cables colour the sound of a system to some extent, but the Silver Diamonds do it to a lesser extent than any other product I've heard so far."

- Jon Myles, *Hifi World* 2015

"This is the most precise, musical, enjoying digital cable I have ever heard. Period!...I'll give this TQ cable 6 out of 5 stars"

"I have just stumbled upon a speaker cable that I'm very tempted to put in a class of its own"

- Mono&Stereo, June 2015

"Tellurium Q Ultra Silver, which is the company's newest cable, playing with a mega large sound stage and lots of nice details. And an incredible precision and delightful musicality. ...without being analytical, or sharp to hear. Just lots of detail on the palette..... a differentiated transparency and an incredible transient reproduction and brawn in the bass .... musical and precise sound"

- Kurt Lassen, *Nomono* 2015



**Tellurium Q®**

**6 products of the year in 2014**

by preserving relative phase relationships in a signal

Find out why Tellurium Q® cables are achieving an audio cable grand slam, why not contact Tellurium Q® or one of our many dealers now.





in last month's issue will be of assistance. There is quite a bit you can do yourself, even though you may not have specialist equipment. On a broader front, there are indeed some people out there that sell all sorts of spare parts, such as Falcon Acoustics (01865 358001), which stocks parts for old drive units. As far as drive belts are concerned, there are many suppliers out there, including GB Audio (0131 6610022) in Scotland which has a huge selection to fit a wide range of models. Also, you'd be surprised what you can find if you have a search on ebay.

**CW:** It's an intriguing idea. There is certainly a need to fettle many older pieces of hi-fi equipment, but I've personally never struggled to find recommendations of people to do this essential work. Quality dealers always have engineers they turn to, so do ask. Online forums can also be an excellent place to start, as not only

## I'm struggling to find a reputable person to fix my ageing cassette player, can you help?

will you find people promoting their own skills, but hopefully also a number of happy customers who will endorse their services. Magazines are perfect for longer-term advertisers that by definition have had to achieve many manufacturing and trading standards. It would, however, be very difficult for a magazine to carry advertisements promoting small service providers with few ways to substantiate their competence, especially around safety and critical electrical engineering.

### ➤ Rattle and hum

I am writing in hope of some help on some issues I have with my vinyl playback. After getting back into vinyl about four years ago, I decided that my ageing

cartridge needed an update on my Systemdek II, so I opted at the time for the Ortofon 2M Red. After fitting it I found it was an improvement in range to my old cartridge, but hated the IGD/Sibilance issues with it from about the last third of each physical record I played. After researching the issue, I found the answer in the shape of Audio-Technica's AT440MLa.

The difference was incredible, although not as lively sounding at the 2M Red, all other issues where completely irradiated.

With the AT440 cartridge completely transforming my vinyl collection, I sought to change the turntable, opting for the very beautiful red Rega RP6.

With the dealer's assistance I decided not to opt for a pre-fitted cartridge and instead asked them to swap my beloved AT440 that was on the Systemdek to the RP6. But the Rega hated it, and produced a very loud hum through the speakers.

Changing down to a Rega RP3, the issue went away slightly, but increased again when fitting the optional TT-PSU. The key component here seemed to be the TT-PSU, as the RP6 cannot function without it, whereas in the case of the RP3 it is entirely optional. So I left the shop with a rather flat grey-looking RP3 instead. But I can still hear a slight hum coming from it when the volume is increased (usual listening volume is -11dB) via the speakers or using headphones. Is this because the Rega doesn't like some cartridges, or the fact that the Rega's arm uses some internal grounding mechanism, not the normal old-school grounding wire?

Is there a way I can stop the hum or am I stuck with it? Would another turntable be my best answer, such as the ClearAudio Concept, and how does it fair

Neil's Rega turntable is suffering from a mysterious humming

# Cabasse

## stream AMP

Wireless High Resolution Audio Amplifier



## Hi-Fi Streaming

Turn your speakers into a high-fidelity wireless streaming system

Control multiple audio zones from your tablet

Access your entire music library and online services (Deezer, Spotify)



stream SOURCE



stream 1



stream 3



www.cabasse-uk.com

# the audiobarn

ESSEX HERTFORDSHIRE LONDON



*'The Audiobarn is an impressive place in which to demo hi-fi equipment, and I was impressed with the comfortable, intimate feel of the venue in amongst a very relaxed rural setting.'*

Matthew T

*'I really can't remember a more pleasurable audition – it was great to be given as long as we wanted, to just listen to music without any pressure.'*

Kristian W

01279 454 860  
www.theaudiobarn.co.uk



## CLEAN-UP YOUR POWER



*"If you want an extremely capable and flexible mains treatment and you don't want to spend a fortune, this is by some margin the most effective solution I have seen." NFC 398*

NOISE REMOVED  
SURGES ELIMINATED  
SAFER SYSTEM BETTER SOUND  
...from just £60



wychwood@evoaudio.uk 01757 706372 evoaudio.uk/wychwood



IMPORTED TO AND DISTRIBUTED IN THE UNITED KINGDOM BY

# Black Rhodium

## A New Revolution By KL (Keith Louis Eichmann)

**COPPER®  
HARMONY**



RRP: £45 / Set of 4

*"...Very easy to solder... This product is really well made and excellent value for money."*

Neville Roberts,  
Hi-Fi Choice,  
September 2014

**SILVER®  
HARMONY**



RRP: £70 / Set of 4

*"...the Silvers offer similarly excellent imaging, but seem to offer improved clarity and transparency to the sound. The Pure Harmonys appear to take this improvement a stage further by opening up the sound stage. Bass drums also have better attack."*

Neville Roberts,  
Hi-Fi Choice,  
December 2014

**PURE®  
HARMONY**



RRP: £90 / Set of 4

**ABSOLUTE®  
HARMONY**



RRP: £120 / Set of 4

REVIEW DUE SOON...

WATCH OUT FOR THIS  
REVIEW IN  
"CHOICE EXTRAS"

For sales, product information and to locate your local dealer:  
www.blackrhodium.co.uk/klei klei@blackrhodium.co.uk

01332 342233





with customisation?

**I've tried different positions, mains sockets, amps, and phono stages, but the hum remains!**

**Neil McAlister, Maidstone, Kent**

**JK:** That's a real mystery Neil, I've used a wide variety of cartridges on an RP6 and never encountered the problem you have. I think you're right with regard to earthing, Regas do not have separate earth wires and the noise you describe does sound like an earthing issue. It may be a case of attaching a separate wire to a screw that's attached to the armbase and earthing that to the phono stage. It's an approach used by SME among others and can be useful as a means to prevent hum. I would also recommend you call Rega and see if someone there has a suggestion, if anyone knows it'll be them.

**NR:** The loud hum is most likely caused by a hum loop. Some cartridges have an internal connection of either the left or right earth pin to the body of the cartridge. This can cause a hum loop when you also have an earth connection of the signal by the phono stage and also by the earth wire coming from the tonearm cable fitted to the RB303 tonearm (that has an internal earth connection near the counterweight stub). I have solved a problem like this in the past by simply leaving the flying earth wire disconnected, but

it may not necessarily work for you. The slight hum, which you consider is coming from the TT-PSU may be hum pick-up from the PSU – try re-siting the PSU as far away as possible from the tonearm. If that doesn't work and if you've tried that already, another option is to disconnect the screen/earth connection in both RCA phono plugs that connect into the phono stage. With hum problems, there is no alternative to trial and error, but I wouldn't give up yet.

### ➤ **Thanks for all the memories**

**Congratulations on the 400th issue (left). I remember fondly those little booklets. They taught me to understand equipment specs and all sorts of technical stuff like matching cartridge compliance with arm-effective mass. Based on those books, when still a student I bought an Armstrong 625 receiver and Philips 312 electronic automatic turntable. The speakers were**

### **My Rega turntable is making a mysterious humming noise – how do I stop it?**

**Rogers Compact Monitors (a size up from the famous LS3-5A). I still have them all although the receiver has conked out. The unfashionable Philips still plays well, lately with a Grado cartridge, and the Rogers are pretty good, but like me they have just retired.**

**Peter Ungphakorn, Coppet, Switzerland**

**NR:** Hello Peter, thank you for your kind words. I bet the Rogers speakers still sound good too – they were really up there with the competition at the time. I believe they are a two-way design using a 205mm bass unit and a 25mm fabric-domed tweeter in an infinite baffle enclosure. I hope we keep the tradition alive of including some technical background and general information for the new

**WIN A RUSS ANDREWS POWERMAX PLUS MAINS LEAD WORTH £56!**

**Letter of the Month winners receive a Russ Andrews PowerMax Plus mains lead worth £56. Write to us at: [letters@hifichoice.co.uk](mailto:letters@hifichoice.co.uk)**



As the manager of the Brand New Kronos Store in Uckfield Sussex, I would like to invite you to visit us. Our opening hours are Tuesday to Saturday 10am -5.30pm and a warm welcome awaits you.

We look forward to welcoming both old friends and new, we have plenty of free parking outside the store.

There are many new Brands and Products in store for you with a fresh cup of tea or coffee while you take time to browse. We look forward to your visit and hope to see you soon.

Best regards Richard I Allan



*Richard Allan*





# This changes everything...



# P.J

Hi-Fi • Home Cinema



Visit our dedicated demonstration rooms at:  
3 Bridge Street  
Guildford  
Surrey  
GU1 4RY

Opening Hours:  
9am-6pm Mon to Sat (later by appointment)

Tel:  
01483 504801 or 01483 304756

Email:  
[info@pjhifi.co.uk](mailto:info@pjhifi.co.uk)

Web:  
[www.pjhifi.co.uk](http://www.pjhifi.co.uk)

The only real hi-fi shop in Guildford



# Show must go on

Whether it's stalls showing off goods for your home, motors you could only dream of owning or hi-fi, **David Vivian** loves a show. But why are they always such a drag?

**W**hy do we like going to 'shows'? I'm not talking about *The Curious Incident Of The Dog In The Night-Time* or *Mama Mia!* but shows where you get to walk around and look at or listen to stuff you probably aren't going to buy. Unless you're extremely lucky, the venue won't be anywhere near and, if you insist on driving there, trying to park will pile on the tension until you're twitching like a stick on a snare drum.

The venues usually aren't that helpful – certainly not designed to help you unwind. They're not designed to showcase 'stuff' at all if you're into hi-fi and attend some of the major annual events that subsume large parts of a hotel for the weekend. It can be frustrating for everyone concerned. Ask any manufacturer to name the worst place to demo a talented hi-fi system and the most likely answer will be: "a hotel bedroom stuffed to overflowing with people". If it's a good system that everyone wants to say they've listened to, you might be lucky and get a seat somewhere in the room in sight of the speakers. More typically, however, the closest you'll come to experiencing anything is just inside the doorway on tiptoes, trying to glimpse what it is you can barely hear because the bedroom next door is playing an earthquake through multiple subwoofers at 125dB.

All right, worst case scenario, but you get the idea. A hi-fi show is not the best way to assess a hi-fi system. Period.

## The Hi-Fi Show Live is undoubtedly the UK's finest exemplar here

Over the years, bedrooms sans beds have been graveyards for the good, the great and the gorgeous; the places, uniquely,

where the famous and the fabulous come to die on their racks. But still we go to drool and touch and gossip and, it has to be said, have a great time. And there's a good reason for this. Of all the types of consumer goods shows out there every month of the year, hi-fi shows, for all their hard to mitigate failings, are by far the best.

Arguably, motor shows are worst. At a motor show – the infamously gruelling Frankfurt extravaganza, say, where the exhibition halls seem to be larger than the city itself – you just get lost. Forever. And for what? Sitting at the wheel of a car you can't switch on is about as stimulating as trying to watch a re-run of *Top Gear* during a power cut. Even then you'll only be there a matter of seconds before the small hairs on the back of your neck are singed by the glare of the next punter desperate to relieve the numbing tedium of, well, looking at impossibly shiny cars under headache-inducing spotlights. Why do so many people

queue to sit in the cars? Because, sadly, next to vaulting the perimeter ropes of the Ferrari stand and applying 100 fingerprints to the bodywork of a 488 Spyder before getting rugby tackled by a security guard employed to make sure you adhere to the 'look but don't touch' policy – it's the most exciting thing you can do at a motor show.

But at a hi-fi show you don't merely have the opportunity to look and touch the hardware, you can shoot the breeze with the people who make it, swap stories of cat-frightening bass with fellow enthusiasts or buy an audiophile recording that will set your system alight when you get back home. Best of all, you can listen to the world's most expensive and powerful kit flat out. And, if the venue is one more sympathetically set up for the appreciation of high-end sonics – The Hi-Fi Show Live at the Beaumont House Estate, Old Windsor, hosted by our sister magazine *Hi-Fi News* is undoubtedly the UK's finest exemplar here – the results can be truly thrilling. For a motor show experience to match that, someone would have to lob you the keys to a Bugatti Veyron Super Sport and invite you to drive it at 260mph down the central causeway.

## The exception to the rule

That said, and as if to confound my contention that hotel bedrooms always bury good hi-fi, the best sound I ever heard at a show was made by an eminently affordable and disarmingly unshowy combo from British manufacturer Rega. It was the stereo that had people queuing in the corridors, mouths slightly agape, feet tapping with a will of their own, heads nodding as one. The question on everyone's lips seemed to be this: how could it be that a system costing considerably less than a metre run of interconnect cable connecting some of the more exotic CD spinners and amps at the show sounded so wonderfully natural and musical? And, of all places, at a hi-fi show. I was happy to leave dazed and confused. It's what keeps me coming back for more ●



**The Hi-Fi Show Live is one of the finest examples there is – even if we do say so ourselves...**



**DAVID VIVIAN**  
Show and tell



STYLE.  
PERFORMANCE.  
FUNCTION.



K3 Integrated  
January 2015



K3 Integrated  
February 2015



K3 System  
April 2015

## K3 INTEGRATED AMPLIFIER & CD PLAYER

Roksan's K3 Series of hi-fi electronics put sound quality first. But more than just sounding great, they're also effortlessly simple to use and come in a design that anyone would be proud to put at the centre of their music system.

The K3 Integrated Amplifier has been built with today's discerning audiophile in mind. Boasting five Line Level inputs, an exceptional Moving Magnet phono stage and superior aptX® Bluetooth technology; it is an ideal hub for all manner of audio sources. There is power and bass drive in abundance, with superb sound staging and engaging detail that is both refined and enjoyable.

The K3 CD Player is a high-quality source component that delivers a rich, almost analogue, sound performance that perfectly matches the Integrated Amplifier's delivery. When using these products together, you have a package that is truly unrivalled for the price.



Distributed by **Henley Designs Ltd.**

T: +44 (0)1235 511 166 | E: [sales@henleydesigns.co.uk](mailto:sales@henleydesigns.co.uk) | W: [www.henleydesigns.co.uk](http://www.henleydesigns.co.uk)



# Caught in the act

No matter where you are in the world, hi-fi systems have the same effect on some people, says **David Price**. But the real trick is not getting found out

**W**herever you go on this great planet of ours, hi-fi is a universal language – with the same needs, wants, imperatives and subterfuges operating. So anyone who has ever lavished their time and money on this glorious pursuit of ours will recognise their own behaviour in that of my Chinese friend Gray, whose name has been changed to protect the guilty.

Living in a well-to-do suburb of Beijing, he's one of a growing number of high-end audiophiles from the Middle Kingdom. He's a successful artist and lives a rather opulent 'dual-income-no-kids' sort of life in a large house that many in China's capital city could only dream of. Gray, being something of a classical music fan, came to hi-fi naturally – around 10 years ago – having first worked his way through some smaller Chinese hi-fi brands like Consonance, which he still likes and respects.

It was a chance visit to a high-end hi-fi shop in the capital that got him into serious audio exotica, however. His ears are as finely balanced as his drawing hand, and this meant he could instantly hear the difference between the good mid-market fare he owned and what was possible if cost was no object. Gray duly decided that he had to have what he heard, and began to save up. Making a very decent living even by Western standards, in a country that can be quite a lot cheaper to live in, helped him amass some cash over a

## He thought he'd smuggled them in until his wife found muddy footprints

couple of years. The downside was that the largely American and Swiss brands he hankered after were subject to a not inconsiderable mark

up by the handful of companies that distributed them. Unable to go into the shop, point at a bit of kit and say, "I'll take that one", Gray began negotiating with the dealers. He aspired to buy new, but ex-demonstration would do, and so began a period of several years waiting for things to come up. When they did, he'd be on WeChat (China's Twitter) to me, asking if it was any good. To this, every time, I would implore him to try it in his system. Sometimes I would later learn he had bought it – not by any text message but simply a picture of the aforementioned piece of equipment sitting proudly where its predecessor used to be.

In the early days, he was able to tell his wife that – despite the new bit of kit looking more glamorous, shiny and expensive than the last – he had merely 'side-graded'. The story was that because of the rarity of his existing CD player, DAC, preamp or whatever in China, the importer or dealer had made him an offer he couldn't refuse and bought it back – and with the profit, he'd bought the new

replacement which just happened to sound better. But as time passed, each upgrade got bigger and more lavish, and even his wife could tell it sounded better. Having presented himself as a kind of hi-fi wheeler dealer, buying and selling without spending any money, he now moved his system down to his man cave in the basement – in the hope that she wouldn't notice the changes going on.

Sadly though, his attempts at expensive yet consequence-free upgrading began to be foiled by external forces – namely, his friends. They began coming round to hear his system when previously he would spend a lot of time away from home, hearing theirs. His wife became suspicious – what was going on in the basement? They kept coming, sometimes in a group of six at a time. Now, in desperation Gray has started trying to persuade his wife to leave the house more: "Why don't you have another lovely day out shopping with your friends dear? You've only been out three times this week..."

## Busted!

His house is fast becoming the Chinese audiophile equivalent of *Fawlty Towers*. Recently, builders came in to reinforce the basement floor while his Missus was out shopping, to make way for his new pair of Wilson Alexandria X-2s. At 275kg apiece, it took the dealer and his band of hi-fi brothers half a day to get them down to the basement. He thought he'd smuggled them in perfectly until his wife came back late and found muddy footprints in the stairwell leading down to the scene of the crime. He had noticed them, but fell asleep exhausted at the end of a long day. He woke up at 3am ready to clean up, only to find his wife back and the footprints gone. Needless to say, the silence at breakfast the next day was deafening...

Pity then, poor Gray. He may now be in hi-fi heaven, but the stares he's getting from his other half could freeze the Sahara desert. Just goes to show you that no matter where you go, the same rules of engagement apply in the hi-fi world. This one will run and run! ●



**The only thing that's worse than your other half finding out about your hi-fi habit is the revelation of how much you've spent**



**DAVID PRICE**  
Getting away with it



# Loving music

## Concept MM



Now £995

The Clearaudio catalogue of high quality pressings inc. Deutsche Grammophon re-issues available now



For orders and information contact;  
+44 (0)1276 501 392 [info@soundfoundations.co.uk](mailto:info@soundfoundations.co.uk)

sound foundations  
[www.soundfoundations.co.uk](http://www.soundfoundations.co.uk)

# You're surrounded!

Surround sound has never taken off in the hi-fi world in the same way it has for home cinema. As **Jimmy Hughes** samples the joys of Dolby Atmos he tries to figure out why

**O**n Wednesday 14 October, Dolby hosted a demonstration of a new disc of music by the 17th century Venetian composer Giovanni Gabrieli sung by the choir of King's College Cambridge, recorded using Dolby Atmos. With the process, up to 64 loudspeakers (including some in the ceiling) can be utilised to recreate the soundfield so that music comes from specific locations. By having speakers in the ceiling, the aim is to reproduce 'height' information and so more faithfully recreate the original soundfield.

The music was recorded in the famous chapel of King's College, with singers and instrumentalists surrounding the conductor. The spacing of voices and instruments is very specific to Gabrieli's music, and the sonic effect is diluted by two-speaker stereo. But first we were treated to a brief video that created the impression of depth and height – though whether one 'hears' what the eye sees (a leaf spiralling down from the sky, and the sound appearing to move vertically downwards) is hard to say.

Via Dolby's Atmos system, the Gabrieli recording had plenty of presence, and the voices projected impressively. At one point, there was a strong antiphonal duet between two widely spaced voices that sounded wonderful. But, perhaps because the loudspeakers were placed above head height, I felt that all the sounds were coming from above

**Once you close your eyes, it's difficult to tell where things are coming from**

my head – as though the singers were in a raised gallery. I couldn't 'place' them directly in front of me... I had my first experience of surround sound back in the summer of 1972. Mullard, the component company, put on an exhibition at its Torrington Place HQ, and the BBC had a small quadraphonic demo room with four upside-down Sendor or Rogers monitors. The music played was Strauss' *Radetsky March*, live from the Proms. In this, the audience claps and stamps in time with the music and the effect created was overwhelming. I was blown away by the sheer realism of the sound. It really was like being there.

I was hooked. Only one problem – in the subsequent 40-plus years, I have never heard anything that impressed me as much. I've heard some stuff that was spectacular, but nothing that transported me to the live event.

The Atmos demo was definitely good, and when I played the Gabrieli recording at home in humble two-channel the sound was a bit flat and lacking Atmos' enveloping warmth. But, at home, the voices and instruments were much more solidly focused and tangible.

I've noticed this many times over the years; the way the sound grows increasingly diffuse as you add speakers and extra channels. You can even hear this happen when going from single speaker mono to two speaker stereo, let alone multi-channel surround.

With mono, the soundstage collapses and (unless the speaker is a direct/reflecting type) becomes narrow and confined. But the clarity of parts is excellent. For example, you're more easily-able to follow the left-hand part when listening to a recording of piano music.

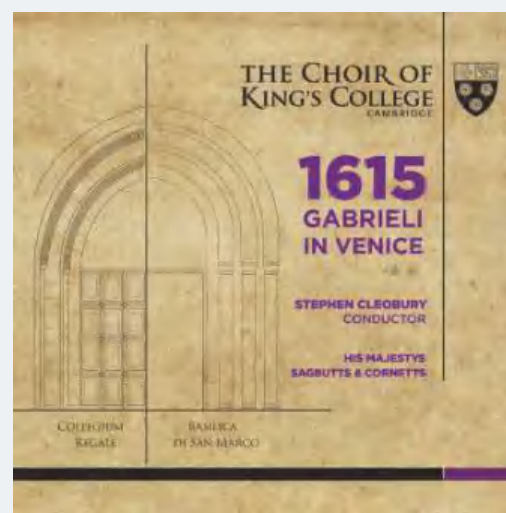
Of course, mono cancels a lot of subtle low-frequency phase information, which helps to clarify the sound by making it drier and leaner. Stereo and surround retain more of this phase information. But while the 'sound' may be more real (in hi-fi terms) the music isn't always as clear.

## Acoustic hologram

With systems like Atmos, you're trying to create an 'acoustic hologram' that tricks the brain and ear into thinking it's listening in (say) the chapel of King's College. But for the subterfuge to work, everything has to be just right otherwise the illusion is shattered. I felt that Atmos gave a pleasant surround effect, but I wasn't quite transported to Cambridge. Nor did I get a clear impression of the brass instruments placed behind me.

In my experience with sound-in-the-round – whether live or reproduced – the ear is led by the eyes. We 'hear' what we see. Once you close your eyes, it can often be difficult to tell where things are coming from.

When young I found the concept of vivid stereo and surround very exciting. But as I grew older, I find that it distracts me from listening to the music itself. There's something reassuring about sound that just comes from one place. The primeval reason our brain/ears can detect distance and placement is to warn us of approaching predators. So it's debatable whether we want to stimulate this sense when listening to music. But, of course, that's a very personal view, and not one that everyone will share. I'll certainly be intrigued to experience new releases recorded using Atmos, as and when ●



**Check out Jimmy's review of Gabrieli's *In Venice - 1615* on page 101**





**FURUTECH**  
PURE TRANSMISSION



WWW.FURUTECH.COM

sound foundations  
www.soundfoundations.co.uk

+44(0)1276-501-392  
info@soundfoundations.co.uk

# GT40 $\alpha$ a master of all trades.

phono stage • 24/192 USB DAC • 24/192 USB ADC • headphone amplifier



**ADL**  
ALPHA DESIGN LABS

Tokyo • Japan  
service@adl-av.com

sound foundations  
www.soundfoundations.co.uk

+44(0)1276-501-392  
info@soundfoundations.co.uk

# Back to basics

Are you overdosing on digital formats and technology in general? There's a simpler, more rewarding way. **Rob Lane** dips his fountain pen and talks vinyl

**A**s Thunderclap Newman sang in 1969, there's definitely "something in the air"; a sense that attitudes are changing, in flux. Perhaps we're all teched out. We've all gorged on digital solutions as if it's Christmas every day; chomped on boxes of After Eight mints on top of the figgy pudding, mince pies and Cadbury selection box. I am, of course, talking about the growing popularity of vinyl (sales have doubled to 550,000 this year according to *The Telegraph*), which, alongside a shift towards fountain pens, annual planners and 'upcycling', appears to be as much of an antacid to digital overload as it is a desire for better sound.

Certainly that's the impression I'm getting from canvassing family, friends, acquaintances and even strangers – as well as absorbing the proliferation of column inches within these pages and elsewhere on the subject. My decision to install a turntable in my wife's specialist stationery and gift shop proved to be on-message with customers, with the modestly priced Pro-Ject Elemental playing classic cuts of Shirley Bassey, Eartha Kitt, Sinatra and Billie Holiday among the quill pens, satchels and notebooks covered in vintage fabrics. Customers understand the connection: analogue music complementing 'analogue' methods of writing. Time away from digital solutions; making time for a slower, more wholesome approach to life.

**If you find yourself wanting to return to a simpler lifestyle you're won't regret it**

unconventional design, with many walking away with full product details, intent on making a purchase. Others comment that they recently dusted off their vinyl and are planning on returning to the format. Some discuss new purchases and favoured second-hand record stores.

Friends and family also report a return to the black stuff and I myself have re-embraced the format with gusto. As well as buying the Elemental, I'm currently refurbishing my old Rega Planar 2 (broken tonearm; needs new belt) and have just inherited a beautiful Thorens TD 160B.

It probably hasn't escaped your notice that the format is now front of house on Amazon, with CDs and vinyl trumping MP3 as the main purchase choices online. The delight I've personally experienced on taking delivery of vinyl, ordered the previous evening, is off the scale and although 12in of flat polyvinyl chloride generally costs more than 4.7in of polycarbonate, the price differential isn't prohibitive (generally £15.99 against £9.99). In fact, every

The various comments and questions about the Elemental – usually from men – are very revealing. Everyone is impressed by its



**Rob's red Pro-Ject Elemental has been a big hit in his wife's shop**

now and again prices flip, as with New Order's peerless *Technique*, currently available as I write these words for £12.99 on CD or £9.99 on re-mastered, 180g vinyl.

Assuming that the remaining vinyl presses can keep up with the growing demand for the black stuff, and can maintain their aging equipment with the diminishing amounts of spare parts available worldwide, this is a great trend for vinyl heads. However, there is a caveat: can we really trust the record companies to provide us with the best possible sound? *Technique* is one of a glut of re-releases, supposedly improved by re-mastering and weightier vinyl. It boasts "newly re-mastered audio by Frank Arkwright" pressed on "high-quality 180g vinyl". This particular purchase appears to be a decent investment, as Arkwright is well respected for his mastering and vinyl cutting at Abbey Road Studios. However, there are plenty of possibly apocryphal stories of 180g vinyl being mastered directly from existing CDs or worse still MP3s. Impossible to verify, it is clear that – as was sometimes the case with CD – we need to be wary of re-masters.

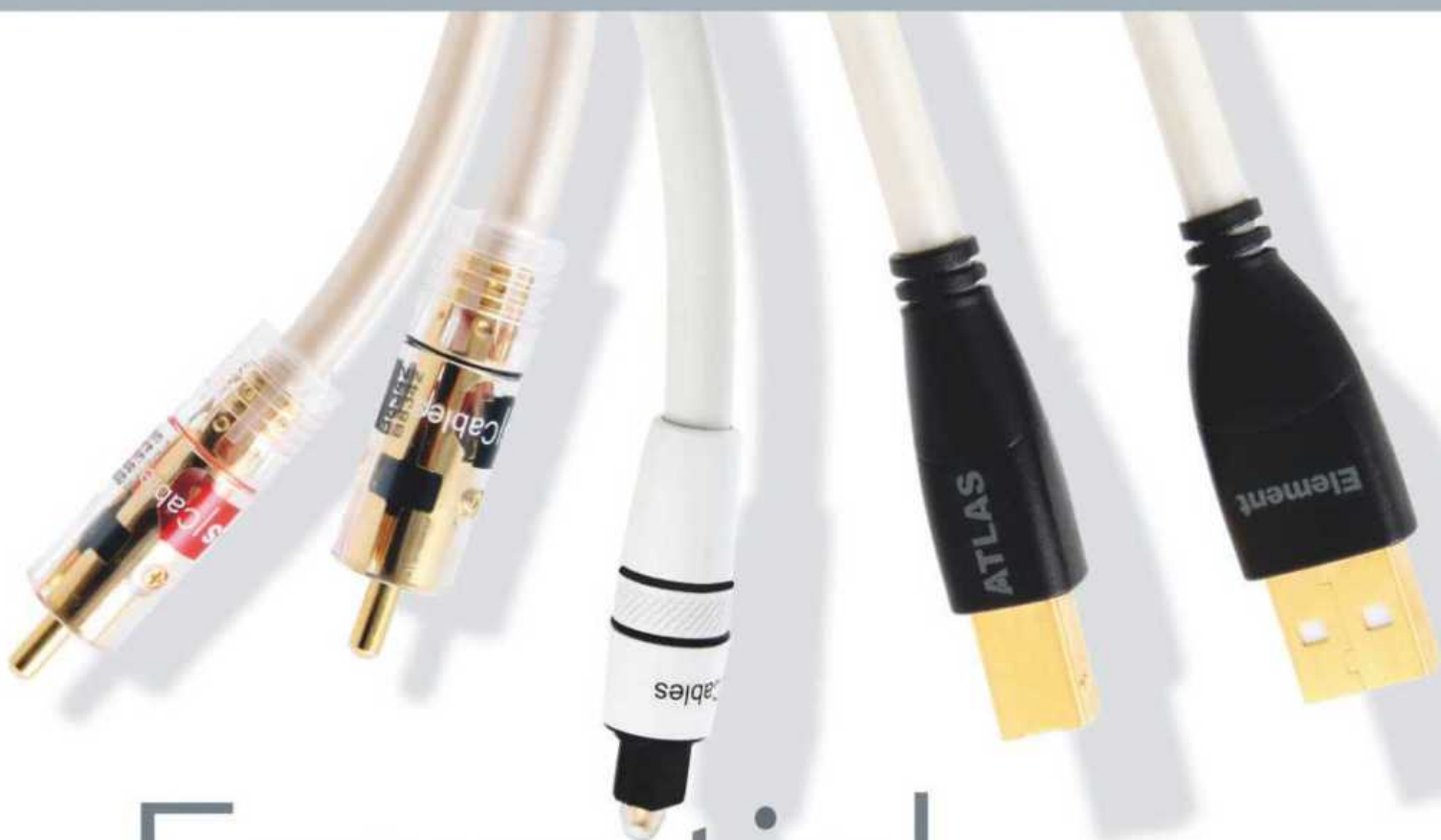
## Pet hate

Classic Album Sundays' Colleen Murphy played a re-mastered version of *Pet Sounds* to investigative journalist John Harris a year ago for an article in *The Guardian* – "underwhelming: compressed, light on bass, palpably small" – which was beaten all heads up by an original early seventies pressing. And as to 180g, Murphy says that she'd "rather have something good on lighter vinyl, than a 180g Frisbee".

My own vinyl nights will investigate this debate during our next gathering. In the meantime, if you too have caught the wave of change and find yourself wanting to return to a simpler, less digitally influenced lifestyle – with vinyl and perhaps even a classic fountain pen – you're unlikely to regret it. Listening to music on vinyl is much more considered and rewarding – leaving aside the debate about a 'warmer' vinyl sound – and the hunt for old and new wax, alongside the challenge of refurbishing classic turntables, is great fun too ●



**ROB LANE**  
In a spin



# Essential Elements.

The Element range is the starting point in our product line-up. But we view it as essential to getting a great performance from your kit.

It seems the world's hifi press agree. We've won a lot of awards for Element, including What HiFi's 'Best Analogue Interconnect' for the last 3 years.

We apply as much innovation and effort to the Element Series as our top of the range Asimi.

The 'Integra' low mass RCA connector was originally developed for the Element cable and the principles applied throughout our range.

Our latest Element sc USB cable is based on research showing solid core cable delivers superior results to conventional multi-strand.

Element cables are available for hi-fi, personal audio, digital & video use.

**winner**  
BEST ANALOGUE INTERCONNECT  
2012 • 2013 • 2014

**WHAT HI-FI?**  
SOUND AND VISION  
**AWARDS 2012**  
CABLES & ACCESSORIES  
BEST ANALOGUE INTERCONNECT  
ATLAS ELEMENT INTEGRA

**WHAT HI-FI?**  
SOUND AND VISION  
**AWARDS 2013**  
ACCESSORIES  
BEST ANALOGUE INTERCONNECT  
ATLAS ELEMENT INTEGRA

**WHAT HI-FI?**  
**AWARDS 2014**  
Accessories  
Best analogue interconnect  
Atlas Element Integra

**ATLAS**<sup>®</sup>  
the performance connection  
atlascables.com





# The big re-issue

One way or another, Christmas can be a fairly unforgiving time for music lovers, but perhaps the biggest affront for **Nigel Williamson** is the recent trend of the boxset

**F**or music fans, this time of year can seem like the season from hell. Even before the clocks go back, a trip to the supermarket finds one harangued by infuriating jingles and madly irritating songs about little drummer boys and sleigh bells. Carole King once sang that “it might as well rain until September”. But then it has to stop, for come October the rain turns to snow, at least in the canned ‘seasonal’ music we’re forced to endure for what seems like months in advance of the actual event.

To make matters worse, record companies stop releasing decent new music and put out artless cash ins called ‘holiday albums’, a pointless and misleading euphemism designed not to offend those of other faiths. Even credible artists feel compelled to release these abominations; alongside the crass commercialism of Michael Bublé we have to file Bob Dylan’s frightful 2009 offering, *Christmas In The Heart*. To be fair, this is mostly an American phenomenon; the US trade magazine *Billboard* even has an annual ‘holiday albums’ chart, which it launches with ridiculously premature over excitement around the middle of October. In Britain the ‘holiday album’ takes second place to endless vapid speculation about which daft novelty single will make it to the Christmas number one spot.

## Every anniversary of a classic album seems to bring a desperate reissue

offered the expensive compensation of that other staple of the festive season, the serious box set. This can be a simple repackaging of an artist’s back catalogue dressed in new livery to persuade us to buy music we already own by adding a miserly handful of hard-to-find B sides and other must-have ‘rarities’. Or it can be hours of previously unheard music deemed by the artist or the label to have been unworthy of release at the time.

The wallet-emptying, mega boxset market-leader this season is Bob Dylan 1965-1966: *The Cutting Edge* (see the review on page 99), which is available in various configurations including a 379-track version spread over 12 discs and retailing at \$600.

But in musical obesity, even this has been trumped by the Grateful Dead, whose *30 Trips Around The Sun* boxset in its maximum configuration contains 80 discs chronicling 30 concerts, one from every year of the band’s 30-year existence. You’d have to stay up for three days and nights

As the supply of interesting new music freezes up, those of us that adopt a ‘bah humbug’ attitude to ‘holiday albums’ are

on end to play it all in a single sitting.

Am I alone in thinking that dredging the vaults to release every fart, burp and gurgle from the studio sessions that produced a great and much-loved record has now reached preposterous proportions? Do we really need warts-and-all versions of our favourite albums in which we get to hear every acoustic demo, false take and bum note, which the original producer sensibly decided to leave on the cutting-room floor?

The phenomenon is no longer restricted to the seasonal market, but now goes on all year round. Every significant anniversary of a classic album seems to bring an increasingly desperate ‘deluxe’ reissue. We recently had the 45th anniversary reissue of *The Velvet Underground and Nico*, which managed to stretch out the original 48-minute vinyl LP to a bloated six discs. Heaven knows what the label’s catalogue division will come up with to mark the album’s half century.

## Scraping the bottom of the barrel

But how many of these reissues really add to our listening pleasure? Dylan is not typical, for there is arguably genuine interest in hearing how he shaped and mutated early versions of songs such as *Like A Rolling Stone* into the classics we know, in the same way it’s fascinating to go to an art gallery and see a great painter’s preliminary sketches for a masterpiece or to visit the British Library and see the handwritten manuscript of a great novel, with the author’s crossings out and corrections.

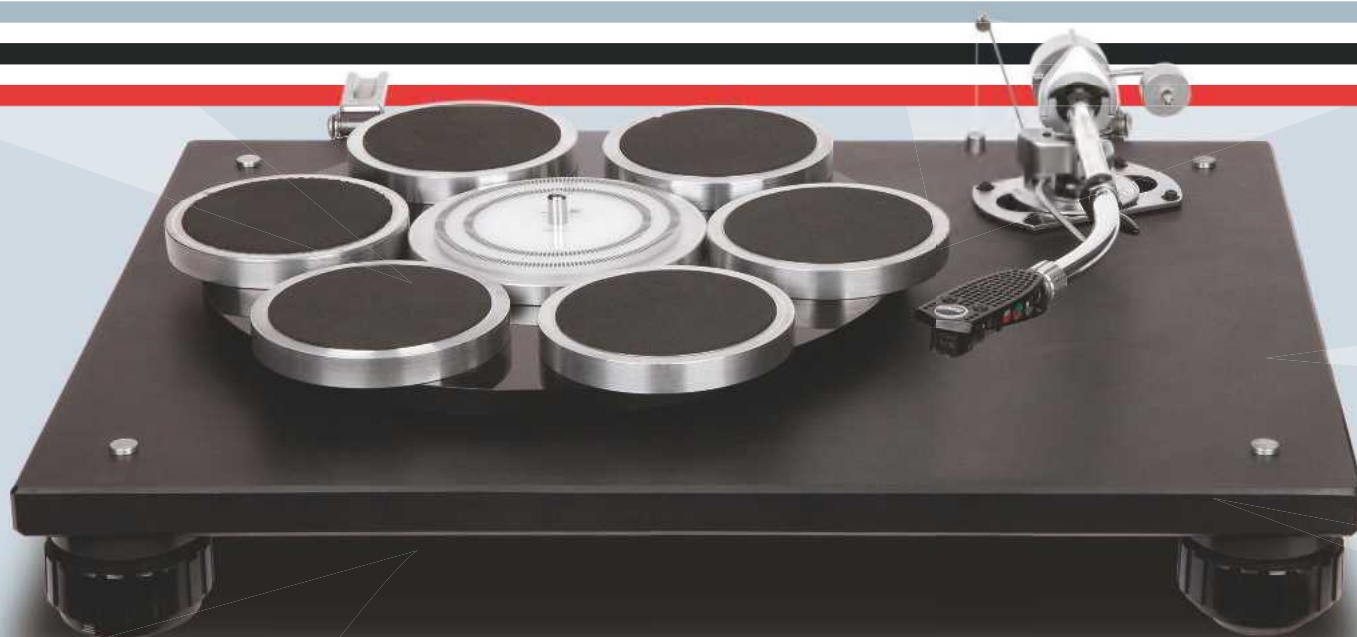
Do we really need Suede’s *Dog Man Star* outstaying its welcome over seven discs or *Dubnobasswithmyheadman* by Underworld rebadged as a five-disc marathon? And what possible justification can there be for Wet Wet Wet’s *Picture This* dribbling incontinently over four discs or Ocean Colour Scene’s *Marchin’ Already* fattened up from the original 13 songs to a will-to-live sapping 71 tracks?

Frankly, as loyal fans we’re being taken for a ride. This boxset deluxe anniversary collector’s edition barrel-scraping exploitation has gone too far. It’s time to shut the door of the vault and call a halt ●



What has the world come to...





# Figure of slate

**David Price** remembers a long-lost, slate-plinthed turntable that has now acquired cult status – the unique-looking JBE Series III

**I**n 1972 Technics announced its new direct-drive turntable that claimed to eliminate all the problems inherent in the belt-drive system that a generation of record players had hitherto used. Direct drive put the motor around the bearing and turned the platter without recourse to pulleys, wheels, cogs, gears or bits of rubber that invariably stretched and degraded with age. What was not to like?

The first high-end Technics direct-drive turntable – the SL150 – measured superbly, comfortably exceeding the specifications for rumble, wow and

flutter of most high-end decks of the day. For a while it seemed belt-drive turntables would soon be a thing of the past. Japanese companies went on to assault the turntable markets, offering decks that were far less fussy to set up and yet measured better. Then, smaller British companies began to make designs based on the new direct-drive platform, with Monitor Audio and JBE being early examples.

They faced a largely hostile hi-fi press that wasn't receptive to the benefits of the technology. It was into this climate that the JBE Series III was born – launched in 1978, it arrived in

a firestorm of controversy. Unlike most Japanese direct drives, it found itself reviewed by journalists who had convinced themselves that belt drive was better. It's no understatement to say the odds were stacked against it.

The JBE Series III had two jewels in its crown – its 24-slot, 8-pole stator, electronically controlled Matsushita direct drive motor, and its beautiful Welsh slate plinth. This large expanse of natural stone was acoustically very dead, and blessed it with good vibration resistance.

It wasn't widely reported at the time, but the deck came in a choice of two

## A brief history of JBE

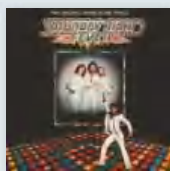
1975

**JBE begins producing its own branded turntables – the same year *Tubular Bells* debuts**



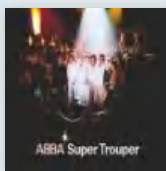
1978

**The Series III debuts as *Saturday Night Fever* becomes the best-selling album ever**



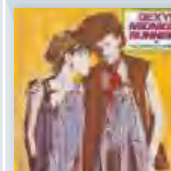
1980

**The JBE Diamond Speakers are launched with slate top and bottom while ABBA rules the album charts**



1982

**JBE Ltd ceases trading as Dexy's Midnight Runners don their dungarees and *Come On Eileen* is the best-selling single of the year**



sizes, 435 x 335mm or 495 x 365mm, with the larger version designed to accommodate the huge, high-end Dynavector DV505 tonearm. Although the JBE was famous for its slate plinth, it was still possible to purchase it in clear and black acrylic versions too. Most were supplied with a cut-out for an SME arm. Quite unusually for its day, when power supplies were often hidden inside plinths, the Series III came with a standalone perspex-finished speed control box, offering a switchable 33 and 45rpm – true high-end esoterica for 1978!

### Back to the future

Another facet of the design was the distinctive six-disc podule platter – effectively a black acrylic disc topped with six machined and balanced, foam-topped aluminium discs. Far from ideal sonically, it gives the deck a striking, futuristic look. Recognising that this wasn't ideal for hi-fi purists, JBE produced a standard version to special order – it was possible to get a solid aluminium platter with rubber mat and rim-strobe if you so wished.

### Sadly in 1982, JBE Ltd ceased trading and the Series III disappeared with it

The podule platter and lack of sprung suspension counted against the Series III strongly. However, that superb plinth and Microsorber feet did compensate for the lack of an independently sprung subchassis, and the podule platter was done far better than many. The excellent motor and separate power supply helped the sound still further and this made for a sonically pleasing performer.

The best way of describing the sound is to imagine what it would be like if a well-sorted Rega Planar 3 and a Technics SL-120 had a child together. From the Rega side you're aware that it has no proper suspension and so has to be placed carefully. This done it gives a very clean, dark and smooth sound, and its motor seems to inject a sense of 'vim' and pace. It's an interesting mix, and the result is a lively yet solid and stable performer that plays every type of music in an engaging yet revealing way.

Sadly, the JBE went on to be judged on its looks and its motor design just as much as its sound quality. The fact it was priced midway between a Rega Planar 3 and a Linn LP12, didn't help

its predicament – it was way better than the former and not quite the equal of the latter, yet found itself being unfavourably compared with the Linn regularly, which wasn't completely fair.

When the JBE was launched back in 1978, the received wisdom was that belt drive was beautiful. The 'official' verdict on rim-drive designs (such as those sold by Garrard) was generally that they were noisy and nasty (in truth, some were and some weren't), and direct drives were not deemed to be worthy of serious consideration due to the 'cogging', the (alleged) notchy way they delivered power to the platter and the supposition that they were always hunting for the right speed, and therefore never quite on it.

The Series III found itself selling through a handful of talented dealers able to set up the deck properly, and get a great sound. A number of prospective purchasers made direct A-B comparisons with the Sondek and went away with the JBE in the boot of their cars. Yet still many British reviewers were scathing and marked it down for being direct drive – seeing this as innately inferior to the belt-drive system that was used by the acknowledged super decks of the day. For many purists, direct drive was a dirty word and the JBE was tainted by its use of the system.

### Change of fortunes

Sensing this, the company decided to take part in a three-way blind listening test, which was published in a popular hi-fi magazine in September 1979. The latest JBE Series 3 went up against a Linn LP12 and a Strathclyde Transcription Developments 305M. All three had SME Series III tonearms fitted and were set up by the manufacturers. The JBE was the cheapest, and many listeners said it won. After this, the deck achieved measured success, with some dealers really getting behind the

### THE NAME GAME

When the deck arrived in 1978, its manufacturer was known as John Bryant Electronics Ltd., but had also been called Janorhurst Limited (Arnold Electronics), and was commonly and wrongly known as Janorhurst JBE when it got its first review. The company also moved premises from Sussex – where it had been known as JB Manufacturing Acoustics and Design Ltd – to Northallerton in 1976. 1981 saw JBE moving out from Janorhurst to Bedford, where the last decks were made.

Just to make life even more confusing, the company ran a parallel product line under the Environmental Sound brand name to sell a range of turntables and, frankly quite bizarre, loudspeakers. JBE had a range of decks before the Series III, from the FF2001 through the 3001 and 7001 to the 8001, which was paralleled by the Environmental Sound EST 4X, EST 5, EST 6 and EST 7. The rule for buying any of them is to take them as you find them – check the motor works smoothly and quietly and the main bearing doesn't sound noisy. The dustcover and hinges will most likely have disintegrated, but can be replaced. The Technics motors seem to soldier on forever and are as strong as the slate plinth that houses them.

product. Still, it was never going to be easy for many to push it because their pre-existing allegiances were already too strong – even if it did offer similar performance to some super decks at about three-quarters of the price.

Sadly in 1982, JBE Ltd ceased trading and the Series III turntable disappeared with it. That year was a bad time for vinyl – the advent of Compact Disc saw to that, knocking out a large part of the high-end vinyl market at a stroke and only the strongest survived. I think this was a shame, because the deck was a fine and nuanced design and would only have got better had it been allowed to grow up – thicker plinths, better platters and superior motor controllers would surely have followed. Had the turntable arrived just a few years earlier, when the British hi-fi press hadn't nailed its colours to the belt-drive mast so strongly, and Compact Disc was further down the road, the company could still be going now.

Instead, the JBE was relegated to the status of another glorious British failure – a cult deck that had five minutes of fleeting fame at the turn of the eighties, yet whose flame was cruelly snuffed out. These days, a surprisingly large number survive – possibly preserved due to their curiosity value (a slate-plinthed turntable is an unusual thing). Second-hand prices depend on condition, but mint examples can be found for £500 if you look hard enough, and at this price are well worth a look ●

The perspex speed control box added a touch of class





# Future Perfect

**Ed Selley** finds out if high-end sound can really go hand in hand with convenience

**T**here is a curiously durable notion that doing something – be it anything from cookery to sports cars – properly requires a little sacrifice. For an object to perform a role perfectly, it cannot do anything else at the same time or make any concessions to user friendliness in the pursuit of absolute performance. The industry has at times taken this idea and run with it. Minimalism, confusing controls and equipment that weighs enough to exert its own gravitational pull has been the order of the day.

The system you see here doesn't abandon all of these long-held principals – I would council against

trying to lift a Focal Sopra No2 alone for starters – but it does take much of this accepted wisdom and ignore significant chunks of it. The electronics carry out an impressive range of functions and do so with a level of convenience that some lifestyle setups can't match. The speakers are a dizzying combination of science and engineering that also happen to be remarkably room and positioning friendly.

In the case of Naim, we should not be too surprised. The company's progression from purveyor of starkly minimalist boxes that performed a single role to their current portfolio, has been comparatively brief but

## COMPONENTS

### NAIM NAC-N 272 STREAMING PREAMP £3,300

The 272 combines Naim's UPnP streaming technology with an analogue preamp and a selection of analogue and digital inputs. As well as network audio, Tidal and Spotify's streaming services are also supported.

### NAIM NAP 250 DR POWERAMP £3,500

A long-standing classic of the Naim range, the 250 DR is an 80W power amplifier and in latest 'DR' form takes technology from the flagship Statement series to achieve higher levels of performance.

### FOCAL SOPRA NO2 LOUDSPEAKER £9,600

The newest member of the Focal range bridges the gap between the Electra and flagship Utopia, but uses a range of new driver technologies to extract higher levels of performance.



**BEAUTIFUL SYSTEM**  
NAIM/FOCAL





## BEAUTIFUL SYSTEM NAIM/FOCAL



impressively radical. The adoption of streaming, digital inputs and app control has been undertaken without losing the brand ethos, but even so, the first of the boxes you see here is still a bold piece of engineering.

This is because the NAC-N 272 is a startlingly multi-role product. This one box is a preamp, streamer, DAC and Bluetooth receiver. Do you want more? What about brilliantly sorted internet radio and the ability to access Spotify and Tidal directly? Still not convinced? The 272 does all this and still allows for the traditional Naim upgrade path of external power supplies to be employed to squeeze more performance out of it. This is all squeezed into Naim's classic casework without any visible sign of it bulging out of the top or bottom.

### It's NAP time

As a result, it is the same size as the partnering NAP 250 DR power amp. Compared with the feature-laden 272, the 250 is a minimalist stalwart that traces its roots back to Naim's early years, but even here all is not as it seems. This latest iteration features the Discrete Regulator technology and NA009 power transistors from the flagship Statement pre/power amplifier in the pursuit of higher performance. The

result is still a 250 power amp, but one that is incrementally better than the one that came before.

By comparison, the Focal Sopra No2 is a rather more radical proposition. The latest range from the French speaker artisan bridges the gap between flagship Utopia and Electra ranges, but definitely has more of the Utopia about it. The cabinet, with its absence of parallel surfaces and incredibly dense front panel is made

### Naim's NAC-N 272 handles pretty much any format you're ever likely to own

in the same way as the Utopia is. The composite 'F-Sandwich' drivers and legendary Beryllium tweeter are employed too, but in the case of the Sopra additional features like a new tuned mass damper, infinite horn loading for the tweeter and a neutral inductance circuit mean that in many ways the Sopra is more advanced than its big brother.

It is – dare I say it – better looking too. The Sopra No2 could only be a Focal speaker with the angled cabinet and combination of flat and curved edges, but the softening of the lines

**Above left: The tweeter chamber of the Sopra is covered in a distinctive grille**

**Above centre: While the 272 boasts extensive connectivity, the 250 is simplicity itself**

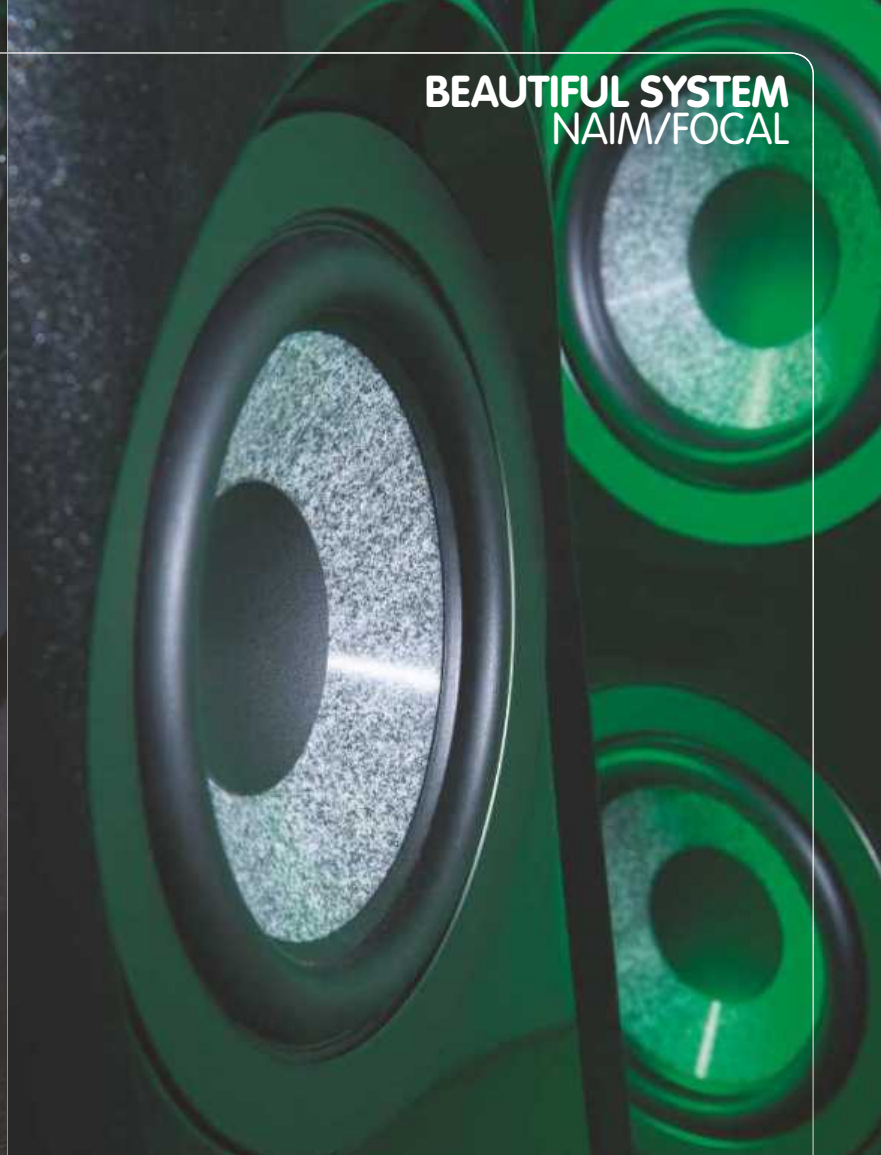
**Above right: Clean lines on both products hide clever technology and sophisticated materials**

and features like the grille around the tweeter horn chamber look absolutely fantastic. The Sopra is unquestionably a big speaker, but it hides its mass rather well under a layer of sumptuous metallic paint. By comparison, the Naim duo is utterly understated, but that glowing front logo, immensely solid casework and those perfectly weighted buttons are still profoundly satisfying. Given the features and functionality, though, they are extremely compact and should present no trouble for even the most space-constrained owner.

### Bring the noise

All very impressive, but let's get down to brass tacks; can a system that combines so much functionality into one device and that is so painless to use really deliver a compromise-free sound? The mighty *Children Of The Sun* by Dead Can Dance is as good a place as any to start listening and in seven minutes and 30 seconds it reveals a great deal about this system. First and perhaps inevitably, the sense of scale is outstanding. Even at low levels, the Sopra has a scale, impact and authority that is simply impossible to achieve from a smaller loudspeaker. Bass is a palpable thing with the Sopra. All the texture and depth you might reasonably expect is





## BEAUTIFUL SYSTEM NAIM/FOCAL

there, but it is underpinned by proper impact that is felt rather than heard.

The Naim units play an important role in this too. There is a sense of grip and authority on display that is pure Naim. Everything starts and stops with a precision and control that is the trademark of the brand and it makes for an immediacy and excitement that is addictive. Even with pieces that don't depend on this timing and impact, the system has a deftness and agility in the way it flows that gives it effortless musicality.

### Keeping it real

Beyond the bass, the rest of the frequency response is open, assured and phenomenally detailed, but it is the way that this system delivers the information that really sets it apart from the opposition. Every nuance and every last audible moment is there to be heard, but there is nothing forced or artificial about the process. You simply sit in front of a soundstage that is a living, breathing representation of the music – nothing more, nothing less. This effortless presentation allows the music to be the centre of attention. There is no recording that's too large, no arrangement so complex that this system doesn't have the measure of it sufficient to get the meaning within.



**Naim Audio**  
**TELEPHONE**  
01722 426600  
**WEBSITES**  
[naimaudio.com](http://naimaudio.com);  
[focal.com/en/](http://focal.com/en/)

If this all sounds a little... intense, you might want to consider that the real-world implications of living with this system are effectively nil. Naim's control app is slick, stable and beautifully intuitive. The NAC-N 272 handles pretty much any format you're ever likely to own and its stability on a network is effectively absolute. The time and effort Naim

### The Sopra hides its mass well under a layer of sumptuous metallic paint

has put into streamers is demonstrated by just how well sorted the 272 is.

The extra features are brilliant too. Switching from my NAS library to Tidal is again utterly painless and usually leads to an excellent couple of hours exclaiming: "wow, I haven't heard that in years!" before listening to something splendidly random. I'm not sure if the design teams at Focal or Naim voiced their products with *Hyperspeed* by the Drummatic Twins in mind, but the results are deeply and intoxicatingly wonderful. Being able to switch between music you own and streaming services so seamlessly is incredibly effective and

gives you a flexibility that is unusual in any equipment, let alone stuff that performs at this level. As you potter through the more curious corners of Tidal, you also begin to realise that although it is at times almost forensically detailed, the Naim/Focal pairing is impressively forgiving too.

### A true masterpiece

And it is this astonishing real-world competence that makes this system so special. It delivers a level of performance that allows it to trade blows with anything you could assemble for the same price. The scale and accuracy and the scintillating speed it possesses is truly extraordinary and a testament to the heady combination of engineering prowess, exotic materials and careful assembly that has gone into it. That it asks nothing more of you than two mains sockets and an internet connection to deliver this and a host of other features that make it so easy to live with is the truly brilliant part. This system is a beautiful counterpoint to the claim we must suffer for the last percentage of performance and quality. What you see here is physical proof that brilliance need not be accompanied by inconvenience and it is a masterpiece in all senses of the word ●



# International ARTISTS

**Simon Berkovitch** tunes into the far-out frequencies of a maverick Texan independent, reverberating far beyond its short sixties lifespan

**W**hat is it about Texas? From R&B pioneer 'Blind' Lemon Jefferson to homegrown rocker Buddy Holly and the good-time boogie of ZZ Top, this law-unto-itself state has birthed an unprecedented number of innovative acts and pulled musicians from all over the USA into its orbit. Maybe there's something in the water? It certainly seemed that way in the mid-sixties. During that post-British invasion boom, a plethora of killer garage then psych outfits sprung up on the local scenes of Fort Worth, Austin and Houston – the latter spawning an enterprising label which provided a sympathetic home to a handful of the best.

International Artists (IA) lasted from 1965 till 1970, spanned the first psychedelic era, and issued just under 40 singles and a dozen albums, eventually resurfacing in the late seventies as a new post-punk audience developed a taste for the more outlandish and raw sounds of the previous decade. On paper, the fledgling label never looked like a contender: IA was cooked up by a bunch of local businessmen looking for easy money, and indeed most of its early releases – all of them singles and all of them flops – were pretty uninspiring. It was only when they stumbled upon an unusual 45 by a popular local Austin band on the Contact label that their

fortunes suddenly changed. That record – *You're Gonna Miss Me*, the stunning debut disc by psych legends in-waiting The 13th Floor Elevators – was a sizeable local hit, and after re-release on IA in May 1966, began to make slow but steady inroads into the national charts. This is when Lelan Rogers – brother of country & western star Kenny – entered the picture, bringing much-needed music biz acumen and enthusiasm to proceedings. He also steered the label toward the weirder and more esoteric acts that would provide IA with its identity and help cement its cult status. As well as local oddballs Red Crayola and Lost And Found, Rogers also signed young Austin

combo The Golden Dawn and realised a dream by recording an album with Texas blues legend Lightnin' Hopkins before departing the label acrimoniously in early 1968. *You're Gonna Miss Me* aside, although often exceptional, few of IA's releases sold in great numbers. Indeed, IA would register just one more hit – Bubble Puppy's *Hot Smoke & Sassafras* – before filing for bankruptcy in 1971. Gone but far from forgotten, having observed the growing cult status of the label, Rogers reactivated IA towards the end of the decade, leading to welcome UK releases for some of its most outrageous and infectious recordings.



# The 13th Floor Elevators

Where the pyramid meets the eye: the psychedelic sounds of Texas' bravest musicians

**F**ormed in late 1965 around the nucleus of Roky Erickson (vocals/guitar), Stacy Sutherland (guitar) and Tommy Hall (electric jug/shamanic lyrics), the group immediately gelled, quickly developing a unique sound and philosophy, steeped in the use of psychedelic drugs.

Devastating live performances of wild songs such as *Roller Coaster* and *Fire Engine* were bold attempts to recreate the acid experience sonically, and the band's musical prowess and energy were a perfect match for frontman Erickson's wild voice. That voice – which fellow Texan Janis Joplin would later cite as an early influence – gained greater attention on the Erickson-penned *You're Gonna Miss Me*, which although only a minor national hit is now an acknowledged sixties classic.

The 1966 debut album that followed was a revelation. Hallucinogens were near-tangible within the visceral,

intoxicating sound, as John Ike Walton's drums played cat and mouse with Stacy Sutherland's fluid and stinging guitar lines, topped by Hall's proto-Moog electric jug and Erickson's earth-shattering larynx.

They were huge in Texas and records by the likes of The Wig, The Iguanas and label mates

## Bold attempts to capture the acid experience on vinyl

The Golden Dawn bear their influence. But as quick as the rollercoaster ride had begun, it was over. After recording second album *Easter Everywhere* in 1967, the combination of excessive LSD use, a mentally discombobulated frontman and the continued search for that elusive second hit caused the band to virtually disintegrate during the prolonged sessions for swansong *Bull Of The Woods*.

**This vibrant, retina-popping sleeve houses an even bolder record; an astonishing debut**



# Red Crayola

Mayo Thompson's free-form freak outs birthed proto-post-punk a decade ahead of the game

**H**aving produced two of the most unusual LPs of the psychedelic sixties, Red Crayola main man Mayo Thompson launched a new Red Crayola in the late seventies and flourished in the UK's post-punk scene.

He formed the original group with a couple of art school cohorts in Houston. Their music, both ragged and avant-garde, caught the ear of Lelan Rogers and Red Crayola's debut LP was issued on IA in 1967.

Billed as Red Crayola with The Familiar Ugly, *The Parable Of Arable Land* was unlike anything else on the label. Five loose songs were linked by segments of a free-form freakout: a colossal group improvisation. Mesmeric cuts such as *Hurricane Fighter-Plane* and *Pink Stainless Tail* sounded on the verge of collapse, but this only added to the excitement.

For the strange 'fake stereo' version, two identical mono

mixes were combined, occasionally at slightly different speeds, causing echo and phasing and ramping up the levels of disorientation.

After a rejected second LP (*Coconut Hotel*, belatedly issued in 1995 by Drag City), the following year's *God Bless The*

## Two mono mixes combined ramp up the disorientation

*Red Krayola And All Who Sail With It* (the spelling change was down to a lawsuit) was a mix of experimental doodles and almost traditionally structured songs. Compositions *Save The House* and *Sherlock Holmes* could have been recorded 10 years later by a group such as Swell Maps on Rough Trade – which is where, after a solo LP and brief hiatus, Thompson found himself in 1978 as an artist and producer.

**Second album *God Bless...* was out of step with 1968's musical trends, but made more sense some 10 years later**





# The Golden Dawn

An acid-rock classic that slipped through the cracks

**R**ock and roll is littered with sorry tales of the boat sailing for an artist. In the case of The Golden Dawn it was IA's shortsightedness that stalled the career of one of its most promising groups.

Singer, guitarist and leader George Kinney had befriended the Elevators' Roky Erickson while at school, leading to the formation of The Fugitives. The Golden Dawn, named after the late 19th-century occult order, formed in 1966, and with a spiky, three-guitar attack were soon a mainstay of the Austin scene.

It was Roky who persuaded IA to sign them, and a few months after his group's LP was released, The Golden Dawn recorded *Power Plant*. Although similar to the Elevators' sound, Kinney's album balanced psych powerhouses *Starvation* and *My Time* with gentler tunes such as *This Way Please*.

The label decided to sit on the LP, choosing to wait until after the second Elevators album. By the time it finally came out, a year later, it was

unjustly dismissed as a rip off of Erickson and co. Spirit broken, The Golden Dawn split shortly after, only re-emerging 35 years later.



# Lightnin' Hopkins

The legendary Texan bluesman meets the Elevators – and survives

**S**am John Hopkins was 20 years into his recording career when he cut his sole LP for IA. Already something of a Texas guitar legend, Lightnin' Hopkins, as he was better known, had fallen under the spell of 'Blind' Lemon Jefferson as a young man.

He taped a series of A sides for the Alladin label in Los Angeles before returning to Houston and the Gold Star label. Lelan Rogers had been a lifelong fan and had more than an album in mind when he brought Hopkins to his label. He left the tapes running throughout the sessions and encouraged the bluesman to reminisce about his life and career. As well as the spoken intros on some of the songs, extracts of the dialogue formed part of the album's fascinating 2014 special edition.

Despite the psychedelic artwork and the presence of

The 13th Floor Elevators' rhythm section Danny Thomas and Duke Davis, the finished album, although ragged in places, was compelling and not

the psych-blues hybrid some had feared. Shortly after its completion, Rogers quit the label, which itself collapsed not long after.



## ► SHOPPING LIST

Though most of the label's recordings are now readily available on vinyl and CD, many of the originals still prove elusive. JT Rathbone rounds them up



### The Coastliners

#### *Alright*

"Briefly available on IA This garage favourite is one of the label's rarest 45s, and fetches a three-figure sum."



### Thursday's Children

#### *Help, Murder, Police*

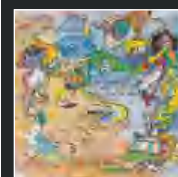
"Another cult 45 and a classic. The group's second and best for the label."



### The Chayns

#### *Night Time*

"Spirited cover of The Strangeloves' hit, originally cut on the band's Chayn-Reaction label in 1966."



### Lost & Found

#### *Everybody's Here*

"The garish sleeve hides a true gem, perhaps the last great International Artists LP. Pricy in its original issue."



### Dave Allen

#### *"The Man"*

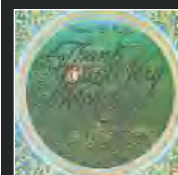
"White blues guitarist Allen's soul-searching songs are strangely moving."



### Bubble Puppy

#### *What Do You See*

"The psych-rock group's last record on IA. Green vinyl DJ copies of this non-LP single are very desirable."



### Endle St. Cloud

#### *Thank You All Very Much*

"This musically diverse offering, was the final album issued by the label in 1970."



### Various Artists

#### *Epitaph For A Legend*

"Rarities abound on this double IA retrospective, issued with two slightly different track lists."

For those seeking true excellence from their audio system



Acustica Applicata	DS Audio	German Physiks	Lyra
AudioDeskSysteme	Edge Electronics	Gutwire Cables	Norma Audio Electronics
Avalon Acoustics	ELAC	Harmonic Resolution Systems	Nottingham Analogue
Benz-Micro	Finite Elemente	in-akustik	ProAc
Clearaudio	Furutech	Lawrence Audio	SME Limited
			Transfiguration



X6 Block, What Hi-Fi Sound & Vision, Sept 2015

*"The enhanced performance is tangible, with impeccable timing and smooth integration allied to an expansive soundstage and rigorous stereo focus.*

*By allowing your electronics to give their best, this mains block is worth every penny."*

**Russ Andrews**<sup>®</sup>  
**X-BLOCKS**<sup>™</sup>

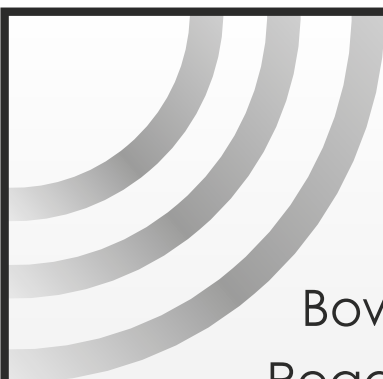
**60** Day  
Money Back  
Guarantee

**From only £169 - BUY YOURS NOW!**

Call: **01539 797300**

or visit **www.russandrews.com**

Mail Order Direct • 60 Day Home Trial • Cable Upgrade Scheme • Free Delivery (orders over £100 within UK Mainland)



Linn  
Naim • Focal  
Bowers & Wilkins • Classé • Rotel  
Rega • ProAc • Unison Research  
Well Tempered • Dynavector • Shahinian

**Bowers & Wilkins 800 D3 series now in stock**

**the audio room...**

Savile Street, Hull, HU1 3EF t: 01482 891375

[www.theaudioroom.co.uk](http://www.theaudioroom.co.uk)



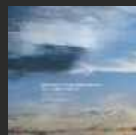




**100 Cass McCombs**  
A Folk Set Apart



**101 David Lynch**  
The Big Dream



**101 Sibelius**  
Symphonies 1-7

# Musicreviews

## Bob Dylan

### Official Bootleg Series Vol 12 : 1965-1966: The Cutting Edge



Six CDs/edited two-CD  
best of/ultra-deluxe 18-CD  
limited editions **Columbia**

**BETWEEN JANUARY 1965** and March 1966, Bob Dylan recorded perhaps the greatest triptych of rock albums ever. So intense was the creativity that produced *Bringing It All Back Home*, *Highway 61 Revisited* and *Blonde On Blonde* that it led to a burnout of such severity that he had to retreat from public view. But Dylan was moving so fast during 1965-66 that the 34 tracks that appeared on the three albums were snapshots. Think, then, of *The Cutting Edge* as the video footage from which the snapshots were grabbed – it transpires the tape was rolling all the time he was in the studio.

The core configuration is a six-CD set, featuring 100 tracks with most songs appearing in several guises. There's also a two-CD trailer of the highlights and, for the uber fans, an 18-disc unedited version which scoops up every single note he recorded during the period, plus as a bonus, three impromptu hotel room sessions.

Mixed from the original studio tracking tapes, but "eliminating unwanted sixties-era studio processing and artifice", the sound is bright and vibrant with a palpable buzz of expectation, as if Dylan and his musicians knew that something visceral and extraordinary was going down. We hear his 'hit and run' approach as songs are created before our ears with arrangements shifting dramatically from one take to the next. *Mr. Tambourine Man* is tried with a rock rhythm before Dylan cuts it off to declare: "The drums are driving me mad". *Highway 61 Revisited* is heard without its manic drive and reframed

as a slow Chicago blues shuffle. An early version of the wistful *Visions Of Johanna* recorded with The Band pounds with an unfamiliar but irresistible aggression. Then there are the songs that never made the albums and to cap it all, the entire two-day session that produced *Like A Rolling Stone*, featuring 15 different, restlessly experimental takes before Dylan is satisfied. To hear such legendary landmarks of musical history evolving as if we were there in the studio is a thrill that you really don't have to wear an anorak to fully appreciate. **NW**

**ALBUM  
OF THE  
MONTH**





## Ballaké Sissoko & Vincent Segal

Musique De Nuit

★★★★★

CD

No Format

**THE VIOLIN-SITAR DUETS** of Yehudi Menuhin and Ravi Shankar half a century ago showed how virtuoso musicians with open minds and a generosity of spirit can combine to create string magic that spans the globe and transcends cultural differences. The second album of kora and cello duets by Malian maestro Ballaké Sissoko and French virtuoso Vincent Segal deserves to be considered in precisely the same company for its freshness and almost telepathic interplay.

Recorded by night under the stars on the roof terrace of Sissoko's home in

**There's a wonderful sense of spontaneity and space in this beautiful recording**

Bamako, there's a wonderful sense of spontaneity and space in this beautiful recording that could surely never have been captured amid the claustrophobia and production techniques of a conventional studio. At times you can hear the murmur of traffic drifting up from below; but instead of interfering with the fidelity of the recording, it somehow enhances the natural ambience. Elegant, expansive, intuitive and utterly exquisite. **NW**

## MUSICREVIEWS



Joanna Newsom  
Divers

★★★★★

CD

Drag City

**NEWSOM'S QUIRKY SINGULARITY** inevitably recalls Kate Bush and Björk, and the fourth album confirms her as a unique artist with a lofty ambition and vision. What makes her so fascinating is that there seems to be a duality about everything she does. Her lyrics are dense, literate and layered with sophisticated allusion. Her bewitching voice is elegant and dextrous and yet weirdly disconcerting. Her arrangements are rich and elaborate but full of subtlety and nuance, featuring not only her trademark classical harp but clavichords, mellotrons, baroque strings, horns and much more besides. **NW**



Alan Vega,  
Alex Chilton,  
Ben Vaughn  
Cubist Blues

★★★★★

CD

Light In The Attic/Munster

**YES, YOU READ** correctly. Alan Vega of Suicide, Alex Chilton from Big Star, and singer songwriter Ben Vaughn playing together on the same record, at the same time. The unlikely collaborators got together for two, all-night improv sessions in 1994 and what could have been an awful exercise in self-indulgence turns out to be an almost-incredible, fantastical trawl through each of their styles, producing something you won't hear anywhere else. The production has that slightly flimsy nineties sheen to it, but the songs are great. Clearly, *Cubist Blues* won't be for everyone but as a curio it really deserves a listen. **PH**



## Cass McCombs

A Folk Set Apart

★★★★★

CD

Domino

**CALIFORNIAN SINGER SONGWRITER** Cass McCombs has worked with anyone who's anyone in the indie scene, and it shows. The first half of this album is lo-fi, sixties garage in a Ty Segall style, so don't expect your system to be put through its paces (nuanced music this is not), but the second half is much more interesting as McCombs takes things down a notch to explore his Americana side. From *Three Men Sitting On A Hollow Log* onwards it's all country-tinged playfulness (especially on *Catacombs Cow Cow Boogie*). There are no resonant strings or traditional instruments, but as a fun if uneven ramble through his many influences it certainly showcases his musical dexterity. **PH**



Do you agree with our reviewers?  
Decide for yourself and listen to  
some of this month's tunes at  
[www.hifichoice.co.uk](http://www.hifichoice.co.uk)

## AUDIOFILE VINYL

★★★★★

Mose Allison  
Takes To The Hills

180g vinyl

RED PICK

Epic/Pure Pleasure



**MOSE ALLISON SONGS** have been covered by The Who, The Clash, Van Morrison and Elvis Costello among many others and he clearly influenced many more,

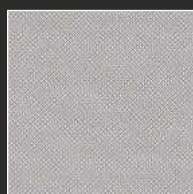
but his work gets little airtime today. This album from 1961 finds him in effortlessly inspired form, singing blues numbers in a louche jazz style and letting his piano playing tell a more sophisticated story. Listening to numbers like *Hey, Good Lookin'* and *I Ain't Got Nobody* it's hard not to hear the profound effect he had on Georgie Fame who

considered him more important than Dylan. Allison grew up in Mississippi and this must be where he learned tunes by Willie Dixon, Sonny Boy Williamson and Lightnin' Hopkins, yet he makes the songs so much his own that you'd be hard pressed to guess their origins if you didn't already know.

Having Teo Macero behind the glass and Paul Motian on drums (for three numbers) clearly helped Allison lay down a wry, snappy vibe that is as sharp as it is cool. This Pure Pleasure pressing lets you hear a surprisingly good-quality recording for its vintage, it sounds as polished as albums that came out 10 years later so clearly Macero knew what he was doing. **JK**



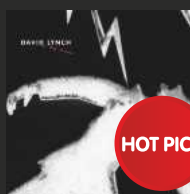
## HIGH RESOLUTION DOWNLOADS


**Ólafur Arnalds  
& Nils Frahm**  
Loon


AIFF 24-bit/96kHz

hdtracks.com

**THE THIRD COLLABORATION** between two of electronica's most innovative artists, this extended player sees the pair perform rather than engineer their music. What follows is a slightly rougher, organic listening experience, although the electronica on this record still has depth and sounds great on a good system. And it's diverse, too – you go from the pulsing *Three* to the glitchy *Wide Open*, to the mid-paced closing track *M*. Recommended. **PH**


**David Lynch**  
The Big Dream

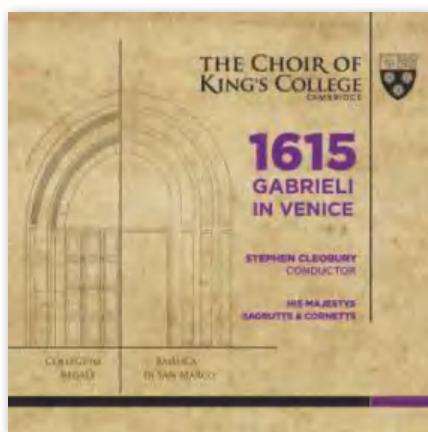
HOT PICK



WAV 24-bit/44.1kHz

naimaudio.com

**ORIGINALLY RELEASED IN 2013**, Lynch's second album is like stepping into one of his films. This HD deluxe edition sees the original tracks supplemented by six extra numbers. Lynch's original 12 tracks have the slo-mo surf twang that'll be familiar with *Twin Peaks* fans and are strange but melodic. It's an odyssey, but has real flair and is a beguiling experience, where Lynch's reedy vocals, breathy synth washes and guitar twangs have real depth. **PH**



**Gabrieli played with surround sound a good couple of hundred years before the speaker even existed**

**Gabrieli**  
**In Venice – 1615**

The Choir of King's College Cambridge



SACD &amp; Blu-ray Pure Audio

King's College

**IT WAS INCREDIBLY** far-sighted of Gabrieli to write surround-sound music back in the 17th century. His aim was to exploit the spatial characteristic of St Mark's Church in Venice, separating voices and instruments to create strong antiphonal effects. The choir is accompanied by chamber organ and small brass ensemble, and was made using Dolby Atmos to capture an impression of height and depth along with the ambience of the venue. The SACD offers two-channel CD and SACD stereo layers, plus 5.0 surround, while the Blu-ray has 5.1 True HD and Dolby Atmos, plus stereo 24/96 PCM. The music is attractive, but a bit 'specialised' in appeal for average listeners. **JH**


**Sibelius**  
Symphonies 1-7  
Berlin Philharmonic  
Orchestra,  
Sir Simon Rattle


HOT PICK

4 CDs/Blu-ray Berliner Philharmoniker Recordings

**THIS NEW SET** of the seven Sibelius symphonies is sumptuously packaged, but the box is big and does not fit on a normal CD shelf. Rattle's performances are extremely accomplished, and (thankfully) not too plush. Of course, the Berliner's playing is very refined and beautiful, but there's plenty of sinew too – the 4th is especially impressive. The live recordings sound sonorous and weighty, with excellent definition and a wide dynamic range. The set can be obtained through normal channels, or via the Berlin Philharmonic's website, at about £50-£60. So, not cheap; but you do get a lot for your money. **JH**

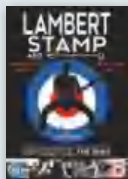
**BLU-RAY DVD** ★★★★★

**Lambert And Stamp**  
The Who

HOT PICK

DVD

Lionsgate Home Entertainment UK



East-end mod Chris Stamp met Oxford-educated Kit Lambert when they were trying to make it in the film business. They decided to find a band and film the process of managing it. They found The High Numbers and encouraged a change of name to The Who, gave them salaries and direction, and the rest is history. Lots of footage of the sixties scene in London and naturally of the band in its early years is contrasted with Townshend, Stamp, Daltrey and others recounting those memorable years. Sound quality is nothing special, but the energy is palpable. **JK**

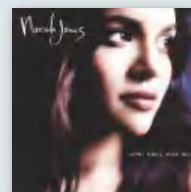
## DEMO DISCS



**Bob MacDonald**, director of product development at Parasound, reveals the music that he uses to demo the company's products


**Jack DeJohnette & Bruce Hornsby**  
Sound Travels

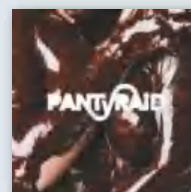
*Dirty Ground* is a track that I can feel soul and emotion in. It's a good test of male vocals and spatial placement of instruments.


**Norah Jones**  
Come Away With Me

*Come Away With Me* is a favourite test track and for good reason. Very well recorded, it demonstrates female vocals with a delicate quiet background.


**Kaki King**  
Glow

A very talented guitarist with a sound much larger than seems possible from just one person. *Streetlight In The Egg* has nice crisp highs with fast transitions.


**Pantyraid**  
The Sauce

Electronic music has come a long way with original content and quality recordings. This is a great test of low-frequency bass response, amp power and 3D imaging.

## HI-RES HIGHLIGHTS

Our pick of the best hi-res downloads released over the past month...



Jean Michel Jarre's *Electronica 1: The Time Machine* debuts on onkyomusic.com. hdtracks.co.uk has The Black Keys' *El Camino*, a wealth of Gary Numan albums

including *The Pleasure Principle* and Charles Mingus' *Mingus Ah Um*. Last but by no means least, highresaudio.com has Scott DuBois' *Winter Light*, Enya's new album *Dark Sky Island* and Seal's Trevor Horn-produced 7.



# Minitest

HI-FI UPGRADES £10-£195

## Top tweaks

**Neville Roberts** takes a look at four effective add-ons to help you maximise the performance from your hi-fi setup

**W**hat do a pair of RCA blanking caps, a turntable mat, an isolation platform and a mains conditioner power block all have in common? On the face of it not a lot, but one answer is that they all offer effective ways to upgrade the sound from your audio system and assist your components in delivering the very best sound that they can. It's quite surprising how much better a particular hi-fi component can perform when fitted

with what is often a low-cost upgrade, and there really is a huge range of different products on the market to help you tweak your system to your heart's content to optimise your system's performance.

The four upgrades included here are very simple to install and this makes it easy to swap them in and out to see how each one fares in your system. Of course, the magnitude of any improvement will very much depend on your particular setup. For example,

an isolation platform can make a vast improvement if your equipment rack is sitting on wooden floorboards and/or is in close proximity to your loudspeakers. This is particularly true if the specific component is inherently susceptible to mechanical vibrations, as could be the case with a turntable, CD player or any valve equipment.

So, without further ado, let's look at four different products priced from just £10 to £195 to see which offers the best-value sonic upgrade.

## Analogue Studio Crystal Glass Turntable Platter Mat

PRICE: £70 TELEPHONE: 01733 350878 WEBSITE: [analogueseduction.net](http://analogueseduction.net)

### DETAILS

#### PRODUCT

Analogue Studio  
Crystal Glass  
Turntable  
Platter Mat

#### ORIGIN

UK

#### TYPE

Glass turntable mat

#### FEATURES

6mm-thick platter  
mat; solid glass  
construction

#### DISTRIBUTOR

Analogue Seduction

**REGA IS A** strong supporter of glass platter turntables, and once you've experienced what it has to offer, chances are you'll concur. Being extremely hard and heavy, it is certainly going to influence the sonic signature of a deck, especially if you have been using foam, felt or cork mats previously. It is most likely to be an upgrade to an MDF platter, but can also be used on metal and acrylic platters. As it weighs in at 1kg, this glass platter will increase the rotational mass considerably and this helps to improve instantaneous speed stability. However, I do not recommend using this mat on decks with sprung suspended sub-plinths as it will increase the suspended mass, and so is likely to shift the balance of the deck from its optimum position.

This glass platter mat is 298mm in diameter and 6mm thick, and Analogue Studio says that these dimensions maximise the effect of minimising distortion and also help

to dissipate unwanted vibrations. The platter has a 0.5mm-deep recess in the label zone to ensure that it supports the record in the playing area.

### Mat's the way to do it

I fit the mat to a turntable that has an acrylic platter and I also raise the tonearm by 6mm to ensure the VTA of the cartridge is unchanged. Listening to some baroque music, I find the strings have a more definite sparkle, but without becoming edgy or harsh, and vocals somehow have a greater

presence in the room with the glass mat in place. I notice little change with the pounding and thrusting bass while listening to some techno music, but with some cool jazz, I have the impression that the musicians are giving just a little more oomph to their performances ●

### VERDICT

Add some sparkle to your vinyl replay, but it works with some music better than others



# Lindy

## 6-way AV Mains Conditioner Power Strip

PRICE: £45 TELEPHONE: 01642 754000 WEBSITE: lindy.co.uk



### DETAILS

#### PRODUCT

Lindy 6-way AV  
Mains Conditioner  
Power Strip

#### ORIGIN

China

#### TYPE

Mains extension strip

#### FEATURES

Six mains sockets;  
built-in mains  
filtering and surge  
protection; filter  
status test facility

#### DISTRIBUTOR

Lindy UK

**RUNNING OUT OF** mains sockets is a perpetual problem for audio enthusiasts. The only safe solution is to use a proper mains distribution strip and if it incorporates some mains filtering and conditioning, so much the better. This power strip from Lindy measures 437 x 31 x 67mm (LxHxD) and includes a number of useful features. It has mains conditioner circuits to aid in the reduction of mains-borne radio frequency interference. It also includes protection rated up to 6,000A to absorb mains surges together with internal thermal fusing to prevent the circuit from overheating in the event of a worse case surge/spike scenario. The circuits use gas discharge tube technology to satisfy the latest safety requirements for surge protectors, and there's a filter status test button to enable you to periodically check the status of all the circuits in the strip. The 6-way



strip is fitted with a 2m screened mains cable to prevent the lead from radiating interference.

### The difference is clear

The sleek and simple lines of the black power strip help it to fit as inconspicuously as is practical on an audio rack. I like the clear cover over the mains conditioning electronics that enables you to see inside, but that's probably just me. (It is. Ed)

Comparing the power strip against a low-cost mains distribution block,

there is a noticeable improvement in terms of the elimination of clicks and pops generated by a refrigerator that's plugged into the same ring main. There is also a discernible improvement in overall clarity, which is particularly apparent with vocals and solo instruments ●

### VERDICT

This is an excellent-value mains distribution block that achieves sonically satisfying results



# Blue Horizon

## Sanctum Isolation Platform

PRICE: £195 TELEPHONE: 01276 501392 WEBSITE: bluehorizonideas.com

### DETAILS

#### PRODUCT

Blue Horizon  
Sanctum Isolation  
Platform

#### ORIGIN

UK

#### TYPE

Equipment isolation  
platform

#### FEATURES

High-density  
fibreboard  
construction;  
shock-absorbing  
spiked feet

#### DISTRIBUTOR

Sound Foundations

### ISOLATION PLATFORMS OFFER

a great way to separate your audio equipment from all of those unwanted external vibrations. Your equipment itself also generates vibrations that need to be dissipated away from the signal chain in the audio setup, and the Sanctum Isolation Platform is designed to support all types of hi-fi component to do just that.

Available in a choice of either matt black or matt white finishes, the Sanctum is made from high-density fibreboard (HDF) for good mechanical stability and measures 450 x 40 x 400mm (WxHxD), including the shelf and isolation feet. The HDF shelf has four recesses that contain a dense compound of cork, rubber and leather to disperse mechanical resonances. It also contains a 'visco-elastic' polymer, which combines shock absorption with vibration isolation and damping characteristics over a wide



temperature range. The recesses are then finished with precision-machined spiked aluminium cones, each of which fits into a 5mm brass spike protection foot. The Sanctum is designed to support loads of up to 30kg and has a large circular hole in the centre that claims to eliminate any vibrations within the shelf itself.

### Make a difference

When in use supporting my record deck, I hear definite improvements, including a tightening up of the bass, which has more attack and punch

than without the Sanctum in situ. The music appears to flow more effortlessly and I find that silences during momentary pauses sound somehow more natural and realistic. I am also able to hear similar improvements, though not quite as great, when the platform is used to support my valve CD player ●

### VERDICT

A well-made isolation platform that offers clear sonic improvements



## Avid HiFi

### Sieveking Sound RCA End Caps

PRICE: £10 per pair TELEPHONE: 01480 869900 WEBSITE: avidhifi.co.uk

#### DETAILS

**PRODUCT**  
Sieveking Sound  
RCA End Caps

**ORIGIN**  
Germany

**TYPE**  
RCA socket blanking  
plugs

**FEATURES**  
Gold-plated pure  
copper construction;  
Teflon insulation

**DISTRIBUTOR**  
Avid HiFi

**AN AWFUL LOT** of modern gadgets produce radio frequency interference (RFI) and other noise that can easily find its way into your system. This can enter through the unused sockets on an amp or other pieces of kit, as any unused input sockets effectively act as aerials for the interference.

One solution is to short out any unused inputs, but some consider that this can exacerbate the problem in strong fields of interference by causing the connectors to behave like low-impedance aerials. These 'aerials' can pick up RFI and feed that interference to the input of your amp. Another potential issue is that shorting links cannot be fitted to unused outputs, such as the record output that is designed to feed a cassette recorder, for example.

Sieveking Sound has designed its RCA end caps to fit all unused inputs and outputs and there's even an XLR connector version available. They are

made from gold-plated pure copper and inside is a Teflon insert. These materials are claimed to provide excellent high-frequency absorption. As well as preventing RFI, they also keep dust out.

#### Doff your cap

Being a straightforward push-fit, the caps are easy to put over all the unused RCA inputs and outputs in my hi-fi setup. In use, I can detect subtle improvements to the sound, especially when fitted over my

unused outputs. I have a greater sense of realism and refinement with the end caps in place and surprisingly, the bass seems better controlled. Instruments have more space around them and, with baroque music in particular, the pauses between notes appear 'darker' or quieter ●

#### VERDICT

A cost-effective addition that gives greater depth to the silences in the music



## Mini test verdict

**IT'S ALWAYS A** challenge to compare items that are designed for different functions. This is especially true when they do the job they are designed for so very well.

Kicking off with the Crystal Glass Turntable Platter Mat, this is going to appeal to those who like a brighter presentation, and the increased mass will improve the performance of turntables that have been fitted with light platters. The extra sparkle won't suit everyone, especially those who prefer a smoother presentation.

The Blue Horizon Sanctum Isolation Platform is a very solidly built support with some nice features, such as the spiked feet that contain a visco-elastic polymer (meaning that it is able to exhibit properties of both liquids and solids). It's also good that a set of

brass spike protection feet are bundled to minimise damage to whatever is sat underneath the Sanctum from its spikes, and it works well and is a very decent upgrade, even though it costs a bit more.

The Sieveking Sound RCA End Caps are a neat little upgrade that work well. The caps are extremely easy to fit as well as easy to remove when you need to connect an extra item to an input on your amplifier, for example. The fact that they can be fitted to outputs as well as inputs is a real bonus.

When overall value for money is



The 6-way AV Mains Conditioner Power Strip from Lindy just noses in front by combining performance with helping to solve the eternal problem of connecting up multiple items of equipment. It certainly eliminates mains-borne interference and offers perceivable sonic improvement as well. Not bad for an item that costs under £50, and it's built well too.

factored into the equation, the clear winner is Lindy's 6-way AV Mains Conditioner Power Strip for its noticeable high-level audio benefits, making it a practical upgrade.



Remember that when choosing a particular upgrade to make sure that the cost of the item is in keeping with the rest of your system. What you are hoping to achieve with any hi-fi tweak is to get your setup to deliver the best possible performance within its design parameters. You are not going to make a low-cost amplifier sound like a high-end one by fitting it with a £1,000 mains cable!

In addition to the upgrades included here, don't forget the importance of cleaning as an easy way of keeping your system sounding its best. Interconnects and power cables often stay in place for many years without being touched and it is very easy for corrosion to build up on the contacts due to their lack of use. Of course, there is a wide range of cleaning products on the market perfectly geared for your needs.



# Choice Systems **at Bartletts Hi-Fi Ltd**

As featured in the June edition of the Hi-Fi Choice Dealer Systems article

## Bartletts System Price **£700.00**

Project Debut Carbon Phono USB Turntable  
Q Acoustics BT3 Bluetooth Speakers  
(excluding accessories)



## Bartletts System Price **£2890.00**

Arcam CDS27 SACD/CD/Network player  
Arcam A19 Amplifier  
PMC Twenty 21 Speakers  
(excluding accessories)



## Bartletts System Price **£5700.00**

Yamaha CDS2100 CD/DAC  
Yamaha AS2100 Amplifier  
Dali Rubicon 5 Speakers  
(excluding accessories)

Contact us to arrange demonstration on these, or any of our wide range of systems



**Bartletts Hi-Fi Ltd.** 175-177 Holloway Road, Islington, London, N7 8LX.  
Tel: +44 (0)20 7607 2148 | Email: [sales@bartlettshifi.com](mailto:sales@bartlettshifi.com) | Web: [www.bartlettshifi.com](http://www.bartlettshifi.com)  
Twitter: [@bartlettshifi](https://twitter.com/bartlettshifi) | Facebook: [facebook.com/bartlettshifi](https://facebook.com/bartlettshifi)

# The New Range of Low Distortion Cables From

## Sonata VS-1



"... so much of Black Rhodium's anti distortion know-how being combined in one cable."

"The Sonata VS-1 is fully loaded with features and should bring positive virtues to almost any system."

**HI-FI Choice, June 2015**



**Find out more and where to buy at:**  
[www.blackrhodium.co.uk/sonatavs1](http://www.blackrhodium.co.uk/sonatavs1)



**Sonata VS-1 and Samba VS-1 are fitted with the** *Graham Walker* **VS-1 Vibration Stabiliser**

"The stabilisers do a great job and offer audible benefits" **Hi-Fi Choice May 2014** [www.gnlegacy.co.uk/vs1](http://www.gnlegacy.co.uk/vs1)

## Samba VS-1



"... the Samba easily makes sense of the pile driving bass riff, thunderous drums, searing electric buzz-sawing vocals, enabling previously unappreciated acoustic guitars and congas to come through cleanly."

"These feature-packed cables are a sensibly priced upgrade that will bring positive virtues to many musical styles and systems."

"Thoroughly recommended"

**HI-FI Choice, January 2015**



**Find out more and where to buy at:**  
[www.blackrhodium.co.uk/sambavs1](http://www.blackrhodium.co.uk/sambavs1)

+44 (0)1332 342 233 • [sales@blackrhodium.co.uk](mailto:sales@blackrhodium.co.uk) • [www.blackrhodium.co.uk](http://www.blackrhodium.co.uk) • [facebook.com/blackrhodium](https://www.facebook.com/blackrhodium)

## Fine headphones from Sennheiser



ATC  
 Audio Research  
 Audio Technica  
 Bel Canto  
 Cadence  
 Clear Audio  
 Crystal Cable  
 Devialet  
 Kaleidescape  
 Musical Fidelity  
 Nagra  
 Sennheiser  
 Siltech  
 Spondor Audio  
 Stax  
 Unison Research  
 Vivid Audio  
 Wilson Benesch

Audio Lounge is home to the world's finest audio systems, conveniently situated in London's West End. Firmly rooted in the audio tradition, we also design, craft and build many of the products ourselves.

Brimming with ground-breaking technologies the Sennheiser Over-ear HD800 and In-ear IE800 headphones are both beautifully engineered with an ergonomic and attractive design.

As a Club Orpheus member and approved Sennheiser specialist you can be confident that you are getting the very best in quality. Visit us and hear one of the best audiophile headphones money can buy for yourself.



**Audio Lounge**  
 138 Wigmore Street  
 London W1U 3SG



**Call for a demo**  
 020 7487 4080  
[www.audiolounge.co.uk](http://www.audiolounge.co.uk)





# BK Electronics

## P12-300SB subwoofer

**THE NAME** BK Electronics might not carry a huge amount of kudos in hi-fi terms, but a closer look at its history suggests that it deserves a higher profile. The Essex-based engineering firm was employed by REL founder Richard Lord to build many early models and while this relationship has now ended, it has continued to produce a large range of subwoofers that it sells directly.

The P12-300SB is the latest and the first in the Platinum series. The sub is built around a 12in driver, which features a doped paper cone and a whopping magnet. This is powered by a 300W onboard amplifier which is a class A/B unit in contrast to the rather more common use of Class D by rivals.

The enclosure is sealed and the P12 can be ordered with the driver forward facing or as tested here in a downward-firing configuration. The latter model is going to work best on a solid floor and needs no space around it, while the forward-firing one is better on a suspended floor, but needs more space to breathe.

### So solid crew

This doesn't really tell the whole story, though. For the asking price, this is a very substantial piece of engineering indeed. The cabinet is made of inch-thick MDF and feels immensely solid and very heavy. The finish is excellent too. There are gloss and real wood finishes available for a premium, but the satin white of the review sample is rather lovely and does a reasonable job of disguising the considerable size of the BK. At 40cm across the footprint and 46cm tall, this is a fairly large sub at the price.

As well as good fundamentals, the P12-300SB should be of particular interest to anyone looking to use it in a 2.1 system. Alongside RCA phono connections the BK is fitted with a Neutrik-style speaker cable connector, which is highly regarded for use in 2.1 setups. There is also a continuously variable phase control and separate volume controls for the high and low inputs. BK then goes on to supply good-quality



connection cables as well. The lack of any remote control functionality and the absence of any onboard EQ functions are bearable omissions considering the price.

Connected to a Cambridge Audio Azur 851A (*HFC* 359) via the supplied Neutrik cable and partnered with a pair of Neat Iotas (*HFC* 357), it makes a very positive impression. With a 60Hz crossover set on the BK, the handover between sub and speakers is extremely well managed and the P12-300SB does a fantastic job of matching the speed and detail of the Neats. The Iota is an especially fast and vivid loudspeaker and the very fact that the BK can keep up at all is worthy of note but it not only manages to stay with the Neats, it also matches the intensity and life they bring to the performance.

With tracks with significant low end like *Leave A Trace* by Chvrches, the BK is capable of extending effortlessly below where the Neats run out of puff, but does so with a refinement that is rare in a sub at this price. There is detail and tonal colour to the performance that makes it more than a simple bass generator. With the enormous and complex low end of the *Pacific Rim* score, it is able to comfortably cope with the twin demands of the strings and brass

while also handling the driving lower bassline with absolute control. There is no sign of bloat or overhang evident, simply deep, clean and dynamic bass.

### Clip joint

The BK isn't completely viceless. Even though the phase control is very clever, it works better on axis with the speakers rather than tucked away in a convenient corner. There are limits to the output as well. Pushed very hard it can begin to clip, but you will be likely to receive an ASBO before you regularly hit this level. The gain ramp also seems to be very slightly different to the 851A, which means that the output of the BK isn't always completely matched to the Cambridge, but this could just as easily be the output of the Neat speakers not being completely linear as well.

These minor concerns don't detract from what is a very fine subwoofer at an incredibly competitive price. The BK is one of the most agile, tuneful and hard hitting subwoofers you can buy anywhere near this price and it is particularly well suited to use in a 2.1-system. In a stereo system, this is one of the very finest sub-£500 options on the market and represents exceptional value. **ES**

### DETAILS

**PRICE**  
£380  
**TELEPHONE**  
01702 527572  
**WEBSITE**  
bkelec.com

### OUR VERDICT





# GROUND-BREAKING TOWNSHEND SEISMIC PODIUM

The Seismic Podium is designed to break 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 ground borne vibration from entering the speakers.
- 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.



**TOWNSHEND**  
Engineering Hi-Fi



Watch the demonstration video showing the effect of vibration on speakers with and without Seismic Podiums.

<https://goo.gl/IL0a8v>



For more info, see [www.townshendaudio.com](http://www.townshendaudio.com)  
mail@townshendaudio.com or call +44 (0)20 8979 2155.

# IK Multimedia

## iLoud Bluetooth desktop loudspeaker

**OVER THE PAST** 12 months we've seen more and more products from pro-audio makers break into domestic audio markets in a bid to offer studio sound quality at home. IK Multimedia is one such brand that's making the crossover work, and is already an established pro-audio name with a host of iOS apps and accessories for musicians and home studio enthusiasts.

The iLoud desktop speaker system has been around for a while and is already a popular accessory with musicians at home or on the move, but it's also making waves in home audio. Anyone who's ever looked into purchasing a desktop speaker system for an office or secondary room sound will know that there's no shortage of products vying for our attention. So what makes the iLoud different?

### It might get iLoud

Fresh from its packaging the iLoud may not be the hottest-looking product to grace my desktop, but its unassuming black casework feels solid enough and the compact dimensions of 250 x 160 x 60mm (WxHxD) means it fits in neatly. The box boldly displays the words "studio-quality portable speaker" and emblazons its claim to deliver 40W stereo power output from the built-in Class D amplifier driving a pair of two-way mid/bass and tweeter speaker units. As well as a 3.5mm jack input from any line-level source, the iLoud can also be connected wirelessly to a mobile device via Bluetooth. Pairing is simply a case of pressing the button on the back of the unit and then connecting from the Bluetooth menu on your smart device. There's no mention of the Bluetooth version utilised, and it only memorises the two most recently paired devices.

The lean-back design looks easy going and has a central volume control that glows red when an audio signal is present and fades in and out when in standby. As well as its wired and wireless connectivity the iLoud also lets you connect a guitar or dynamic microphone to



the 6.35mm jack at the back, and uses IK's iRig circuit inside the box to allow real-time processing of sound through an iOS device with an app.

A built in battery pack enables the iLoud to be truly portable – although it's not exactly light, weighing in at 1.3kg – and it claims to offer up to 10 hours playback time when used at 'normal' listening levels. This falls off to 3 hours when used at higher levels. The speaker system goes into standby mode if there's no audio signal detected, which in my tests seems to be after a few minutes. The iLoud is awakened by the presence of an audio signal, but it does have a tendency to clip the beginning of a track as it does so.

The speaker has already earned respect in pro-audio circles with endorsements from music industry professionals for its sound quality and portability. And rightly so. For a speaker unit of such diminutive proportions, the sound from the iLoud is impressive indeed, and delivers remarkable clarity across the frequency range with everything I play. Even more impressive is that the high clarity level is maintained across the entire volume range, which is no doubt thanks to the built-in digital signal processing that aims to control the speaker under all conditions, and this clearly works to good effect.

Sam Smith's vocal acrobatics singing the latest James Bond track *Writing's On The Wall* conveys all the theatrics that I would expect to hear from a Bond movie theme. It doesn't muddle the layers or sound congested with the big, brassy orchestral soundtrack, and the iLoud resists the pitfalls of many desktop speaker rivals. There's very little sense of any cabinet resonance too, and it is able to manage whatever I throw at it and at whatever volume level I listen.

### Ace of bass

Bass is agile and goes surprisingly low considering the size of the unit, thanks in part to the tiny reflex port at the back. Female vocals provided by Adele and streamed via Bluetooth from a smartphone are faithfully reproduced, and the wireless performance is robust and doesn't let the side down.

The iLoud delivers a remarkably big sound from a truly small package and is a versatile performer with everything I play. Throw in its ability to connect to wired and wireless devices or get creative and hook up a guitar or microphone, and you have a refreshingly flexible portable desktop speaker that will appeal to musicians and quality audio fans in equal measure. **LD**

#### DETAILS

**PRICE**  
£265

**TELEPHONE**  
01223 234414

**WEBSITE**  
ikmultimedia.com

#### OUR VERDICT



## Analogue Studio

### Anti-static Record Cleaning Arm

**STATIC CHARGE BUILD-UP** on an LP is an occupational hazard of playing records. Even the friction of the stylus in the groove can induce static charges. Furthermore, it can attract airborne dust onto the surface of your discs. While anti-static guns are effective at removing charges before the record is played, they obviously can't help once it's in a spin.

#### Clean sweep

Enter the Cleaning Arm, which cleans your records and discharges static during playback. It's a nicely made counterbalanced arm with a carbon fibre brush that gently sits on the record. The downward force can be adjusted using a small weight and the height can also be altered so it is parallel to the surface of the record, which sets the brush at the optimum angle.



A particular feature of this device is the small earth wire that at one end plugs into the base of the unit and at the other is fastened to the earth tag of your turntable deck or phono amplifier to dissipate the static charges from the tip of the carbon fibre brush away to earth. Although the base is fitted with an adhesive pad to fix it to the record player, I find that the weight of the base alone is sufficient to hold it in place. I initially find that the brush gets stuck in the

middle of the record rather than tracking completely across the surface, until I realise that I have the pivot too far away from the platter, so the problem is easily rectified.

I find the cleaner to be very effective at removing dust and there is no evidence of static build up, even on a very dry day with the heating on in the house – ideal conditions for static! Consequently, this cleaning arm is a great addition to any vinyl deck, and comes recommended. **NR**

#### DETAILS

**PRICE**  
£15

**TELEPHONE**  
01733 350878

**WEBSITE**  
analogueseduction.net

#### OUR VERDICT



## TCI Cables

### Temple Constrictor Mains Powerlead

**BASED IN LISBURN**, Northern Ireland, True Colour Industries has been making cables since 1997. The Temple Constrictor features 16 individual cores of PTFE-insulated silver-plated copper and one 2.5mm PVC-insulated copper earth wire. The multiple PTFE-insulated conductors are braided together and sleeved in a halogen-free polyolefin insulation. They are then wrapped in a tough but flexible polyester braid constructed from flame-retardant material, making it ideal for permanent installation.

#### Twice as nice

This new cable has a thicker cross-sectional area and a larger amount of silver in its construction than the TCI Baby Constrictor, which, according to the manufacturer makes it capable of carrying twice the current. Furthermore, it features twice the RFI filtering of a TCI

Constrictor ensuring it has a lower noise floor. The cable is topped and tailed with a rhodium-plated TCI True-Plug 13A mains plug and a True-Plug rhodium-plated IEC plug with sprung contacts.

Removing the cover from the 13A mains plug reveals that both sets of eight braided wires are nicely installed. The plug is fitted with a 13A Bussmann fuse. At the other end is the TCI rhodium-plated IEC plug (which bears an uncanny resemblance to a high-quality Wattgate IEC plug) that is equally well fitted to the cable.

Swapping a standard IEC 'kettle lead' with the Temple Constrictor on



my CD player highlights a reduction in the noise floor and a subtle improvement in imaging and focus. I can also detect a subtle improvement in the accuracy of instrument placement within the soundstage. All in all, this is a very fine mains cable that can hold its own among similarly priced mains lead rivals. **NR**

#### DETAILS

**PRICE**  
£225 for 1m Powerlead  
**TELEPHONE**  
07710 196949  
**WEBSITE**  
tcicables.com

#### OUR VERDICT







**Inspire Hi-Fi**

A diverse range of award winning  
Turntables direct from us  
the manufacturer



**SUPPORTING  
BRITISH  
MANUFACTURING**

**ENTRY LEVEL TO HIGH END TURNTABLES** . DIRECT DRIVE . BELT DRIVE . IDLER DRIVE  
A RANGE OF UPGRADE OPTIONS FOR LINN, REGA, ROKSAN AND MORE.  
PLUS TONEARMS . PHONO STAGES . CARTRIDGES . FULL SYSTEMS . SYSTEM INSTALLS

[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](mailto:robert@inspirehifi.co.uk) | [www.inspirehifi.co.uk](http://www.inspirehifi.co.uk)



# HOME CINEMA

HIGH-PERFORMANCE SOUND & VISION **Choice**

Helping you  
make the  
most of your  
home cinema  
**OUT NOW!**

**FIRST FOR...**  
**4K, Blu-ray, projectors,**  
**AV amplifiers, subwoofers,**  
**speakers, Dolby Atmos & more**



# Russ Andrews

## SilverStreak interconnect



**THERE IS A** plethora of interconnect cables on the market at prices to suit most pockets. They range from no-nonsense copper cables to audiophile-quality leads that employ exotic metals and clever construction. The SilverStreak interconnects from Russ Andrews, however, offer something a little different – audiophile-quality leads that come with the option of a built-in attenuator.

Russ Andrews is aware that many items of audio equipment, especially CD players, produce an audio signal that can overload the inputs of some amplifiers. He notes that the volume control should ideally be in its mid position for normal listening, but some players' output level is so high that the volume is only just cracked open for regular listening. This can distort the sound and restrict the amount of control you have over volume. Another problem is that you can find yourself deafened when starting to play a new track if you switch between components from different manufacturers. Of course, some have a means to adjust their output level and can easily be tweaked. Many, however, do not, and the best solution is to fit a good-quality attenuator on the output of the equipment with the higher output. An even better solution is to have a built-in attenuator in the interconnect, which brings us back to the one that's available with the SilverStreak. Attenuations of 11dB, 14dB, 16dB, 19dB and 22dB are available and can be a benefit for those wishing to balance several pieces of equipment.

### Silver screen

The interconnect uses Kimber cable that has separately insulated hyper-pure silver and copper VariStrand conductors in a fluorocarbon dielectric insulation. The signal wire is silver and two copper wires form the earth return. This configuration is designed to offer the benefits of both types of conductors to give a great performance that is also value for money. The cables are terminated in



Kimber Ultraplate phono plugs, but for an additional cost can be fitted with XLR connectors.

The SilverStreak reviewed here is the un-attenuated version. After running the cable in, I fit it between my CD player and preamp.

Playing a CD of Vivaldi's *Sonatas For Flute Op.10*, it is evident that the SilverStreak produces masses of detail with no strain or unpleasant edge to the sound. The music is reproduced

**The bass is tight and well controlled and the hi-hats are crisp and ringing**

with excellent accuracy and clarity. The flute and the individual instruments comprising the *Basso Continuo* are separately identifiable even though they are playing together in unison. Overall, the balance is accurately focused, natural sounding and realistic.

Moving on to the final movement of Beethoven's *9th Symphony Ode To Joy* played by the Berlin Philharmonic under the baton of Herbert von Karajan takes a lot of beating. During climaxes the orchestra and choir can end up sounding like a muddy blur. This is certainly not the case with the

SilverStreak, which allows the full force of the performance to sing through with tremendous power. The result is an uncluttered sound with a wide and spacious three-dimensional soundstage.

### All that jazz

Next up something more jazzy with Michael Kaeshammer's rendition of *Caravan* from *Tell You How I Feel*. Reproduction of the piano is very clear and believable in my listening room. The balance between the silver and copper conductors appears to be pretty spot on with a smooth and rich sound throughout. The bass is tight and well controlled and the hi-hats are crisp and ringing without being edgy.

Last up is Nigel Kennedy's *Recital*. His interpretation of *Take Five* is a real test for any system. It starts slow with an almost eerie performance and ramps up to a real cacophony of sound. Again, the SilverStreak takes it all in its stride and there is no sense that the last drop of energy is being squeezed out of the system. Instead, the music sounds effortless; Kennedy's virtuosity shines through and his violin sings out with no edginess or brashness.

Overall, the SilverStreak is a great performer and the option of built-in attenuators is a real plus. **NR**

### DETAILS

**PRICE**  
£221 for 0.5m cable  
plus £30 with a  
built-in attenuator

**TELEPHONE**  
01539 797300

**WEBSITE**  
russandrews.com

### OUR VERDICT





# 2NDHANDHIFI.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 selection**

## Analogue

Aesthetix Rhea MM/MC multi input phono stage dem used  
Albany MCA11, battery MC step up, excellent used  
Amazon Referenz Turntable, excellent boxed used  
Ariston RD80 c/w Ariston tonearm used  
AudioNote ANS2L Step up used  
Audio Technica AT120LP USB used  
Audiolico phono stage and line preamp dem  
Avid Acutus Ref power supply dem  
Avid Volvere SP turntable, sealed box new  
Bakoon EQA11r phono stage, near mint boxed used  
Benz Micro LP, boxed plenty of life left used  
Clearaudio Unity Tonearm excellent boxed used  
Clearaudio Basic Symmetry Phono Stage REDUCED used  
Conrad Johnson Premier Six phono preamplifier used  
Fidelity Research FR64S boxed, excellent used  
Garrard 401, Jelco 750 12" arm, new plinth and lid used  
Graham Phantom Supreme, SME cut dem  
Graham Phantom Supreme 12", SME cut dem  
Graham Slee Elevator/PSU1, excellent used  
Graham Slee Fanfare Gramamp 3 used  
Inspire 'Full on' Technics 1210/Plinth/PSU/SME M2 amused  
Leema Elements Phono Stage, excellent used  
Linn Sondek, Heed PSU, vgc boxed used  
Linn Sondek LP12, Khan, Rubicon, Iltok, excellent used  
Linn Sondek LP12, Khan, Rubicon, Iltok, Armagedon used  
Linn Sondek, LVX, Valhalla, boxed vgc used  
Linn Basic Plus, vgc+ used  
Logic DM101 c/w Alphason HR100s and MC15 super used  
Lyra Skala, excellent boxed used  
Michell Orbe Se, used  
Michell Hydraulic Ref c/w Fluid arm, superb dem  
Musical Fidelity XLP/SV8 phono stage dem  
Musical Fidelity XLP-S phono stage, due in dem  
NAIM Aro, excellent boxed used  
NAIM Stageline N vgc used  
Nitty Gritty RCM, vgc used  
Oracle Delphi, mk1 c/w Zeta tonearm used  
Ortofon MCA76 Step up used  
Ortofon SPU Royal GM Mk2, boxed little used used  
Ortofon Cadenza Blue, plenty of life used  
Project Phonobox SE phono stage, excellent value dem  
Project RPM 10 turntable with arm and platform dem  
Project Tube Box DS, excellent boxed, used  
Project Xpression mk2, arm and cart used  
Project RPM 4 Turntable/Arm with cover, great! used  
Project Perspective, Speedbox SE, Shure V15Mx used  
Project Phonobox S, excellent used  
Roksan TMS 2 with Reference PSU, boxed as new used  
SME 3009 improved, vgc+ used  
SME V, excellent boxed no cable used  
SME V, excellent, boxed, due in used  
SME V12, nr mint boxed dem  
SME M2/9r, nr mint boxed used  
Technics 1210/Inspire Plinth & PSU/SME M2/M Bronze used  
Technics 1210/Funk platter/NEW bearing/Hynes PSU used  
Thorens TD170 Auto excellent boxed dem  
Thorens TD160 replinthead c/w RB250, Denon cart used  
Thorens TD160 original, boxed used  
Thorens TD209 turntable package dem  
Thorens TD2030 Blue turntable new  
Tom Evans Groove, 0.85mv/100 ohm, excellent used  
Townshend Elite Rock c/w Excalibur/Merlin/Cover used  
VDH Colibri M/C cartridge dem  
VDH Condor M/C cartridge new  
VPI Scout, JMW arm excellent used  
Wilson Benesch Act 1 Tonearm, nr mint superb used  
Zeta Tonearm, excellent used

## Radio/Recorders

Aiwa F640 3 Head Cassette deck, just serviced used  
Arcam Alpha 10DAB tuner, excellent used  
Arcam T61, vgc+ used  
Audiolab 8000T, vgc+ used  
Cyrus FM7, excellent boxed used  
Denon TU1800DAB, vgc remote used  
Meridian 504, excellent used  
Musical Fidelity ASDAB, sealed box used  
NAIM NAT101 & SNAPS, excellent £500 NAIM service used  
Nakamichi CD2, excellent used  
Nakamichi CR7e, B&W service 2013 excellent used  
Nakamichi BX2, excellent used  
Nakamichi 580, near mint boxed used  
Nakamichi ST7e, rare tuner used  
Pure 701ES DAB Tuner used  
Revox PR99, crated used  
Revox H2, just serviced, great condition used  
Sony TC-K611S, 3 head, vgc used  
Tandberg TCD440a, superb! used  
TEAC V8000S, superb used  
TEAC X1000M, serviced, superb used  
Technics RS1500 in flightcase near mint used  
Yamaha KX1200 excellent used

## Amplifiers

Albany AP11 and M608 monos, excellent! used  
Anthem Integrated 2 Valve Integrated used  
Arcam Alpha 8P, vgc+ boxed used  
Arcam Alpha 7, vgc+ boxed used  
Art Audio Jota 520b, excellent used  
Audia Flight Pre and Flight 50 Class A power dem  
Audio Analogue Bellini VB and Donizetti Cento, superb used  
Audio Analogue Maestro Settanta v2 used  
Audio Project ap60 integrated dem  
Audio Research VS115, excellent boxed used  
Audio Research DS200, excellent, remote used  
Audio Research Ref 610 Monoblocks, vgc boxed used  
Audio Research D240 Power, excellent boxed used  
Audio Research SP9 Preamplifier, VGC+, MM phono used  
Audio Research LS26 Preamplifier, excellent boxed used  
Audiolab 8000P vgc boxed in silver used  
Audiolab 8000Ms, UK versions, vgc used  
Audiolab 8000S vgc boxed in silver used  
Audion Sterling Plus KT88 Integrated boxed dem  
Auralic Taurus Preamplifier, excellent boxed used  
AVI LAB Series Pre/Power v2, excellent REDUCED used  
Bead P101, excellent boxed, just serviced used  
Bryston B100sst excellent boxed used  
Boulder 1010/1060 Pre/Power due in used  
Cayin MT 34L Valve Integrated, excellent boxed used  
Chapter Audio Couplet Power Amplifier dem  
Classe CAP2100 Integrated with phono, ex boxed used  
Consonance Cyber 211 monos c/w Pavane valves dem  
Creek OBH21, excellent used  
Cyrus Ili, excellent boxed remote used  
Cyrus Power, vgc+ used  
DartZeel NHB108B, excellent £20+ new dem  
Denon POA 6600A, Class A monoblocks, vgc+ used  
Esoteric CO3X, ex demo boxed, superb used  
Esoteric A03, ex demo boxed used  
Esoteric CO3/A03, ex/power ex demo boxed used  
Graef G505B Integrated used  
Jolida Envoy 211 Monoblocks, £7k new, superb, vgcused used  
Krell KAV400xi, with remote used  
Lavardin C62/AP150 pre/power and interconnects used  
Leema Hydra 2, vgc+ boxed used  
Leema Tucana 2, excellent dem  
LFD LS1 lineage, reasonable shape used  
Linn Majik integrated, excellent bargain used  
Marantz SM7, great retro power used  
McIntosh C22 & MC275 Commemoratives, boxed used  
Meridian 502 preamplifier with MSR, excellent used  
Meridian 501 preamplifier, excellent used  
Meridian 501V preamp, excellent used  
Micromega IA100, great integrated, boxed dem  
Moon W7RS, excellent used  
Musical Fidelity M6i, near mint boxed dem  
Musical Fidelity A1000 Two box monster Integrated! used  
Musical Fidelity Pre 8 and 2 x MA65 chrome frontedused used  
NAD C320, excellent used  
NAD C326bee, excellent used  
NAIM NAP160, vgc+ used  
NAIM NAP250, very late olive excellent used  
NAIM NAP300/PS, Dec 2013 mint boxed used  
NAIM NAP42.5/NAP110, vgc used  
NAIM NAP250, excellent late boxed olive used  
NAIM NAP150, excellent boxed used  
NAIM NAP150x, excellent boxed dem  
NAIM NAP180, excellent boxed new  
NAIM NAIT 5, excellent remote boxed used  
NAIM NAC152/NAP155XS, excellent boxed used  
NAIM NAC282/Napsc, excellent boxed used  
NAIM NAP250, chrome bumper used  
NAIM NAP200, excellent boxed used  
Neutonia Salis Integrated, classy Restek built used  
Onix OA32 Integrated, excellent used  
Onix OA25 Integrated, excellent used  
Onkyo P3000/M5000 excellent boxed used  
Pathos Logos Integrated dem  
Placette Audio Passive Linestage dem  
Quad 99 Power, excellent used  
Quad 405, from used  
Quad 33/303, vgc, serviced used  
Quicksilver 8417 Monos with spare valves used  
Rega Brio 3 excellent in silver used  
Renaissance RA02 Monos, vgc and excellent value used  
Revox B150, excellent used  
Roksan Kandy K2 Power amp, ex demo used  
Sugden A21a line Integrated dem  
Sugden Masterclass Pre/Monos in Graphite REDUCED used  
Sugden Masterclass Integrated in Titanium dem  
TagMcLaren 60iRV, excellent boxed used  
Tag Electronics Hurricane/Tornado Pre/Power used  
Tannoy TA1400, excellent boxed REDUCED used  
TEAC Distinction A1000 Integrated, ex demo used  
Trio LO7C preamplifier good condition used  
Vincent SAV200 6 Channel monster used  
Yamaha A-S3000, nr mint boxed dem

## Digital

Accuphase DP55V, excellent condition boxed used  
Arcam Alpha 8se, excellent boxed used  
Arcam Alpha 9, vgc remote, recent laser used  
Arcam CD17, excellent used  
Arcam CD192, excellent boxed used  
Atoll 100SE DAC, excellent boxed new  
Audio Analogue Crescendo, end of line new  
Audio Research CD5, excellent boxed used  
Ayre Evolution DVD dem  
Cambridge Audio Minx XI, excellent used  
Cambridge Audio 840C excellent used  
Cayin CD50T, excellent boxed used  
Chapter Audio Sonnet CD & Nevo remote dem  
Chord 'One' CD player used  
Chord DAC 64, excellent boxed used  
Chord DAC 64 mk2, excellent boxed used  
Classe CDP202, excellent boxed used  
Consonance CD2.2, new sealed new  
Creek Destiny CD player, boxed used  
Cyrus Discmaster/Dacmaster, vgc+ used  
Cyrus CDT, boxed remote used  
Cyrus CD7Q chip, vgc+ used  
Cyrus DAD3 excellent boxed, remote used  
Cyrus Discmaster/Dacmaster vgc+, remote used  
Denon DNP720AE, near mint boxed used  
EAR Acute 3, mint boxed dem  
Esoteric X03Se, near mint boxed dem  
Leema Elements CD player sealed box new  
Linn Majik CD, just factory serviced, excellent! used  
Linn Karik 3, excellent boxed remote used  
Marantz CD17, remote, excellent boxed used  
Marantz CD63K1, remote, boxed excellent used  
Meridian 507, 24 bit, excellent boxed with remote used  
Meridian 506/20 with MSR used  
Meridian G08, msr boxed, used  
Meridian 602/606 combo with remote used  
Meridian 200/203 excellent used  
Micromega CD30, excellent boxed used  
Micromega MyDac, excellent boxed used  
Micromega Leader, remote used  
Moon Eclipse CD/DAC c/w PSU, near mint boxed used  
Musical Fidelity A1 CD Pro CD player, fab, boxed used  
Musical Fidelity KW SACD, new laser, upgraded ps used  
Musical Fidelity M1 DAC, excellent boxed used  
Musical Fidelity M1 CDTB dem  
Musical Fidelity A308 CD, dem  
Musical Fidelity M1Cic used  
Myriad Z20DAC, excellent boxed used  
NAIM NDSXS, Radiomodel, 2014, excellent boxed used  
NAIM CD5X, excellent boxed used  
NAIM CD5, recent new laser, upgradeable used  
NAIM CDX2, excellent boxed used  
Onkyo C7000r, excellent boxed used  
Oppo BDP95EU, as new boxed used  
Peachtree DACiC, excellent dem  
Prima Luna Prologue 8, ex demo boxed dem  
Project Stream Box, excellent boxed used  
Quad 99CDP, excellent REDUCED used  
Quad 66CD, excellent remote used  
Rega Apollo R, excellent used  
Rega Apollo 35th Anniversary, excellent used  
Revox B126, excellent remote used  
Roksan Kandy K2 CD, ex demo boxed dem  
Rotel RCD02, Burr Brown HCD chipset, vgc boxed used  
Sansui WLD201 Streamer, mint boxed used  
Shanling CDT80 excellent boxed used  
Sugden Masterclass CD original version used  
TEAC Distinction CD3000, excellent boxed used  
Tube Technology Fulcrum CD transport dem  
Tube Technology Fulcrum DAC (inc DAC64 chip) dem  
Yamaha CD-S3000 near mint dem

## Loudspeakers

Acoustic Energy AE 1 Classic excellent boxed used  
Apogee Duetta Signature (Reality rebuilt) Superb used  
Art Audio Stiletto in Maple dem  
Aspara Acoustics HL6 in Oak new  
ATC SCM40, vgc boxed in cherry used  
Audiocvector S13, near mintboxed dem  
Aurum Cantus Music Goddess in Gloss black dem  
Avalon Ascendant Mk2, mint crated, £10k new used  
B&W CDM1se in cherry, excellent used  
Dail Zensor 3, excellent boxed used  
Dail Zensor 5, excellent boxed used  
Dynaudio Audience 42, vgc used  
Dynaudio Audience 52, vgc used  
Dynaudio Contour 1.1, excellent in maple used  
Edwards Audio Apprentice, excellent boxed used  
Ferguson Hill FH007&8 desktop audio set boxed used  
Focal Electra 1008, mint boxed dem  
Focal Electra 1028, mint boxed dem  
Gallo Nucleus Reference 2, rare, superb & boxed used  
Grundig Auditorium, in great condition used  
Heco Celan 500 in Silver dem  
Heco Statement in gloss black, £3k new dem  
Kef LS50, excellent boxed used  
Kef Reference Three-Two, vgc+ used  
Kef X300a, due in used  
Kudos X2, excellent boxed used  
Kudos C10, boxed vgc and cheap used  
Leema Xandia Mk1 in black new  
Le ConTour Mobile 160, excellent boxed used  
Magneplanar MG1.7 mint boxed REDUCED dem  
Martin Logan Quests, superb sound, REDUCED used  
Martin Logan Prodigy, excellent used  
Martin Logan Summit X, ex demo dem  
Martin Logan Vantage used  
Mission 782se nr mint boxed used  
Mission 752, rosewood excellent used  
Monitor Audio Bx2, brand new new  
Monitor Audio GX300, ebony near mint boxed new  
Monitor Audio GSXW Subwoofer mint boxed new  
Monitor Audio Bx5, nr mint boxed dem  
Monitor Audio Platinum PL300 near mint crated dem  
Monitor Audio Platinum PL200 mint crated dem  
Monitor Audio Platinum PL100 mint crated new  
Monitor Audio Platinum PLW15 mint crated new  
Monopulse Model S new  
Monopulse Model A speakers new  
Musical Fidelity MC6 Floorstanders, boxed vgc+ used  
NAIM Ovator S400, excellent dem  
NAIM SBL, vgc+ used  
NEAT Iola, boxed in black used  
Nola Micro Grand Reference inc stands, £15k new dem  
PMC PB11, boxed, best walnut finish used  
Proac D82, excellent boxed dem  
Proac Studio 115, excellent boxed dem  
Quad ESL57s, due in used  
Quad 25L Classic ex dealer demo boxed used  
Quad 11L2, excellent boxed used  
Red Rose Rosebud £2.5k new with (used) stands dem  
REL T-7 Subwoofer, sealed box used  
Revolver Music 1, excellent boxed used  
Revolver Cynis Gold in Black, £14k new dem  
Rogers LS1, vgc boxed used  
Ruark Etude, excellently in black used  
Roksan Kandy K2 CD, ex demo boxed dem  
Sonus Faber Elipsa, superb boxed used  
Sonus Faber Venere 2.5, excellent boxed used  
Sunfire True Sub Subwoofer dem  
Spendor S3/5, excellent boxed in burr walnut used  
Tannoy Prestige Autograph Mini, ex boxed used  
Thiel CS7.2, fair condition, sonic bargain! used  
Totem Mari 2, boxed near mint REDUCED used  
Totem Mari Signature, boxed near mint REDUCED used  
Totem Mite in black dem  
Totem Staff, near mint boxed new  
Totem Mari 2, excellent boxed used  
Townshend Maximum Super tweeters, excellent boxed used  
Usher Mini Dancer 1, excellent boxed REDUCED dem  
Usher S520, excellent boxed dem  
Vandersteen Quattro, accessories, transformers etc used  
Veritas H3 (Lowther drivers) in gloss black, 100db dem  
Wilson Benesch Actor floorstanders used  
XTC 99.26 mk2, vgc+ in gloss black used

## Accessories/Cables

Audeze LCD2 excellent dem  
Audeze LCDXC excellent dem  
Audiodesk Systeme CD Sound impover used  
Audiodesk Systeme Disc Cleaner used  
Chord Signature Tuned Array RCA Coax used  
Chord Epic Speaker cables, various lengths used  
Cyrus PSXR, excellent from used  
Elemental Audio speaker stands dem  
MIT Cables - various used  
Musical Fidelity M1 HPAB dem  
NAIM Naxo 2.4 dem  
NAIM HiCap DR excellent boxed used  
NAIM HiCap, various Olive/Chrome used  
Nordost Blue Heaven 0.6m boxed dem  
ProAudio Bono Reference Platform used  
Quadrasonic racks various used  
Stax, closed back 'phones & energiser, rare due in used

## Special system deals

Consonance Ping CD/AMP dem  
Linn Klassik Movie 05, excellent boxed used  
NAIM Uniquette 24/192, excellent used  
NAIM Uniti 2, excellent ex demo used  
Orelle EVO CD and Amp was £2700 used  
Yamaha CXA5000/MXA5000 as new boxed dem

**Tel: 01642 267012 or 0845 6019390 Email: choice@2ndhandhifi.co.uk**

# Radius

## NePlayer iOS hi-res playback app

**ALTHOUGH YOU CAN** play 24/192 ALAC and DSD WAV files in iTunes, Apple refuses to embrace hi-res audio on its portable devices. Happily, there is a workaround in the shape of the NePlayer app.

You need to copy your files on to the app via File Sharing (within iTunes) or using AirDrop. Hi-res files eat up a phone's memory, so it's good that NePlayer can stream wirelessly from a DLNA-connected source at up to 24/192. The app has most of the bases covered with playback of ALAC, FLAC and WAV up to 32-bit/384kHz, plus MP3, AAC, HE-AAC. The icing on the cake is DSD up to 11.2MHz, while 5.6MHz and 2.8MHz DSD are replayed on DoP or PCM (your choice), and 11.2MHz DSD is converted to PCM at a 352.8kHz sampling rate.

The app is nicely designed and it's all very logical and pleasing on the eye. Selecting tunes by file type is a handy option. A visualiser confirms the type and resolution of the source and output. The latter is critical because the iPhone's built-in DAC maxes out at 16/44.1 and listening to mega-hi-res files through the iPhone's headphone jack is still a massive improvement on not being able to play them at all.

### Here's the catch

If you want to listen to your tunes at their native resolution you need an external DAC. But you can forget about fudging it with a powered USB hub and portable DAC as the app displays a message saying it will only work with a Radius DAC and amp, which you can't buy in the UK.



I do enjoy listening to DSD, FLAC and ALAC files, but the battery runs down faster than normal. Using Oppo's PM-2 (HFC 402) cans I am delighted with the detail and pure airiness of Beethoven's *Symphony No.6* (DSD 2.8MHz), which is so much more emotional than the AAC. Likewise, the vocals in Fleetwood Mac's *Seven Wonders* are squeaky clean, while the drums, guitars and keyboards shape beautifully. **AJ**

### DETAILS

**PRICE**  
£11

**WEBSITE**  
neplayer.com

### OUR VERDICT



# Chord Company

## Clearway Speaker Cable



### AN ASTRONAUT'S UMBILICAL

cord is the first thing that comes to mind when I unpack the Clearway loudspeaker cable. Resplendent in a silver foil covering that is clearly visible beneath a clear PVC jacket, this cable would not look out of place in a sci-fi movie. Designed to be a high-performance, low-cost option, the Clearway replaces Chord's Carnival SilverScreen speaker cable.

The conductors are a pair of 14AWG bare stranded copper with FEP insulation in a twisted pair configuration. FEP is a derivative of PTFE with very similar characteristics, but Chord considers it to be superior in terms of its neutral tonal character combined with good detail and dynamics. The two conductors are protected with a layer of soft and flexible PVC to correctly space the

shielding in relation to the conductors and minimise mechanically induced noise. On top of this, two contra-wound high-density foil shields are applied to block high-frequency interference. Finally, a clear protective PVC jacket is applied to further reduce noise.

### One direction

The review sample is fitted with banana plugs and the cable directionality is indicated by arrows on the heatshrink insulation.

This is not the most flexible of cables and despite the chameleon-like

aspirations of the reflective finish, it is certainly going to stand out. Audibly, however, it sounds great. With Pink Floyd's *Anisina* from *The Endless River* album, the Clearway does a great job of conveying all of the atmosphere that the recording generates.

It's equally comfortable with orchestras – a great recording of Bach's *Brandenburg Concerto No.3* is clear, well-paced and exciting. Similarly, vocals are decent and imaging is excellent. In short, this is a good value and great-sounding cable. **NR**

### DETAILS

**PRICE**  
£156 for a 3m pair terminated with banana plugs  
**TELEPHONE**  
01980 625700  
**WEBSITE**  
chord.co.uk

### OUR VERDICT





# Hi-FiChoice SUBSCRIPTION ORDER FORM

## DIRECT DEBIT SUBSCRIPTIONS UK ONLY

Yes, I would like to subscribe to **Hi-Fi Choice**

☐ **Print + Digital:** £11.87 every 3 months  
(**SAVE 33%** on shop price + **SAVE 75%** on Digital Download + **FREE GIFT**)

☐ **Print subscription:** £9.79 every 3 months (**SAVE 33%** on shop price + **FREE GIFT**)

## YOUR DETAILS MUST BE COMPLETED

Mr/Mrs/Miss/Ms..... Initial..... Surname.....

Address .....

Postcode ..... Country .....

Tel ..... Mobile.....

Email ..... D.O.B.....

## I WOULD LIKE TO SEND A GIFT TO:

Mr/Mrs/Miss/Ms..... Initial..... Surname.....

Address .....

Postcode ..... Country .....

## INSTRUCTIONS TO YOUR BANK/BUILDING SOCIETY

Originator's reference 422562



Name of bank.....

Address of bank.....

Postcode .....

Account holder.....

Signature..... Date .....

Sort code ..... Account number .....

**Instructions to your bank or building society:** Please pay MyTimeMedia Ltd. Direct Debits from the account detailed in this instruction subject to the safeguards assured by the Direct Debit Guarantee. I understand that this instruction may remain with MyTimeMedia Ltd and if so, details will be passed electronically to my bank/building society.

Reference Number (official use only) .....

**Please note that banks and building societies may not accept Direct Debit instructions from some types of account.**

## CARD PAYMENTS & OVERSEAS

Yes, I would like to subscribe to **Hi-Fi Choice**, for one year (13 issues) with a one-off payment

### UK ONLY:

☐ **Print + Digital:** £49.79 (SAVE 29% on shop price + SAVE 75% on Digital Download + FREE GIFT)

☐ **Print:** £41.49 (SAVE 29% on shop price + FREE GIFT)

### EUROPE & ROW:

☐ **EU Print + Digital:** £69.56

☐ **EU Print:** £61.26

☐ **ROW Print + Digital:** £73.30

☐ **ROW Print:** £65.00

## PAYMENT DETAILS

☐ Postal Order/Cheque ☐ Visa/MasterCard ☐ Maestro

Please make cheques payable to MyTimeMedia Ltd and write code X327 on the back

Cardholder's name.....

Card no: ..... (Maestro)

Valid from..... Expiry date..... Maestro issue no.....

Signature..... Date.....

Offer ends 22nd December 2015. 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: ☐ Email ☐ Post ☐ Phone. If you DO NOT wish to be contacted by carefully chosen 3rd parties, please tick here: ☐ Post ☐ Phone. If you wish to be contacted by email by carefully chosen 3rd parties, please tick here: ☐ Email

**POST THIS FORM TO: HI-FI CHOICE SUBSCRIPTIONS, MY TIME MEDIA LTD, 3 QUEENSBIDGE, THE LAKES, NORTHAMPTON, NN4 7BF.**

**HURRY  
OFFER  
CLOSES**

**22ND DECEMBER  
2015**



## PRINT + DIGITAL SUBSCRIPTION

**Free** Rock Jaw headphones worth £44.95

13 Issues **delivered to your door**

Save up to **33% off 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

**Free** Rock Jaw headphones worth £44.95

13 Issues **delivered to your door**

Save up to **33% off the shop price**

**SUBSCRIBE TODAY**



**DIGITAL  
SUBSCRIPTIONS  
AVAILABLE ONLINE!**

Receive a free pair of **Rock  
Jaw Audio Alfa Genus V2\***  
headphones when you subscribe today

**PAY JUST  
£2.27\* PER  
ISSUE!**

**"Perfectly suited to music  
on the move, no matter  
what type of music  
you choose to listen to"**

**WORTH OVER £44.95!\***



If you're looking for a pair of versatile in-ear headphones for listening on the move, look no further. Introducing Rock Jaw's successor to its Alfa Genus headphones, the Alfa Genus V2. Beautiful, lightweight and durable design rebuilt from the ground up, the headphones now sport a robust aluminium casing to provide a more durable, sleek finish. Boasting unparalleled flexibility and exceptional sound, the Alfa Genus V2 also comes equipped with Rock Jaw's unique tuning filter system. Whether you want to listen to rock, pop, hip-hop, classical or jazz, the Alfa Genus V2 has a filter ideally suited to bringing out the best

performance. With a simple change of one of three bundled filters, you are in control of crisp highs, powerful lows and warm neutrals. The Alfa Genus V2 retains the precision-tuned 8mm driver of its predecessor, delivering exceptionally accurate and detailed sound. Snug, unobtrusive and offering unrivalled levels of comfort, the Alfa Genus V2 is perfect for music on the move, no matter what you choose to listen to. Immerse yourself for hours, listening to what you want to hear and nothing else.


**TERMS & CONDITIONS:** Offer ends 22nd December 2015. \*Gift for subscribers only, while stocks last. \*When you subscribe by Direct Debit. Please see [www.hifichoice.co.uk/terms](http://www.hifichoice.co.uk/terms) for full terms & conditions.

**SUBSCRIBE SECURELY ONLINE**

 [www.hifichoice.co.uk/subscribe](http://www.hifichoice.co.uk/subscribe)

**CALL OUR ORDER LINE**

Quote ref: X327

 **0844 243 9023**

Lines open Mon-Fri 8.00am - 8.00pm & Saturday 9.30am - 3.30pm

UK Calls costs 7p per minute plus your phone company's access charge. Overseas calls will cost more

# Electronica for analogue addicts

The *Gadget Show*'s presenter Jason Bradbury loves analogue synths, vinyl and eighties electronica – and is also a huge fan of Spotify, Sonos and La Roux. **Rob Lane** finds out why

**T**he analogue versus digital debate is often represented as being clear cut, a choice between vinyl and the immediacy and convenience of downloads: two warring factions in the battle for our ears. For most of us, however, peaceful coexistence is the order of the day, with an appreciation of the warmth of vinyl sitting alongside more regular consumption of MP3s and CDs.

Gadget supremo Jason Bradbury is more educated than most in matters digital vs analogue. As lead presenter of Channel 5's *The Gadget Show* he's witnessed the debate first hand during various blind tests, and is happy to wear both his digital and his analogue hats with pride – even if he's an analogue champion at heart.

"I'll always say that vinyl feels warmer than even lossless digital formats," he tells me, "It hasn't always come out that way when we've done blind tests on *The Gadget Show*, but come on – it's definitely warmer. These days I mainly use streaming services to listen to music. I've had a Spotify account for ages and really dig that I can use it seamlessly across platforms, including my multi-room Sonos setup at home."

A keen DJ as well as a broadcaster, Jason has retained a box of his favourite 12in singles – "mainly early eighties electro, break beats and Chicago House" – but rarely plays vinyl at home, either converting his remaining collection to digital via his Pro-Ject Debut Carbon (HFC 361) or playlisting favourites like Yazoo's *Upstairs At Eric's* on Spotify.

## Music around the home

As well as enjoying digital music via his B&W P3 headphones and iPhone 6S while on the road, Jason utilises two Sonos Play:5s in his dining room and two Play:3s in the front and back living rooms. He has a wireless bridge and Sonos

Connect:amp hidden in a cupboard next to the bathroom that feeds a "third-party ceiling speaker" above the bath.

"My best Sonos setup is in the bedroom," he explains. "Two Play:1s, a Sonos Sub under the bed – all driven by a Playbar. I use the bedroom Sonos for home theatre but also play music on this system from my digital files on my MacBook, off my iPhone and various streaming services I have plans with – mainly Spotify (as part of my job I have access to most services) – but I am enjoying Tidal. It's new to me but I was sold by the promise of high definition."

Apple Music frustrates him, however. "I liked the freedom I used to have to just buy a tune via iTunes and am now expected to upgrade to Apple Music."

Jason's loft-based home studio is where he listens to and creates most of his music.

"I use my synths and drum machines for the best-quality lossless digital formats I can get from my MacBook. These go into a Focusrite Saffire Pro 40 and OctoPre MkII (the OctoOree gives me more channels so I can have multiple instruments running at the same time). I have two Genelec 8020s. I also have a Genelec 7350 studio sub. It's overkill for music, but it's there for when I hook up my Xbox and play *Call Of Duty* through the sound system."

## Eighties lover

Back in the eighties – a decade Jason covets for its championing of electronica – his first music system was a Panasonic "double tape ghetto blaster", an RX-CW43, and he quickly added a couple of Technics SL-B2 belt drive turntables for "scratching and mixing" ("I couldn't afford the direct-drive 1200"), a Realistic 32 1201 mixer, a classic NAD 3020 integrated amp and Mission 70 speakers.

"I quickly covered the boom-box in really bad graffiti and attempted to make it look like the one with the horns on the cover of *D'ya Like Scratchin* by Malcolm McLaren."

Jason purchased his first "proper" turntable in the nineties – a Linn Sondek LP12. "I wish I still had it. It's like owning a vintage VW – it never goes out of fashion. They always work and there are loads of upgrade paths to keep them sounding perfect. I seem to remember I still had my NAD 3020 back then and a pair of second-hand KEF Cantor II speakers which I just loved."

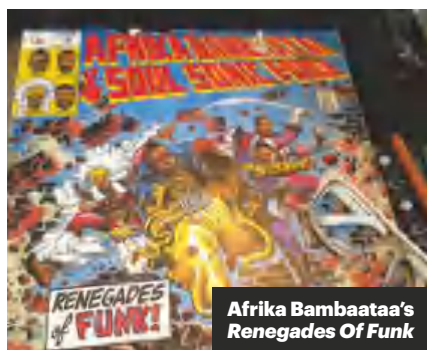
His first memory of hi-fi kit was via his dad – "an early B&O, a gorgeous flat, long multiple turntable behind smoked glass". This Beogram TX2 with two Beovox Uni-Phase S45 loudspeakers must have made some sort of lasting impression as he recently installed a B&O BeoPlay A2 in his kitchen, to complement his Sonos setup.

Jason's musical tastes were also influenced early on, with a lasting impression being made by bands such as Yazoo and Grand Master Flash – whose electro beats continue to influence today's dance acts. "Having had this grounding in synthesiser-generated dance music, I have what many of my generation could term an ear-for-eighties. What I mean by this is an uncanny ability to spot the hand-clap or snare from an 808 [Roland TR-808 drum machine] or the 'Bass 1' factory preset from a Yamaha DX7 when used in modern music. There's no doubt the eighties is the most influential period in music history for dance music today."

Unsurprisingly, he likes eighties sound 'reimaginer' La Roux, who has done "great guest mash ups" with Heaven 17 and New Order (on their new LP, *Music Complete*, and



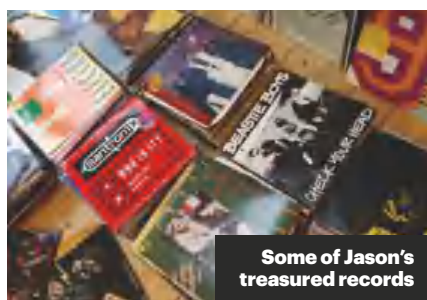




Afrika Bambaataa's  
*Renegades Of Funk*



Jason's cherished  
Roland TR-808  
drum machine



Some of Jason's  
treasured records



Jason loves hip hop  
electro record label  
StreetSounds



Can you spot the  
difference? Jason  
and Vince Clark

## MUSICAL INFLUENCES

Jason's first recollection of hearing music was The Beatles' *Ticket to Ride* in the back of his dad's Rover in 1971. After initially listening to his brothers' records and borrowing vinyl from neighbours, his first purchase was a 7in of *The Chinese Way* by Level 42. His first album, meanwhile, was *Telekon* by Gary Numan, closely followed by *Upstairs At Eric's* by Yazoo – as Jason's love affair with electronic music began to take hold.

Jason bought "plenty" of other LPs, but focused his energies on 12in singles from around 1983, because he was "flirting" with becoming a DJ. "My musical taste was divided between synth-orientated new romanticism and electro funk. I still have most of my Grandmaster Flash, The Sugarhill Gang and Soulsonic Force 12in singles, as well as most of the eighties StreetSounds, StreetSounds Electro & UK Electro compilations on vinyl" he reveals.

Jason's all-time favourite band is "without a doubt" Yazoo, with *Upstairs At Eric's* his fave LP. "I could name 10 UK synth-based outfits that rocked my world, but what Vince Clarke did with those early mono and modular synthesisers was astonishing.

"And, the Vince Clarke-led *Speak And Spell* by Depeche Mode was hugely important to me as a youngster too. It might sound a little too pop now, but to me back in 1981 it was bleeding-edge and such a departure from the rock that had dominated my house for the decade previous."

Jason is also a huge fan of D-Train – pioneers of soulful, funk-driven dance music that "defined" his world after he'd moved on from the new romantics. "Evelyn King's *I'm in Love* and *Get Loose* are other examples of the funk-orientated 12in purchases that dominated my considerable vinyl collection towards the later half of the eighties," says Jason.

during October's 6Music Maida Vale performance), recently watching her perform at London's Shepherd's Bush Empire. Recent purchases include Disclosure's *Caracal* – the brothers can't do any wrong" – and releases from Jesse Ware, Fono and Lorde.

## Lorde of the dance

"Lorde is a great vocalist but listen to something like *Team*, a multi-layered vocal, a very strong stripped-down beat and classic eighties analogue strings and pads – so simple, so early eighties and yet, weirdly fresh and new."

But Jason's first love remains the eighties. "I've seen Heaven 17 several times and spent a morning fiddling with keyboards with Martyn Ware – such a nice bloke and still really switched on to innovations in music technology. I rarely miss a chance to see Gary Numan. I've met loads of my musical heroes – that's the great thing about having lived through the eighties, my early heroes are now very accessible. I get to go to lots of revival gigs and DJ at StreetSounds, and many of the acts are very approachable. I introduced Howard Jones on stage at Shepherd's Bush! I chatted to Steve Strange at a gig shortly before he passed away; Gary Numan in a club in Soho; The Sugarhill Gang; the Duran Duran boys. I'm also good mates with Steve Norman from Spandau Ballet."

But meeting Vince Clarke was the *pièce de résistance* for Jason. "I interviewed Vince in his home in Brooklyn a couple of Christmases ago. I was doing an interview for a music magazine and even paid my own flight and accommodation. I was in his basement, playing synths

with him for several hours. Vince has one of the largest private collections of vintage synths and drum machines in the world."

Jason's own collection of synth-related tech is hardly what you'd call small. He owns seven vintage analogue synths – including a Pro-One "in honour of Vince Clarke" – a Roland System 100 and bright red keytar-style Roland SH-101, plus a couple of analogue drum machines.

"I put my synths and drum machines through a simple soundcard and a pair of Genelec monitor speakers – it doesn't get much more analogue than that (and much more warm). I have to tell you, playing my Roland TR-808 through that setup would convert anyone to the analogue side of the analogue/digital debate."

And Jason – regardless of his appreciation of Sonos and streaming services – is certainly a champion of analogue. "The bottom line is this: whether or not you can distinguish digital from vinyl in a blind test, the act of placing a needle on a piece of vintage plastic with the dust and friction therein is so tactile, so visceral, so real, it imbues the music with a warmth and personality, a charisma that while hard to objectively measure, affects the sound in a positive way. It's leather, as opposed to faux leather; freshly baked bread as opposed to a really good gluten-free roll."

And that's the point. We can't always have silk; sometimes it has to be cotton. The most important thing is that we keep consuming music in all of its available formats – and ensure that we give it the best chance to shine on the best available, most appropriate equipment.






**WIN:**

# MunroSonic EGG100 loudspeakers

Bring the egg-cellent sound of the studio into your home, we're not yolking...

**S**tudio monitors are generally built to be about as tough as they come. As butch as the stubble on Jason Statham's chin, they should be able to shrug off the endless travails of studio life with ease, and – despite what manufacturers tell us – are quite a different kettle of fish to the sort of standmount speakers that hi-fi enthusiasts like to have perfectly positioned in their listening rooms. So it's rare to find a near-field monitor, which is ordinarily plonked on a mixing desk with an engineer hunched behind it, offering the sort of performance that makes it perfect for home listening. But that's precisely what we've got here. Developed by Andy Munro (previously of Shure and founding member of Dynaudio), Philip Smith and James Young (of Sonic Distribution), MunroSonic has come up with the radical 'egg geometry' you see before you here. The idea is to virtually

eliminate the diffraction and internal resonance issues that are so painfully common to conventional box-shaped monitors, and the result is the EGG100.

## EGG-stra special sound

An active two-driver near-field loudspeaker that looks like no other you've seen before, the EGG100 is fed by a dedicated 30W-per-channel amplifier with balanced XLR inputs and features a 25mm soft dome tweeter paired with a 100mm bass driver. There's a downward-firing bass port on the underside and a Speakon cable socket around the back.

Happily, when we tested the EGG100 back in the November issue we discovered that it sounded every bit as good as it looks. Perhaps the first thing to make us sit up and take notice was the level of clarity on show. We'd expect a certain amount given its pedigree, but its five stars for sound rating is

no exaggeration. The EGG100 provides sublime rendering of timbral texture and colour alongside a stunningly low noise floor that genuinely allows notes and ambient reverberation to decay into inky blackness. In short, it's simply awesome.

For more information on MunroSonic's EGG speakers, visit [www.munrosonic.com](http://www.munrosonic.com).

And thanks to the good folk at MunroSonic, you can experience the majesty of the EGG100 for yourself. The first correct answer pulled out of the *HFC* hat will win a pair all for themselves, but that's not all. The second correct answer will nab themselves an Apogee Groove portable DAC/headphone amp and the next three entries will each receive a set of Extreme Isolation EX29W headphones. Generous or what? Answer the ridiculously easy question opposite and send it to us to be in with a chance of winning. Good luck!



### 1st prize – MunroSonic EGG100

Awarded five stars in issue 403, the EGG100 blew us away with its combination of stunning design partnered with sound to match. It's a dream to listen to and presents music in such an unsullied, spatially convincing, believable and coherent form. In short, you're unlikely to hear better focus, speed and timing from anything at or near the £1,300 price.



### 2nd prize – Apogee Groove

The £300 Apogee Groove is a portable USB DAC and headphone amp for listening to music on your Mac or PC. Groove takes the same high-quality audio technology found in the world's most prestigious recording studios and delivers it to your laptop. Its output provides ample power at any impedance and Apogee's Constant Current Drive technology makes your headphones sound great.



### 3rd prize – Extreme Isolation EX29W headphone

Priced at £142, the Extreme Isolation EX29W headphone is no slouch when it comes to the important business of blocking out unwanted distractions. The dynamic closed-back headphone with 40mm drivers boasts a frequency response of 20Hz-20kHz and comes bundled with a 9ft (275cm) premium twin-lead cable.

## TO BE IN WITH A CHANCE OF WINNING, ANSWER THIS SIMPLE QUESTION:

What inputs does the dedicated 30W-per-channel amp have?

- A) Balanced XLR
- B) Unbalanced XLR
- C) RCA phono

### TERMS & CONDITIONS

1. Entrants must be over 18 years old and resident in the United Kingdom. 2. Employees of AVTech Media or My Time Media and companies supplying competition prizes are not eligible to enter. 3. Proof of posting will not be accepted by the magazine as proof of delivery. 4. No responsibility will be accepted for entries lost, damaged or delayed in the post. 5. No alternatives, cash or otherwise, will be offered to the winners as prizes. 6. The editor's decision is final. 7. The closing date is 22 December 2015.

### HOW TO ENTER

Write your answer here to win:

This coupon should arrive by 5.30pm on 22 December 2015 addressed to: MunroSonic Competition **Hi-Fi Choice**, c/o Data Europe Limited, 12 Regent Street, Haslingden, Rossendale, BB4 5HQ

Answer:.....

Initial..... Surname.....

Address .....

Postcode ..... County .....

Email .....

Tel ..... I am 18 yrs old or over ☐

If you do NOT wish to be contacted by *Hi-Fi Choice*, AVTech Media Ltd, MunroSonic or Sonic Distribution please tick here: email ☐, post ☐, phone ☐. If you wish to be contacted by carefully chosen third parties please tick here: email ☐, post ☐, phone ☐. For full privacy policy and terms and conditions, visit [www.hifichoice.co.uk/terms](http://www.hifichoice.co.uk/terms)

# Hi-Fi Choice Reader Classified

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, AVTech Media Ltd, Enterprise 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

Gold 200 loudspeakers in gloss black, no visible marks, less than 6 months old, RRP £2,200 would like £1,700. Buyer to collect: **07473142584** or email: **akmashtree@hotmail.com**

**LINN** Sondek LP12 turntable with Valhalla drive, Akito arm and Ortofon 2M Red (cartridge hardly used). Serviced about 4 years ago with new springs and timing remains good, plus remains fully functional. £300. Buyer collects: **01277633276** or email: **bj1tnz@gmail.com** (Essex).

### MUSICAL FIDELITY

A308cr Dual Mono preamplifier £590, A308cr 24-bit upsampling CD player £490, A3.2 RDS tuner £290: **07500804700** or email: **imeldayates@hotmail.com**

### MUSICAL FIDELITY

M6i amplifier plus KEF LS50 speakers. Both less than 100 hours use, mint condition, smoke/pet-free environment with all packaging. RRP £3,300, would like £2,000: **01902884694** or email: **jukey39@yahoo.co.uk** (West Midlands).

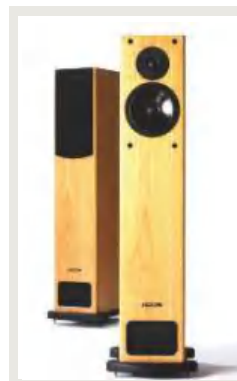
**CYRUS** CD7 £80, integrated amp £150, DAC X £200,

CDXT SE transport £250, 2x PSXR £150 each, Stream X £300, Dynaudio Audience 42 Speakers £100. All boxed with documents: email: **tj.rice@blueyonder.co.uk** (Liverpool).

**ARCAM** FMJ A19 integrated amplifier, one year old and in mint condition with manuals, remote control and original box £450 (new £695). Can post if required for extra £20: **01847841293** or email: **James\_mcleod789@btinternet.com** (Caithness, Scotland).

**PRO-JECT** Xpression UKX latest version with carbon fibre tone arm, Ortofon 2M silver cartridge, Bordeaux plinth, white acrylic platter, few hours use, boxed and in mint condition, £250: **01243607988** (West Sussex).

**LEHMANN** Silver Cube phono amplifier with power supply, 10 years old, excellent condition. With manual but no original packaging £900: **07800606892** or email: **schandler@dopag.co.uk** (Worcestershire).



**PMC** FB1 speakers, excellent condition, boxed. One careful, smoke-free and pet-free owner. Superb speakers. £850: **07920101740** or email: **siloperi@gmail.com** (Romford).

**YAMAHA** RX-A2020 AV receiver, black 9.2 channels, was £1,500 new, now only £200: **01625433996** (Macclesfield).

**AUDIOLAB** 8000A integrated amp £120, Cyrus DAD7 CD player £75, Cyrus PSX-R power supply £100. All in good working condition with boxes and manuals. Buyer collects: **01214542173** or email: **jcdcampbell@sky.com** (Birmingham).

**TANNOY** 6.4 Precision speakers, 6 months old, as new with boxes, piano black can post or collection: **07944049857** or email: **eastbaygray@hotmail.com** (Co Durham).

**MISSION** 735i, 25-125W/channel, 3-way reflex, black floorstanding speakers. Very slight wear on top corner of one cover otherwise super condition. Also have floor studs and original box. £250 the pair. Buyer collects: **01406423462** or email: **lentonlo@hotmail.co.uk** (South Lincs).

**FOCAL** Electra 1027 speakers (burgundy), excellent condition with original boxes. £1,500 ono. Buyer to collect: **07913236601** or email: **farrow\_jim@hotmail.co.uk** (Essex)

**MUSICAL FIDELITY** M3si finished in black, in absolutely mint condition. Only 11 months old, comes

with all original packaging. £700 ono: **07729321919** or email: **rodbryan@aol.com** (Lincolnshire).

**CREEK** CAS4040 amplifier £55. Sony MDS-JE520 MiniDisc with remote £45. SME 3009 Series improved fixed head £175. Tangent AMP-100 amplifier £55. Marantz CD-48 with remote £60. Linn Index Speakers £70 **01708457691** (Essex).

**XINDAK** A600E MkII amplifier. 160W Class A output. Only light use, mint condition, good review. RRP: £2,500, want £250: **07905348812** (Watford). **BOWERS & WILKINS** PV1D 400W DSP subwoofer, white finish, unmarked, instructions and original factory packaging £825: **01908376966** (Milton Keynes).

**ARCAM** A85 integrated amplifier and Arcam CD82 player. Owned from new and in mint condition. Remote and manuals demo with pleasure £525 ono. Buyer to collect: **01922628179** or email: **bryanrs15@tiscali.co.uk** (West Midlands).

**LINN** Majik LP12 2009, Origin Live mat, Linn 2549 arm cable £1,000: **07411849182** (Cambs).

**QUAD** 22L Classic floorstanders, piano rosewood gloss speakers, as new, immaculate condition £330 ono: **07782242190** or email: **SUEBILLS53@yahoo.co.uk** (West Midlands).

**INSPIRE** 160 Super turntable, walnut plinth, Rega 303 arm – upgraded by SRM TECH 2014. Pristine condition, little use £495. BEZ T3B-6 single ended amp. Highly regarded reviews. Few hours use, as new condition £375. House move forces sale: **014870814015** or email: **clydeaylin@gmail.com**.

**BOSE** Lifestyle 28 surround sound system, excellent working order, superb sound, 5 white speakers, purchased direct from Bose, complete system includes adapt IQ, cables & all accessories (boxed),



**YAMAHA** BD-S673 universal player: CD/DVD/Blu-ray, wi-fi, DNLA, streamer, black finish. Plays all codecs inc FLAC, WAV, MP3 etc. In excellent condition with manual & remote. Was £350, sell for £95 + £8.50 Postage UK Mainland: **01745859064** or email: **s.dom@btinternet.com**.

**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!



£500: **07876 563925** or email: **p.timmings2014@btinternet.com**. (Lincoln).

**CARY AUDIO DESIGN**  
CD 303T Pro, SACD-compatible (£6,500) £1,600. NAF Legend Mk2 valve integrated (£5,000) £2,100. Magnum Dynalab MD100 FM tuner (£1,500) £600. *Hi-Fi+* all 125 issues (£625) £100. All mint: **01453 519700**.

**AUDIOLAB** M-DAC, black, mint, boxed £350. Naim SBL black, excellent active with Naim SNAXO £850 or NAXO £650. Strain Gauge Cartridge Panasonic EPC-451C. With new sealed stylus (Shibata stylus, Titanium Cantilever), mint £395. Prefer collection but courier can be arranged: **zen57@rocketmail.com**.

**ACOUSTIC ENERGY**  
Radiance 3 floorstanding speakers. Light coloured, natural wood finish, excellent condition with lovely sound £600: **01793 763573** (Swindon).

**NAIM** Nait XS amplifier, totally as new, boxed, genuine reason for sale. Will accept £1,000: **075830 78744** (Notts/Derby).

**OLIVE** Opus 4HD 2TB (black) for sale. Very good condition £900 ovno. Selling as I'm upgrading: **07905 312191**.

**AUDIOLAB** 8200P power amp, Monitor Audio BX2 Bronze speakers, Tannoy V1 speakers, Denon PMA520AE amp. Open to offers, buyer to

collect: **01977 695385** (West Yorkshire).

**WANTED** Chord Signature or Sarum RCA interconnect. Cash waiting: **01475 529216** or email **LPorsche997@aol.com**.

**CASTLE CONWAY** 3 floorstanding speakers in mahogany, hardly used and in mint condition, boxed £395 ono (new £950): **01992 572098** or email: **vironepping@gmail.com**

**NAD** 701 stereo receiver £70, NAD 6325 tape deck £70, Celestion DL4 loudspeakers £50, Target stands £25 or £150 all-in: **01206 731236**.

**RUSS ANDREWS** Kimber TAK-Cu tonearm cable with 90 deg DIN plug and phono plugs boxed as new £100: **07800 606892** or email: **Schandler@dopag.co.uk** (Worcestershire).

**LINN** LP12 serial no: 27133 with Mission 774 tonearm. Plus power supply for LP12 serial no: 902508 Black Lingo.

£900 for the two: **0161865 9607** or email: **c.fanshawe@sky.com**

**MISSION** 753 speakers – VGC £50. Cyrus 6 CD player – VGC £175. Both in black. Have done upgrade: **07730 477564**.

**NAIM** Air-PLUG for SuperLine phono stage 500 resistive. Walnut plinth for Linn LP12 brand new £180. Half meter of Russ Andrews silver streak interconnect cable attenuated for Naim CD player and preamp: **0208 5242181**

**BRINKMANN** 10.5 tonearm mint condition, manual, protractor, tonearm box. New £3,895, selling for £1,700. Collection preferred, but can ship worldwide. Email: **elsfan@yahoo.com**

**WANTED** Trichord Dino + power supply. Must be Mk2 version in black box: **01332 735431** or email: **stu.valentine@ntlworld.com** (Derby).



**MERIDIAN** 557 boxed in excellent condition: £449. Musical Fidelity F16 boxed in excellent condition £395: **02392 453382** or email: **alanmacleod1@virginmedia.com**. (Hants).

## HOW TO SUBMIT YOUR FREE AD

### YOUR DETAILS

Name

Address

Email address

Daytime telephone number

Date

### YOUR ADVERTISEMENT

---

---

---

---

---

---

---

---

### SEND YOUR ADVERT TO

**Hi-Fi Choice**, AVTech Media Ltd, Enterprise House, Enterprise Way, Edenbridge, Kent, TN8 6HF

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.

www.atlascables.com

# ATLAS<sup>®</sup>

## Equator Asymmetrical Integra



Atlas understands the meaning of uncompromising performance. Is the Atlas Equator asymmetrical the best interconnect on the market? It sure is at it's price! A consistent winner, the Equator Integra is obviously the entry level audio interconnect for discerning music lovers.

Need some advice on choosing the best cables?  
Call us free on  
**0800 731 1140**

**ATLAS** Cables

e: **J.Carrick@atlascables.com**

**www.atlascables.com**

# Missed an issue?

Have you missed a copy of your favourite hi-fi magazine? You can now order *Hi-Fi Choice* back issues online or over the phone!



390 Nov 2014



391 Dec 2014



392 Yearbook 2014



393 Jan 2015



394 Feb 2015



395 March 2015



396 April 2015



397 May 2015



398 June 2015



399 July 2015



400 August 2015



401 Sept 2015



402 Oct 2015



403 Nov 2015



404 Dec 2015

Order online:  
[www.myhobbystore.co.uk/hfc](http://www.myhobbystore.co.uk/hfc)

\*Please note that we cannot guarantee the availability of all issues displayed above.





# Hi-FiChoice

## Digital subscriptions available online

**Don't miss out: order  
a subscription for  
yourself or a friend  
today and pay as little  
as £2.54 per issue**

**HURRY  
OFFER  
CLOSES**  
22nd DECEMBER  
2015



### 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



**SUBSCRIBE SECURELY ONLINE TODAY:**  
[www.subscription.co.uk/hifid/dg01](http://www.subscription.co.uk/hifid/dg01)

## AUDIO DESTINATION

The Finest Audio Products



Owned by husband and wife team: Mike & Caroline - Audio Destination is not your typical Hi-Fi specialist

Audio Destination brings together a range of only the finest audio products and places them in comfortable and relaxed surroundings.

- Tuesday - Friday 9am - 5pm
- Saturday 9am - 4pm
- Demonstration Rooms
- Long-term customer support and care
- Large selection of famous brands

We look forward to seeing you

Call +44 (0)1884 243 584

[www.audiodestination.co.uk](http://www.audiodestination.co.uk)

email: [info@audiodestination.co.uk](mailto:info@audiodestination.co.uk)

Audio Destination, Suite 7a Market Walk,  
Tiverton, Devon EX16 6BL

### DRIVERS:

- ATC
- AUDAX
- ETON
- FOSTEX
- LPG ➤ MAX FIDELITY
- MOREL ➤ PEERLESS
- SCAN-SPEAK ➤ SEAS
- SILVER FLUTE
- VIFA ➤ VISATON
- VOLT



**SOLEN CAPACITORS AND  
INDUCTORS - USED BY THE  
MOST DISCRIMINATING  
LOUDSPEAKER  
MANUFACTURERS.**

### HARDWARE

### HOW TO BOOKS

**Contact us for the  
free Solen CDROM  
Catalog.**

**FREE!**



**SOLEN**  
4470 Avenue Thibault  
St-Hubert, QC, J3Y 7T9 Canada  
Tel: 450.656.2759  
Fax: 450.443.4949  
Email: [solen@solen.ca](mailto:solen@solen.ca)  
Web: [www.solen.ca](http://www.solen.ca)



## Imagine Being Much Closer to the Musicians with **SAMBA VS-1** - The Low Distortion Cable



### **Samba VS-1 Reduces Many Layers of Distortion in your Music Including:**

- Graham Nalty Legacy Range Anti-Vibration stabilisers to reduce distortion caused by vibrations travelling through conductor wires.
- Reduced Transient Phase Distortion due to increased spacing between conductors for a more open sound.
- Anti RFI filtering applied directly to each conductor wire for cleaner, clearer sounds.
- Low noise and reduced distortion through careful monitoring of conductor wire direction.
- Rhodium Plated Graham Nalty Legacy Range GN-1 banana plugs for livelier, more dynamic sounds.

**Contact Us Today!**

*and discover how to remove more layers of distortion from your music*

[www.blackrhodium.co.uk](http://www.blackrhodium.co.uk)  
[sales@blackrhodium.co.uk](mailto:sales@blackrhodium.co.uk)  
+44 (0)1332 342233

**Black Rhodium**

anthem  
audioplan  
dynavector  
chord cables  
>chord electronics  
kudos  
lehmann  
linn products  
lyra  
naim audio  
neat acoustics  
nottingham  
primare  
pmc (including fact)  
rega  
sennheiser  
stax  
sumiko  
trilogy  
tiger paw

# opening chord

**signals**  
hi-fi for grown-ups

**ipswich (01473) 655171**  
www.signals.uk.com

## Transform a good system into a great one!

Low amplitude ground borne vibration (microtremors) are ever present and pass through all buildings and solid supports and into your Hi-Fi system, including speakers.

Eliminate them with Townshend Seismic Isolation and hear the difference.

- |   |  |
|---|--|
| <input checked="" type="checkbox"/> Wider deeper stereo stage | <input checked="" type="checkbox"/> Greater clarity and separation |
| <input checked="" type="checkbox"/> Clearer more defined bass | <input checked="" type="checkbox"/> No more floor radiated boom    |
| <input checked="" type="checkbox"/> Neighbour friendly        |  |

Townshend offers a complete program for isolating ALL Hi-Fi components.

Microtremors

Sorted.

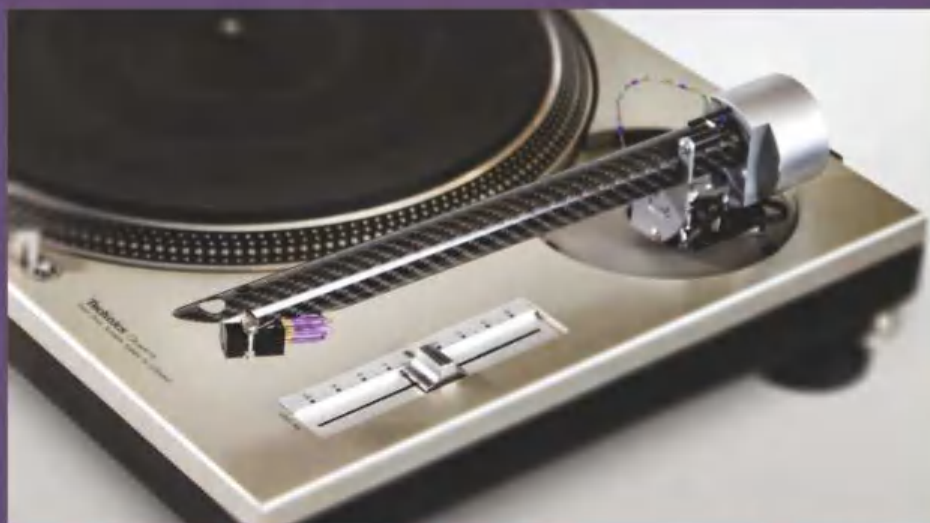


For more information or best advice on Seismic Isolation  
visit [www.townshendaudio.com](http://www.townshendaudio.com)  
email or phone us on +44 (0) 20 8979 2155.

## Long tonearm on Linn or Technics?

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!

THE **WAND**  
UNIPIVOT TONEARM



**hi-fi Choice**  
★★★★★

**hi-fi+**

**HI-FI WORLD**  
VERDICT ●●●●●

"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 excitement... a sense of speed and energy and zest to the LP." **HiFi Plus #112**

"...the low end is a real strength of The Wand as it captures bass lines expertly and never seems to run out of puff or feel it was lacking authority. I would say that it is almost impossible not to fall for The Wand's charms." **HiFi World January 2012**

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

[info@designbuildlisten.com](mailto:info@designbuildlisten.com)  
Retail and OEM enquires now welcome.

Best



# VICKERS HI·FI

*High Fidelity Specialists* Since 1967



- ▶ Visit our Stylish, New... 7,500 sq ft. Store at... ▶ **Unit 8 Concorde Park,**  
Amy Johnson Way, Kettlestring Lane,  
**Clifton Moor, York**  
SatNav: YO30 4WT  
Tel: 01904 - 691600
- ▶ Free Customer Car Park ▶ Wheelchair Friendly
- ▶ Superb Air Conditioned Demonstration Rooms
- ▶ Loaded with Quality Hi-Fi Equipment at all price levels
- ▶ Awesome amplifiers, Gorgeous speakers, Classy furniture
- ▶ Independent Advice, Qualified Staff, Great Offers
- ▶ Easy Online Ordering from... [www.VickersHiFi.com](http://www.VickersHiFi.com)
- ▶ Up to 3 YEARS INTEREST FREE CREDIT subject to status
- ▶ Open 10:30am - 5:30pm 6 days: Mon. to Sat.

**0% FINANCE AVAILABLE**

*... The Award Winning North of England Hi-Fi Specialists*



audiolab CHORD CYRUS DALLI ROKSAN MONITOR AUDIO  
QUAD ProAc TANOY Pioneer Project marantz



## studio



We offer some of the finest music reproduction systems available on the market today, from entry level to elite brands. Our range of products has been carefully chosen to ensure exceptional performance, reliability and value for money.

See the excellent review of **studioAV** in the October edition of **Hi-Fi Choice Magazine**.

44 High Street, Eton,  
Berkshire, SL4 6BL  
Tel: 01753 863300

Stockists of: Avalon, Aurender, dCS, Densen, Dynavector, Estelon, Focal, Golden Ear, Mark Levinson, Naim Audio, Vitus Audio, VTL, Wilson Benesch and many more...

[www.studioav.co.uk](http://www.studioav.co.uk)

# Hi-Fi Choice

To advertise in the dealer directory,  
please contact Simon Dunn 01689 869853  
[simon.dunn@hifichoice.co.uk](mailto:simon.dunn@hifichoice.co.uk)



## criterion audio



01223 233730  
[www.criterionaudio.com](http://www.criterionaudio.com)  
[info@criterionaudio.com](mailto:info@criterionaudio.com)

Is this your problem? Here's your answer

 loud     too loud     way too loud

It's a common problem. The usable range on the volume control is all down at the bottom end and fine control at low listening levels is either difficult or impossible. The noise floor may be audible too. There is a simple and effective solution - the Rothwell In-Line Attenuators. They can be used with pre-power or integrated amps to cure the problems of excess gain and bring sonic benefits with even the most expensive equipment.

£39/pair - post free

01204 366133 [www.rothwellaudioproducts.co.uk](http://www.rothwellaudioproducts.co.uk)



"this accessory  
is heartily  
recommended"  
Gramophone



## REVOX SERVICE

### THE MANUFACTURERS' APPOINTED SERVICE COMPANY

## REVOX SERVICE

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

# THE AR TECHNOLOGY LIMITED

TTL House, Sheeptick End, Near Lidlington, Bedfordshire, MK43 0SF  
Telephone 01525 841999      Facsimile 01525 841009

## Oranges & Lemons

[www.orangesandlemons.info](http://www.orangesandlemons.info)

Audio-Visual  
Hi-Fi  
Multi-Room

020 7924 2040

61-63 Webbs Road London SW11  
[shop@orangesandlemons.info](mailto:shop@orangesandlemons.info)





Visit us in the beautiful  
bedfordshire countryside  
for all your Hi-Fi needs



[www.hifilounge.co.uk](http://www.hifilounge.co.uk)

01767 448121

[www.highendheadphones.co.uk](http://www.highendheadphones.co.uk)






UK's only dedicated demo  
facility for high-end  
headphones



closer to the music...



37 High Street, Aldridge  
01922 457926

EXPOSURE • HEED • KUDOS  
LEHMANN • LINN • MARANTZ • MICHELL  
MONITOR AUDIO • NAIM • NEAT • NORDOST  
OKKI NOKKI • ORTOFON • PROJECT • REL • ROKSAN

Ample parking Tue-Sat 10-5.30pm  
[www.soundcinergy.co.uk](http://www.soundcinergy.co.uk)

## IAN HARRISON HIFI

**NORSTONE**  
HIFI/AV FURNITURE AND  
SPEAKER STANDS  
**MUNARI**  
AV FURNITURE  
**PEERLESS**  
AV CABLES

**PLEASE PHONE FOR PRICES  
OR PRODUCT DETAILS**

[ian.harrison@mercian.myzen.co.uk](mailto:ian.harrison@mercian.myzen.co.uk)  
**TEL: 01283 702875**

## IAN HARRISON HIFI

**HARBETH LOUDSPEAKERS**  
**P3 ESR**      **MONITOR 30.1**  
**HL COMPACT 7ES3**      **MONITOR 40.2**  
**Super HL5+**

Supplier Of Harbeth Since 2003

**PLEASE PHONE  
FOR PRICES**

[ian.harrison@mercian.myzen.co.uk](mailto:ian.harrison@mercian.myzen.co.uk)  
**TEL: 01283 702875**

## IAN HARRISON HIFI

**SALE! UP TO 40% OFF!**

TEL: 01283 702875    [ian.harrison@mercian.myzen.co.uk](mailto:ian.harrison@mercian.myzen.co.uk)

<b>AMPLIFIERS</b> CREEK EAR/YOSHINO ICON AUDIO MARANTZ QUAD SUGDEN TOM EVANS  <b>CABLES</b> BLACK RHODIUM KUBALA-SOSNA PEERLESS PRO-JECT QED SUPRA TRANSPARENT WIREWORLD  <b>CARTRIDGES</b> AIR TIGHT AUDIO TECHNICA BENZ MICRO CARTRIDGE MAN DECCA LONDON DENON GOLDRING KOETSU ORTOFON TECHDAS VAN DEN HUL ZYX	<b>CD PLAYERS</b> CREEK EAR/YOSHINO MARANTZ QUAD  <b>HEADPHONES</b> AUDIO TECHNICA BEYER ERGO GOLDRING GRADO SENNHEISER  <b>HEADPHONE AMPS</b> CREEK FIDELITY AUDIO GRAHAM SLEE LEHMANN PRO-JECT SUGDEN  <b>HIFI FURNITURE</b> ALPHASON ATACAMA CUSTOM DESIGN MUNARI NORSTONE QUADRASPIRE SOUNDSTYLE TRACK AUDIO	<b>PHONOSTAGES</b> EAR YOSHINO GRAHAM SLEE LEHMANN ICON AUDIO MUSICAL SURROUNDINGS PURE SOUND PRO-JECT QUAD ROTHWELL TRICHORD TOM EVANS WHEAT AUDIO  <b>TONEARMS</b> AMG CARTRIDGE MAN GRAHAM HELIUS MICHELL MOERCH MOTH ORTOFON PRO-JECT REED REGA ROKSAN SME*	<b>TUNERS</b> CREEK QUAD  <b>TURNTABLES</b> AMAZON AUDIO AUDIO TECHNICA EAR INSPIRE MUSIC HALL MICHELL PRO-JECT ROKSAN SRM TECH THORENS  <b>SPEAKERS</b> EPOS HARBETH OPERA Q. ACOUSTICS QUAD
---	--	---	--

**SPECIAL OFFER!!**  
**DENON**  
DL110    £120  
DL103    £140  
DL103R    £215

**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.



# Next month

## Hi-Fi Choice

### ESSENTIAL AUDIO OF THE YEAR

#### BEST OF 2015

**164 PAGES** of the greatest-sounding hi-fi kit and music reviews that hit the headlines this year, plus all our favourite hi-fi high points. Don't miss it!

## REVEALED

## YEARBOOK ISSUE ON SALE 22 DECEMBER

# Hi-Fi Choice

**PASSION FOR SOUND**

#### EDITORIAL TEAM

**Editor** Lee Dunkley  
**Production Editor** Jake Day-Williams  
**Art Editor** Emily Hammond

#### CONTRIBUTORS

Simon Berkovitch, Paul Hiron,  
James Hughes, Adrian Justins, Jason Kennedy,  
Rob Lane, David Price, Neville Roberts,  
Ed Selley, Andrew Simpson, David Vician,  
Chris Ward, Nigel Williamson

#### ADVERTISING

**Sales** Simon Dunn  
**Tel:** 01689 869853  
**Email:** simon.dunn@hifichoice.co.uk

#### SUBSCRIPTIONS

**Subscriptions Manager** Kate Hall  
**UK** - New, Renewals & Enquiries  
**Tel:** 0844 243 9023 or +44 (0) 1604 828 748  
**Email:** help@hfc.secureorder.co.uk  
**USA & CANADA** - New, Renewals & Enquiries  
**Tel:** 001 866 647 9191

**REST OF WORLD** - New, Renewals & Enquiries  
**Tel:** +44 (0) 1604 828 748

#### BACK ISSUES

**Website:** www.myhobbystore.co.uk  
**Contact:** www.myhobbystore.co.uk/contact

#### 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  
Enterprise 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.



If you don't want to miss an issue



Please reserve/deliver my copy of Hi-Fi Choice on a regular basis, starting with issue:

Title..... First name .....

Surname .....

Address .....

.....

Postcode .....

Telephone number .....



Published by AVTech Media Ltd. All rights reserved, 2015. ISSN 0955-1115. The Publisher's written consent must be obtained before any part of this publication may be reproduced in any form whatsoever, including photocopies, and information retrieval systems. All reasonable care is taken in the preparation of the magazine contents, but the publishers cannot be held legally responsible for errors in the contents of this magazine or for any loss however arising from such errors, including loss resulting from negligence of our staff. Reliance placed upon the contents of this magazine is at reader's own risk.

Hi-Fi Choice, ISSN 0955-1115, is published monthly with an additional issue in July by AVTech Media Ltd, a division of MYTMEEDIA Ltd, Enterprise House, Enterprise Way, Edenbridge, Kent, TN8 6HF, UK. The US annual subscription price is \$50.00 (equivalent to approximately £30.00). Airfreight and mailing in the USA by agent named Air Business Ltd, c/o Worldnet Shipping Inc., 156-15, 146th Avenue, 2nd Floor, Jamaica, NY 11434, USA. Periodicals postage paid at Jamaica NY 11431, US Postmaster: Send address changes to Hi-Fi Choice, Worldnet Shipping Inc., 156-15, 146th Avenue, 2nd Floor, Jamaica, NY 11434, USA. Subscription records are maintained at ddb-net Ltd, 3 Queensbridge The Lakes Northampton NN4 7BE. Air Business Ltd is acting as our mailing agent.



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!



# TRIANGLE

MANUFACTURE ELECTROACOUSTIQUE

30 years of passion : TRIANGLE continues to strive for the highest possible level to provide music lovers with perfection in terms of no compromise sound reproduction, faithfully conveying the emotion and beauty of music.



Signature Theta

£2700

Impedance 8 Ohm  
Frequency range 45 Hz - 20 kHz  
Sensitivity 90 dB  
(stand not included)



Magellan Cello

£10000

Impedance 8 Ohm  
Frequency range 35 Hz - 20 kHz  
Sensitivity 91 dB



Signature Delta

£4600

Impedance 8 Ohm  
Frequency range 35 Hz - 20 kHz  
Sensitivity 92 dB



# audioemotion



w: [audioemotion.co.uk](http://audioemotion.co.uk) e: [info@audioemotion.co.uk](mailto:info@audioemotion.co.uk) t: 01333 425 999



# pure virtuosity



For more than a quarter-century, Sonus faber has represented the pinnacle of loudspeaker aesthetics. From its earliest models, incorporating real wood, furniture-grade finishing, seductive curves and even grilles that reveal style and inventiveness, this repository of Italian artisan skills and artistry has achieved what was once deemed impossible: creating speakers that sound as beautiful as they look.

Along with a series of models paying homage to the great luthiers of Cremona, the company has since been inspired by the Teatro Olimpica in Vicenza. It is appropriate that this new family of speakers considered the standards of a famed venue as the ne plus ultra of the reproduction of music with vivacity and power... exactly what defines music from opera to orchestral to rock music to soul to jazz. To achieve this, Sonus faber has exploited all that it has learned since its inception.

Like all Sonus faber loudspeakers, Olympica represents what is possible, while respecting what has mattered.

---

 **absolute sounds** ltd.

International Distributors & Consultants of Specialised Hi-End Audio & Video Systems  
58 Durham Road, London, SW20 0TW T: +44 (0)20 89 71 39 09  
W: [www.absolutesounds.com](http://www.absolutesounds.com) E: [info@absolutesounds.com](mailto:info@absolutesounds.com)

*Sonus faber*®