

# HI-FI WORLD

SEPTEMBER 2020 UK £4.50

www.hi-fiworld.co.uk

**FREE READER CLASSIFIED ADS IN THIS ISSUE!**



**CAMBRIDGE AUDIO AXR100D  
DAB/FM STEREO RECEIVER**



**PRO-JECT CD BOX RS2 T/  
PRE BOX RS2 DIGITAL  
pre-amplifier**



**iFi iPHONO 3 BLACK LABEL  
phono stage**

**ROHDE & SCHWARZ  
MEASUREMENT**



## MAGNEPLANAR LRS loudspeakers

**COMPETITION**



**WIN A IBASSO DX160  
HI-RES PLAYER!  
WORTH £349!  
(UK ONLY)**

**EXCLUSIVE!**

**PRO-JECT STREAM BOX S2 ULTRA  
FOCAL CHORA 816 LOUDSPEAKERS  
Q ACOUSTICS 3030i LOUDSPEAKERS  
CHORD CLEARWAYX LOUDSPEAKER CABLES**



SEPTEMBER 2020



9 770961 766208

**FIVE PAGES OF LETTERS - THE BEST WINS A PAIR  
OF KEF Q150 LOUDSPEAKERS! (UK ONLY)**

# [master]

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

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

High-end audiophile quality at a realistic price and each one built to **your** specific requirements. Arrange a demonstration with your nearest Chord Company retailer and hear the difference for yourself.

Designed and hand-built in England since 1985 by a dedicated team of music-lovers. Find more information and a dealer locator at: [www.chord.co.uk](http://www.chord.co.uk)



# CHORD<sup>TM</sup>

COMPANY



## EDITOR

Noel Keywood  
e-mail: [editorial@hi-fiworld.co.uk](mailto:editorial@hi-fiworld.co.uk)

## DESIGN EDITOR

Faiza Chunara  
tel: +44 (0) 20 8206 6018  
e-mail: [adproduction@hi-fiworld.co.uk](mailto:adproduction@hi-fiworld.co.uk)

## PRODUCTION EDITOR

David Noble  
tel: +44 (0) 20 8206 6017  
e-mail: [classifieds@hi-fiworld.co.uk](mailto:classifieds@hi-fiworld.co.uk)

## SALES MANAGER

Louise Palfrey  
mob: +44 (0) 7917 047 548  
e-mail: [louise@hi-fiworld.co.uk](mailto:louise@hi-fiworld.co.uk)

## ADVERTISING EXECUTIVE

Joanna Holmes  
mob: +44 (0) 7958 602 347  
e-mail: [joanna@hi-fiworld.co.uk](mailto:joanna@hi-fiworld.co.uk)

## PUBLISHER

Noel Keywood  
e-mail: [publisher@hi-fiworld.co.uk](mailto:publisher@hi-fiworld.co.uk)

## FREE READERS CLASSIFIEDS

tel: +44 (0) 20 8 206 6017  
e-mail: [classifieds@hi-fiworld.co.uk](mailto:classifieds@hi-fiworld.co.uk)

## SUBSCRIPTIONS

tel: +44 (0) 1442 820 580  
fax: +44 (0) 1442 827 912  
e-mail: [hifiworld@webscribe.co.uk](mailto:hifiworld@webscribe.co.uk)

## PHOTOGRAPHY

David Noble  
tel: +44 (0) 20 8206 6017

## WRITERS

Paul Rigby, Martin Pipe,  
David Tutt, Chris Frankland



It's been said many times that loudspeakers are all the same – and going nowhere. Two or three Rice Kellogg drivers in a box that date in concept from 1925. Not a lot has changed in the last 95 years! Yep, it's all been refined and computers have made their contribution but multiple Rice Kellogg drivers in a box is one old idea with lots of weaknesses, most of which are little discussed. Reason being their manufacturers would rather not talk about what's wrong with multiple drivers in a box, or worse they don't even know.

Bringing me to our lead review this month of the fascinating Magneplanar LRS loudspeaker, that you can read about on p10. This flat open panel has no box and no Rice Kellogg drivers. It throws the whole design proposition out of the window. So if you are a conscientious objector to modern loudspeakers, as some are, try this one! We'd like to know what you think, as would readers, so write in if you get to hear them.

The sound of valves is always bubbling under. Pro-Ject's Pre Box Ultra RS2 on p17, reviewed by Chris Frankland, has no fewer than four of them inside to offer the unique valve sound, as a switchable alternative to pesky transistors. As a reviewer who has drifted into valves almost by accident and has become a convert, Chris grapples with modern complexity and "old fashioned" sound in this review.

Valves get another nod with iFi's iPhono3 Black Label phono stage, that you'll find on p83. No valves inside, but they allude to "tube state" circuitry (valves / tubes being the same). I'm a deep sceptic here, but the iPhono3 did indeed have some of the loveliness of valve sound – an easy natural quality – that eludes most silicon chip based phono stages.

Since better fundamental design techniques and resultant circuitry, lost to chip designers surrounded by application notes, give improved sound, there's hope yet for transistors, as there is for loudspeakers when they finally get to break away from 95 year old technologies. I see – potentially – a bright future for musical enjoyment and this issue captures some of the ways we might get there.

**Noel Keywood**  
**Editor**



## testing (see [www.hi-fiworld.co.uk](http://www.hi-fiworld.co.uk) for full explanations of all our tests)

To ensure the upmost accuracy in our product reviews, *Hi-Fi World* has extremely comprehensive in-house test facilities, and our test equipment - from big names like Rohde & Schwarz and Hewlett Packard - is amongst the most advanced in the world.

Loudspeakers are measured using a calibrated Bruel & Kjaer microphone feeding a Clio-based computer

analyser, using pulsed and gated sinewaves, in a large room to eliminate the room's influence. Pickup arm vibration is measured with a Bruel & Kjaer accelerometer.

No other UK hi-fi magazine has in-house testing, and none has access to such advanced tests across all types of equipment. That's why you can depend on *Hi-Fi World* reviews.



## hi-fi world

Audio Web Publishing  
Studio 204,  
Buspace Studio,  
Conlan Street,  
London W10 5AP  
[www.hi-fiworld.co.uk](http://www.hi-fiworld.co.uk)

## verdicts

●●●●●	<b>OUTSTANDING</b>
●●●●	<b>EXCELLENT</b>
●●●	<b>GOOD</b>
●●	<b>MEDIOCRE</b>
●	<b>POOR</b>
£	<b>VALUE</b>

amongst the best  
extremely capable  
worth auditioning  
unremarkable  
flawed  
keenly priced

## ELECTRONIC MAGAZINE

Go to our website [www.hi-fiworld.co.uk](http://www.hi-fiworld.co.uk) to buy an electronic version of this magazine, individual issues, back issues or a subscription.

Distributed by Select Publisher Services Ltd. P.O. Box 6337, Bournemouth, BH1 9EH UK Tel +44 (0) 1202 586848

Printed by Precision Colour Printing Halesfield 1, Stirchley, Telford TF7 4QQ, United Kingdom Tel: +44 (0) 1952 585585

Our Agents in Malaysia Millennium Hi-Fi & AV Simon Chang Showroom & office, 500-1-3 First Floor Wisma Indah (Shen Court), Jalan Tun Razak 50400 Kuala Lumpur, Malaysia

Tel: 603 9283 8171 Fax: 603 9281 3762 e-mail: [info@millennium-audio.com](mailto:info@millennium-audio.com)

All unsolicited submissions and goods are at the owner's risk. We accept no responsibility for such submissions, nor do we undertake to return them.

No material may be reproduced from this magazine without the publisher's written permission. © Audio Web Publishing Ltd

# contents



## LOUDSPEAKERS

### MAGNEPLANAR LRS LOUDSPEAKERS 10

A budget magnetic planar loudspeaker unlike all else. Noel Keywood investigates.

### Q ACOUSTICS 3030i LOUDSPEAKERS 31

Affordable small loudspeakers with great sound. Noel Keywood enjoys.

### FOCAL CHORA 816 LOUDSPEAKERS 58

Chris Frankland takes on new floorstanders from Focal – and is suitably impressed.

## DIGITAL

### PRO-JECT CD BOX RS2 T & PRE BOX RS2 17

A complex box of tricks from Pro-Ject gets Chris Frankland onto the front foot, spinning high quality CD

### PRO-JECT STREAM BOX S2 ULTRA 42

Do all great things come in small packages? Chris Frankland finds out.

### CAMBRIDGE AUDIO AXR100D DAB/FM STEREO RECEIVER 36

Martin Pipe looks deep into the complexities of this new budget receiver that has both DAB and VHF/FM radio.



# SEPTEMBER 2020

VOLUME 30 ; NO. 7

## CABLES

### 22 CHORD COMPANY CLEARWAYX LOUDSPEAKER CABLES

Budget loudspeaker cables with complex construction capture the attention of Martin Pipe.

## OLDE WORLDE

### 44 OLDE WORLDE

Martin Pipe finds a pair of abandoned Q Acoustics 1030 loudspeakers and looks at their abilities.

## VINYL

### 80 NEWS

All the latest and greatest vinyl releases for you, from the pen of Paul Rigby.

### 83 iFi IPHONO3 BLACK LABEL

Noel Keywood looks into a new phono stage from iFi.

### 88 AUDIOPHILE VINYL

Paul Rigby rounds up more of the latest audiophile vinyl releases.

### 93 AUDIOPHILE VINYL BOOK

The hidden history of Library Music. Paul Rigby reviews Unusual Sounds.



## HEADPHONES

### 48 RAI SOLO SINGLE DRIVER DYNAMIC IEM

Martin Pipe listens to Romanian in-ear 'phones with pedigree – and titanium!

## REGULARS

### 7 NEWS

Words from the world...

### 15 COMPETITION

Your chance to win a superb iBasso DX160 portable player worth £349.

### 26 MAIL

Seven pages of your views, wonderful as always...

### 40 SUBSCRIPTIONS

Ensure your copy every month and save money too!

### 50 WORLD STANDARDS

A guide to the latest and greatest hi-fi hardware on sale.

### 64 AUDIOPHILE VINYL

Paul Rigby rounds up the latest audiophile vinyl releases.

### 67,69,71,73 OPINION

The team get to grips with matters music, hi-fi and life!

### 74 WORLD CLASSICS

Brilliant designs that have stood the test of time...

### 90 DIAL-A-DEALER

A comprehensive guide to UK hi-fi retailers.

### 95 CLASSIFIEDS

Second-hand bargains.

### 96 NEXT MONTH

What we hope to bring you in the next sizzling issue...

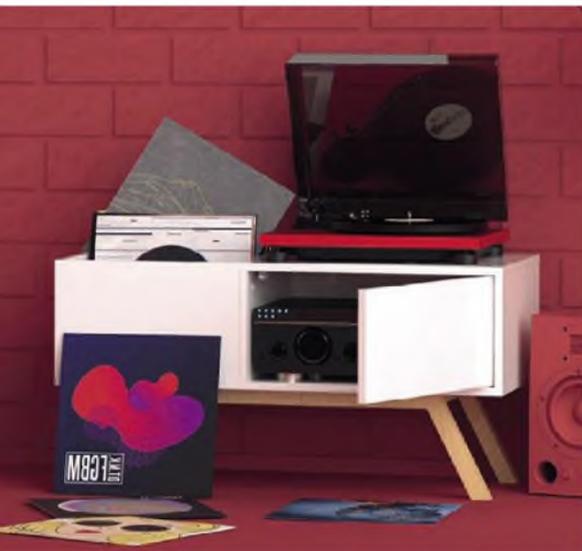
### 97 ADVERTISERS' INDEX

### 98 CLASSIC CUTS

The Birthday party, from The Idle Race. Paul Rigby explains.



# GLOrIOUS



## ENJOY PRACTICAL SOLUTIONS FOR ELEGANT STORAGE

NEW

Glorious provide practical storage solutions for records and CDs, which can be easily integrated at home or in the studio, offering optimal access to your entire music collection. Our carefully designed furniture is based on a modular concept and can be assembled fast and easily. Sturdy constructions and robust surfaces are essential for our durable products constructed using high quality MDF that meet the high demands of music enthusiasts to offer the highest standard of care when storing a beloved collection, old or new. Storage solutions starting from as little as £23.00.

FINISHES AVAILABLE:



Distributed by Henley Audio

T: +44 (0) 1235 511 166 | E: sales@henleyaudio.co.uk | W: www.henleyaudio.co.uk | Facebook: HenleyAudioUK | YouTube: HenleyAudio

email:news@hi-fiworld.co.uk

# news

## RETRO REVIVAL

The most ancient and venerable brand name in high fidelity sound reproduction – Leak – is going to be revived by the International Audio Group (IAG). This has been on the cards for some time but likely the success of their Wharfedale Linton loudspeaker has made revival of Leak seem a viable proposition today. First product up is a Leak Stereo 130 amplifier, based on Quad Vena 2 circuitry we are told. It is accompanied by CDT CD transport.

As the pictures show, for Leak IAG have pursued serious retro. design. The Teak sleeves and stylistically ancient front and rear panels make little concession to modern design practice. Even if, inside, the new Stereo 130 has a digital section based around the ESS ES9018 Sabre32 DAC chip, Bluetooth for wireless playback from a 'phone, an MM phono stage to cater for LP, tone controls (that can be switched out), USB for computer connection, plus headphone output. The amplifier is classic Class A/B fed by a linear power supply, power 45W per channel. There is remote control too.

The CDT transport also has remote control and a front mounted USB socket able to read music from a solid-state flash-drive (memory stick). It is a slot-loader.

Prices are just £699 for the Stereo 130 without Teak sleeve or £799 with it. The CDT comes in at £449 or £549 with Teak sleeve. We hope to be reviewing both items in our next (October 20) issue.

For further details see: [www.leak-hifi.co.uk](http://www.leak-hifi.co.uk).  
Tel: +44 (0)1480 447700.



## LET'S PUT OUR DACS TOGETHER

Pitched at those who appreciate state-of-the-art mobile music playback is Astell & Kern's SE200, billed as "the world's first DAP with two types of DAC". Under the firm's recent division of its products into three distinct (and oddly-named!) categories ("A&ultima", "A&norma" and "A&futura"), the £1,799 SE200 slots firmly into the A&futura class on account of "the advanced audio chip they are using". This is the ES9068AS (more accurately, two of them in a dual-differential DAC arrangement), and Astell&Kern reckon they're the first manufacturer to use this chipset - which boasts an "industry-leading specification".

The second DAC is a AK4499EQ, which is provided so that users get "the best of both chips, in one player". The 274g SE200 is, according to A&K, "super-analytical and delivers even the faintest of details with little to no effort at all...the insane level of detail retrieval from both chips is truly incredible".

Their wonderfully-OTT engineering doesn't stop there. Two sets of headphone amps allow you to "plug your headphones into either the ESS or the AKM output - both of which are available in 2.5mm balanced and 3.5mm unbalanced form". That's right folks, this baby sports four headphone sockets!

Other features of this hi-res marvel include 256GB of inbuilt storage (plus up to 1TB via microSD card), Bluetooth, an 8-core CPU, wide codec support, a friendly user-interface, up to 14 hours of continuous playback, USB DAC mode, manually-selectable digital filters, a 5-inch screen, and a machined-aluminium case with ceramic covers. Look out for our review in next month's issue.

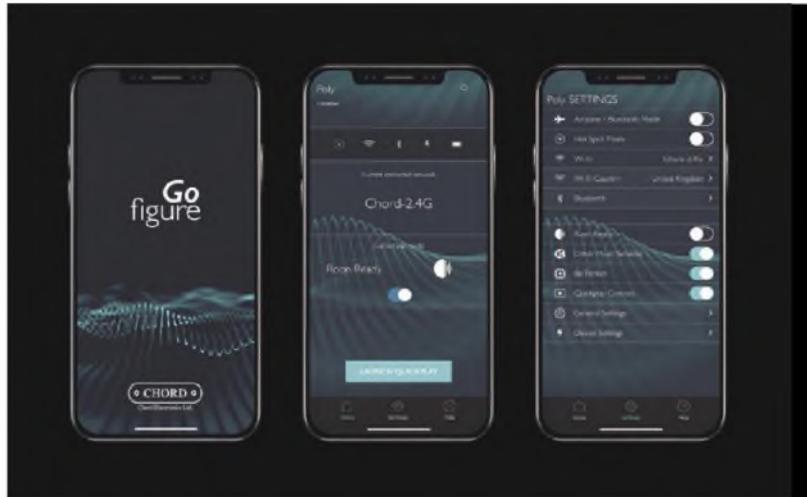
Further details: [www.astellnkern.com](http://www.astellnkern.com). UK distributor: [www.audioconcierge.co.uk](http://www.audioconcierge.co.uk)



## GOFIGURE IT OUT

A free app from Chord Electronics, which configures and manages the powerful music player you get when a Poly joins forces with a Mojo DAC (or a 2go is used with a Hugo 2) has received a major update. The new version of 'Gofigure' (Android 1.2.90, or 2.05 if you're an Apple iOS loyalist) provides "better performance across a number of key areas". These include playlists, battery-status and network switching as well as enhancements to AirPlay, Wi-Fi and MPD (microSD card playback). 2go users, in particular, are strongly advised to update to the latest Gofigure from the relevant portals - so their devices are optimised for an imminent firmware upgrade (the first since launch). Chord Electronics recommends a fresh install, and that your devices are running - at the very least - Android 7 or iOS 13.

Further details: [Chord Electronics](http://Chord Electronics),  
Tel: +44 (0)1622 721444. [www.chordelectronics.co.uk](http://www.chordelectronics.co.uk)



## NEWS FROM B&W

Like so many iconic hi-fi brands in recent years, Bowers & Wilkins could soon become a part of global multinational American Sound United LLC concern that owns the likes of Denon, Polk Audio, Marantz, Definitive Technology, HEOS, Classé and Boston Acoustics.

What this means for British jobs and manufacturing (there's still a B&W factory in Worthing) is unclear. Note however that Bowers & Wilkins hasn't been truly British since 2016, when it was sold to another American firm - Silicon Valley start-up Eva Automation, founded by a former Facebook CEO.

Irrespective, B&W has announced premium 'Signature' versions of the 705 (£2699, 2-way) and 702 (£4499, 3-way) vented-box speakers. As with previous Signatures, these new models are "carefully-upgraded and lavishly-finished loudspeakers representing the apex of B&W design, engineering and manufacturing".

As well as new cabinet finishes, the 705 & 702 Signatures have improved performance courtesy of technologies borrowed from the exotic 800 Series Diamonds. Among these are solid-body (carbon-domed) 'tweeter-on-top' assemblies and high-grade crossovers. The pricier 702 also boasts 'Continuum' coned midrange-drivers and aerofoil-profile woofers.

Further details: [Bowers & Wilkins](http://Bowers & Wilkins), Tel +44 (0)800 2321513.  
[www.bowerswilkins.com](http://www.bowerswilkins.com)



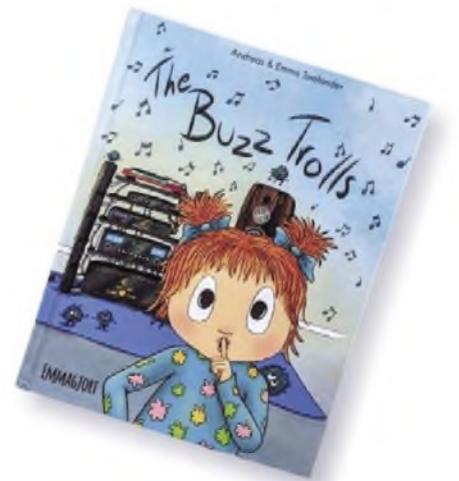
## REELING 'EM IN EARLY

We've seen all manner of items sold in the name of hi-fi...but an illustrated children's book? Yes, and it's from Sweden - with more than a little help from Russ Andrews, which is selling 'The Buzz Trolls' for £10.95.

The book, written by hi-fi retailing couple Andreas and Emma Svalander, charmingly recounts the steps taken by a family's Bjork-loving children to catch the eponymous cable-chewing nasties they hold responsible for the interference that spoils Dad's musical enjoyment. The artwork was created by Emma, who also happens to be a professional illustrator.

Russ Andrews' MD John Armer explained that it was "refreshing" to see something so perfectly-timed emerge from the imagination of someone right at the heart of an industry that can sometimes take itself a little too seriously".

More information: [www.russandrews.com](http://www.russandrews.com), [www.kreativaemma.se](http://www.kreativaemma.se)





## PLAY IT AGAIN...

Audiolab is encouraging us to save space and money with its new £799 6000A Play, which combines the functionality of the £599 6000A stereo amplifier and £449 6000N Play streamer in a single chassis. Although the 6000A Play will start playing music after hooking up 'speakers, mains and network (Ethernet or Wi-fi), it can do a lot more.

There are three inputs for line-level analogue sources and a specially-developed low-noise MM phono stage, as well as four digital inputs – two optical and two coaxial – for CD transports, DAB tuners and the like. The latter drive an ES9018K2M DAC, which caters for hi-res (up to 192/24) playback and has three user-selectable digital filters.

This circuitry is also available to the 'Play' streaming functionality, which can be controlled by a free Play-Fi app (Android/iOS). The latter supports streaming services including Spotify, Tidal, Amazon Music and TunesIn – as well as playback of music stored on a local DLNA-compatible server in (amongst others) WAV/AIFF, FLAC, MP3 and AAC formats. DSD has, for some reason, been left off the list.

Other features include aptX Bluetooth, 50 Watts per channel of solid-state amplification, DTS Play-Fi, Alexa compatibility, current-feedback headphone amp, binding-post speaker terminals, 60,000uF of reservoir capacitance in the power supply and the ability to act as a preamp or power-amp as well as an integrated unit.

Further details: [Audiolab](http://Audiolab), Tel: +44 (0)1480 452561. [www.audiolab.co.uk](http://www.audiolab.co.uk)

## COVID SNIPPETS

The Covid-19 pandemic has affected the hi-fi industry as much as anyone else. One casualty is the Tonbridge Audiojumble that was scheduled for September 27th 2020. The next event will – infection spikes permitting – be on 21st February 2021.

But there have also been positive developments. UK hi-fi industry trade association Clarity told us that "100% of surveyed hi-fi retailers" confirmed they will be "open for business" following the easing of lockdown rules. Clarity reports that during lockdown a "big switch to online selling and click-and-collect" helped to mitigate the effects of retail suspension. It will be supporting the trade with an advertising campaign, informing the hi-fi buying public that customers are welcome again.

One Clarity member, the East Anglian family business Martins Hi-Fi, celebrated this partial return to normal by stocking products from Welsh hi-fi brand Leema Acoustics.

And new music to play while confined to your home? As soon as the lockdown was announced, Bandcamp waived its fees to help artists and labels – meanwhile listeners played their part by spending considerably more than usual on music and merchandise.

More information: [www.audicjumble.co.uk](http://www.audicjumble.co.uk), [www.clarityalliance.co.uk](http://www.clarityalliance.co.uk), [www.martins-hifi.co.uk](http://www.martins-hifi.co.uk), [www.bandcamp.com](http://www.bandcamp.com)



## A TALE OF THREE BUDS

Electronics giant Panasonic has, with uncharacteristic tardiness, finally stepped into the "true" wireless headphone market with two new Bluetooth earbud sets – the £169 RZ-S500V, which boasts what is claimed to be "industry-leading noise-cancellation" and the compact (approx 17mm in diameter) £109 RZ-S300V. Both models, Panasonic is keen to stress, have been designed with "an extra focus on stable connectivity and excellent call quality...no matter what the occasion".

What apparently makes the RZ-S500V so great is its "dual hybrid noise-cancelling technology" that captures the noise both outside and inside the headphones before using "analogue and digital processing...to block out the world". Both are compatible with Siri and Google Assistant voice-control, with support for Amazon Alexa to follow.

Too cheap for your liking? Well, there's always the flagship Blue Dragon from Chinese IEM specialist QDC. Its "ergonomically-shaped" enclosures, blinged-up by 800 sapphires (hence the name), are fashioned from gold-fused titanium for lightness and "complete inertness...to both drivers and the outside world". Each enclosure contains no fewer than ten drivers for a "seamless, ultra-high bandwidth soundstage". They cost £12,199, aren't even wireless (although those wires are gold-plated silver) and there's a three month wait.

Further details: [www.panasonic.com](http://www.panasonic.com), [www.qdc.com](http://www.qdc.com), [www.audioconciierge.co.uk](http://www.audioconciierge.co.uk) (QDC UK distributor)





# Little Goes Large

**Little in size and price, but large in sonic impact, Magneplanar's new LRS loudspeaker wows Noel Keywood.**

**A**t just £995 Magneplanar's new LRS (Little Ribbon Speaker) is going to have a lot of other loudspeaker manufacturers very worried – but you possibly amazed. I say “possibly” because there are those inevitable negatives I'll make quite clear that could result in 95% amazement. But the positives of this new panel are so obvious and attractive I suspect a lot of people will be convinced by its charms.

The first positive is price. Panel loudspeakers are at the exotic end of the hi-fi spectrum. I don't recall any panel coming in at under £1k, although someone might want to tell me what Gilbert Briggs, founder of Wharfedale, asked for his SFB3 (sand filled baffle) open panel loudspeaker, marketed in the 1950s. Otherwise, you pay good money for an open panel, Martin Logan's electrostatic panels coming in at more than a few £k. Up till now they have set the standard – and I use one.

Looks like Magneplanar would like to change things. I'm taken aback that they should decide to again attempt to make the open baffle loudspeaker popular by slashing price to under the crucial £1000 mark.

But there's far more to the LRS. It is not just a cabinet-less open baffle loudspeaker measuring 1in (2.54cm) thick, but uses Magneplanar's own magnetic-planar drive units. The whole surface of the loudspeaker moves air, not just one small cone drive unit (or many of them). Increasing radiation area reduces distortion: look at

Concorde's small engine nozzles versus a modern high surface area Trent engine – and hear the difference! The LRS has a wide surface area radiator and you'll hear how it sounds easier and more relaxed moving air than a small area cone.

To be more specific, what you get in the LRS are two planar (flat) drive units. Each comprises a Mylar film with aluminium conductors on it; you can see them as vertical lines in our pictures. Electrical current passes through these conductors and the resultant magnetic field acts against fixed bar magnets. Sorry for the lecture, but it's all quite different to the norm and may well become more common in our homes, especially since with a flat panel like the LRS you get something just 1in thick.

To throw in a bit more history, Wharfedale produced an Isodynamic (magnetic planar) headphone in 1972 (checkout Wharfedale Isodynamic at the Victoria & Albert museum) and nowadays everyone is at it, Audeze making good examples. Interestingly, Magneplanar's first loudspeaker, the MG-1, was also released 1972. So the LRS I'm reviewing here has history behind it. Until recently, and with headphones, magnetic planars have met no great success in the market place but



***Magneplanar fit 'flippers' (their term, not ours) to optionally tilt the panel forward, changing its tonal balance. The bent iron feet are crude by current standards.***

perhaps the LRS could change things.

A great advantage of any open panel is there's no box to trap the rear sound. What happens in all box loudspeakers (and is never talked about) is that this sound travels back out through the cones. It's very easy to measure with an impulse, sound decaying for up to 0.3 seconds or so our measurements show – a long time in acoustic terms. You don't suffer this with an open panel – and you can plainly hear how clean the LRS sounds as a result.

The main disadvantage of any open panel is lack of bass, especially low bass – the rumbly subsonic bits that add underlying weight. The specific disadvantage of magnetic planar drive units is they need a lot of power. The LRS will go loud with 60 Watts but really you need 100 Watts. Happily, 100 Watts comes cheap and good nowadays.

Physically, the LRS is very similar to the .7 and most of my comments in our May 2020 issue review apply. Although delivered in handed (left / right) pairs it's difficult to distinguish one from the other – and there's no name / model badge on the front, which borders on weird; why



**Superficially – a picture of nothing. No box, no fancy bits, not even a name badge. The LRS offers little visually. Yet internally it is both different and complex.**

wouldn't you want to display your name? Obviously, a stick-on badge could be used to identify the tweeter side, solving both problems. As things stand the vertical line tweeter can be identified from front through the grille cloth by its narrower tracks. The LRS lacks the patch beneath the tweeter just visible from front on the .7 and useful for identification.

Size wise and in Imperial measure, because this is a U.S. product, the LRS is 4ft tall, 14in wide and 1in deep. If that means nothing to you then make it 122 cm high, 36 cm wide and 2.5 cm deep. However, the feet extend backwards 1ft (31 cm). Ideally, it should have a few feet (let's say 60 cm) of rear space to 'breathe' and, preferably, some sound absorption / diffusion on a rear wall, examples being a curtain for absorption or a bookshelf for diffusion (dispersion). You can buy acoustic absorption and diffusion panels from StudioSpares for less than £100 but such tweaks are not essential, especially if there's more than 2ft of clear air behind.

Magneplanar fit their own slightly unusual connection panel that accepts 4mm banana plugs and bare wire but you need an adaptor for spades. A removable shorting link can be replaced with a resistor to lower treble, using multiples of 0.47 Ohm I'd suggest (5W carbon film). After a while I did begin to wonder whether some might want to do this with the LRS: it radiates quite a lot of treble power (radiating area, front and rear) and can be a tad forceful up top.

There are funnies like the bent iron bendy feet and flippers to sit the panel upright. An option pack with cast alloy brackets and adjustable spikes/floor pads is needed. I was also a bit intrigued by three damping 'buttons' on one speaker but just one on the other. This was a little alarming – left and right looked different – but both were the same in performance, in fact closely matched measurement showed.

If all this seems to make the



**The unusual connecting panel of the LRS. It accepts 4mm plugs or bare wires of 4mm diameter, secured by a hex-key grub screw. The Tweeter/Attenuator link can be replaced by a resistor to reduce treble.**

LRS seem a bit exotic, in use it is not. There are no external power supplies, nor any other challenge. They come in a flat box: attach feet, plug-in and go. It's as simple as that.

## SOUND QUALITY

To drive the LRS I used our trusty Creek Evolution 100A (100W) amplifier connected through Chord Company Signature Reference cables. Feeding it was a Chord Electronics Hugo 2 DAC, CDs being spun by our Oppo BDP-205D universal player.

There's no sound trapped in a rear cabinet to bounce back out through the loudspeaker drive unit and the LRS revealed this with The Pink Panther Theme, where the laconic saxophone introduction cruised in its own nice dark space, free from subliminal background muddle. So think: darkness between notes and a sense of sudden surprise as a riff suddenly comes out of nowhere.

This track also highlighted almost definitive timbral resolution of the sax body, which had a fruitily brassy sound that I suspect its makers had spent enormous effort perfecting, only for it to be lost through most loudspeakers, or even hi-fi systems. Not here: the LRS told me straight away that this sax had body and timbre, with quite a lot of light on it too, to reveal fine nuances. Like listening to a big instrument onto which someone was shining a spotlight.

With Nils Lofgren's Keith Don't Go – a test of any loudspeaker – his acoustic guitar strings were

bitingly fast I have to say, but with an easy quality my ears did not shrink from. There was also masses of fine internal detail that was almost a shock; this is quite a dramatic loudspeaker if you turn the volume up – as I suspect most will. If too many bats fall dead in your living room (dare I mention them!) then treble level can be reduced with a resistor.

"masses of fine internal detail that was almost a shock"

As Sinead O'Connor drops into barren lament at the end of Foggy Dew her stark, unaccompanied vocal was eerily present against the background acoustic of the studio being picked up by the mic. It made for dramatic listening, the LRS doing not just a fine job here but one notches above all else – except Martin Logan's XStat electrostatic panel.

A big no-no with open panel loudspeakers like the LRS is they don't deliver deep bass. Magneplanar have twiddled the LRS to sound full-bodied and bass rich, but when I span Loreena McKennit's 'Gates of Istanbul' the opening bass line lacked deep rumble. The LRS has a hard cut-off of deep notes so it sounds big and warm – but won't be shaking the foundations. Smaller rooms than ours will however give stronger deep bass. A room around 18ft long

would be ideal.

Imaging across the sound stage was fabulous. Dadawa singing Canton Story hovered clearly centre stage. The sax in the Pink Panther theme similarly had position chiselled in stone.

Downsides? Yes, they are always there. Being totally absorbed by the LRS I used it hard. After a while some understanding emerged as to

the difference between it and an electrostatic panel. The LRS has a slight metallic colour, reminiscent of a metal cone loudspeaker, that contributes to its sense of speed and hardness. An electrostatic like Martin Logan's XStat panel has a lighter, more ethereal sound. I suspect the LRS will appeal to those who want 'fast' Rock, rather than those demanding absolute tonal purity from Classical instruments.

**CONCLUSION**

What a proposition! A small panel loudspeaker for under £1000. And with magnetic planar drive units. Totally different to all else at this price and

quite radical in its sound, the new Magneplanar LRS or Little Ribbon Speaker, from Magneplan (USA), is in many areas streets ahead of conventional box loudspeakers. Clearer by far and with superb sound staging and imaging, also far more coherent so singers and instruments are more "one of a piece".

There was some warmth, strong upper treble (but this is adjustable) and good if not deep bass, at least in our large listening room. In smaller rooms (circa 16ft long) bass would likely be stronger.

With a different sonic to all else, the LRS I found riveting. Very, very worth hearing. Try and get a demo.

**Supplied are two fuses, plus a Hex key and four resistors, 2 x 1.2Ω, 2 x 2Ω, for reducing treble level. They are 10W wirewounds.**



**MEASURED PERFORMANCE**

Frequency response of the Magneplanar LRS measured reasonably flat in overall trend across most forward measuring-microphone positions. Our third-octave analysis of pink noise shown here was made centrally on-axis, in front of a small disc visible behind the front grille cloth, approximately ear height with the feet 'flippers' down to make the panel stand upright.

There is some emphasis of low frequencies, as there needs to be in a panel loudspeaker to add a sense of body to the sound. The vertical ribbon tweeter extends smoothly to 16kHz and the mid-range dip seen here all but disappeared with the microphone moved to the side opposite to the tweeter, suggesting the ribbon tweeter should be on the outside of what are handed-pair loudspeakers (i.e. left and right), unlike the .7 reviewed in our May 2020 issue.

Bass extends down to 50Hz so the LRS reproduces low frequencies in spite of its limited width. The bass panel works up to 800Hz, measurement showed, leaving the ribbon tweeter to cover a lot of the audio band (800Hz-16kHz).

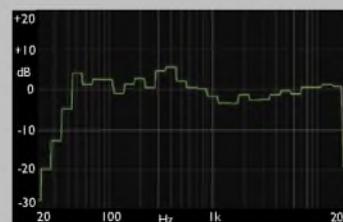
At rear a removable link couples the treble unit. It can be replaced by a 0.47 Ohm or 1 Ohm resistor to pull down high frequency output if desired.

As an amplifier load the LRS is effectively a 3.5 Ohm resistor, our impedance plot shows. In spite of this low value the speaker is insensitive, producing just 80dB sound pressure level (SPL) at one metre; it needs an amplifier of 60 Watts to go reasonably loud and 100 Watts is probably a better choice.

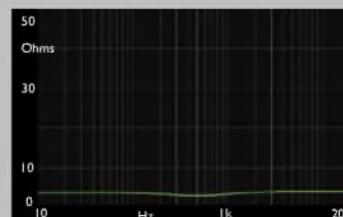
The LRS has a reasonably accurate tonal balance with quite strong upper treble. It will sound a tad warmer than

many modern box speakers and needs a powerful amplifier for high volume. **NK**

**FREQUENCY RESPONSE**



**IMPEDANCE**



**MAGNEPLANAR LRS £995**



**OUTSTANDING - amongst the best**

**VALUE - keenly priced**

**VERDICT**  
Amazingly good – but lacks deep bass

**FOR**  
- great insight  
- big, precision sound stage  
- clean and clear

**AGAINST**  
- lacks deep bass  
- needs power  
- poor standard of finish

Decent Audio  
+44 (0)56 0205 4669  
www.decentaudio.co.uk

# The First Word in Music Streaming.



Music. Literally the first word in 'music streaming', and always our top priority. Our network players feature cutting-edge technology – developed over 3 years by 25 expert engineers at our Salisbury HQ – but more importantly stay true to our founding mission, to take you closer to the authentic emotion of the music you love.

So, whether you're listening to your own digital library, commercial music services such as TIDAL and Spotify, internet radio, or exploring the world of Roon, you'll enjoy music streamed with our signature pace, rhythm and timing. Handmade here in

England, the slimline **ND5 XS 2**, Classic superstar **NDX 2** (pictured) and flagship **ND 555** players are winning Awards around the world. Hear the difference with your favourite music at your local Naim specialist retailer.

[naimaudio.com/streaming](http://naimaudio.com/streaming)

#### Awards for NDX 2





# WIN

## iBASSO'S SUPERB DX160 HI-RES PLAYER WORTH £349 IN THIS MONTH'S GREAT GIVEAWAY!

**H**ere's your chance to win a superb iBasso DX160 portable hi-res player, reviewed in our March 2020 issue. Read the review excerpt below and answer the questions.

"Style and facility wise, this player is right up to date and lacks little. It has a lovely 5in Sharp capacitive 1080P resolution touch screen with clear graphics: I had no trouble except with some legends greying out when inactive, becoming faint in sunlight.

At heart lies an Arm Cortex 8-core processor with 2GB RAM – making it fast – running Android. There is 32GB of shared storage, on our player 7GB consumed by the system, leaving 25GB for music. That's

enough for 400 CD tracks but not so useful for DSD tracks that come in at 500MB or more, meaning 50 in total. To cope, there is a single microSD card slot of unspecified maximum capacity. It's a push-to-fit type; there's no card loading tray.

Alternative music inputs are wi-fi (5G) connection to the internet for music streaming, Amazon HD now being incorporated in the firmware. Bluetooth 5 connection allows incoming data so the unit acts as a DAC / headphone amplifier, and outgoing Bluetooth so it acts as a wireless music source to a hi-fi system.

For wired connection to the hi-fi the 3.5mm stereo headphone output can be set to Line out for analogue linking, or to S/PDIF for digital linking

– electrical not optical. There's also a 4.4mm fully balanced output that delivers 6.4V, but no 2.5mm alternative for those that may have such (barely-usable) cables.

The 4.4mm plug is quite sturdy, giving the DX160 a chunky balanced output socket next to the conventional unbalanced headphone output.

iBasso use two Cirrus CS43198 digital-to-analogue (DAC) chips, one per channel – and these I have not come across before. To date ESS, followed by AKM have dominated the DAC space; Cirrus Logic popping up in such a rarefied market was a surprise. This is a brand new design, relatively speaking. Cirrus claim 130dB dynamic and we measured an amazing 127dB from the DX160".

For a chance to win this great prize, just answer the four easy questions at right. Send your entries on a postcard only, by 8th September 2020, to:

**September 2020 Competition,  
Hi-Fi World magazine,  
Studio 204,  
Buspac Studio,  
Conlan Street,  
Notting Hill,  
London W10 5AP**

### QUESTIONS

**[1] The touch screen is from -**

- [a] Sennheiser
- [b] Sony
- [c] Sharp
- [d] Southern Rail

**[2] The processor is from -**

- [a] Artix
- [b] ARM
- [c] IBM
- [d] Intel

**[3] S/PDIF digital link is -**

- [a] electrical
- [b] carrier pigeon
- [c] optical
- [d] AES/EBU

**[4] DAC chips are from -**

- [a] ESS
- [b] AKM
- [c] Wolfson
- [d] Cirrus

### RULES AND CONDITIONS OF ENTRY

- ONLY ONE ENTRY PER HOUSEHOLD
- MULTIPLE ENTRIES WILL BE AUTOMATICALLY DISQUALIFIED
- PURCHASE OF THE MAGAZINE IS NOT A PRE-CONDITION OF ENTRY
- NO CORRESPONDENCE WILL BE ENTERED INTO
- THE EDITOR'S DECISION IS FINAL
- NO EMPLOYEES OF AUDIO WEB PUBLISHING LIMITED, OR OF ANY COMPANIES ASSOCIATED WITH THE PRODUCTION OR DISTRIBUTION OF THE PRIZES, MAY ENTER

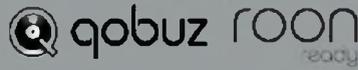
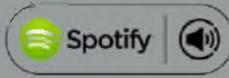
**ENTRIES WILL BE ACCEPTED ON A POSTCARD ONLY**

**PLEASE ENSURE YOU PUT A TELEPHONE CONTACT NUMBER ON YOUR ENTRY**

**APRIL 2020 WINNER: BLUE AURA'S BLACKLINE HOME AUDIO SYSTEM  
Mr. A Bayliss of Haselmere, Surrey**

# NOVAFIDELITY

Innovators in streaming devices offering unrivalled future-proof feature sets since 2003.



## Multiple control options

- Full traditional remote control
- Full front panel control with 7 inch colour screen\*\*
- Web interface via PC, iOS or Android device
- [NEW] Music X Neo control app for iOS and Android

## Highly flexible

- Up to 8TB internal storage (16TB on X50/X50PRO)
- CD ripping functionality
- Network protocols supported
  - UPnP(DLNA) Server/Client/Media Renderer
  - Samba Server/Client
- Bluetooth, Airable (internet radio), DAB/FM
- Wide-ranging analogue I/O including phono stage\*\*\*

\*HD implementation due early 2020

\*\* Excludes N15D. app/webinterface control only

\*\*\*Phono stage on X35, X45, X45Pro



**Now shipping  
with MusicX NEO**

Remote control  
app compatible  
with iOS and  
Android



WWW.NOVAFIDELITY.COM

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



**Chris Frankland checks out Pro-ject's CD Box RS2 silver disc spinner and accompanying Pre Box RS2 Digital convertor (with valves).**

# Boxing clever

**P**ro-ject's Pre Box RS2 Digital (£1750) and CD Box RS2 T (£2199) units were introduced last year. The Pre Box RS2 Digital headphone amp/DAC/preamp is the bigger brother of Pro-ject's existing Pre Box S2

Digital, using the same top quality ESS ESS9038 Q2M DAC chip. There's one per channel, each chip strapped for mono (single channel use) to give highest quality. These highly-regarded chips allow it to support file resolutions up to 768kHz/32-bit in PCM and DSD (up to DSD512) formats.

The RS2 Digital is all solid-state, but a valve output stage employing 6922 twin triodes has also been fitted and can be optionally switched in for a bit of thermionic loveliness.

The front panel of this compact unit (72mm high by 206mm wide by 222mm deep) is minimal with



*exposure*



*exposure*

**Exposure Electronics Limited**

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

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

a volume control, LCD display and four control buttons, although most will use the remote control which allows certain functions to be directly accessed.

On the rear there are balanced and unbalanced analogue inputs and outputs, with digital inputs in the form of two optical, one coax, an AES/EBU balanced input and an I2S differential bus via HDMI – the last being for the CD Box. The RS2 provides a master clock signal at 16.9344MHz to the transport through the I2S link, via the HDMI cable link (I2S keeps data and clock separate, but it is an internal protocol; there is no cable purposed for external transmission; HDMI here is an ad-hoc choice). Pro-Ject says that the Pre Box RS2 also supports MQA playback.

The headphone amplifier is,

went to Stream Unlimited in Vienna, founded by former members of the Philips CD R&D department. They provided the CD Box RS2 T with their top-of-the-line Blue Tiger CD Pro 8 top-loading module, suspension system and CD-84 servo board, which Henley told me is used in some very high-end players.

The player has a chassis milled from a solid block of aluminium and the whole assembly is isolated from the outside world on an anti-vibration platform. The suspension, cover and turntable platter are all made of 100% carbon fibre, while the turntable is machined from steel and chrome-plated.

And by leaving out the DAC and preamp, Pro-Ject says they have ensured these circuits do not interfere with the perfect reading of the CD. All of which makes CD Box



**CD Box RS2 T chassis is milled from solid aluminium while suspension system, cover and turntable platter are made from carbon fibre.**



**CD Box RS2 T has coax, optical, AES/EBU balanced and I2S outputs (HDMI connector).**

they claim, direct coupled, having no coupling capacitors in the signal path.

Pro-Ject describe the CD Box RS2 T as “revolutionary”. Heinz Lichtenegger, Pro-Ject founder and MD, says that most players are so bad they only manage to resolve 10 bits rather than the 16 bits they should. So he decided to create “the perfect transport”. To help achieve this, he

RS2 T more than it seems; this is a hi-tech CD transport replete with an external I2S clock link – rare. But it is expensive as a result.

Each unit has its own remote control and external switch-mode power supply, accepting 110V-240V input, with 20V 3A output.

**SOUND QUALITY**

So what does this diminutive duo deliver in terms of sound quality? To kick off, I started with the Pre Box set with oversampling off, tube amplifier off, upsampling off and reclocking off, with the digital filter set to ‘linear phase slow’ (one of eight options!), as generally I find the slow filters sound better. The units were played through an Audio Note Tonmeister integrated valve amplifier and AN-J LX Hemp speakers.

First impressions on sax player Dave Koz’s The Bright Side were very good. Percussion and drums were detailed and dynamic and his sax had good presence and bite. Jonathan Butler’s backing guitar was well captured and differentiated in the mix.

On Days Like This by Van Morrison, the track held together well with good definition on his tricky vocals and good detail and dynamics to the horn section. Could the horn section have had better presence? Probably. Could the track have been pacier? Probably. But at the price, I wasn’t complaining.

Ben Sidran’s Sunny Side of the Street confirmed good vocal rendition, solid and tuneful bass lines and sparkling percussion. Overall the sound was very good and the CD player and Pre Box would more than



**Pre Box RS2 Digital valve stage uses four 6922 twin-triode valves. Motorised Alps volume control at left.**

hold their own at the price.

So how did the valve stage sound? On the title track from guitarist Larry Carlton’s Sleepwalk CD, bass lines were a bit fuller, guitar a bit mellower, but the Fender Rhodes was perhaps a bit too mellow. Not a huge difference, though. On Never Too Fall to Fall by George Benson, the bass line moved



**Remote controls for Pre Box RS2 Digital and CD Box RS2 T.**



**SPENDOR**

REVEALING EVERY DETAIL

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

MADE FOR MUSIC. DESIGNED FOR YOU.

[spendoraudio.com](http://spendoraudio.com)

well, percussion was delicate and vocals slickly handled, but the track maybe lost some of its impetus and life. The valve stage had great warmth and weight, but solid state moved things along more pacily.

I quickly raced through the eight digital filters and decided I definitely disliked 'oversampling bypass' and 'brickwall', but of the others my vote was still in favour of Linear Phase Slow, which gave a generally better integrated and more musical performance. Similarly, I found I preferred oversampling and reclocking switched off.

Next, I tried the Pre Box on Bluetooth. It was easy to pair up if you follow the instructions and sounded good. Streaming through USB was also excellent, but users can only use an Apple Mac, PC or Pro-Ject's own Stream Box.

But what of the DAC? Those ES9038s give it street cred, but how good was it? I compared it with the built-in DAC in a well-respected, good-sounding CD player that sells for around £4,000 to check this out. On Van Morrison's Days Like This, the Pro-Ject DAC definitely made his voice marginally more intelligible,



**Pre Box RS2 has balanced and unbalanced analogue inputs and outputs, digital inputs in the form of two optical, one coax, an AES/EBU balanced input and an I2S differential bus via HDMI.**

separated backing vocals better and gave the horn section more bite. Not a huge difference, but the Pro-Ject was better. On So Amazing by Luther Vandross, again the Pro-Ject impressed with its vocal presence and articulation, tight tuneful bass lines and great backing vocal separation.

Onto the headphone output – and to do this I hooked up a pair of Focal Stellias.

At first I thought the Pro-Ject sounded quite dynamic. It had good bass weight and instrumental separation, but at times vocals

could get a bit shouty and I felt the sound seemed a bit compressed and lacking the composure of some of its competitors. Its added bass weight did not seem to compensate for that. I must admit to some reservations.

**CONCLUSION**

On balance, these two Boxes from Pro-Ject performed very well. The CD player sounded good and the Pre Box was versatile and offered good performance at the price, only let down by its performance on headphones.

**PRO-JECT PRE BOX RS2 DIGITAL £1,750**



**EXCELLENT - extremely capable.**

**VALUE - keenly priced.**

**VERDICT**

Good sound and easy to use.

**FOR**

- ESS sound quality
- versatile
- optional valve output
- I2S digital link to CD

**AGAINST**

- mediocre sound with headphones

**PRO-JECT CD BOX RS2 T £2,199**



**EXCELLENT - extremely capable.**

**VALUE - keenly priced.**

**VERDICT**

Quality CD transport.

**FOR**

- top quality transport
- comes with own puck
- easy to use
- digital I2S clock link

**AGAINST**

- top loading restricts siting

Henley Audio  
+44 (0)1235 511166  
www.henleyaudio.co.uk

**MEASURED PERFORMANCE**

With 24/96 digital distortion (-60dB) from XLR out measured a low 0.03% – good if not 0.01% of the best, including other converters with the ESS ES9038Q2M DAC chip. Dynamic range (EIAJ) came out at 117dB USB in and a tad less (115.4dB) from AES/EBU in, again good but the ES9038 can manage better – the 124dB value quoted in Pro-Ject's spec.

With a digital S/PDIF input via optical cable (TOSLINK) feeding RCA phono socket analogue outputs the figures degraded to 113dB dynamic range and 0.04% distortion.

Changing filters had minimal affect, but switching in valve output introduced thermal noise that degraded dynamic range to 94dB (RCA phono analogue output) or 103dB (XLR analogue output).

Used as a pre-amplifier gain from XLR in/out measured a useful x3.65 (11dB), falling to x2.2 (RCA phono in/out) or x1.7 (4.6dB) with Valve switched in. These are useful if not high gain values, just enough to drive a 1V input power amplifier from an external source like a phono stage.

Frequency response extended to 96kHz with 192kHz sample rate digital (-1dB at 58kHz) and to above 100kHz via the analogue preamp. The digital filters

had little affect upon response, but the analogue 25kHz filter rolled off output fast above 25kHz.

The headphone output gave worse results than Line. Dynamic range at full volume (5.2V out) was a low 103dB, falling to 80dB with volume set for 1V out for headphones, due to noise in the output stage after the volume control. There was distortion too.

The Pre-Box RS2 measured below expected from an ES9038Q2M DAC chip, likely due to slight noise in the output amplifiers. Very low noise circuits must be used from this chip's balanced output to a balanced XLR output (unbalanced being a derivation) and I suspect this unit's complexity (switchable analogue filter etc) gets in the way a bit. However, there is still an ES9038 and 6922 in there, so sonics may not firmly link to measurement. The headphone output was mediocre. **NK**

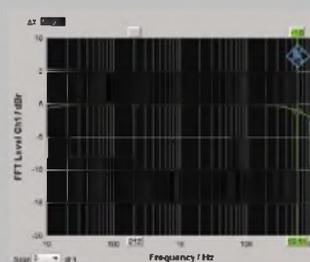
**ANALOGUE**

**Frequency response (-1dB)** 5Hz-100kHz  
**Distortion (-60dB, 24bit)** 0.002%  
**Noise (line/h'phone)** -107 / -87dBV  
**Max output (RCA/XLR)** 10.5V / 21V  
**Gain (RCA/XLR)** x2.2, x3.65

**DIGITAL**

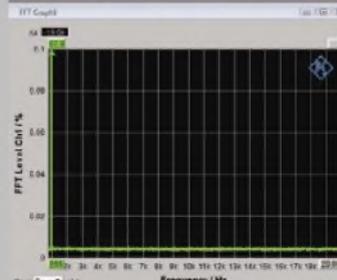
**Frequency response (192kHz, -1dB)** 5Hz-58kHz  
**Distortion (-60dB, 24bit)** 0.03%  
**Dynamic Range (EIAJ)** 115dB  
**Output (0dB, XLR)** 4.2V

**FREQUENCY RESPONSE**



**DISTORTION**

THD all-B	Level RMS	Frequency
0.0365 %	4.2247 mV	997.00 Hz
OFF	OFF	OFF





# Quality time with your X

**ClearwayX, from Chord, is a pretty damn fine budget speaker cable reckons Martin Pipe.**

**F**or several years, Chord Company's Clearway was the 'go-to' speaker cable for the audiophile on a budget. For £10 per metre, it performed better than some cables selling for several times the

price. You can't stop progress, though, and the original cable has just been displaced by the ClearwayX.

The new product is 50% more expensive, at £15 per metre. That's quite a leap, and so I pestered Chord for an explanation. "The price had to

increase for a number of reasons" I was told. "Clearway was selling for the same amount since it was launched in 2015, meaning that for five years Chord absorbed the effects of inflation on labour, materials and shipping – as well as a weakening pound."



With this budget and affordable new cable Chord has made improvements. The ClearwayX has a new and more expensive XLPE (cross-linked polyethylene) insulation, replacing the original's FEP (fluorinated ethylene propylene) that Chord used because it had the "same electrical characteristics" as the PTFE found in costlier cables. The two conductors, built from multiple strands of high-purity oxygen-free copper are arranged in a twisted-pair configuration; this, say Chord, will "reduce interference".

The 14 AWG conductors are "big enough to bring control and definition to both bookshelf and floorstanding speakers". They are covered by a soft PVC internal jacket, over which twin foil shields that reduce radio frequency interference pickup are contra-wound. The internal jacket will also, it is said, minimise any "mechanically-induced noise". Finally, there is a tough outer protective covering of 10.5mm overall diameter.

In all, Chord's construction is carefully-considered. If you buy ClearwayX cables professionally-terminated (standard lengths of 1.5, 2m, 3m and 5m are available) then you get substantial shrouds that cover the 90mm or so of wiring that splits from the cable's body and goes to the plugs. These shrouds look good – and the "ChordOhmic" 4mm banana

plugs (spades can be specified as an alternative) are of a high standard. They are silver-plated, and their colour-coded bodies are ribbed for ease of handling.

However, termination adds significantly to the cost. The 3m pair I tested would set you back £210 – comprising £90 for the cable (2x 3x £15), plus £120 for the plugs (or spades). However, Chord told us that you can buy "off the reel" if you're prepared to attach bare wire directly to the binding posts of your amp and speakers. This is worth considering – avoid stray strands, and tighten those terminals!

We were also told that Chord – and its dealers – would "always be able to help with custom lengths and configurations for customers". If you want cables of specified length – and professionally-terminated at either or both ends – Chord dealers are equipped with the special tools needed to do this properly.

I tried the 3m ClearwayX review samples with a variety of equipment – the Cambridge AXR100D receiver and Q Acoustics 1030 speakers featured in this issue, as well as vastly more expensive Cambridge gear (the Edge NQ streamer and W amp) driving Quadral Aurum Wotan VIII 'speakers.

I compared ClearwayX with 2-core mains flex, of the sort you can

buy at DIY stores. It is typically sold for wiring indoor-lighting to mains plugs and covered by a white jacket. I chose it, because it's cheap – just over 50p a metre – and I've actually witnessed some people use it in their budget hi-fi systems! So, do the audible benefits justify splashing out an extra £87 for 3m lengths of ClearwayX?

The improvements were 'night and day', especially with the higher-end Cambridge kit and 'speakers. Bass was more revealing and bestowed with tangible solidity, a sonic looseness of the cheaper wire disappearing altogether. Midrange clarity – strings and vocals in particular – was better, while previously-elusive treble details now burst out of the mix. The system also conveyed dynamic swings with greater ease, but the biggest advantage is that everything just sounds...more musical. Even with the cheaper system, many of these improvements could be heard – albeit to a lesser degree. If you're still using bell-wire, give your ears a treat and ride the ClearwayX to better listening.

## CONCLUSION

Despite the higher price relative to its predecessor, the Chord ClearwayX is still something of a bargain – especially if you're prepared to use bare wire attached to binding posts. A fine budget cable that is sophisticated in construction and audibly excellent.

**CHORD  
CLEARWAYX  
£15 PER METRE  
(£210 FOR  
TERMINATED 3M  
PAIR TESTED)**



**OUTSTANDING - amongst  
the best.**

### VERDICT

A technically sophisticated budget cable with fine sound.

### FOR

- audible improvements across the spectrum
- musical involvement
- well thought-out design, impeccably-executed

### AGAINST

- terminations add significantly to cost

The Chord Company  
+44 (0)1980 625700  
www.chord.co.uk



SCANSONIC

AUDIO ANALOGUE  
soundpleasure

DECENTAUDIO.CO.UK



TEL: 05602 054669  
EMAIL: INFO@DECENTAUDIO.CO.UK

AUDIO ANALOGUE - KRONOS AUDIO - MAGNEPAN - RIVA AUDIO - SCA



*Transfiguration*

**KRONOS**  
TIME FOR MUSIC™



**DECENT AUDIO**  
SOUND DISTRIBUTION

ANSONIC - TRANSGIFURATION - USHER - VAN DEN HUL - VELA AUDIO

# Mail



Visit our website at [www.hi-fiworld.co.uk](http://www.hi-fiworld.co.uk) or send your emails to [letters@hi-fiworld.co.uk](mailto:letters@hi-fiworld.co.uk). Letter of the month wins a pair of KEF Q150 bookshelf speaker

Answers by: **NK** - Noel Keywood; **CF** - Chris Frankland; **PR** - Paul Rigby; **MP** - Martin Pipe.

## LETTER OF THE MONTH PRIZE



### KEF Q150 BOOKSHELF SPEAKER

<https://uk.kef.com/products/q150-bookshelf-speaker>

[subject to availability - Satin Black / Satin White]

**A PAIR KEF Q150 LOUDSPEAKERS are on their way to PHIL CHARLES, Letter of the Month winner in our August 2020 issue.**

## Letter of the Month

### DIGITALLY COPYING LP

Like your correspondent Phil Charles (Letters August 2020 issue) I decided to use some of my lockdown time to begin converting my vinyl collection to digital files. I have wanted to do this for several years but had not taken the plunge. I have been a vinyl collector for over 50 years and have amassed more LPs than I care to count and a good number of singles and EPs from the 1960s.

Vinyl is still my preferred medium and I listen, regularly, to many of my LPs. As I have already converted most of my CDs to FLAC files on a large hard drive which is connected, via Bluetooth, to a Yamaha WXAD-10 streaming adapter, it seemed logical to do the same with my vinyl collection. This will, also, allow me to have digital copies for my portable devices.

I am also thinking that I may sell some of my more valuable and less played records. Having considered my options, I decided to purchase a Rega Fono Mini A2D, that has a USB output but only has an MM cartridge input. Had I checked back into old copies of Hi-Fi World (or waited for the August edition) I would probably have been drawn to the Furutech ADL GT40a which has an MC input.



**"I decided to purchase a Rega Fono Mini A2D, that has a USB output but only has an MM cartridge input" says Colin Topping. This £90 phono stage is likely 16bit for CD quality we suggest.**

What the hell, the Rega was cheap and I could sell it on, having used it to gain experience of the digitisation process. Out of the cupboard came a long abandoned, but still viable, Roksan Corus Black MM cartridge. I set it up in my Origin Live Silver arm on my Garrard 401, listened to a few LPs and made some minor adjustments.

I was quite surprised by the quality of the sound. For a cheap item, the Rega offers very good sound quality. Not as good as my EAR valve phono stage and modified Denon DL304, but closer than I had expected. The

suggested recording software for use in conjunction with the Rega is Audacity which I downloaded (for free) and read the relevant tutorials.

I decided it would be prudent to follow the advice and thoroughly clean the records before attempting to record. I do have, and use, a KAB-EV1 cleaner. For those not familiar with this device, it is essentially a Nitty Gritty cleaner without the built in vacuum motor and is attached to your domestic vacuum cleaner. This has worked well for many years but, latterly, has been leaving a deposit in the grooves that collects on

the stylus. I considered buying some new cleaning fluid but was seduced by the idea of immersion and groove-scrubbing offered by the Disco-antistat. Sadly, after cleaning with this, a deposit still remained, both on air drying (6hrs) and using the KAB-EV1 to dry the LPs.

Internet searches led me to Mark Fletcher ([highqual.co.uk](http://highqual.co.uk)), a hi-fi enthusiast and ex KEF man, who offers his own accessories and cleaning fluids, at very reasonable cost, for the Disco-antistat. To cut a long story short, I now have two Disco-antistat baths, the first using the provided cleaning fluid and the second using Mark Fletcher's HQ3 fluid (a quick drying cleaner/rinse with reduced surfactant) which is based on ethanol as opposed to the less volatile isopropanol. It also acts as a single cleaner on less contaminated records.

The result – beautifully clean grooves and no deposit left on the stylus on either air or vacuum drying. The sound is, also, much improved, with more detail and air and very little surface noise.

I also purchased one of Mark's filter systems to ensure that the cleaning fluids were returned to the bottles free of dirt when the cleaning baths were emptied.

Back to Audacity. Thus far, I have followed their Sample workflow for LP digitisation tutorial, which is pretty clear and straightforward, with excellent results. Admittedly, the process is time consuming and, for the perfectionist, could be very time consuming, but the results have been very worthwhile and, certainly, of very good CD quality. The benefits of 96kHz and 192kHz are not on offer here, but the Rega is less than 1/5 the price of the Furutech and I am sure that all but the perfectionists would be happy with the results.

**Colin Topping**

Hi Colin. Rega carefully avoid



**"Internet searches led me to Mark Fletcher ([highqual.co.uk](http://highqual.co.uk)), a hi-fi enthusiast and ex KEF man" says Colin Topping.**

specifying the bit depth of the Fono Mini A2D but at its low price of around £90 it can only be a 16-bit CD quality convertor. These come from a factory in China – I can identify them by low MM gain and the presence of a warp filter of identifiable characteristic. They do a good enough job as a starter unit but you need to move up to the Furutech that has 24bit resolution. There is a clear difference: 16bit gives a simulacrum complete with 16bit sound as we know it from CD, a tad coarse and dynamically un-engaging, where the digitisation process gets in the way of analogue sound. With 24bit from the Furutech you will clearly hear the qualities of analogue LP, rather than the qualities of old-tech digital.

Hope you enjoyed reading up about recording LP in Audacity! It's a bit challenging all-round but Audacity

does give superb results – and it's free, as you say.

Fascinating to hear about Mark Fletcher's LP cleaning fluid and its effectiveness. I'm sure other readers will value your experience here, as I do, having some embarrassingly dirty LPs from my mis-spent youth in the 1960s! **NK**

### MAGGIE MISTAKE

*In the August H-Fi World you announce that you will be highlighting the Magneplanar LRS panel speaker in the September magazine. Is this a new and different speaker to the Magneplanar MG 0.7 LRS reviewed in your May 2020 issue?*

*If so I look forward to another review. I very much enjoy their sound but they are quite intrusive in a typical size room!*

*Yours faithfully,*

**Colin Alford.**

Hi Colin. I made a blooper: the Magneplanar .7 and LRS are different if similar loudspeakers. Basically, the .7 is around one year old I was told, and with a price of £1995. The LRS is a slightly smaller speaker, although you'd hardly know it, and half the price – strategically just under £1000. Looks to me like Magneplanar have decided to enter the UK market with a critically priced panel loudspeaker with the LRS, to grab market share and build the brand. Martin Logan have done just that over the last decade with their hybrid electrostatic panels and they have made it work. Their big demo room at The Bristol Show this year (2020) I dropped into



**For high resolution 24bit digital from LP, Furutech's ADL GT40a preamplifier is a top choice.**



**Magneplanar's .7 and LRS loudspeakers carry no front panel badges stating model – or even manufacturer! The small rear connecting panels shown here say which is which.**

many times and it was consistently packed – all seats taken, people standing around the sides.

I suspect Magneplanar are aware of this and using the same strategy. The UK market isn't big for hi-fi, but historically it is seminal for panel loudspeakers – Quad ESL57 and Wharfedale SFB3 – so potentially fertile territory.

The loudspeaker I reviewed in our May 2020 issue was the .7 and the one I am reviewing in this issue is the LRS – to be quite clear about it. If you have enjoyed the sound, then please let us and readers know what you liked (or disliked!). NK

**ARCAM, QUAD, PRIMA LUNA**

*I have spent a lot of time during lockdown listening to my new Richer Sounds 'discontinued bargain' Arcam SR 250 amplifier. I have also compared the 'Arcam Sound' to the 'valve sound' of a Prima Luna amplifier and the 'Quad Sound' of an Artera power amplifier. I cannot add much to the forever ongoing valves v transistors debate. They are all comparable in overall sound quality with different strengths and weaknesses. Each in their own way are totally absorbing when listening carefully via each individual amplifier.*

*But there is one aspect of the Arcam SR250 which stands out when used with Monitor Audio Gold 200 speakers. They hold everything together when the going gets tough.*

*I will use just one example: a DXD download (352/24) of Beethoven's 7th symphony second movement played by Pittsburg SO and conducted by Manfred Honeck. The CD version is available on Amazon, see [Beethoven-PITTSBURG-ORCHESTRA-REFERENCE-RECORDINGS/dp/B015OPM7G0](#).*

*Gramophone noted of this recording that: "Honeck's approach to Beethoven's music is no less forensic but far more robust than that of the new-age authenticists – more Promethean, you might say. In the Seventh Symphony, he tells us, it is essential to have everything played*

*This sublime music is known for repeatedly rising from delicate quiet woodwind to huge orchestral crescendos. With the Arcam as the music rises in volume and increases in the complexity of orchestration nothing is lost. All instruments remain locked in position and with full power. So often the bass seems to get lost as the higher instruments take over and the location of instruments becomes a bit vague. With the Arcam the bass just keeps on going and is easily heard even at full volume. This adds enormously in creating a realistic scale to orchestral music.*

*I have to record that the Arcam has*



**"With the Arcam SR 250 the bass just keeps on going and is easily heard" says Mike Tartaglia Kershaw.**

*with the biggest possible impetus and pent-up power. It's what he calls taking the music to the edge, which is very much what he does in this astonishing live performance".*

*the best bass I have heard so far, but this in no way detracts from its overall musicality with all instruments. I guess this just is a hint at what very expensive and powerful amplifiers and huge*

speakers can achieve in large rooms. But I feel I am at least having a taste of the real 'high end' when I listen to the Arcam.

Then I switch on the Prima Luna and somehow warmth and elegance and subtlety and spaciousness become the main features of the sound.

Who can choose one over the other?

Best wishes,

**Mike Tartaglia Kershaw**

Hi Mike. Yes, that is an eternal problem with making subjective assessments in audio. Two amplifiers can sound quite different but which is the best really comes down to a matter of taste. I tend to veer away from a sound that's mechanistic, shall I say. Quad's "closest approach to the original sound" slogan (of long ago) still strikes me as a valid guide. No screaming treble for artificially enhanced 'detail', and some sense of three-dimensional space, that a microphone is able to capture. Valves still manage to convey this better than transistors in my experience, but the latter are getting closer.

Component quality has a big influence: valve amps are simple and necessarily have few but specialist components; transistor amps are commonly jammed with cheap op amps not designed for high quality audio, and smaller parts that are cheap rather than good. Add in noisy switch-mode power supplies and it is hardly surprising that so many transistor products are sonically deficient.

Your Arcam SR250 likely has a linear power supply in keeping with the company's heritage and this will help with those crescendos, since linear supplies by their nature have massive energy storage, in their transformer fields and in their smoothing capacitors.

In the end though, it is best just to listen to an orchestra, as you do, and come to your own conclusions. Reviews can (with measurement) pinpoint deficiencies but cannot describe sound quality except through personal listening experience – the reviewer's opinion. If the reviewer has no experience or sensitivity to the sound of unamplified musical instruments, rather than synthesised ones, then this falls apart too. Readers often implore us to listen to classical in addition to Rock – and rightly so. So have fun and hopefully

enjoyment with your Arcam bargain and Prima Luna amplifiers. NK

### CHOOSING A CARTRIDGE

It's always difficult when considering purchasing a new cartridge, whatever they sound like in the shop or whatever is said in a review in a magazine, you are always worried that your setup at home will not be the same and get the same results.

After much reading of reviews from many magazine articles I had narrowed the choice down to two possible, both had good reviews and both were about the same cost. I decided to write into Hi Fi World to get your opinion (as you listen to many more model of cartridges than I could ever do) but then came Covid and the stalling of Hi Fi World publications.

So, doing what any impatient Hi Fi purchaser would do I picked one and ordered it! I have now had the Hana ML installed and playing well for about two months and am most definitely not disappointed, it is brilliant, a considerable improvement over my previous cartridge. While running it in I have been going through some old albums I have not played for ages, expecting more clicks & pops than listening to Rice Crispies! but no, silence reigns. Even though some of those albums were played on my parents old radiogram with a needle the size of a six-inch nail, they play perfectly.

Listening to old Beatles albums through the Hana I can now realise how good George Martin's production was, superb and even a very old and cheap copy of Creedence Clearwater Revival sounds excellent.



**Hana's ML moving coil cartridge (Japan) gives a smooth sound and is great value.**

I know all the reviewers tell us purchasers to go out and listen to products before ordering and I agree but cartridges prove very hard to do this with so the only other option is to read all articles on your prospective purchase, with a good dose of scepticism and try to glean an overall picture of what that cartridge will give you. If all reviews of a cartridge, from all over the world (thank you Internet) say it is good then there must be something inherently good about it.

Anyway, I am going back to a long listening session now, rather than writing about it, keep up the honest reviews of the equipment you get in, its very important to us potential purchasers.

**Andrew Burtchaell**

Hi Andrew. Hanna cartridges are wonderfully smooth and svelte. They have no technical weaknesses, which helps toward their sense of assured ability. Their lack of "obvious" treble makes ticks, pops and noise less apparent, leaving you to get on with



**KEF Q150 loudspeakers, Letter of the Month prize, set up in John Speight's living room.**

enjoying the music. I tend toward the deeply analytical Shibata and Super Line Contact tips of our Audio Technica VM750/760 MM cartridges, and the Shibata OC9X but they can be fiercely revealing with old and damaged records. The Hanna cartridges are altogether a gentler experience that suits these with big collections full of oldies, rather than the preened new LPs I must use for review purposes. Glad you are enjoying the Hanna ML; it really is a fine cartridge, one I enjoyed too. NK

### I BOUGHT STAX

Firstly, thank you for the Letter of the Month KEF Q150 loudspeakers prize. As you can see, I acquired a pair of stands, along with some Morrow audio speaker cables and a Quad Vena 2 Play amplifier for use in France. I seem to have got the streaming to work with Amazon but not Spotify.

This got me thinking; all too complicated and I ended up plugging an Astell&Kern AK100Mk2 portable player via Audioquest cable into Aux1...much easier. I do think the whole streaming thing is great when it works but overall the use of CD or vinyl is simpler and quality is pretty good – if not often better.

Anyway, on headphones; thank you for the help published in August 2020 Letters. I ended up buying a pair of Stax 700 Mk2 and these arrived just before holiday. Initial impressions are positive and looking forward to using in the coming months. I am also taking back to UK an old Eclipse amp and speakers

to use with Mac Pro, looking forward to seeing how these sound.

**John Speight**

### STAX REPAIR

As a Stax user, John Speight's letter on the repair of the SR-507 headset reminded me of my Stax experience a while ago. If, as Dave Tutt says, that the repair would be north of £600, and if John is prepared to pay that type of money, he would be better to get in touch with Philip at Cheshire Audio <https://www.cheshireaudio.co.uk/index.html> and discuss the Stax options on a replacement. Cheshire Audio are an excellent company to deal with, and I'm sure that Philip will come up with something beneficial to John.

**Mike Bickley.**

### BIG BANDS

I finally surrendered to your repeated recommendations and bought the Syd Lawrence Orchestra Big Band Spectacular album. In fairness, I already knew the power of a jazz big band – when I was growing up jazz was dad's music until one Sunday afternoon I heard a 20-piece jazz band upstairs in a Glasgow pub and thought – Ah, now I understand.

As anyone who has seen Jools Holland's Rhythm & Blues Orchestra live will know, when a jazz big band starts to blow it is a veritable force of nature. So it is with this record – the all-analogue tape recording sounds fantastic and the direct to disc recording is beyond fantastic, it's like being there.

When I had played it, there was only one thing to do: fish out dad's old 1962 stereo recording of Frank Sinatra and the Count Basie Orchestra and turn it up. Anyone who has this record will know what I mean.

I also succumbed to another of your recommendations: the Origin Live Cartridge Isolator. Flying in the face of 50 years of hi-fi orthodoxy, instead of torqued fixing screws etc. this device sets out to isolate the cartridge from the arm and headshell. Aside from your enthusiastic review, it comes from a company known for some of the finest arms and turntables on the market, and it is hard to believe they would lend their name to such a cheap upgrade unless there was something in it.

I confess to being sceptical but



**If you are interested in Stax headphones, "get in touch with Philip at Cheshire Audio <https://www.cheshireaudio.co.uk/index.html>" says Mike Bickley.**

with the device installed as instructed, I breathed in, suspended disbelief and listened. Instead of the expected soggy, muffled sound, everything remained nicely crisp and clear but any hints of high frequency fizz and resonance had disappeared and it sounded, well, like an improvement. I'm afraid that you (and Origin Lives Mark Baker) are right – the damned thing works. So, on your recommendation I have spent a modest amount of money and only had pleasure as recompense.

I then had a rush of blood to the head and bought an upgrade which has not been mentioned so far in your pages. The Vinyl Adventure in Huddersfield advertise their Pressure Points as an alternative to conventional turntable mats: instead of a mat of felt, rubber, cork or other exotic materials, the record rests only on 8 tiny plastic points placed around the turntable perimeter. They confidently claim that this will upgrade the sound of most turntables, including the Garrard 401, Technics SL1200, Project Classic and many others. I bought a set, fitted them to my (excellent) Analogue Works Zero turntable and ... wow! Better bass and treble detail, better midrange projection, better overall coherence. Even the PRAT (Pace Rhythm And Timing) that hi-fi buffs used to bang on about was improved – the turntable just sounds right. If this sound quality upgrade had resulted from several hundred pounds spent on a turntable, cartridge, or preamp upgrade it would have counted as good value. However the cost is only ... £15. Try it and see what you think?

Yours sincerely,  
**Alasdair Beal**  
**Leeds**

### BIG BAND SPECTACULAR! Unique Audiophile Double Album



**The Syd Lawrence Orchestra**  
Glenn Miller • Benny Goodman • Artie Shaw



**A recent audiophile LP from Chasing the Dragon brings The Syd Lawrence Orchestra into the home. Direct-to-disc on one disc and via 30ips master tape on another. Live performance – devastating quality.**



# High Q

High quality from a small loudspeaker that costs little. Noel Keywood enjoys Q Acoustics 3030i.

I suspect this is a loudspeaker that won't be easily spotted for the fine proposition it is, amongst a herd of rivals that swarm around its low £330 price point. Not easy to make a small two-way loudspeaker stand out, visually or sonically – but that's the point with Q Acoustics 3030i. Rather than stand out as an acoustic hooligan, it's a model of poise and correctness.

The design approach used by Q Acoustics is entirely conventional, mounting a bass/midrange unit and tweeter in a compact cabinet measuring 200mm wide, 320mm high and 113mm deep, the grille and rear terminals adding 16mm. With spade or bare wire connection depth is unaltered, but 4mm banana plugs

protrude rearwards as always. With a rear port a small amount of room needs to be left behind in any case, but not much – a few inches or centimetres will do.

I liked the smooth Graphite Grey finish of our samples and the neat, polished alloy trims around the drive units when the grille, held by invisible magnets, is removed. The grille affects frequency response little, just a tad more treble is available with grille off. Measurement showed the 3030i has broad dispersion so the cabinet can be pointed straight down a room or toed-in toward the listening position without obvious difference between the two.

The 165mm bass/midrange unit has an impregnated and coated paper cone, Q Acoustics

say, and closely above it sits a 22mm tweeter that looks like a cloth dome to me. I thought it was ring-dome, but perhaps not. All the same, measurement showed it has a smooth response and wide dispersion for even tonal balance. No sharpness here.

The cabinet is sturdy, weighing 6.4kgs. In addition to the Graphite Grey of our review samples, Arctic White, English Walnut or Carbon Black are available.

## SOUND QUALITY

I drove the 3030is from our Creek Evolution 100A amplifier, connected by Chord Company Signature Reference cables. CDs were spun by our Oppo BDP-205D Universal player connected direct by XLR



Hi Fi World "Best Valve Amplifier" NEW Stereo 40 MK IV £2499

New Upgraded Model. Now With Headphone Socket



Bluetooth option available NEW HP205D DHT Headphone Amplifier £2999

High Definition With The Relaxing Sound Of WE Vintage Directly Heated Triodes



60 + 60 Watts Triode  
115 + 115 Watts UL  
New Tung Sol KT150  
£4299 pr

MB90 MK II Monoblock Power Amplifiers many features



Stereo 300 MK II £3999

Sublime Sound From Vintage 300B Triodes



Stereo 25 MKII from £1399

Simplified ST40 30W UL, HQ Headphone Socket



Hi-Fi World "Best Valve Amplifier"  
Stereo 30se £2499

Single Ended Pure Class A, 28W UL, 18W Triode



PS1 MKII MM/MC £1549

Our fantastic value pure valve phono stage. MC and MM



PS3 MKII MC/MM £2699

Pure Valve Phono Pre-amplification At Its Best!



HP8 MKII £999

Smooth non-fatiguing Triode Sound, Match 8-600 Ohms



NEW ST 60 MK IV £3799

Outstanding Performance 80w UL, 50w Triode

Buy direct from us or through one of carefully chosen dealers or worldwide distributors:

<p><b>Audio Gold</b> Crouch End, London Tel: 0208 341 9007 Web: <a href="http://www.audiogold.co.uk">www.audiogold.co.uk</a></p>	<p><b>Wilkinsons Hi Fi</b> Nelson, Lancashire Tel: 01282 612901 Web: <a href="http://www.wilkinsons.tv">www.wilkinsons.tv</a></p>	<p><b>Shropshire Hi Fi</b> Shrewsbury SY2 5EF Tel: 01743 232317 Web: <a href="http://www.smcsoundandvision.co.uk">www.smcsoundandvision.co.uk</a></p>	<p><b>Audio Affair</b> Birmingham, B9 4AA Tel: 0121 224 7351 Web: <a href="http://www.audioaffair.co.uk">www.audioaffair.co.uk</a></p>
<p><b>Analogue Seduction</b> Whittlesey Peterborough Tel: 01733 350878 Web: <a href="http://www.analogueseduction.net">www.analogueseduction.net</a></p>	<p><b>Lighting Sound &amp; Vision</b> Coleraine, Northern Ireland BT52 1BE Tel: 028703 42354</p>	<p><b>Canada: Audioarc</b> Barrie, Ontario, Canada Tel: +1 249 880 5040 Web: <a href="http://www.audioarc.com">www.audioarc.com</a></p>	<p><b>Denmark: High End Sound</b> Vodskov 9310, Denmark Tel: +45 9829 2448 Web: <a href="http://www.hichend-sound.com">www.hichend-sound.com</a></p>
<p><b>Germany: TCG Handels GmbH</b> Nordhorn 45831, Germany Tel: +49 (0) 5921 78849.27 Web: <a href="http://www.tcg-gmbh.de">www.tcg-gmbh.de</a></p>	<p><b>Netherlands: Hi Fi Matters BV</b> Rijswijk 2288EV, Netherlands Tel: +31 (0) 70 3193936 Web: <a href="http://www.hifimatters.nl">www.hifimatters.nl</a></p>	<p><b>Spain: Union Musical Casa Werner</b> Barcelona 08010, Spain Tel: +34 933 021 792 Web: <a href="http://www.werner-musica.com">www.werner-musica.com</a></p>	<p><b>USA: Music Direct</b> Chicago IL 60660 USA Tel: +1 800 449 8333 Web: <a href="http://www.musicdirect.com">www.musicdirect.com</a></p>

**0% APR Interest Free Credit**

Purchases over £1120 ask for a quotation\*

**Up to 20% off B grade & Ex-demo**  
Technically perfect Fully Guaranteed. Audition in our  
Leicester showroom. Most models available.  
See our website, email or ring for availability.  
Subject to availability\*. Prices vary.

We are open and working normally (as far as possible). Should you wish to visit us please contact first for up to date information.

UK Prices only inc 20% VAT\* Limited stock subject to availability UK only. Some models show upgraded valves. E&OE.

[www.iconaudio.com](http://www.iconaudio.com) [sales@iconaudio.com](mailto:sales@iconaudio.com)

**icon Audio**

(+44) 0116 2440593 351 Aylestone Rd Leicester LE2 8TA UK

cables. Also, I brought in a Chord Electronics Dave DAC to play CD, the Oppo acting as a transport in this case.

Reason for Dave? Primarily because Chord Electronics DACs are more vivid than the ESS ES9018 DAC in our Oppo player, appropriate when reviewing "darker sounding" loudspeakers like the 3030i. The Oppo is a very safe player to use for review purposes; it is smooth, minimising digital nasties, suiting modern loudspeakers because most come with raised upper mid-band and treble.

I felt Dave would better suit the 3030i that are not artificially enhanced – but I was not exactly right. Our Oppo represents today's sound as far as CD is concerned, ESS DACs being dominant and it was used mostly.

Just about whatever I spun, the overall impression was the same. Holly Cole sang laconically against a dark background, in the Train Song, is if the recording was made at night. There was a comforting warmth yet no lack of detail. In fact, her voice was sharply clear, stable and well etched as an image. The slow bass line was fulsome, even in our large listening room (6550 cu ft), where small loudspeakers can sound lean. This surprised me; the 3030i came over as big bodied and obvious in the bass, even though measurement suggested otherwise.

As CDs slipped by I latched onto the consistency of this big-bodied sound. Bass lines were large and almost plummy with the Oppo, where Dave pulled lows back, tightened them up and added in detail. With a dry sounding CD player,



**A large port loads and damps the bass/midrange unit.**

**No bi-wiring available at this price, so just two loud-speaker terminals, well made.**

as older ones are, the 3030i suit, but perhaps less so with a CD player like the Oppo that has its own version of warmth. With Willy DeVille singing Spanish Harlem the 3030i showed their poise and sophistication however: I could hear the sibilants coming from his close-miked vocals, which I know are in this live recording, but they were just there, rather than offensive.

The 3030i sound has depth to it, making the choir and soloists in Beethoven's Missa Solemnis seemingly stretch far back. The various solos were well identified on the stage too; again I enjoyed very stable and assured imaging.

Whilst these 'speakers sound big bodied and bass strong, the low-end rumblings at the start of Loreena McKennit's Gates of Istanbul were not so rumbly – we're not talking Tannoys here – but I didn't feel robbed. The effect was still well conveyed.

With heavy bass lines, such as Flur Feat 'You and I', the 3030i became a tad plummy and box bound, in their enthusiasm to convey low end weight. But at least I heard the effect and felt it where most other speakers of the size would just lose



**A neat little 22mm fabric dome tweeter with good dispersion. It gave smooth treble.**

it. The 3030i work hard to sound big – and for the money do it well, if not perfectly.

## CONCLUSION

Q Acoustics 3030i were smooth and poised, dark sounding and deep. They take a different approach to many – no shrill treble, no inaccurate emphases. What you get here is a well honed performance with excellent imaging, oodles of detail and a sense of weight that adds to visceral impact. Their sonic size is far greater than their physical size. I found them thoroughly enjoyable – and more than a little impressive for just £330.

## MEASURED PERFORMANCE

Frequency response of Q Acoustics 3030i closely followed the 0dB datum across the audio band, our third-octave analysis of pink noise shows, extending from 100Hz up to 20kHz (grille on). Removing the grille brought a small 1dB lift in upper treble, barely enough to be audible, but the front panel has been well finished to look good without the grille.

The tweeter works from 2kHz

upward our impedance trace shows, and it had wide dispersion, frequency response changing little from on-axis to off-axis. The tweeter has been placed very close to the bass/midrange to improve vertical phase alignment.

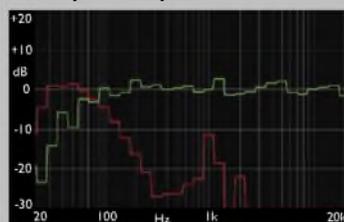
Below 100Hz output rolls down progressively to measure -5dB at 40Hz, below which output drops rapidly. This is a response tailored for near-wall mounting in a small-to-medium room, up to approximately 15ft long. The port is tuned to 45Hz, the dip in the impedance trace shows, and it extends output down to a low 30Hz, applying good bass damping, as the breadth of the red port output trace shows.

Sensitivity was fairly typical for a small loudspeaker, measuring 86dB from one nominal Watt of input (2.8V), impedance measuring 6.5 Ohms with pink noise, 4.2 Ohms (d.c.r.) being the minimum. Amplifiers of 60 Watts will be sufficient for high volume, but 40 Watts will still go loud.

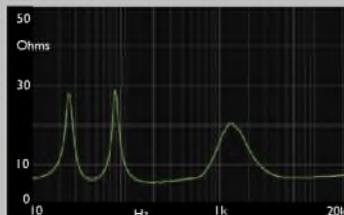
Q Acoustics 3030i is notably smoother in response than most and will likely sound even and refined. With good sensitivity and no weaknesses, plus well damped bass suited to small-ish rooms, it measured well all round. **NK**

### FREQUENCY RESPONSE

**Green - driver output**  
**Red - port output**



### IMPEDANCE



**Q ACOUSTICS**  
**3030i £329**



**OUTSTANDING - amongst the best.**

**VALUE - keenly priced.**

#### VERDICT

A small loudspeaker with a large, smooth and accurate sound. Lovely.

#### FOR

- big, deep sound
- smooth and accurate
- well finished

#### AGAINST

- plummy bass at high vol
- a little box bound

Q Acoustics  
+44 (0)1279 501111  
[www.qacoustics.co.uk](http://www.qacoustics.co.uk)



01202 911 886

bourne mouth store

01592 744 779

glenrothes store

website: [www.jordanacoustics.co.uk](http://www.jordanacoustics.co.uk)

**McIntosh**  
LEGENDARY PERFORMANCE™



**McIntosh MA252**  
Hybrid amplifier  
£4,500

**0% FINANCE EXAMPLE\***

Initial 20% deposit of  
**£900.00**, then **£150.00**  
per month for **24 months\***



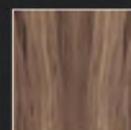
**twenty5i**

PMC has launched the twenty5i series, following a substantial re-engineering of the multi-award winning twenty5 series, to benefit from the research carried out while developing the company's flagship loudspeakers. **The result is the removal of anything that detracts from the music, providing greater realism, transparency and musicality.**

**0% Finance available\***



Oak



Walnut



Diamond Black



White Silk

For further information please call 01202 911 886 or email [ask@jordanacoustics.co.uk](mailto:ask@jordanacoustics.co.uk)

# ESOTERIC



Esoteric K-01XD  
Super Audio  
CD Player  
£21,000

**0% FINANCE EXAMPLE\***  
Initial 20% deposit of  
**£4,200.00**, then **£560.00**  
per month for **30 months\***

Esoteric K-03XD  
Super Audio  
CD Player  
£13,450

**0% FINANCE EXAMPLE\***  
Initial 20% deposit of  
**£2,690.00**, then **£358.67**  
per month for **30 months\***

**GOLD NOTE**  
il suono italiano

Gold Note is unmistakably Italian with a luxurious range of products, from amplification to digital, turntables to speakers. Beautifully engineered and musically sublime, Gold Note is not only an absolute pleasure to own it's incredible value for money too.

**0% Finance available\***



**\*0% Finance examples above are subject to status & conditions**



# For What We Are About To Receive



### Martin Pipe tunes into the Cambridge Audio AXR100D that combines potent budget amplification with FM/DAB radio, Bluetooth and a hi-res DAC.

**D**uring the 1970s, when hi-fi was mass-market, the receiver – a tuner and amplifier in the same box – was at the heart of many a system.

Recently, UK brand Cambridge Audio introduced the AXR85 and AXR100 FM/AM receivers. Now there's a new version of the AXR100 which complements it – the £499 AXR100D I'm reviewing here.

This new variant loses AM steam radio and in its place you get a DAB/DAB+ tuner and VHF/FM tuner that takes advantage of SDR (Software Defined Radio) techniques. Presets, accessible from the remote or front-panel, are assignable to 15 FM and 15 DAB stations (as opposed to the AXR100's FM and AM 'favourites').

A common rear-panel aerial input, for both FM/VHF and DAB, is provided – interesting, given that

two different sets of frequencies are involved. A piece of wire, masquerading as an aerial, is supplied; for best results, an external aerial is essential.

And digital alternatives to DAB? There's no Wi-Fi or Ethernet for internet radio but – as with the AXR100 – Bluetooth can fill in the gap, courtesy of a suitable smartphone app.

In analogue terms, the AXR100D is well-stocked. You get three line-level inputs plus a 'rec out' or record output, which is in effect a preamplifier output. Next to these is an output for an active (powered) subwoofer, which may appeal to those using small bookshelf speakers for the same space-saving reasons that led to a receiver being chosen in the first place.

Other than that, the connectors are RCA phono input sockets (plus

earth terminal) for a turntable, an IEC inlet (so you can experiment with mains leads) and two sets of 'speaker terminals'. The AXR100D's are of high quality, and will accept bare wire as well as 4mm banana plugs.

The final part of the package is a rather uninspiring remote control. Although it will control other Cambridge products (notably AXC CD players), the tiny buttons aren't backlit. They're hard to identify, on account of the manufacturer's use of tiny lettering. Familiarity will, I'm sure, help.

The AXR100D is a bit clunky operationally – accessing preset stations from the front panel can be a tad laborious. There's a two-line fluorescent dot-matrix display on the front panel (the review sample's stopped working...and then mysteriously restored itself a day



**At left is the hefty toroidal mains transformer of the linear power supply and – running vertically down the middle – the heatsink to which the output transistors are bolted. At the top of the heatsink is the somewhat-eager cooling fan that was on the noisy side. Digital sources, including the Bluetooth receiver and Colin’s SDR module, are mounted on the rear panel.**

later, before extinguishing again) and various front-panel buttons for setting stations, adjusting tone controls and so on. The display also shows volume/treble/bass levels, as well as FM RDS and DAB station info.

**SOUND QUALITY**

I used the AXR100D with a rooftop Band II aerial, although a wire aerial was necessary for DAB as this uses different frequencies. Other equipment included a Cambridge CXN v2 streamer fed via coaxial digital, a Technics SLI200 Mk3 with AT440MLb MM cartridge and two pairs of speakers – Q Acoustics I030s and Quadral Aurum Wotan VIIIs. For Bluetooth, my trusty Google Pixel 3a (which runs VLC

Media Player for music) was once again pressed into service. A selection of hi-res and CD-derived lossless material was available on the 'phone, and via a networked library made accessible from the CXN.

The Bluetooth feature worked pretty well. It eludes the finer details that make decent recordings convince, but the sound was nevertheless enjoyable with no tonal inadequacies or obvious audible artifacting. It's certainly more than good enough for background listening, and will be handy for house-parties (when we're allowed to have those again!). Likewise, radio – FM and DAB alike – left me no reason to complain.

I would say that the

shortcomings of the source material (overly-compressed FM stations, low DAB bitrates) are probably going to be more of a limitation than the AXR100D's innate qualities. Radio 3's evening concerts were a joy to listen to, even on DAB – although I could definitely hear a subtle improvement in terms of space and resolution after tuning into the same service's 320kbps AAC stream via the CXN. All power to the AXR100D's DACs and amplification for revealing them, though.

FM also fared well. It's sensitive – no background 'mush' on Radio 3, and weaker stations could be heard; I seldom had a need to use the mono over-ride function to reduce hiss.

Note that the very weakest and most distant of FM stations alarmingly (and loudly) 'crack' like gunshot, which is worse for speaker welfare than analogue noise. On the plus side, selectivity was also good; lesser stations close in frequency to more powerful ones can at least be listened to! Tonally, the AXR100D

is very even with no untoward emphases – but there's a lack of upper-treble detailing compared to the AAC streams. That's more down to ancient broadcast technology than anything.

The phono stage is optimised for the majority of MM cartridges in



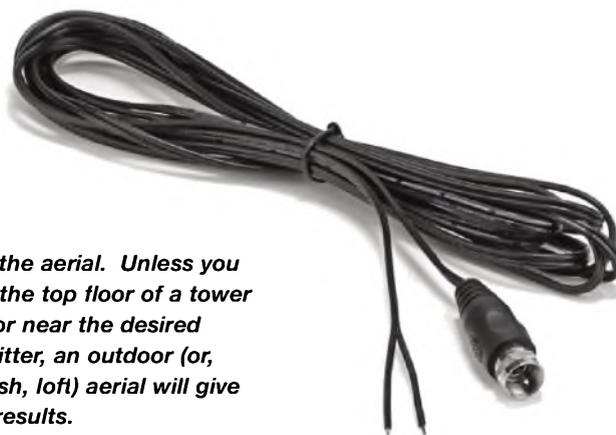
**The AXR100D's remote is a bit of a let-down. It has a rather 'plasticky' feel, and the labelling could be clearer.**



**Plenty of connectivity here – three line-level analogue sources, plus MM phono. There's a mono subwoofer and recording output, but no tape loop. A single aerial socket is used for both VHF/FM and DAB. Four external digital sources – two optical, one coaxial and Bluetooth – are catered for. Bluetooth is built in, not reliant on a USB dongle (there is a USB port, but it's for service purposes). For the output, Cambridge has specified decent terminals – bare wire or banana plugs – for two pairs of speakers.**

terms of gain and input characteristics. A Deutsche Grammophon recording of von Karajan conducting the Berlin Philharmonic in a performance of Chopin's Les Sylphides was satisfyingly-open, tonally-balanced and well-communicated here. Some infrasonic filtering appears to be permanently in-circuit – there's a notable absence of loudspeaker cone-flap - but John Deacon's throbbing bassline propelled Queen's Another One Bites The Dust (The Game LP) with impact as well as articulation.

The sheer power reserves the AXR100D can draw upon definitely help. But there's a downside, at least with the review sample. A fan, bolted to the output stage's heatsink, whirred constantly – and annoyingly. The noise was sufficient to distract from quiet passages when sitting close, in a small room. But that very amp muscle aided my digital music – amongst other things, a fairly obscure track by Royksopp, Keyboard Milk, which you'll find on the 2011 CD single Forsaken Cowboy, is an outstanding piece of what can only be described as 'progressive electronica', with moods



**This is the aerial. Unless you live on the top floor of a tower block, or near the desired transmitter, an outdoor (or, at a push, loft) aerial will give better results.**

shifting between melancholy and euphoria. The AXR100D did justice to the piece's deep and brooding sequenced low-end, the organic timbres of the synthesisers and the drums that roll from one channel to the other.

Detailing was good, rather than excellent; one of my references (a 24/48 Noseda/LSO Live recording of Britten's War Requiem) may have been enjoyable to listen to, but it seemed to miss out on the space and scale that hi-res can bring into the home. But this is a £500 receiver... not superfi.

**CONCLUSION**

Once again, Cambridge shows it still has its finger on the pulse of the mass-market – by bringing a product of the '70s high-volume hi-fi heyday bang up to date. The AXR100D is meaty and fun to listen to, like those Pioneers and Kenwoods of the disco era, but it isn't short of refinement either. Add all the features and gizmos, and you have the makings of a bargain. I can only hope that the noisy fan and temperamental display were peculiar to the review sample. Steer clear of very weak FM stations, though, if you value your speakers.

**MEASURED PERFORMANCE**

Power measured 128 Watts into 8 Ohms and 196 Watts into 4 Ohms, making the AXR100D massively powerful. The cooling fan worked strongly even at low power levels and was audibly obvious; not a silent fan by current standards.

Distortion levels were very low, at low and high output powers – and at high frequencies too; a very good (Class A/B) amp. Noise was very low too.

Dynamic Range (EIAJ) of the digital section was compromised by noise, measuring a low 103dB with hi-res (24bit) and with CD (16bit) this fell slightly to 100dB, both offering CD quality. Around 112dB or more is needed for hi-res benefit to be apparent; this is a CD quality receiver in its digital stages. The DAC was limited in ability. The optical (TOSLINK) input socket accepted 24/192 PCM where some still do not – a plus point.

The Phono input had accurate RIAA equalisation and flat frequency response as a result. A warp filter suppressed subsonic signals below 20Hz, providing useful -9dB attenuation at 5 Hz to lessen loudspeaker cone flap. Noise was low and sensitivity high at 3.5mV. Curiously, when the input overload limit of 50mV was reached the receiver's protection circuits triggered, with volume at zero and no output. This is not a feasible real-

life situation but it does suggest unseen and comprehensive protection circuitry.

VHF/FM performance showed this is a Software Defined Radio receiver. Distortion levels were unchanged from low to high modulation levels, and at 100% mod, the figure was an extraordinarily low 0.1%. At 50% mod. the distortion harmonics were low-order and benign. Frequency response measured flat to 11kHz (-1dB), rolling down fast to the pilot tone filter at 19kHz. Excellent results.

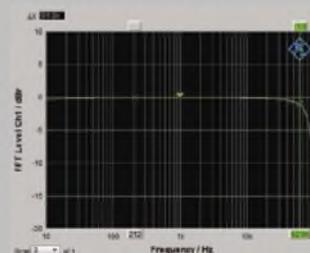
As always with Cambridge products, the AXR100D receiver produced a fine measured performance, except the digital section that was restricted to CD quality and no better. NK

<b>ANALOGUE</b>	
<b>Power</b>	128W
<b>Frequency response (-1dB)</b>	5Hz-100kHz
<b>Distortion (1W, 10kHz)</b>	0.03%
<b>Noise</b>	-103dB
<b>Sensitivity</b>	300mV
<b>DIGITAL</b>	
<b>Frequency response (192kHz,-1dB)</b>	5Hz-62kHz
<b>Distortion (-60dB, 24bit)</b>	0.1%
<b>Dynamic Range (EIAJ)</b>	103dB
<b>PHONO</b>	
<b>Frequency response (-1dB)</b>	20Hz-20kHz
<b>Distortion (-60dB, 24bit)</b>	0.2%

<b>Sensitivity</b>	3.5mV
<b>Overload</b>	40mV
<b>Noise</b>	-78dB
<b>VHF/FM</b>	
<b>Frequency response</b>	20Hz-11kHz
<b>Distortion (-60dB, 24bit)</b>	0.1%
<b>Noise</b>	-65dB

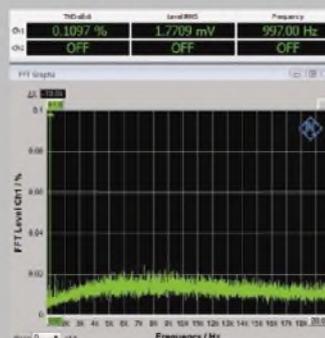
**FREQUENCY RESPONSE**

DIGITAL S/PDIF 192kHz S.R.



**DISTORTION**

DIGITAL S/PDIF 24bit



**CAMBRIDGE AUDIO AXR100D £499**



**OUTSTANDING - amongst the best.**

**VALUE - keenly priced.**

**VERDICT**

Affordability, features and a strong performance outweigh the AXR100D's flaws.

**FOR**

- VHF/FM and DAB radio
- MM phono stage
- Bluetooth
- gutsy and enjoyable sound

**AGAINST**

- fan noise
- front-panel display issues
- mediocre remote and user interface
- loud 'cracking' intrudes on weak FM stations

Cambridge Audio  
+44 (0)207 551 5422  
www.cambridgeaudio.com

# SPRING INTO SUMMER

VISIT OUR WEBSITE: [www.hi-fiworld.co.uk](http://www.hi-fiworld.co.uk)

**A SUBSCRIPTION TO HI-FI WORLD  
MAKES THE PERFECT GIFT FOR  
YOUR NEAREST AND DEAREST.**

**SAVE**

...up to

**26%**

Subscribe today and you will get a special discounted rate giving a **saving of 15% to 26%** off the cover price. That's an amazing **£3.83 - £3.33** per issue including postage.



***So don't delay, take out a subscription today!***

FOR BACK ISSUES ENQUIRIES PLEASE CALL

**01442 820580**

OVERSEAS SUBSCRIPTIONS IF YOU LIVE OUTSIDE THE UK,  
PLEASE CALL FOR OUR LATEST PRICES

**+44 (0) 1442 820580**

**SO WHAT ARE YOU WAITING FOR? CALL NOW!!!  
SUBSCRIPTION HOTLINE 01442 820 580**

**Lines open Mon-Fri 9.00-5.00 or (weekend answering service available)**

FOR OUR  
ON-LINE MAGAZINE  
GO TO [WWW.HI-FIWORLD.CO.UK](http://WWW.HI-FIWORLD.CO.UK)

email:  
[hifiworld@websubscribe.co.uk](mailto:hifiworld@websubscribe.co.uk)



# Living the stream

**They say good things come in small packages. But will Chris Frankland think so in the case of Project's Stream Box S2 Ultra?**

**W**hen I first clapped eyes on Pro-Ject's tiny Stream Box S2 Ultra streamer, I thought it underwhelming. Not the kind of product to impress your friends. No big displays or flashing lights. But I found it big on performance.

Inside, this tiny (37mm high x 103mm wide x 115mm deep) high-resolution network bridge is based on a processor running a tailor-made version of the Volumio OS. It supports DLNA, Shairport (Apple AirPlay) and RAAT data protocols,

runs Shoutcast for internet radio and supports audio formats up to PCM 32bit/352.8kHz and DSD256. Importer Henley Audio says the Stream Box uses only top-quality "audiophile-grade" components throughout.

The front panel is minimal, sporting just a power button, a USB/PC button, LEDs for power, network and the Detox function (of which more later), plus an additional USB input for a NAS drive, server or USB stick. On the rear panel is a USB output for an external DAC, a Boot button that allows "experienced users" to install a different operating

system, another USB input for a network server or NAS drive and an HDMI socket for a TV or touch-screen monitor to control the device. Finally, there is a microUSB input for the Detox function.

The first step was to plug in an Ethernet network cable from a wireless router (you can also connect to it via Bluetooth or wi-fi) and then install the Pro-Ject Play app; it runs on a 'phone or tablet.

My app quickly found the Stream Box, but one odd quirk was that when it came to play from Tidal or Qobuz, I had to log in through the Pro-Ject Play App, not the Tidal app.



I could also access the Stream Box using Roon, but I stuck with the Pro-Ject Play app, which additionally provided access to a wide variety of UK and worldwide internet radio stations, as well playback of music files through the Music Library button.

You can also plug in a CD drive with a USB output, such as Pro-Ject's CD Box S2 T, and use the Stream Box to rip CDs either to its internal 16GB drive or to a drive of your choice.

I decided to start by looking at its rather intriguing "Detox" function. This is said to clean up the signal from a computer before passing it on to the DAC. Henley tells me the circuit was designed by renowned John Westlake, who also designed Audiolab's M-DAC. It is said to clean up the power supply and reclock the signal, filtering out the noise generated by the computer.

## SOUND QUALITY

I admit I was sceptical, so I sat down for a critical listen. First I fed my

"the sound was detailed, dynamic, tuneful and musical."

Apple MacBook Pro straight into the USB input on the Pre Box RS2 Digital (see pages 41-43). Then I compared that with the signal fed through the Detox circuit on the Stream Box.

On Ben Sidran's Broad Daylight from The Doctor is In, my jaw hit the floor as Sidran's voice was more open with 'Detox', the bass line was fuller and more tuneful and percussion more detailed. His piano runs were more fluid and the instrument had more body. Hmmmm...

Next I tried Days Like This from Van Morrison. Again I was amazed to find that with Detox his vocals were more 'human', more intelligible, the horns were less



*This compact streamer packs a lot of tech in a small box.*

glaring and the bass line tighter and more tuneful. Backing vocals were better separated and the whole thing simply flowed better.

On balance, I have to say that the Detox function worked superbly well. But better to stream directly from the Stream Box itself.

Streaming The Bright Side from Dave Koz's The Dance from Tidal, the direct stream won the day with a more realistically voiced sax, fuller and

snappier bass lines and more detailed and syncopated percussion. Track after track proved its superiority.

On Ben Sidran's Sunny Side of the Street, vocals were more open streaming direct, saxophone had more bite and detail, bass lines were more tuneful and tighter and percussion was better defined.

Comparing the Stream Box/PreBox RS2 Digital to another well-respected streamer/DAC duo proved the Pro-Ject combo was excellent. The sound was detailed, dynamic, tuneful and musical. In short, it sounded great and comfortably outperformed its rival.

I also took the opportunity to play back a few hi-res music files from a separate USB drive through the Stream Box. This was simple. Henley says that most UPnP drives will work, but the drive must be formatted in exFAT format for the Stream Box to see it. It successfully played back my hi-res files in AIFF, FLAC and DSF formats and the sound was excellent.

## CONCLUSION

Don't let the diminutive proportions of the Stream Box S2 Ultra fool you. It packs in lots of useful features, which work superbly well, and delivers great sound quality. It gets an unequivocal recommendation from me.



*Stream Box Ultra has Ethernet and USB inputs, an HDMI socket for a touch-screen monitor, a USB output to a DAC and a microUSB input for the detox function.*

**PRO-JECT STREAM BOX S2 ULTRA**  
£629



**OUTSTANDING - amongst the best.**

**VALUE - keenly priced.**

### VERDICT

Excellent sound and versatile. Offers a lot of functionality for the money.

### FOR

- computer Detox facility was brilliant
- easy network hookup
- easy to control through Pro-Ject Play App
- can rip CDs

### AGAINST

- some minor quirks in app

Henley Audio  
(0)1235 511166  
www.henleyaudio.co.uk

# Chinese Q

**Martin Pipe discusses China's growing dominance of globalisation – and the role it played in Q Acoustics 1030 speakers.**



**B**y the mid-2000s, the importance of China as a manufacturing base had become only too apparent...especially when it came to cheap, disposable consumer goods – and their impact on the planet. Western

consumers, it seemed, were happy to overlook environmental concerns in their quest for ever-lower prices. How, I wonder, did that 'chase-to-the-bottom' trend square with a constant claim of contemporary economists: that everybody's wealth was rising? Some it would

seem were struggling.

In 2006, you could buy a 'no-brand' Chinese-made DVD player in a supermarket for £10 - the same price as a disc to play on it. Like the countless microwave ovens, toasters, inkjet printers, toys, midi stereos, TV set-top boxes,

vacuum cleaners, el-cheapo HDTVs, personal CD players and other junk that shared space in shipping containers bound for British ports, they barely lasted beyond the guarantee period. Uneconomic (or downright impossible!) to repair, they were left out with the other trash or joined piles of similar goods building up in local 'recycling centres'.

But decent stuff was being made in Chinese factories too. One thinks of FiiO, Shanling, and Consonance...and the list of Chinese 'quality' brands is continuing to grow.

Some more recent hi-fi brands have never manufactured in their native countries. Research, design, sales/marketing and admin may be carried out 'at home', but production takes place in China.

One such company is Q Acoustics, which in 2006 joined the established Goldring (of cartridge fame) and cable specialist QED as part of the Armour Home group. Unlike Wharfedale and Quad, Q Acoustics was a completely-new operation that had to start from scratch. In its own words, Q Acoustics "assembled a design team from the world's most experienced and successful loudspeaker designers...and then challenged them to design and produce the very best affordable loudspeakers the world has ever known".

Instead of buying-in drive units, crossovers, cabinetry and so on



**Like most of the competition, the 1030 is a bass-reflex design – as the presence of this flared-exit 50mm port proves. The 'hole' is covered – along with the two drive units – by a fabric covered grille that's held in place by magnets**

from third-party suppliers, they designed 'bespoke' components that were optimised specifically for each new model. Said components were made in Chinese factories, from CAD data wired across by the Q Acoustics designers. They were then assembled into finished speakers, by other Chinese teams.

And when the products found their way here, they offered

remarkable value for money. Take the 1030 "compact floorstanding speakers" featured here. Part of Q Acoustics initial "1000 Series" range of hi-fi and home-cinema 'speakers' (the top model of which, the 1050, sold for £330), the 1030s look like a grand's worth of 'speaker.

They actually sold for a mere £230 – bookshelf territory, in other words. A bass-reflex design

"I was very impressed with the natural stereo image that the 1030s could deliver"



**Expensive speakers use real wood veneer – not so the 1030s. Superficially, they look like models that sell for four times the price. Look closer, though, and you'll see that the 1030s are instead finished with vinyl.**

with front-mounted port and 100 Watt handling capability, the 1030 features a long-throw 165mm bass/mid driver with doped-paper cone and a 25mm woven-fabric dome tweeter. They are fed by an "advanced, fourth-order Linkwitz-Riley crossover", which ensures the "smoothest response" and a nominal 6 Ohm impedance.

Stringent quality-control, Q Acoustics assured us, required "every drive unit to be torque-mounted into the front baffles... rigid, low resonance, multi-radial designs up to 32mm thick". The drivers are hidden behind a slim fabric-covered grille, which is held to the front baffles by magnets.

Interestingly, the 17.7-litre 15.5kg cabinet features a compartment that can be filled with sand – 5kg of dry 'play' sand is recommended – to increase rigidity

# MUSICAL FIDELITY



## M8 Xi

A NEW CHAPTER IN OUR STORY FOR GREAT MUSICAL FIDELITY



## M8 Xi | INTEGRATED AMPLIFIER

DUAL MONO INTEGRATED AMPLIFIER WITH UNRIVALLED POWER

Introducing the M8xi, a high quality musical fidelity amplifier that combines separate preamp with two monobloc power amps combined. Each has its own heat sink and separate transformer. The preamp has its own dedicated power supply that is mounted close to the input sockets; consequently, PCB tracks are very short. This elegant idea ensures that both channels signals are ultra low impedance the instant they get into the amplifier.

Finishes Available:



Distributed by Henley Audio

T: +44 (0) 1235 511 166 | E: sales@henleyaudio.co.uk | W: www.henleyaudio.co.uk | Facebook: HenleyAudioUK | YouTube: HenleyAudio

and “dampen acoustic vibration”.

The cabinet sits on a stylish aluminium plinth that makes provision for spikes.

Incredibly, given their price, the 1030s can be bi-wired; the terminals that connect the treble and bass sections of the speakers to the outside world are, under normal circumstances, interconnected by stylish bridging-plates.

Look closely, though, and you’ll see where production costs have been shaved off. The veneer (cherry, beech or graphite-black)



**Unusually, given the price, the 1030s can be bi-wired (or bi-amped) since the LF and HF sections of the crossover are electrically-separable. Normally interconnected by bridging plates, these terminals are of decent quality and will accept either bare wire or 4mm banana plugs.**

is plastic, not wood! Q Acoustics’ achievement is nevertheless pretty significant, and demonstrates the upside of globalisation.

And they don’t sound half bad even today, driven by a Marantz PM-66SE Ki integrated amp and a Cambridge CXN v2 source in my case. In order to avoid boom, Q Acoustics recommended they be positioned at least 200mm from the back of the room, and 500mm from the side walls. ‘Toeing

them in’ towards the listening position is also suggested in the manual.

These guidelines followed, I was very impressed with the natural stereo image that the 1030s could deliver – it’s comparable with much more expensive speakers, and very engaging. The all-important midband communicates reasonably well, being free of the noticeable colouration that some cheap speakers impart to speech and vocal performances. However, it can be restrained at times.

Another criticism is that the treble is a



**Recessed into the baffle slightly, the 165mm bass driver of the 1030 has a 115mm doped paper cone. It was developed by Q Acoustics specifically for the 1000 series, and is capable of a communicative midband.**

“Q Acoustics “assembled a design team from the world’s most experienced and successful loudspeaker designers”

little reticent and lacks ‘bite’ – the 1030s would complement a bright amp or source.

And if you think big floorstanders mean ‘big bass’, you’re in for a bit of a disappointment here. Admittedly, the 1030’s bass is not without musical charm but a lack of weight, coupled with occasional traces of thickness, means you could do better for rock, electronic dance and organ works (I note, in passing, that the 1000 Series included an active sub!).

Let’s put it in context, though; today, you can pick up pairs of 1030s for less than £50 – even less, for specimens with tatty grilles or peeling veneer. For that sort of money, the ‘starter’ or budget-constrained audiophile is unlikely to do much better. As they sold quite well at the time – thanks in part to some positive reviews – they’re not uncommon. You’ll often find 1030s on eBay, at second-hand events...and if you happen to be in the right place at the right time (as I was!), you might chance on a pair that had been left out for the dustman...



**The 1030’s 25mm tweeter - like the woofer, developed especially for the range of which the 1030 is part - has a woven-polyester dome. Although acceptable low-level musical treble detail is apparent, the 1030 is far from ‘bright’ in character. Working in conjunction with the woofer, an excellent stereo image is created across the speakers.**

# Num r Uno in Heaven

Martin Pipe's ears are lent to the Rai Solo IEMs from Meze.

Last year, I reviewed the £2,699 Empyrean headphones from the Stratocaster-playing Romanian industrial designer Antonio Meze. Most of Meze's other offerings are aimed at the more affordable end of the ear-transducer market. But there's more to Meze than full-sized 'phones. The Baia Mare-based firm also sells two pairs of Chinese-made IEMs (in-ear monitors), the £949 Rai Penta and £229 Rai Solo I am reviewing here.

Those names hint to the number of individual driver elements in each IEM – five in the Penta, and one in the Solo. And 'Rai'? It's the Romanian word for 'heaven'. You'll however have to wait until next month to find

out just how heavenly the Pentas are – for this review, my attention is focused on the Solo – described by its maker as an “entry-level audiophile IEM”.

The Solo, like its bigger brother, is built into a specially-shaped body that has been in development since 2015. Meze wanted to achieve a good anatomic fit. To realise its complex shape with the desired degree of accuracy, Meze turned to a mass-production process known as metal injection-moulding. Here, a heated mix of finely-powdered stainless-steel and a binder material is injected into a precision-machined mould.

Form follows function – those rounded edges are designed to accommodate the natural curves

of the ear, thereby achieving a good fit. The use of steel and Meze's internal structure are also claimed to dampen unwanted resonances, so there's “minimum interference to the vibration created by the driver”. In terms of audio performance, these characteristics are said to translate to “a clean and dark background, with well-defined imaging”.

The 9.2mm UPM (unified pistonic motion) driver that lives inside each Uno body is no less innovative. “In a traditional earphone driver” Meze told us “the lead-in wires of the 16 Ohm voice-coil are glued to the rear of the membrane”. This is responsible for “unbalanced vibration”. In the Uno's driver, the 9µm-thick membrane is electrically-



conductive so there's no need for those wires. Benefits, according to the Meze website, include low distortion, mid-range clarity and "outstanding reproduction of low frequencies".

Meze, which guarantees its products for two years, pays plenty of other attention to detail. The nozzles that channel the drivers' output are colour-coded – blue is left, and red right. To them are mated the tips that snugly fit into your ear canals. The review pair was supplied with a bag containing three pairs of soft silicone eartips, and two pairs of deep-insertion double-flanged eartips. I preferred the latter as they stayed put, especially when I was on the move!

To protect them, Meze has included an unusually-styled ethylene-vinyl acetate (EVA) protective case. This has sufficient room for the detachable cables, that mate with the Unos via industry-standard MMCX socketry. Supplied is a braided 1.3m cable, terminated in a standard unbalanced 3.5mm plug (no 6.3mm adaptor is provided). Meze also offer upgrade cables with silver-plated copper conductors and rhodium-plated plugs. Balanced (2.5mm and 3.5mm) and unbalanced (3.5mm) versions of these are available.

## SOUND QUALITY

I tried the Rai Unos with a FiiO K5 Pro (reviewed last issue) and a Prism Callia, both of which were driven by a Cambridge CXN CD that had access to a library of lossless CD rips and hi-res material. Also pressed into service was my trusty X3 FiiO player, and a Google Pixel 3a 'phone – the headphone output of which, if nothing else, substantiated Meze's claim that the "Rai Solo works effortlessly with any device, due to its low impedance and high sensitivity". The results may not be hi-fi as we know it, but the 'phone didn't audibly-struggle to drive these IEMs.

With more capable devices, such as the X3 player, the impression I got was of fine stereo imaging with my hi-res LSO/Nosedá performance of Britten's War Requiem and a tonal character that to my ears seemed rather forward.

This had a positive upshot for the intelligibility of vocals. With The Existential Threat, a track from Sparks' new album A Steady Drip, Drip, Drip, every word of Russell Mael's intense and fast vocal was clearly heard – the sax benefited too.

Percussion had plenty of energy and precision, but an obvious



**£229 buys a comprehensive package – a detachable 1.3m unbalanced cable with 3.5mm stereo plug (but no 6.3mm adaptor), a series of tips to suit different ears, a hard zip-up carrying case and even a tool to remove wax and gunk from them.**

**With MMCX socketry, the Solos can accept aftermarket cables. Meze offer upgrade cables too.**

drawback was distinct lack of bass. This was also noticed with London Grammar's Hey Now (If You Wait, CD), which has a prominent bassline in places. Don't get me wrong – what there is of it is well-defined and musically-adept. It's just that there should really be more of it. More positively, the Solos did justice to Hannah Reid's vocal. But if you listen to bass-heavy electronic dance music, the Unos probably aren't for you.

Next came a CD rip of the

second Buggies album – Adventures in Modern Recording. Released just before Trevor Horn turned his talents to Yes and production.

Towards the end of Vermilion Sands the electronic-drum parts of a synthesised big-band are out of step with each other in places. With the Solo it was possible to distinguish between those clashing percussive flows. The slightly-forward nature of these IEMs tends to emphasise certain elements of the mix.

In the case of Lenny – another track off the Buggies album – the rhythm guitar, and its subtle interplay with a piano buried within the busy mix, were laid bare in a revealing yet enjoyable manner.

## CONCLUSION

There's much to be said in favour of the Rai Solo IEMs. They're thoughtfully-designed, very comfortable to wear, offer an upgrade path and are immaculately-presented. I'm also impressed with the musicality of the drivers; Meze are onto something here. In this regard the Solos are, quite frankly, hard to beat in their price-range.

But their downside is a lack of guts at the lower end of the spectrum. Furthermore, some might not appreciate the intimacy imparted by that midrange emphasis.



**The Solo's specially-shaped body ensures a good anatomic fit and listener comfort. For channel identification purposes, the 'nozzles' – to which the ear-tips are attached – are colour-coded. Blue is left, and red right.**

## MEZE RAI SOLO £229



**EXCELLENT - extremely capable.**

### VERDICT

Distinctive-sounding and fairly-priced IEMs, with plenty going for them.

### FOR

- well packaged
- revealing mid-band
- comfortable fit

### AGAINST

- midrange emphasis
- bass-shy

SCV (UK distributor)  
+44 (0)3301 222 500  
www.scvdistribution.co.uk



# WORLD STANDARDS

Your guide to the best products we've heard that are currently on sale in the UK...

## TURNTABLES

**AVID INGENIUM** £800  
Great bass response and upper midrange detail allied to clarity makes this a must-hear at its price-point.



**CLEARAUDIO INNOVATION** £6400  
Expensive, but offers great results from a finely honed and beautifully finished belt drive turntable, with servo control from the platter to keep a grip on tempo like few others. Can be fitted with a Clearaudio tangential arm, or any conventional design. Awesome.



**INSPIRE MONARCH** £4,350  
A rebuilt from the ground up Technics Direct Drive, having blistering pace and dynamics allied with smoothness, sophistication and purity of tone. A true reference.



**LINN LP12SE** £3,600  
The UK's most iconic turntable, the legendary Sondek goes from strength to strength. New Keel sub-chassis and Radical DC motor add precision and grip to one of the world's most musical disc spinners. Expensive though.

**MICHELL GYRO DEC** £1700  
Wonderful styling coupled with great build and finish make this turntable a delight for friends and family. It has an attractive clear acrylic dust cover, and you can mount just about any arm. A current design standard.



**PRO-JECT ESSENTIAL DIGITAL** £300  
A budget turntable that turns in a great analogue performance, but also has a hi-res digital output. Send 24/96 across your lounge via optical cable to a DAC and get great audio quality. Or record LP to your laptop.



**REGA RP3** £550  
The first of the super-quality Regas, little compromised by price and featuring Rega's outstanding RB303 tonearm, suitable for MM and MC cartridges. A standard at the price point.

**TIMESTEP EVO** £2100  
The famous Technics SL-1210 MkII Direct Drive but with improved plinth, isolation, main bearing and power supply, plus an SME arm (add £1500). DD convenience, rock steady pitch and fab sound at a great price. Our in-house reference.



## TO NEARMS

**ORIGIN LIVE ENCOUNTER MK3C** £1,745  
Origin Live combines carbon fibre and ebony to marvellous effect in its new 12-inch arm. Creamy and rich in presentation, the Encounter delves deep into the mix for a satisfying listen.

**HADCOCK GH-242 EXPORT** £810  
Consummately musical, lyrical sounding tonearm, but needs the right turntable.

**ORIGIN LIVE ONYX** £450  
Easy, smooth, creamy nature that reminds you why you're listening to vinyl in the first place. Essential audition at the price.



**REGA RB303** £300  
A one piece tapered casting makes this arm's structure almost unrivalled. Great dynamics and superb imaging, for MM and MC. Reference quality for peanuts.

**SME 312S** £1,600  
Twelve inch magnesium alloy tapered arm tube plus SME V bearings. An insightful yet smooth and relaxed sound. Superlative build completes the package. Our Editor's steed.



**SME 309** £1500  
A one-piece tapered 9in arm finished like a camera and slick to use. Superlative SME quality and sound at affordable price.

**SME V** £3000  
Offers rapid fire timing and a sense of precision, plus rock solid dynamics. Top dollar for deep pockets.

## CARTRIDGES

**AUDIO TECHNICA AT-OC9 MLI/III MC** £420  
A fine sounding MC with strong bass and super fine treble from a great stylus – yet inexpensive.



**AUDIO TECHNICA AT-F3/III MC** £150  
Great value entry level moving coil with detail and grip you just can't get from similarly priced moving magnets.

**BENZ MICRO ACE SL MC** £595  
Smooth, lucid and full-bodied, award-winning, hand-made cartridge from Switzerland.

**BENZ MICRO WOOD SL MC E945**  
Highly finished Swiss moving coil that plays music with riflebolt precision.

**DENON DL-103** £180  
A popular and much loved budget MC with big bass, smooth treble and deep sound stage. Fantastic value.



**LYRA TITAN I MC** £3,500  
Breathtaking speed and dynamics from LP, helped by diamond coated, boron rod cantilever.



**ORTOFON 2M MONO SE MM** £80  
A mono cartridge purposed for The Beatles in Mono microgroove LPs. Fitted with a top quality Shibata tip. Fab for the four.



**ORTOFON 2M BLACK MM** £400  
As good as it gets from MM. Fabulous detail and insight from a Shibata stylus, good bass and excellent tracking.

**ORTOFON CADENZA BRONZE MC** £1,400  
A mid-price MC with a slightly livelier presentation than the super smooth Cadenza Black. High-end sound at midband price – great value.



**ORTOFON CADENZA BLACK MC** £1,800  
Ultra smooth and dimensional moving coil with bass and punch aplenty. Lovely stylus.

**ORTOFON A95 MC** £3,750  
Fast and extremely detailed, this is an MC cartridge that sets standards.

**REGA CARBON MM** £35  
Budget price for a competent cartridge with a fairly unflappable nature. Ideal for beginners.



**GOLDRING 1012GX MM** £250  
A glorious sounding cartridge with solid bass and strong dynamic punch, plus excellent treble from its Fritz Geiger stylus. Fun and affordable.



**SHURE M97XE** £80  
Big warm sound, but great tracking and bullet proof stylus protection from damped guard. A survivor.

**VAN DEN HUL DDT-II SPECIAL MC** £995  
Long-established cartridge from Holland with an open and dynamic sound.

**PHONO PREAMPS**  
**CAMBRIDGE AUDIO 651P** £200  
Clean, concise sound from MM and MC cartridges at a very low price. A real bargain.

**ICON AUDIO PS3 MKII** £2,500  
All valve MM phono stage with MC transformer option, graced by big, spacious and relaxed sound.



**LUXMAN EQ-500 PHONOSTAGE** £4,495  
A fully-equipped phonostage from Japanese manufacturer Luxman that offers comprehensive cartridge matching allied to superb sound.



**LEEMA ACOUSTICS ELEMENTS ULTRA** £1,199  
Smooth and detailed sound with the ability to accommodate most modern cartridges. Exceptional value for money.



**PRO-JECT TUBE BOX DS** £425  
Compact MM and MC phonostage with valve output circuit and a big sound.



**QUAD QC24P** £995  
MM and MC, oodles of gain, a volume control – and valves! Looks superb and sounds even better: smooth, atmospheric and big bass.

**TIMESTEP T-01MC** £995  
New, minimalist phonostage that sonically punches well above its weight.

**PREAMPLIFIERS**  
**ICON AUDIO LA-4 MKIII** £1,400  
Uses early 6SN7 triodes for liquid sound. Has plenty of gain and a remote control into the bargain.



**MF AUDIO CLASSIC SILVER** £4,500  
One of the best preamplifiers we've heard at any price, this transformer-coupled marvel does very little wrong. It's powerful, clean and open, yet delicate. Its sound is unmatched at or near the price.

**MING DA MD7-SE** £1,520  
A valve preamplifier with an open, effortless sound and a big soundstage. It has plenty of gain so will accept any source and drive any power amp. A real beauty.



**INTEGRATED AMPLIFIERS**  
**ARIAND PRO845SE** £1,499  
Pure single-ended valve magic. Low-powered but immediately gorgeous, easy-going yet forcefully dynamic at the same time.



**AUDIO RESEARCH VS160** £3,500  
Power house sound with enormous pace and punch from traditional U.S. muscle master Audio Research. Breathtaking, but expensive.



**CAMBRIDGE AUDIO AZUR 651A** £350  
Dual-mono construction and meaty toroidal power supply combine to produce a solid and sharp sound with sonics far beyond its price point.

**CREEK EVOLUTION 100A** £1,500  
Superb build and smooth confident sound make this powerful amplifier a benchmark.



**CYRUS 8DAC** £1,400  
Trademark shoebox-sized Cyrus integrated now offering 88Watts per channel, plus DAC. Svelte delivery from a dainty case that fits in anywhere – and isn't Class D!

**EXPOSURE 1010** £495  
Entry-level integrated from Exposure has excellent upper mid-performance with an almost valve-like sound.



**ICON AUDIO STEREO 60 MKIII** £2,800  
Excellent tube integrated with plenty of power and an expansive soundstage, plus KT150 tube output and bias meter for easy adjustment.



**NAIM NAIT 5Si** £925  
Naim's fabled entry-level integrated amplifier is updated to si status. Demos Naim's superbly muscular sound at entry level.

**SUGDEN A21SE** £2,480  
Class A amp with fantastic sound quality producing hard, sculpted images, deep detail and tight bass. Just don't expect disco-like sound levels!



## POWER AMPLIFIERS

**AUDIO RESEARCH VS175** £7,498  
Powerful, fast valve sound that makes everything else look weak at times. Needs careful matching but well worth the effort.

**AUDIO RESEARCH VS115** £5,000  
Oodles of power with enormous punch. Rafael Todes said it provided "shock and awe" while retaining incredible smoothness and texture.

**ICON AUDIO MB845 MKII** £7,600  
With 120W from big 845 valves right down to low frequencies, this power amplifier has massive dynamics and bass swing, yet is easy on the ear.



**ICON AUDIO MB81PP** £15,000  
Big Russian transmitter valves deliver 200W from these massive monoblock amplifiers. Frightening in every sense.

**MCINTOSH MC-152** £4,995  
Stunningly insightful sound with enormous bass punch from a uniquely designed transistor amp. Amazing audio, a league up, if expensive.



**QUAD ELITE QMP MONOBLOCKS** £2400 PR  
The proverbial iron fist in a velvet glove. Plenty of power but delivered with an assured and confident nature. Smooth on top and easy on the ear but can rock out when needed.

**QUAD II-EIGHTY MONOBLOCKS** £6,000 PR  
Powerful and expansive sound from modern design monoblocks that also look lovely. Superb – used by us as a reference.



## LOUDSPEAKER FLOORSTANDER

**B&W 803 D3** £12,500  
B&W's updated statement floorstanders deliver depth and definition with breathtaking speed and authority, aided by a diamond coated tweeter. Expensive – but enormously impressive.

**CASTLE AVON V** £1,600  
A big floorstander at a modest price that suits the average room. Refined ribbon treble and deep bass give it a great delivery.



**EMINENT TECHNOLOGY LFT-8B** £2,500  
Excellent U.S. planar magnetic loudspeaker at bargain price. Utterly superb - a must hear.

**EPOS K2** £1,000  
A fun sound that is tidy all round and very engaging, with solid bass. Music as you hope it to be.

**FOCAL ARIA 926** £1,400  
Simple, clean, neutral sound – easy going but well engineered and affordable.

**MARTIN LOGAN SUMMIT X** £16,698  
Matches Martin Logan's XStat electrostatic panel to a powerful subwoofer to provide extended, powerful bass. Dramatic sonic purity. Awesome – all but unmatched.



**MARTIN LOGAN ELECTROMOTION** £2,500  
Martin Logan's budget baby XStat hybrid electrostatic. Fits into any lounge to give electrostatic levels of clarity and imaging.



**QUADRAL CHROMIUM STYLE 8** £1,700  
A supremely smooth yet open sounding loudspeaker. Clean and detailed treble from a fine ribbon tweeter. Accurate yet informative and enjoyable. Pure class.

**QUADRAL ORKAN VIII AKTIVS** £6,200  
Active loudspeaker with tight, powerful bass, perfect accuracy and detailed treble from a ribbon tweeter.



**Q ACOUSTICS 2050i** £480  
A large floorstander at a budget price. Offers high sensitivity and big sound and has very few flaws for the price.

**SPENDOR SP100 R2** £6,495  
Retro looks but a sound that's hard to match. Spendor's 12" bass unit provides massive low-end grunt with a room-filling sound.



**SPENDOR A3** £1,300  
Fine little floorstander with a smooth, natural midband and even tonal balance. Ideal for smaller rooms.

**TANNOY DEFINITION DC10 Ti** £6,000  
Enormous power with great projection. Glorious subsonics too. Need little power to go very loud and have superb finish into the bargain.



**TANNOY KENSINGTON** £9,950  
Big but not overpowering, punchy modern sound from classic cabinetry. Need little power to go very loud and suit a traditional home, or castle.



## LOUDSPEAKERS STANDMOUNT

**ACOUSTIC ENERGY NEO 1 V2** £225  
Civilised sounding speaker with fast and tuneful bass.

**ACOUSTIC ENERGY AE1 CLASSIC** £845  
Brilliantly successful remake of an iconic design; not flawless, but surely one of the most musical loudspeakers ever made.



**ELAC BS243** £1,000  
More transparent and spacious than they've a right to be at this price, these refined mid-price standmounters represent top value.



**EMINENT TECHNOLOGY LFT-16A** £1,200  
U.S. planar magnetic bookshelf loudspeaker with unrivalled mid-band and treble. Hear it before all else.

**WHARFEDALE DIAMOND 220** £200  
Builds on the success of previous Diamond ranges with better bass, more detail and a greater sense of scale.



**KEF LS50** £800  
Supremely musical mini-monitors which sound much bigger than they look.



**MARTIN LOGAN MOTION 35** £1,300  
Folded Air-Motion tweeter gives a taste of Martin Logan's electrostatic sound in a standmount. Different from the standard mini-monitor and all the better for it.



**PMC TWENTY.21** £1,575  
Transmission line loaded standmount with a big box sound from a compact cabinet. Punches well above its weight.



**Q ACOUSTICS 2020i** £165  
Great little bargain-priced stand-mounts with a friendly, fun yet surprisingly refined sound. Hard to better for a pair of starter loudspeakers.

**WHARFEDALE DENTON** £500  
A beguiling mixture of retro looks with modern, high-technology drive units. The Denton has an easy-going, big-hearted sound with a touch of trad warmth that should appeal to many.



## HEADPHONE AMPLIFIERS

**CREEK OBH11** £150  
Designed specifically for low to medium impedance (30 Ohm – 300 Ohm) headphones the little Creek has a marvelously well-judged sound.

**CHORD MOJO** £399  
Class leading portable DAC and headphone amp with ability beyond all else. Big, open spacious sound.



**EPIPHANY EHP-02** £99  
PP3 battery-powered portable gives great sound quality at an almost giveaway price. Happy with the output from an iPod or CD player, the little epiphany is a true bargain.



**ICON AUDIO HP8 MKII** £650  
The HP8 MKII valve-based headphone amplifier brings the spacious sound of valves to headphones. And it matches 'em all.



**FIDELITY AUDIO HPA 100** £350  
Great little headphone amplifier with a lively yet refined and open sound.

**MUSIC FIRST PHONE BOX** £276  
Brings a big stage, plenty of detail and rich, deep colours to the sonic spectrum.



**OPPO HA-2** £250  
Remarkable performance and sound from ESS Sabre32 DAC in a slim portable package.



## CD PLAYERS

**AUDIOLAB 8200CDQ** £949  
Inspired CD player and DAC with price-performance ratio like no other. Capable of matching designs costing much more.



**CANOR CD2+** £3,100  
Musically coherent and tuneful valve-driven CD player from Slovakia. Lovely liquid sound.



**CAMBRIDGE AUDIO AZUR 651C** £410  
Snappy modern presentation from this budget CD player. Cracking audiophile entry point for any digital fan.

**CHORD RED REFERENCE MKIII** £16,000  
A unique and massive engineering exercise that could well be the best CD player available. Chord's Pulse Array DAC technology produces a musical experience like few others. A true reference player.



**ESOTERIC K-03** £9,495  
Superb high-end silver disc spinner that is beyond criticism. Devoid of its own character but has a flawless presentation.



**EXPOSURE 101** £395  
Detailed player with fine sense of timing should be an automatic entry on any demo list at this price.

**ELECTROCOMPANIET EMP-1/S** £4,650  
Epic in scale, lavish in tone and exuberant in its musicality - this is a memorable SACD spinner. Quirky in operation and modest in finish, though.



**OPPO BDP-105D** £1200  
Universal player and DAC that makes CD and Blu-ray (+DVD) sound deep, spacious and full bodied. Reference quality that's affordable.



**REGA APOLLO-R** £550  
Rega comes up with a fine CD player again. Tremendous detail and an easy, unforced sound at all times. Few bells and whistles but made up for by its superb sonic ability.

**ROKSAN KANDY K2** £900  
A charmingly musical performer at the price - this is a surprisingly sophisticated CD player for the money.



**TUNERS**

**CAMBRIDGE AUDIO AZUR 651T** £299  
Value-packed AM/FM/DAB and DAB+ ready tuner. Precise and detailed with excellent resolution of spoken word.



**CREEK DESTINY 2** £550  
Creek's tuner expertise shines through in the Destiny 2. This AM/FM receiver is wonderfully three-dimensional and smooth.



**MAGNUM DYNALAB MD-90T** £1,900  
Exceptionally able, but commensurately priced, audiophile tuner that cannot fail to charm.



**DACS**

**AUDIOLAB M-DAC** £600  
Excellent sound from ESS Sabre32 DAC and impressive flexibility with a unique range of filter options make this a stand-out product. Low price is the icing on the cake.



**AUDIOLAB Q-DAC** £250  
Stripped-down version of Audiolab's M-DAC loses some features but retains much of the sound, making it a veritable bargain.

**ANTELOPE ZODIAC GOLD/VOLTIKUS** £3,095  
DAC/preamp/power supply combination majors on detail but has a remarkable un-digital sound. One of the best at its price.



**CHORD 2QUOTE HD** £990  
Superb build quality and exceptional sound from this compact unit. Boasts the ability to handle DSD direct via USB and has an exceptional soundstage. One of the best DACs you can buy.



**DCS DEBUSSY** £8,000  
DCS's bespoke 'Ring DAC' circuit gives a beautifully-fluid, almost analogue sound that encourages long listening sessions. Not cheap but worth every penny.

**NORTHERN FIDELITY DAC** £650  
Packed full of features, including Bluetooth and USB, this ESS Sabre32 equipped DAC offers crisp, insightful sound at low price.



**METRUM OCTAVE** £729  
Unique two-box digital-to-analogue converter with great sound at a great price. Cuts upper treble, though.

**NAIM DAC** £2,400  
Superb high-end digital converter with a probing, punchy and forensically-detailed sound.



**TEAC UD-501** £699  
Feature-packed DAC with benefit of DSD playback. Superb sound means little to touch it at the price.



**RESONESSENCE INVICTA MIRUS** £4,499  
One of the most highly spec'd DACs available, with a smooth yet enthralling presentation. Few approach it.



**NETWORK PLAYERS**

**CHORD DSX100** £7,500  
Chord's proprietary DAC circuit shines in their top-of-the-range streamer. Hear-through clarity with a sound rich in detail, dynamics and soundstage.



**CAMBRIDGE AUDIO NP30** £399  
Budget offering from Cambridge offers a great introduction to network streaming.

**CYRUS STREAM X** £1,400  
Gorgeous sound quality even from compressed digital music. New control app makes everyday operation a doddle.



**CONVERT TECHNOLOGIES PLATO** £2999.00  
A network player with amplifier that does it all, including turn LP to hi-resolution digital, and add cover artwork from the 'net.



**NAIM NDX** £2,995  
Clean, incisive and very detailed sound with Naim's traditional pace and timing make this one of the best network music players around.

**NAIM ND5XS** £2,175  
Great sound quality with traditional Naim heft. A wonderful DAC with full 24/192 handling. Only the display could be better.

**NAIM NAC-N172 XS** £1,650  
A pre-amp/DAC/streamer package provides a taut, rock-solid presentation with a tonally rich midband and a superior sense of rhythm.



**PRO-JECT STREAM BOX RS** £1,095  
Unusual valve-based streamer/preamp with variety of inputs and a lovely liquid sound. Not the most detailed but compensates with sheer musical verve.

**QUAD PLATINUM DMP** £2,500  
Combined CD/network player has all the usual Quad elements but with added zest and detail that brings life to everything you care to play.



**DIGITAL SOURCES**

**ASTELL&KERN AK100 MKII** £569  
Portable high-definition digital player with superb sound quality. Punchy and fast.



**FiiO X3** £150  
Fabulous value player with nice easy sound and full range of abilities. Small and light. For newbies.

**LOT00 PAW GOLD** £1,500  
Reference quality sound; it's like carrying your hi-fi in your pocket. Equivalently large too, but stunning headphone quality.



**NAIM HDX** £4,405  
Interesting one-box network-enabled hard-disk music system that gives superb sonics together with impressive ease of use.

**NAIM UNITILITE** £1,995  
A 50W amplifier with traditional Naim heft, a CD player and vhf/fm radio, plus network input and Bluetooth make this a great all-in-one.



**PORTABLE SPEAKERS**

**BAYAN SOUNDBOOK** £149.99  
Superb design and great sound make for one of the best portable Bluetooth speaker/radios on the market. Not the cheapest – but worth every penny.



**IRIVER IBA-50** £69  
Big, warm sound with plenty of volume and clean at high levels. Muscular sound compared to many rivals.

**CABLES**

**BLACK RHODIUM TWIST** £71/3M  
Twisted to fight off radio frequency, the Black Rhodium speaker cable is easy on the ear with a fine sense of clarity and focus. A remarkable performer at the price.



**MAINS CABLES R US NO.27** £95  
Offers a sprightly pace with a precise nature. Fast performance enhance frequencies and beautifully etched detail.



**CHORD SIGNATURE REFERENCE** £900  
Majors on timing, detail and openness. Capable of getting the best from most systems and a recommended upgrade.



**TELLURIUM Q BLACK** 280/3M  
A deep, dark, velvety performer that's nevertheless highly musical, it represents excellent value as mid-price cables go.

**TELLURIUM Q SILVER DIAMOND** £804/M  
An open, natural and transparent sound that is difficult to beat, from these great loudspeaker cables.



**HEADPHONES**

**AUDEZE LCD-3** £1,725  
A planar magnetic 'phone that offers monitor quality. Strong sound with silky, dark quality that others struggle to match.



**B&W P3** £170  
Beautifully presented headphones from the loudspeaker specialists. Feed them a good quality source signal and they reward with excellent sound.

**JAYS V-JAYS** £49  
Wonderful little budget over-ear portable 'phones with a clean, clear sound to beat the best of the rest at the price.



**NOBLE K10 INC. FITTING** £1,279  
Custom fit in-ear phones with 10 drivers deliver a sound that is out of this world. Personal and perfect.



**OPPO PM-1** £950  
Planar magnetic phones with a warm, easy but big bodied sound that draws you in. Need a lot of drive, but deliver superb bass.



**SENNHEISER HD700** £599  
Tremendously fast with a strong, focussed, lower-frequency range and a firm bass punch.



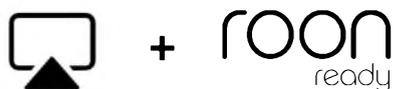
**YAMAHA HPH-MT220** £150  
Purposed for indoor monitoring yet light and comfortable enough to be used on the move. Excellent sound quality marred only by a slight warmth to vocals.

# 2GO

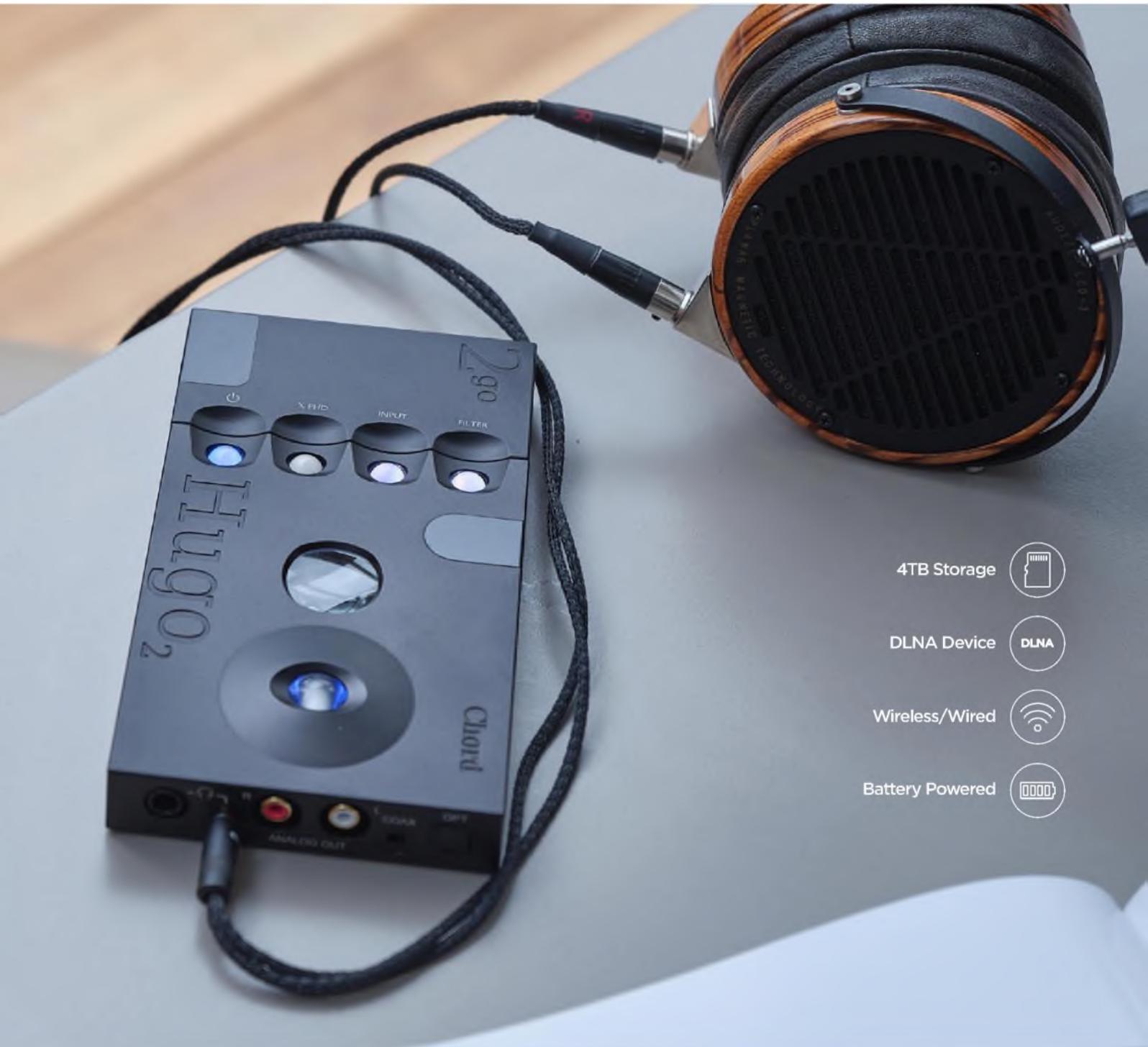


## **GO ANYWHERE STREAMER/SERVER**

HUGO RANGE



Hugo 2 has taken one giant leap: with a new addition of the 2go streamer/server device, which brings wireless and wired streaming, up to 4TB of storage, plus auto source-switching for seamless music playback between playback applications. Hugo 2 with 2go is now a DAC, preamp, headphone amp, streamer and digital music library, all in one class-leading British-built device.



4TB Storage



DLNA Device



Wireless/Wired



Battery Powered



# CHORD

Chord Electronics Ltd.

[CHORDELECTRONICS.CO.UK](http://CHORDELECTRONICS.CO.UK)

Made in  
BRITAIN 

 PURE  
AUDIO  
since 1989



# Choral Ensemble

**The new Chora 816 from Focal is a lot of entry-level speaker for the money. But will it win the heart of Chris Frankland?**

**T**he Chora 816 from Focal is a lot of 'speaker for £1,099. It is well presented and finished and would give an owner confidence in having purchased a quality product.

This 2.5-way reflex-loaded floorstander from France measures 303mm high by 388mm wide by 102.3mm deep. It also comes with its own floor stands, each with four spiked feet, that bolt to the bottom of the handsome dark wood veneered cabinets.

Focal may be a relative newcomer to the UK, but it was founded in France in 1979 and is a significant player in the European market. It designs its speakers in-house and has its own manufacturing and cabinet making facility (although the Chora cabinets are not made there). It sprang to prominence in the UK when merging in 2011 with UK hi-fi legend Naim Audio. After, in 2014, Focal and Naim were acquired by French investment group Naxicap Partners and private equity company



**165mm Slatefibre-coned bass drivers .**

Aquasourça and are now part of holding company The Vervent Group.

The Chora range was unveiled in late 2019. In the middle is the 816 I'm reviewing here; at the top is the three-way 826 at £1,200 and there is an entry-level 806 two-way bookshelf for £599. All are bass-reflex designs and feature a 25mm aluminium/magnesium tweeter and Focal's newly-developed Slatefibre-coned bass and midrange drivers. These cones are made from a composite of recycled non-woven carbon fibres and thermoplastic polymer. The carbon fibres in the cone are said to improve rigidity and are bound together by the thermoplastic polymer to increase damping.

The cones are claimed to be very light in order to optimise sensitivity. Delivering a loud 90dB from one Watt (at 1m) they need little power, so are an easy match to all amplifiers, including those with valves.

The 165mm bass driver crosses over at 270Hz to a 165mm midrange cone, which in turn hands over to the 25mm tweeter at 2.7kHz. This uses a memory foam material called Poron for the surround, which is derived from the beryllium tweeter used in the Utopia range. It is said to reduce distortion between 2kHz and 3kHz.

The new Chora range replaces Focal's old Chorus range and is intended to offer high quality sound at an accessible price point.

## SOUND QUALITY

With their stands bolted in place, I placed the 816 'speakers around 9in from the rear wall of my listening room and about 12in from the

corners. This usually proves the best place in my room and the Focal Chora 816 was no exception.

My new Audio Note Tonmeister valve amplifier was on hand, which I thought would be a suitable partner.



**This bass reflex-loaded 2.5-way floorstander comes with its visually interesting stands.**



## ULTIMATE ACOUSTICS | STELLIA & ARCHE

Featuring groundbreaking circum-aural technology and a new generation of exclusive electro-dynamic speaker drivers, Stellia closed-back headphones are capable of offering outstanding performance and an extensive frequency response in any environment.

Arche is an ideal all-in-one DAC and headphone amplifier solution, also equipped with the capability to integrate with your home Hi-Fi system. Offering presets for every set of Focal Premium headphones, Arche ensures you get the absolute best result from this ultimate combination, every time.

**Acoustic sound purity, everywhere | Amplify your emotions**

I also used a Naim NAIT XS2, which seemed a logical partner as the two products are stablemates. Sources were an Audio Note 4.1x CD player and TT3 turntable with Arm2 and lol cartridge through an S9 transformer.

I kicked off with the Tonmeister driving the 816s, reaching for Dave Koz's The Dance to spin up The Bright Side. Immediately, I was



**Both Slatefibre-coned bass and midrange drivers are made from a composite of recycled non-woven carbon fibres bound together in a thermoplastic polymer to improve rigidity and increase damping**

"uncoloured, dynamic, detailed and able to convey the life and impetus of music well"

impressed by the life and dynamics of the 816s, their detail and control on sax and their exuberance and detail on percussion. The track hung together well and there seemed little to seriously criticise for a 'speaker at the price. But was that percussion at times a little over-exuberant? Certainly revealing.

Next up was Ben Sidran's wonderful rendition of On the Sunny Side of the Street. Bass was tight and tuneful without being boomy. Vocals were very good – articulate and

detailed, while dynamics were excellent and percussion really sparkled.

Next, I brought the Naim NAIT XS2 into play. On Van Morrison's Days Like This, his vocals were well handled, backing singers nicely separated and detailed and the horn section dynamic. But would that horn section prove a little tiring over time? They have a vivid sound.

On Labi Siffre's It Must Be Love, his ukulele intro was beautifully handled, his guitar solo detailed and well voiced with good insight into his playing, but was his voice could be a little shouty at times. Again, forward and vivid.

**CONCLUSION**

The Focal Chora 816 is a very capable performer – uncoloured, dynamic, detailed and able to convey the life and impetus of music well,



**This 25mm aluminium/magnesium dome tweeter derives from the Utopia range and uses a memory foam material called Poron for the surround to reduce distortion between 2kHz and 3kHz.**

from both a Naim Nait XS2 and Audio Note Tonmeister. It has many fine qualities but some may find the top end lively. There's plenty of treble sparkle – that's for sure – and good bass also. This is a lively loudspeaker and fine value. Worth auditioning at your local retailer.

**MEASURED PERFORMANCE**

Frequency response of the Chora 816 was at its flattest when measured 20 degrees off-axis, as shown, where there is still treble lift. Measured on-axis, this lift was pronounced at +2dB, sufficient to make the Chora sound bright. The grille does not cover the tweeter and made no difference to these results. So the Chora 816 is best aligned to point straight down a room, not at

**FREQUENCY RESPONSE**

**Green - driver output**  
**Red - port output**



**IMPEDANCE**



listeners, for even tonal balance.

There is some small emphasis of low frequencies, sufficient to give obvious bass. Output extends down to a low 40Hz, the forward facing port (red trace) extending this down to 30Hz, sufficient to generate powerful deep bass. Our impedance trace shows the port tuned to 40Hz and with broad effect, offering good acoustic damping to the bass driver, suggesting subjectively well controlled bass.

Sensitivity was very high at 90dB from one nominal Watt (2.8V) of input; amplifiers of 20-40 Watts will be sufficient to provide high volume, much more likely going unused in most homes. High sensitivity is partially achieved by a low measured impedance (with pink noise) of 6 Ohms, d.c. resistance measuring a low 3.7 Ohms. This is in line with trend, most current designs measuring similarly. And all amplifiers can cope; there are no problems here.

Focal's Chora 816 measured well in all areas. It has some treble lift to add obvious treble and there's plenty of bass output too, well controlled. Add in very high sensitivity to expect a powerful and lively sound. **NK**

**FOCAL CHORA 816**  
**£1,099**



**EXCELLENT - extremely capable.**

**VALUE - keenly priced.**

**VERDICT**  
Detailed, uncoloured, dynamic and tuneful but a little bright at times

**FOR**  
- great dynamics  
- uncoloured sound  
- highly efficient and easy to drive  
- suit valve amplifiers

**AGAINST**  
- bright edge to top end that may prove tiring

FOCAL  
www.focal.com/uk



**Solid State Preamp**  
**McIntosh C47**

- 7 analogue & 5 digital inputs
- Decode & play back high fidelity DSD files via USB
- Limited stock at this price

**SAVE 40%**



36 Months Warranty



**£4,995** **£2,995**

END OF LINE OFFER

Only 1 available in the UK of 70 available Worldwide

**70th Anniversary**

**2-Channel Vacuum Tube Amplifier**  
**McIntosh MC2152**



- Commemorative system marked with matching serial numbers
- 150 watts x 2 channels
- (8) KT88, (4) 12AX7A and (4) 12AT7 vacuum tubes

**£25,000**

36 Months Warranty



**2-Channel Vacuum Tube Preamp**  
**McIntosh C70**



- (5) 12AX7A and (1) 12AT7 vacuum tubes
- MM & MC phono inputs
- All analog design and a retro look
- Standard editions also available



Includes McIntosh History Book that contains a certificate of authentication

**Integrated Turntable System**  
**McIntosh MTI100**

- Turntable, vacuum tube preamplifier and amplifier all in one
- Includes Bluetooth and auxiliary inputs
- Just add speakers



ON DEMO

**£7,495**

36 Months Warranty



**Stereo Integrated Amplifier**  
**McIntosh MA252**

- 160 watts per channel
- Hybrid design: vacuum tube preamp and solid state power amp



ON DEMO

**£4,500**

36 Months Warranty



**Stereo Integrated Amplifier**  
**McIntosh MA352**

- 200 watts per channel
- Retro all analogue design
- 5 Band tone control
- Includes Sentry Monitor™



ON DEMO

**£8,495**

36 Months Warranty

**JUST LAUNCHED**



**Solid State Preamp**  
**McIntosh C53**

- DA2 digital audio module
- Supports up to DSD512 files
- 8 band analog equalizer
- 9 analogue & 7 digital inputs



AVAILABLE TO ORDER

**£9,995**

36 Months Warranty

**JUST LAUNCHED**



**Stereo Integrated Amplifier**  
**McIntosh MA9000**

- 300 watts per channel
- 8-band tone control
- DA1 digital audio module
- MA7200 also available



ON DEMO

**£12,995**

36 Months Warranty



**Monoblock Solid State Amplifier**  
**McIntosh MC611**

- 600 watt quad balanced
- Eco-friendly power management
- 2, 4 and 8 Ω outputs
- 55% increase in dynamic headroom compared to previous model



ON DEMO

**£19,995 /pair**

36 Months Warranty



**7-Channel Solid State Amplifier**  
**McIntosh MC257**

- 200 Watt per channel
- 94% increase in dynamic headroom
- Quiet fanless design
- Can be used in 5.1 home theaters



AVAILABLE TO ORDER

**£12,995**

36 Months Warranty

**JUST LAUNCHED**



**SME Tonearms**

**Series 309**



**£2,450**

**Series V**



**£5,200**

**Series IV**



**£3,350**

**Series V-12**



**£7,550**

ON DEMO

**AT-6006R**

- Automatically lifts tonearm before runout extending the life of your stylus
- Works on any turntable

ON DEMO

**£112.90**

24 Months Warranty





FREE VINYL RECORDING WORKSHOPS IN-STORE

### HTF Vinyl Recording Software

- The fastest and most efficient way to digitise your vinyl
- Convert to WAV, MP3, WMA, AAC/MP4 simultaneously
- Enter track meta-data during recording, including album artwork
- Record a full side of an album unattended with auto track split
- 192khz 24 Bit
- Free training

Dozens Of Features



£25 /v.2.4

### Mytek Brooklyn Bridge

- WiFi Streamer / DAC / Preamp all-in-one
- Reference headphone & phono stage
- Includes remote control
- Also available in silver



£2,595

24 Months Warranty



### Technics Direct Drive Turntable SL-1000R / SP-10R

- Coreless direct drive
- Separate control unit
- Probably the best DD turntables in the world



24 Months Warranty  
**Technics**

SL-1000R  
£13,995

SP-10R  
£7,999

### Technics Direct Drive Turntable SL-1200G / 1200GR / 1210GR

- The legendary turntable reborn
- Coreless direct drive
- Free Ortofon 2M blue cartridge



24 Months Warranty **Technics**

SL-1200G  
£2,339

SL-1200GR  
£1,299

SL-1210GR  
£1,299

### Mytek Manhattan & Brooklyn DACs

In our opinion, the best digital-to-analogue converters on the market



24 Months Warranty



Manhattan DAC II  
£4,995

Brooklyn DAC+  
£1,749

Brooklyn ADC  
£1,599

### SME Turntable Synergy + Series IV Arm

- Built-in NAGRA phono stage
- Ortofon's 'exclusive series' MC Windfeld Ti cartridge
- Internal crystal cables



£14,950

24 Months Warranty



### SME Turntable Model 10

- Ltd. Edition Black comes with free Ortofon Cadenza cartridge



SAVE OVER 25%

With 309 Arm  
£4,499

Ltd. Edition Black  
£4,999



### Belt Drive Turntable Valore 425 Plus

- 9" tonearm derived from B-5.1 model
- Available in acrylic, black, white, walnut or black leather



£1,445

24 Months Warranty



### JBL Passive Loudspeakers L100 Classic

- Classic 70s look
- Frequency response 40Hz – 40kHz
- Vintage Quadrex foam grille
- JBL JS-120 floor stands available at £325.00



£3,995 /pair

36 Months Warranty



### Avantgarde Speakers UNO XD

- 2-way horns system speakers
- 18 Ohm high-impedance voice coil design, efficiency of 107 dB
- Active crossover programmable by built-in DSP



£25,000 /pair

36 Months Warranty



### Avantgarde Speakers DUO XD

- 2-way horns system speakers
- Powerful SUB231 XD subwoofer module
- Various colour combinations available
- Why not book an in-store demo today?



£32,500 /pair

36 Months Warranty



### Audio-Technica Cartridges AT-OC9X Series

- Moving coil

JUST LAUNCHED



24 Months Warranty



AT-OC9XEB  
£209

AT-OC9XEN  
£299

AT-OC9XML  
£479

AT-OC9XSH  
£569

AT-OC9XSL  
£659

### Audio-Technica Cartridges AT-ART1000

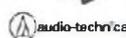
- Moving coil

Available in-store only



£4,450

24 Months Warranty



### Phono Stage PH-10 Power Supply PSU-10



- 2 separate inputs
- 6 EQ curves
- 4 GAIN options
- For use with MM & MC cartridges

- Worldwide voltage
- Optional external power supply for Gold Note PH-10

PH-10 & PSU-10 also available in black

£1,264

24 Months Warranty

£864

ESTABLISHED 1991  
**HARD TO FIND®**  
**WHISKY**  
www.HTFW.com

VISIT OUR WEBSITE TO BROWSE OVER 3,500 WHISKIES & WHISKY GIFTS



Cibi Blade Runner 2x Whisky Glasses in Gift Box  
Twin Pack • 2x 37cl

£119.95

LP2708

AS FEATURED IN THE ORIGINAL 1982 MOVIE  
**BLADE RUNNER**  
ITALIAN CRYSTAL GLASSWARE COLLECTION

📍 No. 1 Spencer Street The Jewellery Quarter Birmingham B18 6DD United Kingdom

🕒 Monday - Saturday 10:00 to 17:30 ☎ 0121-448 84 84 ✉ sales@hardtofindhifi.com



Next Day Delivery Available

Fast worldwide shipping with tracking provided



McIntosh Reference Dealer

The majority of the McIntosh range is on demo

Vinyl, CD, SACD & MQA CDs In-Store

Over 1,000,000 records in stock



WRITTEN BY WOLVES

Secrets  
Tenfold

I have to apologise for my late review on this one. This debut vinyl LP has been sitting in a tower of 'I'll get around to it tomorrow' for about six months. But I got there and thank goodness I did!

A New Zealand band spouting a recipe of genres and sub-genres into a gumbo of hard rock and metal. Ultimately, I'd call this melodic rock or pop/rock but with thrash and metal grammar and classic rock and synth sprinklings, plus hair metal chrome bits on the front and back.

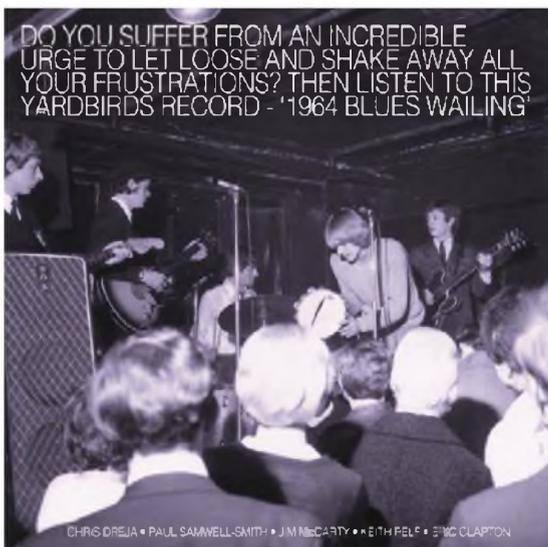
And then there's the high production values, the well constructed songs and the hooks. Ahh, the hooks. I was humming along with 'Better Luck Next Time' and doing a little boogie in my listening chair in a few minutes of studious listening. This LP is – how do I put this – funnn.

Well fun, yes but there's also some introspection and self awareness here. The album is not a party LP. On 'T'ell Me What You're Running From' for example "if I keep running from this, this is not gonna get better, I'm not gonna fix this" said the band. "Whilst the short-term gain of running away might be great for a while, there's a realisation that if I don't be honest with myself, then it's never gonna change".

Ignore the horrendous vocal introduction on track one though, which sounds like the first few minutes of a bad Cher song, draped in exuberant vocal processing in the worst pop-R&B, hit-by-numbers tradition. If I could cut this one out with my Stanley knife, I would.

Apart from that car crash, the rest of the album is truly excellent. High energy, full of life and free from any restraint, this is melodic rock at its very best.

AUDIOPHILE VINYL



DO YOU SUFFER FROM AN INCREDIBLE URGE TO LET LOOSE AND SHAKE AWAY ALL YOUR FRUSTRATIONS? THEN LISTEN TO THIS YARDBIRDS RECORD - '1964 BLUES WAILING'

CHRIS DREJA • PAUL SAMWELL-SMITH • JIM MCCARTY • KEITH RELF • ERIC CLAPTON

THE YARDBIRDS

Five Live Yardbirds 1964  
Repertoire

Recorded live at the Marquee Club on 7 August 1964 and featuring Eric Clapton (this was Clapton's first ever recorded album) this recording shows the band at their early peak and represents one of the most important British rock releases of the early 60s. Blues & R&B standards abound, of course.

You might be interested to know that the same night of this recording, other artists also featured. The audience would have also enjoyed the talents of Long John Baldry and the Hoochie Coochie Men (featuring Rod Stewart) plus American blues legend Sonny Boy Williamson, who a few months later invited The Yardbirds to support him on a UK and German summer tour.

This edition has been nicely and newly remastered by Eroc

and includes liner notes written by Ugly Things magazine founder Mike Stax with contributions from surviving band members.

The full line-up features Eric Clapton on lead guitar, Chris Dreja on rhythm guitar, Paul Samwell-Smith on bass, Jim McCarty on drums and Keith Relf on vocals and harmonica.

It includes Chuck Berry's Too Much Monkey Business, Howlin' Wolf's Smokestack Lightning, Sonny Boy Williamson's Good Morning Little Schoolgirl and, as the saying goes, much more!

One of the charms of this release is the between-song banter which adds atmosphere and the sense that you're part of an occasion. This rather relaxed element of the production is a welcome one. A live album should be all about the moment in time. And not a Spotify playlist. This album production got it right.

The lady released her solo album, Penelope Two, a wee while ago. This release, Redeux, is a contemplative pause in her career path as she looks again at her past work, with the aid of a number of artist friends who've contributed their reworking skills to the original music.

The idea was actually broached by her label, Houndstooth, "...to get a couple of remixes of 'Penelope Two' which I took as an exciting opportunity to find a way to express my ideas about what I feel a 'remix' can be. I have always loved when artists really stretch their own creativity with their own reinterpretation of other people's songs, whether as a cover or as a remix. I knew I would be looking for a very unique take on Penelope Two" said the Aussie.

One of the important parts of this project was there to be a balanced mix of artists in regard

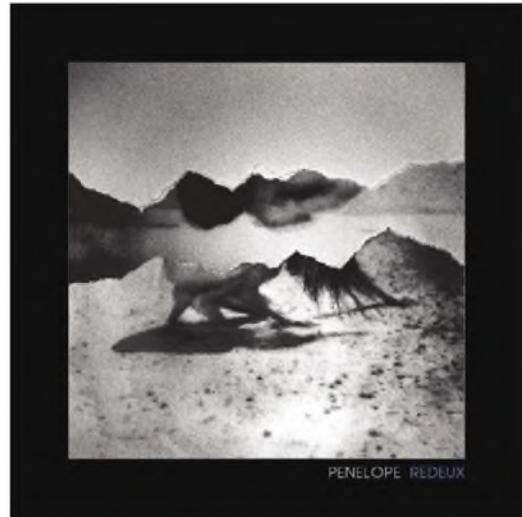
to gender and genre.

So there's a host of names here that will be imminently familiar. I'm talking about people like Mogwai, Cosey Fanni Tutti and Nik Colk Void. Shelter Press label founder, Felicia Atkinson, adds to that list alongside Houndstooth label chum, Throwing Snow, plus JFDR, Aasthma, Jonny Hostile, Poppy Ackroyd and Paul Corley.

This electronica is moody, full or dark portent and industrial ambience, driven by deep throbbing beats but, because these works are bounced off the atmosphere of each newly introduced personality, the music takes on a slightly more individualistic suite of styles.

Fascinating, stuff. Penny fans should investigate toute suite.

As for the mastering? Gawd knows. I reviewed this off a CD-R so no conclusions can be drawn (never trust a man who offers mastering comments from a CD-R).



## PENELOPE TRAPPES

Redeux  
Houndstooth

# AUDIOPHILE VINYL

Simon represents a time and a place in popular music. She has a signature position as a singer-songwriter in the 70s. But there is more to her musical output than her hit single You're So Vain.

Released in 1972, this LP features that very single, helping this album to hit Gold status in five minutes flat. Her autobiographical honesty had a lot to do with that because this album certainly has that atmosphere. That hit single was reputedly all about her relationship with actor Warren Beatty while the song, The Right Thing To Do, laid her relationship with James Taylor open to public scrutiny.

Friends and family must have kept their lips firmly sealed when Carly came over for tea. Just in case. That honesty was also turned inwards, though. She was never afraid to admit to her own failings.

Many forget how many friends

and guests joined Simon on this release. Jagger sang with her on You're So Vain, for example. Also, on James Taylor's Night Owl, which is a rock outing in a blues frame of mind, you'll find session musician extraordinaire Nicky Hopkins, friend of The Beatles, Klaus Voorman and sax player Bobby Keys who knew everyone and appeared on all of their albums, plus vocals from Bonnie Bramlett (of Delaney & Bonnie fame), Doris Troy who was a famed soul singer with hits under her belt but was also one of the famed voiced on Floyd's 'Dark Side of the Moon'. The track even saw an appearance from a pair of McCartneys, for goodness sake! This LP was name drop city, and no mistake.

That the heartfelt lyrics and delivery were wrapped up in a digestible commercial rock and pop presentation sealed its success.

As for the mastering? Typically excellent from Speakers Corner.



## CARLY SIMON

No Secrets  
Speakers Corner

# Black Rhodium



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

Bespoke high end audio cables hand made in the U.K  
[www.BlackRhodium.co.uk](http://www.BlackRhodium.co.uk)

# "Old products look to be value beyond modern conception"



Noel Keywood

**M**y column this month is rubbish – or about it. Contributors Dave Tutt and Martin Pipe get worked up over rubbish. The UN agrees with them, issuing a report recently that puts figures onto the amount of electronic rubbish we produce nowadays – all those old TVs, 'phones and – perhaps – hi-fi amplifiers that we so casually discard. In my view inevitably discard because there is no worked out way to efficiently recycle electronics rubbish.

There's strange amnesia about this. I live in London where the amount of electronic product being discarded, replete with precious metals such as gold, copper, silver, nickel and much else lurking in a circuit board, turns up on the street as battered and damaged domestic refuse sitting at the base of a tree, awaiting collection from the bin men, namely a constant stream of heavy Veolia trucks that patrol the streets to keep them clear of such rubbish.

The noise from these monsters goes on all day, Sundays included, just to keep up with this torrent. But they crush what is thrown in, for landfill; re-cycling isn't involved. There is nowhere in Westminster to deposit such equipment. A few miserable local bins accept hair dryers, but you won't get your old Samsung TV, whose switch-mode power supply has failed (as they do), in there.

This is my experience of trying to discard unwanted electronic product in a city. If you live somewhere with a local tip that has the ability to properly re-cycle such electrical waste – or rescue potentially valuable products that can be restored to full working order – then you are in a better place than I.

And as for old computers,

rendered useless automatically by software updates that do not read old code, this is another world again, one of built-in obsolescence that goes unchallenged.

We had WEE regulations from the EU in 2008 that were meant to deal with electronic waste but the solution, implemented at huge cost to everyone, where the supplier from which you bought the product (termed the "polluter" no less) was responsible for its re-cycling – was a bureaucratic nonsense, proving completely impracticable in real life. Leaving us with piles of uncollected electronic rubbish and piles of EU regulation unfit for purpose.

A Press Release of the UN report I mentioned earlier, excitingly titled 'Chemicals & Waste', dated Jan 2019, says "as much as 50 million tonnes of electronic and electrical waste is produced a year, more than all the commercial airliners ever made, and only 20% is efficiently recycled". It's worth over \$62.5 billion and there is 100 times more gold in there than a tonne of gold ore, they say. Other valuable elements are platinum, cobalt and rare earth elements. Interesting that the UN report talks vaguely about "buy back and return" as a solution, but omits to mention WEE. So we'll forget about that then.

That the EU WEE directive of 2008 should be ignored by the UN report just 11 years later shows how ineffective both agencies are in offering any useful solutions to this global problem.

Our columnist Dave Tutt deals with this at ground level, as a repairer of hi-fi and electronics. A long, tortured e-mail from him on the subject of just how bad things are out there with regard to reliability, repairability and disposability fits neatly into the problem of electronic rubbish. In a nut-

shell, Dave explains that much modern equipment is effectively unrepairable. Built by robots using micro-miniature surface mount devices (SMDs) that humans cannot easily manipulate, if it goes wrong it is scrap.

And it does go wrong, repeatedly and consistently with switch-mode power supplies, one reason they have such a bad reputation. I had a close look at a Samsung TV that died on me a few years ago and the power supply was a wreck. No point in ordering a new board, this TV was fit only to be thrown out next to my local tree. I didn't do that of course (even though WEE says "kerbside waste collection" is valid) and could not get it into my local waste electrical bin purposed for hair dryers, so it went into a general waste bin – which wasn't right. Some practicable way of dealing with waste electronic product like this is needed.

The sheer simplicity of old analogue equipment, especially when hard wired, makes it an easy and quick service proposition. Factor in great sound quality and all of a sudden old products look to be value beyond modern conception. But I'll not ignore modern products here either.

A good modern valve amplifier like the simple Icon Audio Stereo 30 SE I use is an interesting example. I have built more valve amps than I care to think about, becoming accustomed to the whole push-pull thing. But – hey! – it does not now need to be like this. With KT150s there's enough power from just one output valve per channel – and no crossover distortion. Ultimate simplicity, giving great reliability and sound. Repairable and not destined to be abandoned beneath a tree..

A reminder to me about purist fundamentalism. Let it be simple and pure, easily repairable and not a piece of rubbish. ●

# THE VINYL REVOLUTION



**The EVO and the new EVOke** Now you have a choice of *any* SL-1200! The new EVOke has world beating performance figures that are comparable with the world's most expensive turntables. The ability to fit any arm or cartridge to any SL-1200 new or old, means you can now have the EVO that you want at the price you want.

The EVO was used by Hi-Fi World to evaluate the Beatles In Mono records and is now used as their everyday reference. The EVO comes fitted with a tonearm of your choice and a cartridge of your choice.

We have worked with direct drive turntables and moving coil cartridges for nearly 40 years. We can supply completely new units with 6 year guarantees, used ones with 5 year guarantees, or we can convert your own.

**Technics SP-10R & SL-1000R** Many combinations available  
**Hi Fi World said:**

This is a spinner of vinyl for the serious, where you just want to punch a button and get on with it. It offers a degree of unarguable perfection for professional studios and anyone working with vinyl. If you want such unerring focus on the basics of playing LP it's time to check the piggy bank.

**Hi Fi News said:**

Any great turntable gives you a certain frisson when you hear it. It's that old 'shivers down the spine' feeling, a sense of being let into a world to which you had previously not been privy. This is a remarkable turntable, and arguably the apex of vinyl playback. It's difficult to see how the SP-10R motor unit can be improved upon. It is a definitive statement of engineering prowess, and marks the return of direct drive to the top tier of turntables.

Miyajima - Stereo - Mono - Denon DL-103 - Audio Technica AT33 & OC9

Turntables & Tonearms - Technics SL-1200 & SP-10R - Furutech - Klipsch - 78rpm - SL1200 Mods

Tax free best prices for World wide mail order by Fed Ex

Sound Hi Fi Dartmouth Devon 01803 833366 [www.SoundHiFi.com](http://www.SoundHiFi.com)



TRANSFORM YOUR SYSTEM WITH A  
MUSIC FIRST AUDIO PREAMPLIFIER

**CALL TODAY 01424 858260**

[www.mfaudio.co.uk](http://www.mfaudio.co.uk) [info@mfaudio.co.uk](mailto:info@mfaudio.co.uk)

# "Go analogue. Take a digital album and put it on cassette"



Paul Rigby

If there's one thing about content that really winds me up – and when I say content I mean everything from books, computer games, film, music and more – it's the corporate wish to digitise the lot and to feed it to us on a strictly rental basis.

Ever since downloads appeared illegally as MP3s on Napster and then legally via the likes of iTunes, physical formats have been an endangered species.

In the USA, last year, only 17% of all computer games were sold in a physical format and, judging by many YouTube channels I've seen, lots of gaming fans are not happy and sense that they're losing something important.

Because of a lack of shelf space, I have a Kindle with around 1,000 books on it but I don't feel that I actually own any of them. I rent them. After the first flush of novelty, my time in between reading a Kindle-based book, grows. I read physical books, principally. I appreciate the fact that I actually own the things.

Film of all types is streamed into our homes. I have Netflix and Amazon and I used to have Sky but (thankfully) binned that. Now? Apart from YouTube watching, most of my TV watching is done via DVD and Blu-ray. I feel all the better for it too.

In hi-fi, music is streamed from Tidal, Spotify and the rest. Even when I do manage to grab a file, I don't see it. I see the container, the hard disk say, but not the actual content. I feel more at one with my music when I handle vinyl. Even CD makes me feel better than hitting a stream button.

The problem I'm alluding to is not that streaming and digital

formats exist. I actually like streaming and digital and find them useful. It's the opposite. It's my right to choose that is being eroded. I feel that choice is being taken away from me. Slowly and steadily.

This comment space is too small to properly examine all corners of the issue and to offer considered conclusions and so I won't be doing that here.

The reason I bring up the above relates to a disturbing side effect. That's the phenomenon of exclusive digital content. That is, content we would like to consume that cannot be bought in a physical format.

There are thousands of computer games out there that fit this spec. There are fewer Kindle-only books but they do exist. Film too. Many superb documentaries, for example. And there's more music now being produced that is digital only. It worries me because, if this music was, as it were, switched off, it would disappear into the ether, possibly never to be heard again. With, who knows, no backup to record its existence. That possibility is there and it's real.

But is it our fault? Or rather, are the lovers of physical formats, those that actually care, just too small in number to influence the market any more? Are we actually a dying breed. Do we matter?

One notable electronica/trip hop-esque artist of long experience whom I respect, Steve Cobby, possibly better known to you as Solid Doctor or Fila Brazilia, views physical formats with mistrust. He tried selling his own work physically but "...the move was a disaster. Stock was over-pressed with higher manufacturing and

printing costs plus I was paying storage on unsold stock...it was not the way to go".

For Cobby, digital appears to be the prime format with the possibility of crowd funding offering the chance appearance of a physical version.

How long will it be before crowd-funding becomes a chore?

I say this because I have three or four favoured artists, all of whom have a residence on the online music site Bandcamp, whose work can only now be purchased in a digital form.

So, what to do? Well, I've decided that if I want a physical format, I must produce it myself and produce it to the audiophile standards that I expect. I've decided to take a DIY approach to the physicality of media. Well, to music at least.

My solution? Go analogue. Take a digital only album and put it on cassette. Daft? Not from my point of view. There's plenty of high quality cassettes still around and I can manipulate both bias and level to taste.

Many of the digital-only source options are of CD quality or higher. If I can push that through my reference hi-fi and then record it using a quality cassette deck (and I am fortunate to have the choice of a very nice Yamaha or a Nakamichi or even a Studer) and save that to a high quality chrome, cobalt-doped ferric or metal tape, adorned with a suitable cover, then I have a physical version of that hires digital-only album and in a form that I am very happy to listen to.

More to the point. I also have a variant of the album that is going absolutely nowhere.

The future of physical formats then? DIY. You read it here first. ●

# Klipsch®

**E ENTERTAINMENT  
D HI-FI  
R CONNECTIVITY  
T HOME**

**ALL NEW | THE FIVES  
POWERED MONITORS**

THE FIVES are the first powered monitors on the market with HDMI-ARC to connect directly to a TV for high resolution, discrete 2-channel TV sound. Immensely improve your TV's sound with THE FIVES - easy-to-use, powered, high def speakers that connect directly to your TV - and virtually anything



Distributed by Henley Audio

T: +44 (0) 1235 511 166 | E: sales@henleyaudio.co.uk | W: www.henleyaudio.co.uk | f: HenleyAudioUK | y: HenleyAudio

# "it's the quality of the stereo sound that really impresses"



Martin Pipe

**B**eing confined to home, courtesy of the Covid-19 'lockdown', gave me an opportunity to attack those jobs (large and small) that have been accumulating. Judging by the numerous skips I've seen around my neighbourhood, the clearing of lofts and outbuildings has been a popular task.

Personally I'd rather fix than chuck, and have been tending to a number of repair jobs – ranging from a Walkman Professional and a Revox G36 tape deck (destined for Olde Worlde), to various items of test kit.

Among these was a 1960s-vintage Radiometer SMG1 stereo FM generator, donated by our own Noel Keywood. Built in Denmark, its *raison d'être* was to check and align Zenith/GE-standard 'multiplex' stereo decoders.

Stereo FM broadcasting in the UK officially began in 1966; following a series of BBC trials, the BBC's Third Programme (Radio 3) was radiated from Wrotham.

As well as aiding manufacturers, generators like the SMG1 allowed service departments to check and set up receiving gear in readiness for the 'big day' – when the VHF transmitters serving their areas 'went stereo'.

Audio-frequency oscillators within these units modulate either or both stereo channels in various ways, the multiplex signal being fed to a low-power VHF/FM transmitter with accurate output-attenuation facility. The latter's output, usually a 'spot' frequency that could be shifted either way by 1MHz or thereabouts, would drive the aerial input of the receiver being investigated. Those test tones could, for example, verify the separation between left and right channels.

The SMG1 is particularly

interesting because it accepts external audio from line-level sources like tape machines and phono stages. Voila! My own 'closed-circuit' stereo FM station! Useful if I need to review tuners and receivers, needing a known audio source to assess their relative sonic virtues.

The SMG1's front panel, dominated by a wonderfully old-school level-meter, also has an input marked 'SCA' for a 67kHz subcarrier modulated by narrow-band audio. SCA didn't take off here, although it distributed Muzak and talking-books throughout North America. You could presumably inject RDS data (also modulated onto a subcarrier; here, 57kHz) into this socket. Available cheaply are programmable RDS-encoders based around PICs – tiny single-chip computers with various 'real-world' interfaces. While I still have spare time, I plan to experiment with one.

This particular SMG1 wasn't working. Noel had rebuilt its power supply with more modern components, but a short-circuit tantalum capacitor had taken out a voltage regulator. There were also problems with the internal timing-chain. Here, the output of a 76kHz crystal oscillator is divided by two to get 38kHz (at which rate the left and right channels are switched, thereby forming a suppressed-subcarrier AM signal containing the L-R 'difference' information). That 38kHz is, in turn, divided by two, deriving the 19kHz pilot tone that a radio uses to detect the presence of a stereo broadcast and decode it i.e. demodulate the 38kHz subcarrier and (using a 'matrix') reconstitute the stereo channels from the difference and the 'sum' (L+R, or the 'compatible' mono audio) that the SMG1 also throws into the 'mux'.

It's all implemented with ancient germanium PNP transistors, so I

was taken aback by just how well it performed. For a start, the VHF oscillator is surprisingly-free from drift, certainly after an hour's warm-up. However, it's the quality of the stereo sound that really impresses. Fed from a CD source and in turn feeding a decent FM tuner, it trounced most of the overly-compressed garbage that pollutes today's broadcast band. It's warm and musical in presentation, far more detailed than I expected it to be and free of objectionable background noise. Remember: this test gear's older than I am, and using techniques even older than that. Those analogue guys knew what they were doing...

The rejuvenated Radiometer proved handy when focusing my attention on a fully-featured Pioneer QX-949 quadrasonic receiver with a duff tuner. Its IF amplifier/FM demodulator chip had partially-failed and an electrolytic coupling capacitor had risen in value. Furthermore, the RF stage and FM discriminator tuning were way out of alignment (had a 'twiddler' been at work?) and the 8V miniature bulb that indicates 'stereo' broadcasts had failed.

People moan that equipment designers spare little thought for repairers. That's as true then as it is now; the Pioneer and Radiometer were difficult to work on. In both cases, getting to 'hard-wired' circuit-boards involved considerable disassembly. The Pioneer board, which the firm also used in some contemporary AM/FM tuners, had to be lifted out so I could make a discriminator-coil adjustment on the board's track side.

All the same, being locked down gave me the time to repair for re-use these items. Old gear isn't so easy to work on, but with a little time and effort the rewards are worthwhile. ●

# SOUND WITH STYLE

WORLDWIDE  
DISTRIBUTORS  
WANTED!!!

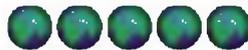
info@quadral.com

www.quadral.com

quadral 

**HI-FI WORLD**

ISSUE MARCH 2016



5 OF 5 GLOBES

Test: HI-FI WORLD, 03/2016

„Verdict:

A refined sound from a sophisticated product.

**Superb!”**

## CHROMIUM STYLE

CHROMIUM STYLE unites form and function in to an incredibly convincing sound experience. The elegant cabinet fulfils highest design standards and their rounded sides reduce sound divergence through the sound conduction.

Get more information on [www.quadral.com](http://www.quadral.com).



LEGENDARY GERMAN  
ENGINEERING



www.quadral.com Phone: +49 (0)511 7904-0



"that a cleaner or brighter sound is closer to hi-fi many of my customers would dispute"



Dave Tutt

If you are looking for a decent sound on the cheap then some of the second hand equipment out there can be a brilliant solution.

So what have I been playing with this month? I had a request for a hi-fi for less than £500, for use when away from home. He was using a Sony stacking system at home which he obviously loved. He had been to a number of outlets but not seen anything that suited his wish for what I can only call a non hi-fi warm and sort of muggy sound – yet an upgrade at the same time!

On my list of equipment for him to try was a Rotel RA921 which I have to say, from my point of view, is a cracking little amplifier. Simple in that it isn't festooned with gadgets, not even a tone defeat switch. Decent components and enough power to drive an average room perfectly loud enough. This one had obviously suffered from shorted 'speaker wires as it had blown its right channel fuse but a replacement and a clean up made it sing.

I also had a Marantz PM4200 that I purchased from eBay as faulty – it just needed a clean of the volume control so was ready in minutes.

Both of these amps had MM phono inputs – with a customer who might like to add a turntable this was another plus.

Then there was a Cambridge Audio A5 amplifier still in its box but with one channel blown that, due to the very expensive output transistors, was not a cheap repair but is an easy amp to fix all the same. Most Cambridge Audio amps sound pretty clean and hi-fi-ish, getting better as you get higher up the price range.

More bottom end thump can be gained by power supply upgrades but given his 'speakers it was

doubtful this would be necessary.

Finally on the amp front was something a little different, an NAD 712 receiver which has that great NAD sound that I thought was more in keeping with what he wanted. The benefit of having a tuner might just clinch the deal – and again there was an MM phono stage.

Next for him was a CD. I had a Teac, three Sonys, a beaten up Marantz and a couple of Cambridge Audios in stock but an older more substantially built Sony CDP-777 seemed ideal. Its slightly warmer presentation would be a plus even if its ultimate sound might be a little dated now.

'Speakers were a problem though. I had some compact Denons that get dragged around the workshop to test things. Although they work well for tiny speakers they were in too much of a state to sell. Then there were a pair of Eltax floor standers with grills that are a bit dirty – and baby Celestions with different tweeters and no grills!

So, doing a demo, I connected up the NAD 712 receiver, the Sony CDP 777 CD player and the Eltax Symphony floor standers that together made a really nice sound. The Eltax only have tiny bass drivers, around 4.5 inches, so they are never going to rattle the windows but are perfectly adequate in a home. For more bass there are any number of subs out there that could be added on – or alternatively bigger 'speakers of course.

My customer took the NAD, Eltax and Sony solution and was happy with it until the CD started doing odd things; I swapped it for one of the others for him.

So in this instance I charged £200, plus taking the Yamaha CD player he had that was having disk read issues. It seemed to have been

a good solution for him.

The Marantz PM4200 was sold the following day to another customer so my stock is diminishing again.

I am a little wary of the Marantz PM4200 as I have had three in the workshop with open circuit mains transformers, most probably with the thermal fuse fitted internally having blown. This isn't repairable I found after a dig through the windings of a faulty transformer did not reveal the fuse – so there was no way provide a fix.

Fusible transformers are a safety component (preventing fire) so it would have to be replaced with an identical one. Of course, finding a replacement would have been far too expensive, rendering the amp beyond economic repair.

A much earlier Marantz PM1072 that arrived in the workshop with just a loud hum needed new power supply smoothing capacitors. Once repaired it had a warmer sound than the PM4200. Given the 30 year age difference I guess that is taste and perhaps progress in electronic design.

To some extent the idea that a cleaner or brighter sound in amplifiers might actually be closer to hi-fi, which many of my customers would dispute, is something that could be discussed for many hours.

The PM1072 went back to its owner within 24 hours, after a further strip down to remove the years of nicotine ground into the case.

There is so much equipment out there to try and once it has had its quirks and age related issues dealt with is far better than any nasty stacking system. I am sure there are many real gems hidden in lofts and cupboards that, with a bit of work, would be great today. Trouble is finding them before they get binned. ●

**HI-FI SERVICE & REPAIR**  
**Dave Tutt**  
 +44 (0)7759 105932  
 dave\_london@hotmail.com  
 www.tutt-technology.co.uk

We do not sell these products. It is for your information only.

# WORLD CLASSICS

Here is our list of the great and good from audio's glorious past, products that have earned their place in hi-fi history. You'll also see some oddities which aren't classic as such, but are great used buys. The year of introduction is given, alongside the original UK launch price.

## TURNTABLES

**EAT FORTE** 2009 £12,500  
Lavishly finished two box, two motor turntable with gorgeous Ikeda 407 tonearm bundled. Exceptionally stable and unfussy performer with a relaxed but highly enjoyable gait.



**FUNK FIRM VECTOR II** 2009 £860  
Innovative engineering gives a nimble, pacy and musical sound that's one of the best at the price.

**REGA P2** 2008 £300  
Excellent value for money engineering, easy set up and fine sound.

**MCINTOSH MT10** 2008 £8,995  
Big, expensive, controversially styled and glows more than some might consider necessary, but an astonishingly good performer.

**REGA P3-24** 2008 £405  
Seminal affordable audiophile deck with fine bundled tonearm. Tweakable, and really sings with optional £150 outboard power supply.

**ACOUSTIC SOLID ONE** 2007 £4,050  
Huge turntable, both in terms of sheer mass and sonic dynamics. Fit up to three arms and enjoy, just don't damage your back moving it...

**AVID VOLVERE SEQUEL** 2007 £4,600  
Stylish high end vinyl spinner with industrial strength build quality and a sound to match. Sound is edge-of-the-seat stuff.

**MICHELL GYRODEC SE** 2005 £1,115  
Design icon with superlative build. Sound is beautifully smooth, effortless and exceptionally expansive.

**MARANTZ TT-15S1** 2005 £1,299  
Cracking all in one deck/arm/cartridge combination, this must surely be the best sound/plug and play package at this price point.

**MICHELL TECNODEC** 2003 £579  
Superb introduction to Michell turntables - on a budget. Top quality build and elegant design mean it's still the class of the mid-price field.



**MICHELL ORBE** 1995 £2,500  
The top Michell disc spinner remains a superbly capable all rounder with powerful, spacious sound that's delicate and beguiling.

**SME MODEL 10A** 1995 £4,700  
Exquisitely engineered deck and SME V tonearm combo that's an extremely accomplished performer with classical music.

**LINN AXIS** 1987 £253  
Cut-price version of the Sondek with LVX arm. Elegant and decently performing package. Later version with Akito tonearm better.

**ROKSAN XERXES** 1984 £550  
Super tight and clean sound, with excellent transients. Less musical than the Sondek, but more neutral. Sagging plinth top-plates make them a dubious used buy.

**DUAL CS505** 1982 £75  
Simple high quality engineering and a respectable low mass tonearm made for a brilliant budget buy. Polished, smooth and slightly bland sound.

**MICHELL GYRODEC** 1981 £599  
Thanks to its stunning visuals, this bold design wasn't accorded the respect it deserved. Clean, solid and architectural sound.

**TOWNSHEND ROCK** 1979 £ N/A  
Novel machine has extremely clean and fluid sound. Substantially modified through the years, and capable of superb results even today.

**MARANTZ TT1000** 1978 £ N/A  
Beautiful seventies high end belt drive with sweet and clean sound. Rare in Europe, but big in Japan.



**REGA PLANAR 3** 1978 £79  
Brilliantly simple but clean and musical performer, complete with Acos-derived S-shaped tonearm. 1983 saw the arrival of the RB300, which added detail at the expense of warmth. Superb budget buy.

**SONY PS-B80** 1978 £800  
First outing for Sony's impressive 'Biotracer' electronic tonearm. Built like a tank with a clean and tidy sound, albeit lacking involvement. Scarily complicated and with no spares support - buy with caution!

**TRIO LD-7D** 1978 £600  
The best 'all-in-one' turntable package ever made. Clean, powerful and three-dimensional sound, ultimately limited by the tonearm.

**ADC ACCUTRAC 4000** 1976 £300  
Bonkers 1970s direct drive that uses an infra red beam to allow track selection and programming. More of a visual and operational delight than a sonic stunner.

**PIONEER PLC-590** 1976 £600  
Sturdy and competent motor unit that performs well with a wide range of tonearms. Check very thoroughly before buying due to electronic complexity and use of some now-obsolete ICs.

**PIONEER PL12D** 1973 £36  
When vinyl was the leading source, this bought new standards of noise performance and stability to the class, plus a low friction S-shaped tonearm. Later PL112D was off the pace compared to rivals.



**TECHNICS SP10** 1973 £400  
Seminal Japanese engineering. Sonics depend on plinths, but a well mounted SP10/II will give any modern a hard time, especially in respect of bass power and midband accuracy.

**LINN SONDEK LP12** 1973 £86  
For many, the Brit superdeck; constant mods meant that early ones sound warmer and more lyrical than modern versions. Recent 'SE' mods have brought it into the 21st century, albeit at a price.

**ARISTON RD11S** 1972 £94  
Modern evolution of Thorens' original belt drive paradigm. Scotland's original super-deck was warm and musical, albeit soft. Still capable of fine results today.

**GOLDRING LENCO GL75** 1970 £15.6S  
Simple, well engineered motor unit with soft, sweet sound and reasonable tonearm. Good spares and servicing support even today.

**GARRARD 301/401** 1953 £19  
Tremendously strong and articulate with only a veiled treble to let it down.



**THORENS TD124** 1959 £ N/A  
The template for virtually every 1970s 'superdeck', this iconic design was the only real competition for Garrard's 301. It was sweeter and more lyrical, yet lighter and less impactful in the bass.

**TONEARMS**

**REGA RB251** 2009 £136  
Capable way past its price point, the new 3-point mount version of the classic RB250 serves up a taut and detailed sound. A little lean for some tastes, but responds well to rewiring and counter-weight modification.

**HELIUS OMEGA** 2008 £1,595  
Stylish and solid lump of arm with fabulous build quality, that turns in a dynamic and weighty performance.

**AUDIO ORIGAMI PU7** 2007 £1,300  
The classic Syrinx PU3 updated to spectacular effect. Hand made to order, with any mass, length and colour you care for. Fit, finish and sound truly impressive.



**GRAHAM PHANTOM** 2006 £3,160  
Sonically stunning arm with magnificent bass dexterity and soundstaging. Build quality up to SME standards, which is really saying something!

**TRI-PLANAR PRECISION** 2006 £3,600  
Immaculate build, exquisite design and one of the most naturally musical and lucid sounds around.

**MICHELL TECNOARM A** 2003 £442  
Clever reworking of the Rega theme, using blasting, drilling and rewiring!

**SME 309** 1989 £767  
Mid-price SME comes complete with cost-cut aluminium arm tube and detachable headshell. Tight, neutral sound with good tonality, but lacks the IV's pace and precision.

**NAIM ARO** 1987 £1,425  
Charismatic unipivot is poor at frequency extremes but sublime in the midband; truly emotive and insightful.

**SME SERIES V** 1987 £2,390  
Vice-like bass with incredible weight, ultra clear midband and treble astound, although some don't like its matter of factness!

**NAIM ARO** 1986 £875  
Truly endearing and charismatic performer - wonderfully engaging mid-band makes up for softened frequency extremes.



**ALPHASON HR100S** 1981 £150  
First class arm, practically up to present day standards. Buy carefully, though, as there is no service available now. Totally under priced when new, exceptional.

**SME SERIES III** 1979 £113  
Clever variable mass design complete with Titanium Nitride tube tried to be all things to all men, and failed. Charming nonetheless, with a warm and inoffensive sound.

**TECHNICS EPA-501** 1979 £ N/A  
Popular partner for late seventies Technics motor units. Nice build and Titanium Nitride tube can't compensate for middling sound.

**LINN ITTOK LVII** 1978 £253  
Japanese design to Linn specs made for a muscular, rhythmic sound with real dynamics. The final LVIII version worth seeking out.

**AUDIO TECHNICA AT 1120** 1978 £75  
Fine finish can't compensate for this ultra low mass arm's limited sonics - a good starter arm if you've only got a few quid to spend.

**HADCOCK GH228** 1976 £46  
Evergreen unipivot with lovely sweet, fluid sound. Excellent service backup.

**ACOS LUSTRE GST-1** 1975 £46  
The archetypal S-shaped seventies arm; good, propulsive and involving sound in its day, but ragged and undynamic now.

**SME 3009** 1959 £18  
Once state of the art, but long since bettered. Musical enough, but weak at frequency extremes and veiled in the midband. Legendary serviceability and stunning build has made it a cult, used prices unjustifiably high.

**PHONO STAGES**

**CREEK OBH-8 SE** 1996 £180  
Punchy, rhythmic character with oodles of detail makes this a great budget audiophile classic. Partner with a Goldring G1042 for an unbeatable budget combination.

**MICHELL ISO** 1988 £ N/A  
This Tom Evans-designed black box started the trend for high performance offboard phono stages. Charismatic, musical and punchy - if lacking in finesse.



**LINN LINNK** 1984 £149  
Naim-designed MC phono stage built to partner the original Naim NAIT - yes, really! Fine sound, although off the pace these days.

**INTEGRATED AMPLIFIERS**

**NAIM NAIT XS** 2009 £1,250  
With much of the sound of the Supernait at half the price, this is powerful, articulate and smooth beyond class expectations.

**MUSICAL FIDELITY PRIMO** 2009 £7,900  
Seriously expensive, but one listen explains why. Wonderfully exuberant sound that can only come from a top quality tube design.

**SUGDEN A21A S2** 2008 £1,469  
Crystalline clarity, dizzying speed and forensic detailing. Power limited so needs sensitive speakers.

**CREEK OBH-22** 2008 £350  
Brilliant value budget passive, with remote control, mute and input switching, plus an easy, a neutral sound.

**CAMBRIDGE 840A V2** 2007 £750  
Version 2 addresses version 1's weaknesses to turn in a mightily accomplished performance, offering power, finesse and detail.

**SUGDEN IA4** 2007 £3,650  
Goodly amount of Class A power, icy clarity and a breathtakingly fast, musical sound make this one of the very best super-integrateds.

**NUFORCE P-9** 2007 £2,200  
Impressive two box preamp with superb resolution and an engaging sound.

**MELODY PURE BLACK 101D** 2007 £3,295  
The clarity and openness of valves plus firm grip and fine detail make this a preamplifier masterclass.

**AUDIOLAB 8000S** 2006 £400  
In another life, this sold for three times the price, making it a stand-out bargain now. Very clean, powerful and tidy sound.

**MCINTOSH MA6800** 1995 £3735  
Effortlessly sweet, strong and powerful with semi-nal styling to match.

**DELTEC** 1987 £1900  
Fast, dry and with excellent transients, this first DPA integrated is the real deal for eighties enthusiasts. Ridiculously punchy 80W per channel from a tiny, half-size box. Radical, cool and more than a little strange.

**EXPOSURE VII/VIII** 1985 £625  
Seminal pre-power, offering most of what Naim amps did with just that little bit extra smoothness. Lean, punchy and musical.



**AUDIOLAB 8000A** 1985 £495  
Smooth integrated with clean MM/MC phono stage and huge feature count. Extremely reliable, too. Post '93 versions a top used buy.

**VTL MINIMAL/50W MONOBLOCK** 1985 £1,300  
Rugged, professional build and finish allied to a lively and punchy sound (albeit with limited power) make them an excellent used buy.

**MUSICAL FIDELITY A1** 1985 £350  
Beguiling Class A integrated with exquisite styling. Questionable reliability.

**MISSION CYRUS 2** 1984 £299  
Classic 1980s minimalism combines arresting styling with clean, open, lively sound. Further upgrade-able with PSX power supply.



**NAIM NAIT** 1984 £350  
Superb rhythms and dynamics make it truly musical, but tonally monochromatic. Fine phono stage, very low power.

**CREEK CAS4040** 1983 £150  
More musical than any budget amp before it; CAS4140 loses tone control's, gains grip.

**MYST TMA3** 1983 £300  
Madcap eighties minimalism, but a strong and tight performer all the same.

**ROTEL RA-820BX 1983 £139**

Lively and clean budget integrated that arguably started the move to minimalism.

**NAD 3020 1979 £69**

Brilliantly smooth, sweet and punchy at the price and even has a better phono stage than you'd expect. The archetypal budget super-amp.

**ROGERS A75 1978 £220**

Lots of sensible facilities, a goodly power output and nice sound in one box. The later A75II and A100 versions offered improved sonics and were seriously sweet.

**A&R A60 1977 £115**

Sweet and musical feature-packed integrated; the Audiolab 8000A remains a classic.



**SUGDEN C51/P51 1976 £130**

Soft sounding early Sugden combo with a plethora of facilities and filters. A sweet and endearing performer but lacking in power and poor load driving ability.

**SUGDEN A21 1969 £ N/A**

Class A transistor integrated with an eminently likeable smoothness and musicality. Limited inputs via DIN sockets.

**ROGERS CADET III 1965 £34**

Sweet sounding valve integrated, uses ECL86 output valves, even has a half useable phono stage, sweet, warm a good introduction to valves.

**CHAPMAN 305 1960 £40**

Smooth pre/power combo with a sweet and open sound. Not quite up to Leak/Quad standards but considerably cheaper secondhand.

## POWER AMPLIFIERS

**ELECTROCOMPANET NEMO 2009 £4,995 (EACH)**

Norwegian power station as cool as a glacier tonally, yet impresses with sheer physicality and fleetness of foot. 600W per channel.

**NUFORCE REFERENCE 9SE V2 2006 £1,750**

Brilliant value for money monoblocks with massive power and super-clean, three dimensional sound.

**QUAD II-80 2005 £6,000 PER PAIR**

Quad's best ever power amplifier. Dramatic performer with silky but dark tonality, blistering dynamics, serious power and compellingly musical sound.



**QUAD 909 2001 £900**

Current-dumper has a smooth and expansive character with enough wallop to drive most loads. Not the most musical, but superb value all the same.

**NAIM NAP 500 2000 £17,950**

Flagship amplifier will drive just about any speaker with ease. Factor in the company's trademark pace, rhythm and timing and it all adds up to one effortlessly musical package.

**MARANTZ MODEL 9 1997 £8000**

Authentic reproduction monoblocks still more than cut the sonic mustard. Highly expensive and highly sought after.

**MICHELL ALECTO 1997 £1989**

Crisp, clean and beautifully controlled with gorgeous styling. Partnered with the £1650 Orca this sounds delicious!



**MUSICAL FIDELITY XA200 1996 £1000**

200W of sweet smooth transistor stomp in a grooved tube! Under-rated oddity.

**PIONEER M-73 1988 £1,200**

Monster stomp from this seminal Japanese power amplifier, complete with switchable Class A and Class B operation. Clean, open and assured sounding, albeit a tad behind the pace on high speed dance music. Rosewood side cheeks and black brushed aluminium completes the experience.

**KRELL KMA100 II 1987 £5,750**

Monoblock version of the giant KSA-100 is one of the seminal 80s transistor power amplifiers. Massive wallop allied to clean and open Class A sound makes this one of the best amplifiers of its type.

**RADFORD STA25 RENAISSANCE 1986 £977**

This reworking of Radford's original late sixties design was possessed of a wonderfully rich, old school valve sound with enough power (25W) and lots of subtlety.

**QUAD 405 1978 £115**

The first of the current dumpers is a capable design with smooth, effortless power and a decently musical sound. 606 and 707 continue the theme with greater detail and incision.

**HH ELECTRONICS TPA-50D AMPLIFIERS 1973 £110**

Simple design with easily available components, solid build quality and fine sound make for a surprisingly overlooked bargain.

**LECSON AP1 1973 £ N/A**

Madcap cylindrical styling alluded to its 'tower of power' pretensions, but it wasn't. Poor build, but decently clean sounding when working.

**QUAD 303 1968 £55**

Bullet proof build, but woolly sound. Off the pace, but endearing nonetheless. Some pipe smoking slipper wearers swear by them!

**LEAK STEREO 20 1958 £31**

Excellent workaday classic valve amplifier with decent power and drive. Surprisingly modern sounding if rebuilt sympathetically. Irrepressibly musical and fluid.



**LEAK STEREO 60 1958 £N/A**

Leak's biggest valve power amp offers 35 Watts per channel and more low end welly than the smaller Stereo 20. Despite concerns over reliability rarity value means high price.

**QUAD II 1952 £22**

The all-time classic valve amplifier, with a deliciously fluid and lyrical voice. In other respects though, it sounds hopelessly dated. Low power and hard to partner properly.



**LEAK POINT ONE, TL10, TL12.1, TL12 PLUS 1949 £28**

Early classics that are getting expensive. Overhauling is de rigueur before use, using original parts if possible. Surprisingly crisp and musical. Deeply impressive in fine fettle.

## PRE AMPLIFIERS

**AUDIOLAB 8000C 1991 £499**

Tonally grey but fine phono input and great facilities make it an excellent general purpose tool.



**CROFT MICRO 1986 £150**

Budget valve pre-amp with exceptionally transparent performance.

**CONRAD JOHNSON MOTIV MC-8 1986 £2,500**

Minimalist FET-based preamplifier is brilliantly neutral and smooth with a sly, light balance in the mould of Sugden. Something of a curio, but worthwhile nonetheless.

**AUDIO RESEARCH SP-8 1982 £1,400**

Beautifully designed and built high end tube pre-amplifier with deliciously sweet and smooth sound. Not the last word in incision or grip.

**LINN LK-1 1986 £499**

A brave attempt to bring remote controlled user-friendliness to hair-shirt audiophile hi-fi. Didn't quite work, but not bad for under £100.

**NAIM NAC 32.5 1978 £ N/A**

Classic high end pre. Brilliantly fast and incisive sound that's a joy with vinyl but a tad forward for digital.

**LECSON AC-1 1973 £ N/A**

Amazing styling courtesy of Allan Boothroyd can't disguise its rather cloudy sound, but a design classic nonetheless.

**QUAD 33 1968 £43**

Better than the 22, but Quad's first tranny pre isn't outstanding. Responds well to tweaking/ rebuilding though.



**LEAK POINT ONE STEREO 1958 £ N/A**

Good for their time, but way off the pace these days. Use of EF86 pentode valve for high gain rules out ultra performance. Not the highest fit!

**QUAD 22 1958 £25**

The partner to the much vaunted Quad II monoblocks - cloudy and vague sound means it's for anacrophiles only.

**LOUDSPEAKERS**

**WHARFEDALE DIAMOND 10.3** 2010 £290  
Great small standmounters for audiophiles on a budget; dry punchy sound with impressive sound-staging at the price.



**YAMAHA SOAVO 1.1** 2009 £3,000  
Musical, transparent with impressive dynamics and cohesion. Excellent build and finish.

**USHER BE-10** 2009 £10,500  
Clever high end moving coil design with immense speed and dizzying clarity allied to epic punch. Needs the best ancillaries to fly, though...



**SPENDOR A5** 2009 £1,695  
Multi-talented floorstanders with generous scale and punch and Spendor's classic mid-range detail. Deliver a sound that thoroughly engages whatever you care to play.

**MONITOR AUDIO PL100** 2008 £2,300  
The flagship 'Platinum' series standmounter has a lovely warm and delicate sound with superlative treble.



**MARTIN LOGAN SOURCE** 2008 £1,600  
Brilliant entry level electrostatics, giving a taste of loudspeaker esoterica for the price of most moving coil boxes. Tremendous clarity, evenness and delicacy, although not the world's most powerful sound.

**PMC OB11** 2008 £2,950  
Cleverly updated floorstanders give scale and solidity in slim and well finished package.

**ISOPHON GALILEO** 2007 £2,100  
Big standmounters that really grip the music and offer quite startling dynamics and grip.

**ONE THING AUDIO ESL57** 2007 £1,450  
One Thing Audio's modifications keep the good old ESL57 at the very top of the game.

**MOWGAN AUDIO MABON** 2007 £3,995  
Massively capable loudspeakers that offer dynamics, scale and clarity in an elegantly simple package. Wide range of finishes, too.

**B&W 686** 2007 £299  
Baby standmounters offer a sophisticated and mature performance that belies both their dimensions and price tag.

**B&O BEOLAB 9** 2007 £5,000  
Technically impressive and visually striking loudspeakers with sound quality that more than matches their looks



**ISOPHON CASSIANO** 2007 £12,900  
Drive units featuring exotic materials allied to superlative build quality result in an immensely capable loudspeaker. Not an easy load to drive, however.

**QUAD ESL-2905** 2006 £5,995  
The old 989 with all the bugs taken out, this gives a brilliantly neutral and open sound like only a top electrostatic can; still not a natural rock loudspeaker, though.

**B&W 801D** 2006 £10,500  
In many respects, the ultimate studio monitor; dazzling clarity and speed with commanding scale and dynamics.



**REVOLVER CYGNIS** 2006 £5,999  
Revolver pull out all the stops and show what they can do with this magnificent flagship loudspeaker. A superb monitor that is like a mini B&W 801D in many ways.

**USHER BE-718** 2007 £1,600  
Beryllium tweeters work superbly, allied to a fast and punchy bass driver. The result is subtle, smooth and emotive.

**USHER S-520** 2006 £350  
Astonishingly capable budget standmounters that offer detail and dynamics well beyond their price and dimensions.

**ACOUSTIC ENERGY AE1 CLASSIC** 2006 £845  
Brilliantly successful remake of an iconic design; not flawless, but surely one of the most musical loudspeakers ever made.



**MISSION X-SPACE** 1999 £499  
The first mass production sub and sat system using NXT panels is a sure-fire future classic - not flawless, but a tantalisingly unboxy sound nevertheless!

**MISSION 752** 1995 £495  
Cracking Henry Azima-designed floorstanders combined HDA drive units and metal dome tweeters with surprisingly warm results. benign load characteristics makes them great for valves

**TANNOY WESTMINSTER** 1985 £4500  
Folded horn monsters which sound good if you have the space. Not the last word in tautness but can drive large rooms and image like few others.



**CELESTION SL6** 1984 £350  
Smallish two way design complete with aluminium dome tweeter and plastic mid-bass unit set the blueprint for nineteen eighties loudspeakers. Very open and clean sounding, albeit coarse at high frequencies and limp in the bass. Speakers would never be the same again...

**HEYBROOK HB1** 1982 £130  
Peter Comeau-designed standmounters with an amazingly lyrical yet decently refined sound. Good enough to partner with very high end ancillaries, yet great with budget kit too. A classic



**QUAD ESL63** 1980 £1200  
An update of the ESL57, with stiffer cabinets. Until the 989, the best of the Quad electrostatics.

**MISSION 770** 1980 £375  
Back in its day, it was an innovative product and one of the first of the polypropylene designs, warm, smooth, clean and powerful sound.

**ACOUSTIC RESEARCH AR18S** 1978 £125  
Yank designed, British built loudspeaker became a budget staple for many rock fans, thanks to the great speed from the paper drivers, although finesse was most definitely not their forte...

**YAMAHA NS1000** 1977 £532  
High tech Beryllium midband and tweeter domes and brutish 12" woofers in massive sealed mirror image cabinets equals stunning transients, speed and wallop allied to superb transparency and ultra low distortion. Partner carefully!

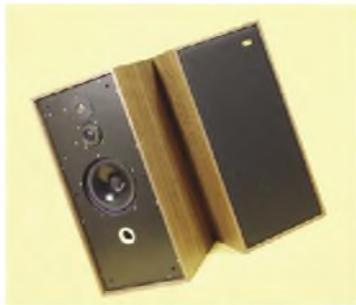


**JR 149** 1977 £120  
Cylindrical speaker was ignored for decades but now back in fashion! Based on classic KEF T27/B110 combo as seen in the BBC LS3/5a. Doesn't play loud, needs a powerful transistor amplifier, but has clarity and imaging.

**KEF R105** 1977 £785  
Three way Bextrene-based floorstander gave a truly wideband listen and massive (500W) power handling. A very neutral, spacious and polite sounding design, but rhythmically well off the pace.

**IMF TLS80** 1976 £550  
Warm and powerful 1970s behemoth with transmission loading and a mixture of KEF and Celestion drive units. Impressively physical wideband sound but rhythms not a forte.

**SPENDOR BC1** 1976 £240  
 Celestion HF1300 tweeter meets bespoke Spendor Bextrene mid-bass unit. The result is a beautifully warm yet focussed sound. A little bass bloom necessitates careful low-stand mounting.



**HH ELECTRONICS TPA-50D AMPLIFIERS** 1973 £110  
 Simple design with easily available components, solid build quality and fine sound make for a surprisingly overlooked bargain. Not exactly stylish, however.

**BBC LS3/5A** 1972 £88  
 Extremely low colouration design is amazing in some respects – articulation, stage depth, clarity – and useless in others (both frequency extremes). Came in wide variety of guises from various manufacturers building it under licence.

**LEAK SANDWICH** 1961 £39 EACH  
 Warm sounding infinite baffle that, with a reasonably powerful amplifier can sound quite satisfying.

**QUAD ESL57** 1956 £45 EACH  
 Wonderfully open and neutral sound puts box loudspeakers to shame. Properly serviced they give superb midband performance, although frequency extremes less impressive. Ideally, use in stacked pairs or with subwoofers and supertweeters.

## SYSTEMS

**MERIDIAN SOOLOOS 2.1** 2010 £6,990  
 Crisp styling, bright, colourful touchscreen, plus excellent search facilities. This is one hard disk music system with a difference. Best partnered to Meridian active loudspeakers.



**NAIM UNITIQUE** 2010 £995  
 Great little half width one-box system with truly impressive sound allied to a wealth of source options.

**ARCAM SOLO MINI** 2008 £650  
 Half the size and two-thirds the price of a full-sized Solo, the Mini gives very little away in terms of performance to its bigger brother.

**MERIDIAN F80** 2007 £1,500  
 Fantastically built and versatile DVD/CD/DAB/FM/AM unit, designed in conjunction with Ferrari. Ignore nay-sayers who sneer that it isn't a 'proper' hi-fi product. Just listen.

**MARANTZ 'LEGEND'** 2007 £22,000  
 The combination of SA-7S1 disc player, SC-7S2 preamp and MA-9S2 monoblocks delivers jaw-dropping performance.

**SHANLING MC-30** 2007 £650  
 Quite possibly the cutest all-in-one around with fine performance from the CD player, tuner and MP3 player input. Very low power, though.



**AURA NOTE PREMIER** 2007 £1,500  
 Lovely shiny CD/tuner/amplifier with fine sound quality and dynamic abilities.



**ARCAM SOLO NEO** 2006 £1,100  
 Excellent all-in-one system, with a warm, smooth and balanced sound to match the features and style.

**PEACHTREE AUDIO IDECCO** £1,000  
 Excellent sounding iPod dock, impressive DAC and fine amplifier section make this an excellent one box style system.



## TUNERS

**ARCAM FMJ T32** 2009 £600  
 Excellent hybrid FM/DAB+ tuner with a smooth, engaging sound. Factor in its fine build and it's a super value package.



**MAGNUM DYNALAB MD-100T** 2006 £1,895  
 One of the best ways to hear FM that we know; superbly open and musical sound in a quirky but characterful package.

**MYRYAD MXT4000** 2005 £1,000  
 Sumptuous sound and top-notch build quality make for a tempting AM/FM package. Warm and richly detailed on good-quality music broadcasts.

**NAIM NAT03** 1993 £595  
 The warm, atmospheric sound is further proof of Naim's proficiency with tuners.

**CREEK CAS3140** 1985 £199  
 Excellent detail, separation and dynamics - brilliantly musical at the price. T40 continued the theme...

**QUAD FM4** 1983 £240  
 Supreme ergonomics allied to a pleasingly lyrical sound with plenty of sweetness and detail made this one of the best tuners around upon its launch.



**NAD 4040** 1979 £79  
 Tremendously smooth and natural sound allied to low prices and good availability make this budget analogue esoterica.

**MARANTZ ST-8** 1978 £353  
 Marantz's finest radio moment. Warm, organic sound plus an oscilloscope for checking the signal strength and multipath.

**YAMAHA CT7000** 1977 £444  
 Combines sleek ergonomics, high sensitivity and an explicit, detailed sound.

**SONY ST-5950** 1977 £222  
 One of the first Dolby FM-equipped tuners, a format that came to naught. Still, it was Sony's most expensive tuner to date, and boasted good sound quality with brilliant ergonomics.



**ROGERS T75** 1977 £125  
 Superb mid-price British audiophile design, complete with understated black fascia. Smooth and sweet with fine dimensionality.

**SANSUI TU-9900** 1976 £300  
 A flagship Japanese tuner. It boasts superlative RF performance and an extremely smooth and lucid sound.



**TECHNICS ST-8080** 1976 £180  
 Superb FM stage makes for a clean and smooth listen.

**REVOX B760** 1975 £520  
 The Revox offers superlative measured performance although the sound isn't quite as staggering as the numbers. Fine nonetheless, and surely the most durable tuner here?



**SEQUERRA MODEL 1** 1973 £1300  
 Possibly the ultimate FM tuner. Massive in terms of technology, size and features dedicated to extracting every ounce of performance from radio, including impressive multi-purpose oscilloscope display.

**LEAK TROUGHLINE** 1956 £25  
 Series I an interesting ornament but limited to 88-100MHz only. II and III are arguably the best-sounding tuners ever. Adaptation for stereo easy via phono multiplex socket. Deliciously lucid with true dimensionality.

## HEADPHONE AMPLIFIERS

**GRAHAM SLEE NOVO** 2009 £255

Dynamic headphone amplifier with a great sense of timing. Crisp, clear treble and warm midrange gives an involving sound.



**MUSICAL FIDELITY X-CAN V8** 2008 £350

Open and explicitly detailed sound plus serious bass wallop. A great partner for most mid-to-high end headphones.

## CD PLAYER/RECORDERS

**MUSICAL FIDELITY TRIVISTA** 2002 £4000

When playing SACDs, the sweetest, most lucid and lyrical digital disc spinner we've heard. Old school stereo, pure DSD design. CD sound is up in the £1000 class, too! Future classic.

**MARANTZ SA-1** 2000 £5,000

The greatest argument for SACD. This sublime Ken Ishiwata design is utterly musically convincing with both CD and SACD, beating most audiophile CD spinners hands down.



**SONY MDS-JE555ES** 2000 £900

The best sounding MD deck ever, thanks to awesome build and heroic ATRAC-DSP Type R coding.

**PIONEER PDR-555RW** 1999 £480

For a moment, this was the CD recorder to have. Clean and detailed.

**MARANTZ DR-17** 1999 £1100

Probably the best sounding CD recorder made; built like a brick with a true audiophile sound and HDCD compatibility.



**CAMBRIDGE AUDIO CD4SE** 1998 £200

A touch soft in the treble and tonally light, but outstanding in every other respect.

**SONY TCD-8 DATMAN** 1996 £599

Super clean sound makes this an amazing portable, but fragile.

**LINN KARIK III** 1995 £1775

The final Karik was a gem. Superb transport gives a brilliantly tight, grippy dynamic sound, albeit tonally dry.

**NAIM CDS** 1990 £ N/A

Classic Philips 16x4 chipset with serious attention to power supplies equals grin-inducing sonics.

**TECHNICS SL-P1200** 1987 £800

CD version of the Technics SL-1200 turntable. Massively built to withstand the rigours of 'pr' use and laden with facilities - a great eighties icon.

**SONY CDP-R1/DAS-R1** 1987 £3,000

Sony's first two boxer was right first time. Tonally lean, but probably the most detailed and architectural sounding machine of the eighties.

**MARANTZ CD73** 1983 £700

A riot of gold brushed aluminium and LEDs, this distinctive machine squeezed every last ounce from its 14x4 DAC - super musical.



**MERIDIAN 207** 1988 £995

Beautifully built two-box with pre-amp stage. Very musical although not as refined as modern Bitstream gear. No digital output.

**CAMBRIDGE AUDIO CD1** 1986 £1500

Inspired Stan Curtis redesign of Philips CD104, complete with switchable digital filter. Lean but tight and musical performer.



**MERIDIAN MCD** 1984 £600

The first British 'audiophile' machine was a sweeter, more detailed Philips CD100. 14x4 never sounded so good, until the MCD Pro arrived a year later.

**SONY CDP-701ES** 1984 £890

Sony's first bespoke audiophile machine used a 16x2 DAC to provide a clinically incisive sound; supreme build quality allied to the pure unadulterated luxury of a paperback-sized remote control.

**YAMAHA CD-X1** 1983 £340

Nicely built 16x2 machine with a very sharp and detailed sound; sometimes too much so. Excellent ergonomics, unlike almost every other rival of the time.

**SONY CDP-101** 1982 £800

The first Japanese CD spinner was powerful and involving. Brilliant transport more than compensated for 16x2 DAC, and you even got remote control!



## ANALOGUE RECORDERS

**AIWA XD-009** 1989 £600

AIWA's Nak beater didn't, but it wasn't half bad nonetheless. Massive spec even included a 16x4 DAC!

**NAKAMICHI CR-7E** 1987 £800

The very best sounding Nakamichi ever - but lacks the visual drama of a Dragon.



**SONY WM-D6C** 1985 £290

Single capstan transport on a par with a Swiss watch, single rec/replay head better than most Naks. Result: sublime.

**PIONEER CTF-950** 1978 £400

Not up to modern standards sonically, but a great symbol of the cassette deck art nonetheless.

**YAMAHA TC-800GL** 1977 £179

Early classic with ski-slope styling. Middling sonics by modern standards, but cool nonetheless!

**SONY TC-377** 1972 £N/A

A competitor to the Akai 4000D open reel machine, the Sony offered better sound quality and is still no slouch by modern standards.

**REVOX A77** 1968 £145

The first domestic open reel that the pros used at home. Superbly made, but sonically off the pace these days.

## COMPACT DISC TRANSPORTS

**ESOTERIC P0** 1997 £8,000

The best CD drive bar none. Brilliantly incisive, ridiculously over engineered.

**TEAC VRDS-T1** 1994 £600

Warm and expansive sound made this a mid price hit. Well built, with a slick mech.

**KENWOOD 9010** 1986 £600

The first discrete Jap transport was beautifully done and responds well to re-clocking.

## DACs

**DCS ELGAR** 1997 £8500

Extremely open and natural performer, albeit extremely pricey - superb.

**DPA LITTLE BIT 3** 1996 £299

Rich, clean, rhythmic and punchy sound transforms budget CD players.

**CAMBRIDGE AUDIO DAC MAGIC** 1995 £99

Good value upgrade for budget CD players with extensive facilities and detailed sonics.

**PINK TRIANGLE DACAPO** 1993 £ N/A

Exquisite; the warmest and most lyrical 16bit digital audio we have ever heard.

**QED DIGIT** 1991 £90

Budget bitstream performer with tweaks aplenty. Positron PSU upgrade makes it smooth, but now past it.

## CABLES

**MISSING LINK CRYO REFERENCE 2008**  
£495/0.5M

High end' interconnects, with deliciously smooth, open and subtle sound without a hint of edge.

**TECHLINK WIRES XS** 2007 £20

Highly accomplished interconnects at an absurdly low price. Stunning value for money.

**VDH ULTIMATE THE FIRST** 2004 £250

Carbon interconnects that help you forget the electronics and concentrate on the music. Miraculous transparency. Tight and tuneful bass mixed with air and space.



**WIREWORLD OASIS 5** 2003 £99/M

Excellent mid-price design with a very neutral, silky and self-effacing sound. Superb value for money.

**TGI CONSTRICTOR 13A-6 BLOCK** 2003 £120

Top quality 'affordable' mains outlet block, with fine build and good sonics. Well worth the extra over standard high street specials, which sound coarse and two-dimensional by comparison.

# vinyl section

## contents

SEPTEMBER 2020

[www.hi-fiworld.co.uk](http://www.hi-fiworld.co.uk)**VINYL NEWS 80**

All the latest and greatest vinyl releases for you, from the pen of Paul Rigby.

**iFi IPHONO3 BLACK LABEL 83**

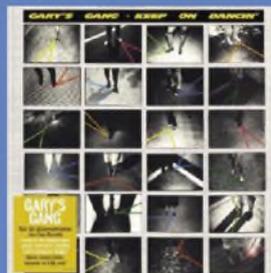
iFi's new MM/MC phono stage, packed with adjustment. Noel Keywood investigates.

**AUDIOPHILE VINYL 88**

Paul Rigby rounds up the latest audiophile vinyl releases.

**AUDIOPHILE VINYL BOOK 93**

The hidden history of Library Music. Paul Rigby reviews Unusual Sounds.

**DEMON**

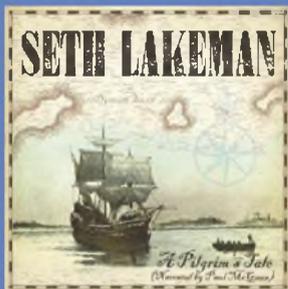
Strutt were a disco-funk outfit from New Jersey. Signed up to the Brunswick label, they produced 'Time Moves On' ([www.demonmusicgroup.co.uk](http://www.demonmusicgroup.co.uk)), a 9-tracker, back in 1976. The title track and 'Funky Sign' are the best known tracks from this release before the outfit slipped back into the mists of time and out of the business. It offers lots of energy and effort and solid performances. It never truly stands out but it will be of great interest as a rarity buy for fans of the genre.

Gary's Gang's 'Keep on Dancin' was released on the Sam label in 1978. This disco/R&B band is repetitive and derivative – so a great party record. That's why you should buy this vinyl release (or as a sampling source).

**SETH LAKEMAN**

His new release, 'A Pilgrim Tale' (BMG), sees the man produce an album as the result of his involvement in a theatrical production called The Land, a tale of The Pilgrims and their journey from Plymouth to America (ready for the 400th anniversary in September).

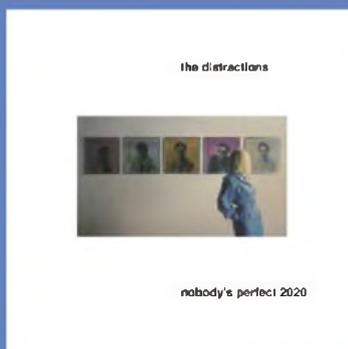
A folk outing, this is a full-on musical appreciation of the events with Lakeman giving his all in fiddle and vocals, actor Paul McGann adding a spoken narrative 'tween the songs.

**THE DISTRACTIONS**

If you like Factory, the legendary Manchester-based record label, then check out this vinyl release. Heavily influenced by The Buzzcocks and guided – in some respects – by them, the songs sound distinctly 60s in nature. Late beat era, perhaps?

Some tracks also add classic R&B/garage overtones to that mix.

'Nobody's Perfect 2020' (Man in the Moon) deserves more attention because they knew the band way around a groove. If you like your rock laced with retro adornments then check this one out.

**SEU JORGE & ROGÊ**

Seu Jorge & Rogê's self-title LP (Night Dreamer) was recorded direct-to-disc. Featuring both Seu Jorge and Rogê on guitar and vocals it also includes percussionists, Peú Meurray and Pretinho da Serrinha.

The seven original songs vary in tempo and style but the direct-to-disc vinyl recording method not only allows you to get to the core of the songs and their attendant performances but it offers a naturalistic presentation.



## THIRD MAN

Broken Social Scene 'Live at Third Man Records' (Third Man) was recorded at Third Man and direct to disc too.

This multi-layered, multi-peopled indie rock outfit from Canada started in 1999 and has seen many band members come and go – and hey, if you don't like one song, a new style will be around in a few minutes.



## AXEL RUDI PELL

From SPV, 'Sign of the Times' presents Pell's work in classic heavy rock terms. Anyone who loves AC/DC, Iron Maiden and the like will love Pell – although his more recent outings are slightly harder and the 'frantic' level has been edged up a tad. Lots of energy and flailing hair yes, but there's plenty of melodic intent here and hooks to pull you along from track to bass thumping track. And then there's the guitar, of course.

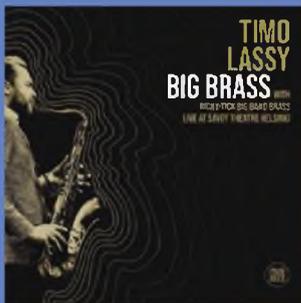
Pell is more than ready to stand up and whisk off a quick guitar melange of supreme skill.

## BRENDAN BENSON

One Mississippi (Virgin) is an intriguing one. Benson was co-leader of the band, The Raconteurs (along with ex-White Stripes man, Jack White). This power pop outing, the man's solo debut album, was released in 1996.

Well, I say power pop but it's more rock than pop. Benson was brought up through the rock filter of Detroit.

This LP doesn't represent the happiest times for Benson, who experienced ructions with his record label. The album is solid, a little workman like but it has its moments. Sittin' Pretty being one such track that adds swagger to Bowie/glam-like vocalisations.



## ...AND FINALLY

From Timo Lassy 'Big Brass' (Must Have Jazz) is subtitled '...With Ricky-Tick Big Band Brass Live at Savoy Theatre Helsinki'. Spanning two slabs of vinyl, combining a mixture of soul and free jazz, tradition and innovation, this is a well mastered release packed with quality jazz.

'Beats' is an Original Motion Picture release (Republic of Music) that focuses on the 1994 dance scene. Including Orbital's Belfast, Model 500's The Chase, and Leftfield's Song of Life, see this release as a good retro-dance collection and you won't go far wrong.

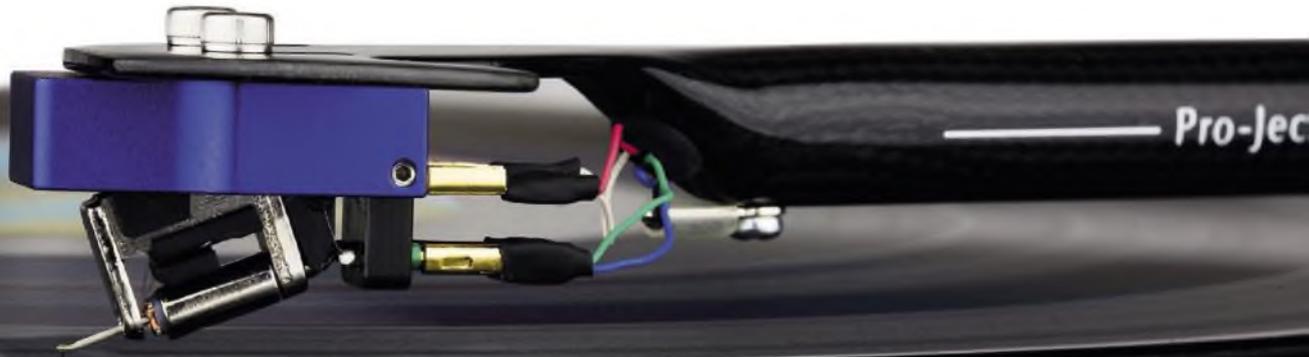
Clarice Jensen's 'The Experience of Repetition as Death' (Fat Cat) may relate to looking after her terminally ill mother and the nature of care, the concept of repetition in care and the looping structures that such care can form if looked at as a whole. Meditative neo-classical.

From Ian William Craig, 'Red Sun Through Smoke' (130701) arrives on vivid red vinyl. This experimental outing combines both authority with simplicity, even if this music sometimes sounds like it's hanging on by its fingertips.

From Eivind Aarset & Jan Bang 'Snow Catches on her Eyelashes' (Jazzland), think avant-garde electronica. Of a Norwegian stripe. This down tempo vinyl album provides intriguing rhythms and contemplative tones.

# SUMIKO

## PHONO CARTRIDGES



## REFERENCE

### *Songbird Line*

The Songbird line represents the penultimate step in SUMIKO'S cartridge series, elevating overall performance and expectation firmly into the high end arena.

From the Songbird with its exceptional tracking ability and wide compatibility, through to the long-standing Blackbird and its exceedingly low noise levels and wide dynamic range, up to our reference open architecture design, Starling, with its microridge stylus on a Boron cantilever; each model promises to sing as beautifully as its name suggests.



### SONGBIRD

The sophisticated and smart Songbird design with its open architecture construction, new aluminium mounting body, low mass elliptical stylus and Alu coated cantilever results in a high end cartridge that lives up to its name.



### BLACKBIRD

The classic Blackbird design has a level of performance and clarity that competes with cartridges twice its price. It's been designed for exceedingly low noise levels, exceptionally wide dynamic range and the highest possible fidelity.



### STARLING

No aspect of the Starling's design was left to chance. Our flagship open architecture cartridge renders the grandeur of an orchestra while still preserving air and space, also delivering responsive dynamics and deep silences.

# Black On Black

Noel Keywood enjoys the darkness of iFi's iPhono3 Black Label phono preamplifier.

It's surprising just how twiddly LP can get and this little pre-amp has plenty of twiddle-ability to suit. I'm alluding here to Decca and Columbia EQ settings. iFi's new iPhono 3 Black Label phono stage (£999) has both, plus a lot more twiddle factor to suit pickup cartridges. Plus a dark sound.

As a physical package the little iFi borders on physically peculiar, but stays in keeping with the company's design idiom of a very small case with plenty of facilities. At heart it offers broad compatibility with moving magnet (MM) and moving coil (MC) cartridges – ultra low noise with MC I found – and unusual pre-1980s equalisation curves.

Most LPs conform to equalisation specified by the Radio Industries Association of America or RIAA. But Decca (UK) had their own equalisation curve that was also used by Deutsche Grammophon (Germany), and Columbia (USA) had a different take on things. For collectors who want sonic authenticity, the iPhono 3 is perhaps a must, Decca and Deutsche Grammophon being known for the quality of their classical releases in particular. However, Decca also put out quite a lot of early British Blues onto LP in the 1960s – so I dug out some treasured oldies whose oblong Decca label is burnt into my brain, after youthful nights peering at it as the music played. I admit to only having used RIAA with these discs; would the iFi tell me I was missing out in those dark nights? I'll say more about this later.

Whilst a small three-way toggle switch selects between these differing equalisations (EQs) and is easily accessible, iFi also includes other variants on the underside – and these are not easily accessible, being pre-set by miniature in-line DIP switches that are best set with a small jewellers' screwdriver.

I'm not convinced these EQs are especially valuable. There is a warp filter to cut out subsonics, but unfortunately it is an IEC warp filter – and they aren't very clever. This filter reduces loudspeaker cone flap with warped records alright – but it audibly lightens bass too. Nowadays it is easy enough to design and implement a high-pass filter better than this one dreamt up long ago. So the iPhono 3 has a warp filter, but not a good one.

There is also another little tweak called enhanced RIAA that, I recall, has something to do with correcting cutting lathes. iFi bill it as a default setting in the iPhono3, so they prefer it, but I find this little tweak, when it occasionally appears, makes little subjective difference. It slightly raises treble above 10kHz but whether you like this will depend upon your cartridge and its

stylus. The deeply analytical Shibata and SLC (super line contact) tips I use don't benefit since they are forthright up top in any case, throwing out information without any need of assistance from twiddled EQ. Cooking conical styli in budget cartridges will be subtly livened up however, so how useful eRIAA is will depend much upon the cartridge being used. It's all good fun and there if you like it.

As you can see from our pictures, there are myriads of settings that can be made on the underside DIP switches. I'll break them down for easy understanding. There are normal and high gain values for both MM and MC cartridges. The 'high gains' are for low output types. The use of low (normal) gain is preferred because it reduces the possibility of overload, but the amplifier's volume control will have to be wound up a little to compensate. Because the iPhono3 overloads at a low 6V out – 10V being common nowadays – there is not a lot of leeway here, but overload in real





"Tellurium Q's Ultra Black II's can be seen as one of the best loudspeaker cables on the market at their price"

-John Moyles, HiFi World

"The differences were stunning.....What I can state is that the Ultra Black II cables are currently the best I have heard in my system"

-Ian Ringstead, HiFi Pig

"Tellurium Q Ultra Black II is a remarkably coherent and "well-timed" cable"

-Jason Kennedy, HiFi Plus

"I have yet to hear a speaker cable which delivers timing like this one"

-Chris Kelly, The Ear

# Tellurium Q®

Preserving relative phase relationships in a signal is our focus



Winner of the Queen's Award for Enterprise

life is not an issue; music peaks from LP rarely get close to causing overload I've found from measurement.

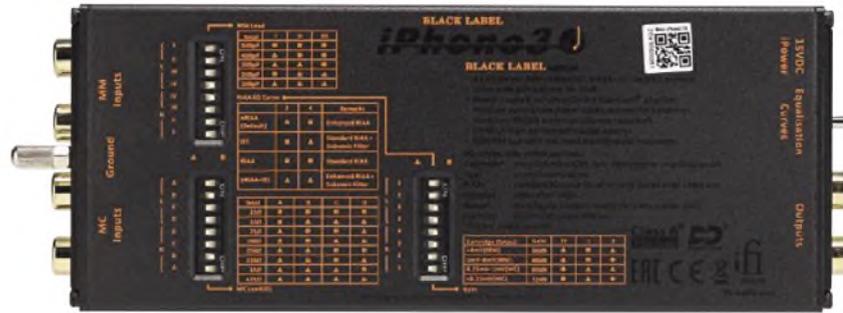
In addition to the left and right channel gain setting DIP switches, there are also plenty of DIP switches to set cartridge loading. Again, no big issues here, so much as fine tweaks. The 100pF - 500pF capacitance options for MM are a tad historical. Long ago MMs sounded warm and adding capacitance could correct this, raising the mid-band/lowering upper treble, but nowadays most MMs are best left alone, since they are not warm sounding anymore (due to more efficient generators).

With MC loading the picture is different. The standard load value is 100 Ohms, ten times the generator resistance of 10 Ohms (a rule of thumb to minimise losses) and the iPhono3 has this value. But some MCs (e.g. Clearaudio) need at least 300 Ohms and the iPhono3 covers this too, with settings up to 1000 Ohms, plus a 47k option on MC. It also goes the other way – down to 22 Ohms and this invokes other issues, offering better damping at the possible expense of tracking. But whilst I can see differences under test I'm unsure I can hear any great differences in use. So again, it's all there if you want to twiddle!

Size wise the iPhono3 measures 170mm long, 64mm wide and 25mm deep. Weight on our scales was 254gm. It can stand on its side next to a turntable to take up just 25mm of shelf space. The package includes an iPowerX super-silent switch-mode wall-wart style power supply that



**The 'front' of the case – or is it the back? Outputs and a small three-way toggle switch to select standard RIAA, Decca or Columbia playback EQs.**



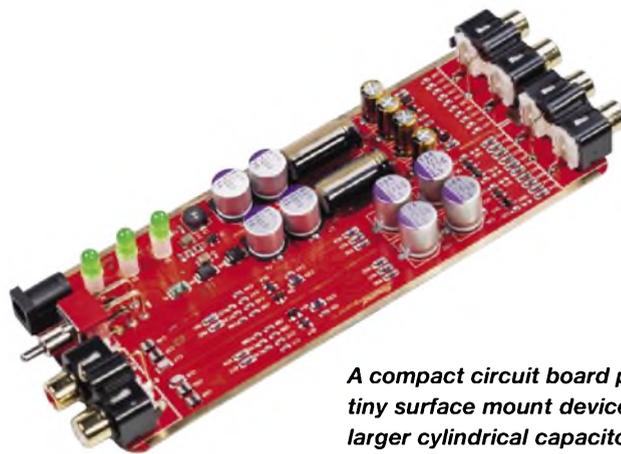
**Arrays of tiny slide switches, known as DIP switches, set gain, MM input loading and MC input loading, through various permutations shown in the charts. Also selected here are eRIAA and IEC equalisations, both variants of RIAA. Note black text on black background!**

delivers 15V (1.5A) through a cable 2m long. iFi claim very low noise from this unit and you definitely can identify it amongst all the others, with illuminated iFi legend. It works from 100V-240V, 50/60Hz.

On usability, I note only that all the DIP switch settings need careful

Technica VM750 SH MM cartridge with Shibata tip, as well as an Audio Technica OC9X SH MC also with Shibata tip. Downstream was a Creek Evolution 100A amplifier driving Martin Logan ESL-X hybrid electrostatic loudspeakers.

I ran through modern LPs first,



**A compact circuit board populated with tiny surface mount devices (SMDs), plus larger cylindrical capacitors of audiophile quality iFi say.**

studying; this is not the easiest phono stage to set up – or change. It is also awkward in layout, with inputs and outputs at opposite ends, and the power plug on what is effectively the front, since it carries the EQ switch. The earth terminal is miserably small too, but because the unit floats electrically there may be no need to use it (depending upon the earthing arrangements in your system). I did not need it. However, some hum floated in when placed on a shelf below the Creek's mains transformer, but re-positioning cured this.

### SOUND QUALITY

The iPhono3 was connected up to our Timestep Evo modified Technics SL-1210 Mk2 turntable, fitted with SME309 arm and Audio

all RIAA, and got a fine result from a wide range played with our Audio Technica M750 SH via MM input. Quite obvious was good stage depth, a nice sense of silence and a big bodied sound more reminiscent of valves than transistors. There was no hint of the flat, papery quality that taints many phono stages. Only point to note here is that 'standard gain' (38dB) is very low: I had to crank volume up on our Creek almost to maximum.

Swapping to MC and our Audio Technica OC9X SH there was even more depth and solidity in the sound, bringing scale to the chorus behind Hugh Masekela's 'Nelson Mandela', from his Hope LP. It's a live recording – very well made – and iPhono3 conveyed the male singers with

# X1

**Pro-Ject**  
AUDIO SYSTEMS

## THE NEXT GENERATION OF AUDIOPHILE TURNTABLES

In 1991, Pro-Ject Audio Systems started a revolution in the Hi-Fi world with the introduction of the Pro-Ject 1 turntable. A new high-end, low budget turntable at a time when CD was king. Against all odds, we were creating interest in analogue audio at a time when others were turning their backs.

Flash-forward to the present day, with the introduction of our all-new X1 which reimagines the classic turntable design and elevates the sound performance to new heights. You will find no plastic here, only high-end, durable materials that boast an audiophile sonic performance at a fantastic price.

The X1 is available in three finishes to suit any home décor; a premium walnut wood veneer or luxurious black or white eight-layer gloss paint.



Electronic speed control  
for 33, 45 and 78 RPM

8.6" carbon/aluminium  
sandwich tonearm



Pick-IT S2 MM cartridge  
designed by Ortofon

Belt-driven acrylic  
platter supplied





**The separate iPowerX low-noise switch-mode power supply, complete with accessories. It lights up to show an iFi logo, making it clearly identifiable. iFi claim this is a special audio grade power supply, free of the noise and with better regulation than a typical, cheap wall wart. It delivers 15V d.c. and is fully floating (no earth).**

gusto, making them sound big bodied behind Masekela's wailing trumpet. For this performance the iPhono3 shot right up my personal preference scale, where 10 is our Icon Audio PS3 MkII valve phono stage with input transformers for MC. The iPhono barged up to 9 pretty fast! Not only did it have stage depth and an organic quality that made humans sound human, but there was no hiss – none. I have never heard an MC preamp so quiet, even with full volume applied.

Across a broad range of LPs the iPhono3 maintained its sense of sonic poise, with no top end sharpness, a wonderfully clear midband and an almost honey sweet analogue quality. There was no forced detail, just great natural insight, bringing Jackie Leven's big voice out fully in front of me, singing Young Male Suicide Blessed by Invisible Woman, where echoes enveloping the invisible woman ran eerily deep. The next track, Some Ancient Misty Morning, had a firm bass line and captured Jackie's

plaintive tones.

Now on to Decca. My use of Decca equalisation was, I admit, fun but inconclusive. For this it meant ferreting through the record collection to find Blues Breakers (1963 Wikipedia, 1966 on my disc), featuring John Mayall with Eric

Clapton. The quality was so shaky I could not really form any conclusion here. It was with The World of Blues Power (1966) and the wonderfully atmospheric recording of Peter Green's Out of Reach, of excellent quality, that switching in Decca moved vocals and guitar back a bit, slightly softening the sound. I could say there was "less shout" but quite frankly I don't mind at all hearing Peter Green moved toward me. So I won't wave my arms about here and declare Decca EQ a "must have" – but perhaps those sheltering old classical recordings a little less – er – fundamental than my early British Blues, will be delighted at the difference it makes. This is an issue for buffs.

## CONCLUSION

On mechanical layout and ease of setting the iPhono3 Black Label is not the greatest. iFi even use black text on a black background that required a spotlight and magnifying glass to interpret. The range of input settings is a good one though.

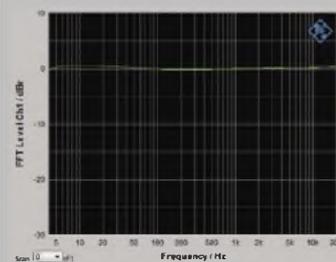
## MEASURED PERFORMANCE

Frequency response with RIAA equalisation – that normally used – was flat, as our MM response analysis shows. There is however slight plateau lift at low frequencies, just enough to ensure some weight in the sound. The MC response was also flat, even at full gain (72dB) where some stages run out of puff.

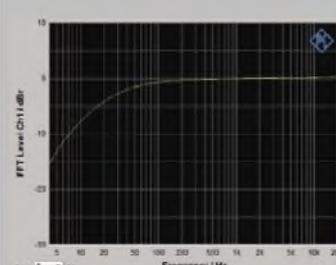
Switching in eRIAA (enhanced RIAA) raised treble above 10kHz slightly and will change little subjectively.

The IEC warp filter is true IEC, cutting bass strongly below 100Hz, the

### FREQUENCY RESPONSE RIAA



### FREQUENCY RESPONSE IEC



reason this filter is rarely used since subjectively it is obvious.

The Columbia and Decca equalisation curves are very different to RIAA and should be used only with old LPs that need such EQ.

Gain values were as quoted, the maximum being a massive x3660 or 71.3dB for low output moving coil (MC) cartridges. However, with a low-ish output swing of 6V from iPhono 3 this gave an input overload value of just 1.6mV. Best to use the conventional gain value of 60dB (x1000) for MC where overload is then 6mV.

MM similarly has a normal gain (36dB, x63) and a high gain setting (48dB, x250) and the former is best used for highest overload ceiling.

Noise (equivalent input noise, or e.i.n.) measured 0.04µV which is extremely low, making this a super-quiet preamplifier suitable for the lowest output MC cartridges.

Very low noise, but also low overload margins, so gain is best set low. NK

Frequency response	20Hz-20kHz
Separation	68dB
Noise (e.i.n.)	0.04µV
Distortion	0.1%
Gain (MM, MC)	48dB /72dB
Overload	6V out



**The back of the case, or perhaps the front. Separate MM and MC phono socket inputs plus a tiny earth terminal barely able to clamp a large earth tag.**

## iFi IPHONO 3 BLACK LABEL £999



**OUTSTANDING - amongst the best**

**VALUE - keenly priced**

### VERDICT

Superb sound quality distinguishes this phono preamplifier. Mechanically a tad awkward.

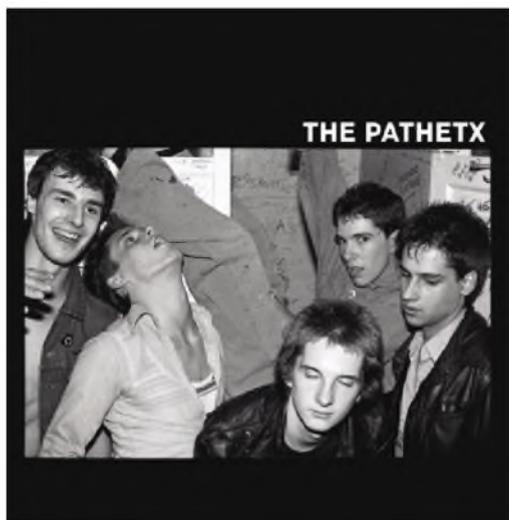
### FOR

- spacious, dynamic sound
- no hiss
- adjustability

### AGAINST

- fiddly DIP switches
- obscure case graphics
- mechanically awkward

iFi Audio  
+44 (0) 1704 227 204  
www.ifi-audio.com



THE PATHETX

1981  
Third Man

**A** Detroit punk band, The Pathetx were a five-piece bundle of energy consisting of Mark Leavitt on vocals, Greg Kutcher on lead guitar who was joined by Tom McHenry on rhythm (joining after being discovered at a local community college) and Mick Goldwater on bass (aka Filthy McNasty who tried out for the band at a local music store). Drums were handled by the late Ted Meek (or 'Iggy Moon', found via a locals listings service of the Detroit News).

So then. You've got a punk cum hardcore band. And they stand there. And they play 'Climb Every Mountain' from the Sound of Music? Oh yes. And let's not forget 'It's Fun to be Clean' by the Human Beinz. Neither of which are on this Third Man LP release. A sad fact but 'tis so.

In fact, if you take a look at Discogs, you won't find much else. Well, anything else. This is the first

release by the band and spans a whopping great eighteen minutes. And sixteen seconds. Seconds really count on an eighteen minute album.

So, you have to ask, why? Because a multi-track tape recording was made at the Reel Sound Studio, late 1981. Which was then promptly lost. Band manager Steve Shaw did have a master in his possession for over three decades. Which is why, after more than thirty-eight years, this LP has hit the shelves.

The label call this music "fast and unhinged" and I wouldn't disagree. There's a distinct classic three-chord, late-70s punk attitude and presentation here with the uncontrolled, controlled vocals ranging across the scale backed by a wall of guitar sound.

This is an album crammed with energy so that eighteen minutes or so will seem like a lot longer, to be frank. The guys pack in about 48 hours worth of energy and passion into this brief time.

AUDIOPHILE VINYL



AVERAGE WHITE BAND

Feel No Fret  
Demon

**T**his is an interesting album but maybe not for the reason you expect. Why? Because it represented their decline after many years of success at the Atlantic label. For the first eight or so albums, despite a hiccup here and there, the band persisted in producing quality music.

One of the very few white bands of the time that produced quality funk, well-received by all too. Funk that seemingly had absolutely nothing to do with their Scottish roots. Music that seemed at odds with the same, in fact. Alan Gorrie on bass and vocals teamed with guitarists Hamish Stuart and Onnie McIntyre, plus the sax of Malcolm Duncan, Roger Ball on keys and sax and drummer Robbie McIntosh

Once the Arif Mardin-produced instrumental 'Pick Up the Pieces' hit the public, the band was secured in place and received many plaudits

and success.

Another Top 10 hit followed in 1975 via the title track from the album, 'Cut the Cake', amongst other well received singles with their final Top 40 hit being the single 'Queen of My Soul'.

And then this one appeared in 1979. It wasn't well received by the public, at least compared to earlier releases and failed to gain the then usual gold or better sales status.

It was also the first album that wasn't produced by the genius of Arif Mardin. This self-produced outing is good, don't get me wrong. There's plenty to like here. The issue is that the band play within themselves. They 'make do'. They're comfortable. They're in a rut. For some fans, of course, that 'rut' will be enough.

This reissue is rather nice from the UK audiophile outfit, Demon. Presented in a gatefold sleeve, the vinyl has been pressed upon clear wax.

**A**hh, rock bands an umlauts, eh? Someone could write a book on that phenomenon alone.

You could call this LP release a turning point. A girding of the loins. An album where the band woke up from their reverie, pulled themselves together, raised their socks to acceptable levels, dug deep into the bucket of creativity, pulled out a finger, made...well you get the idea.

This one was released in 1981. Before its release, fans had clamped their eyes and ears on two earlier releases of contrasting quality. In 1979, 'Mirrors' produced chin scratching and lots of "Hmmm." while 'Cultosaurus Erectus' (1980) certainly had its fans but the catcalls could still be heard.

This release seemed to lift the group back on its pedestal.

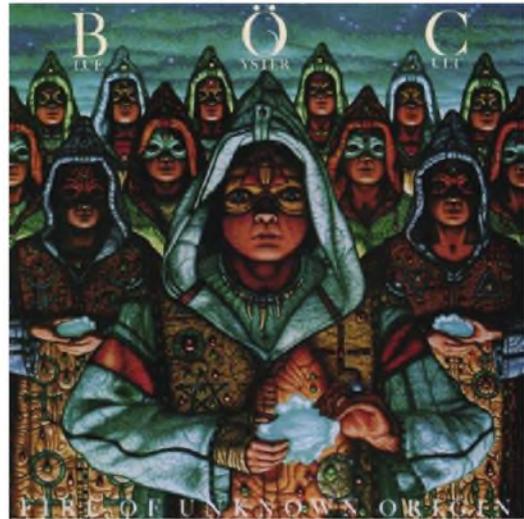
Maybe the producer Sandy Pearlman, Richard Meltzer, and

Patti Smith who all helped to pen lyrics, helped to strengthen the bedrock of the LP while science-fiction writer Michael Moorcock also helped out.

You could say that the core songwriting quality was the reason this LP found success. Tracks like 'Heavy Metal: The Black and the Silver', 'Burning For You' (which became a Top 40 hit) and the wonderfully named 'Joan Crawford' were just some of the highlights.

The keyboard work was also magnificent while the back-up guitars really added strength and a sense of forward motion to the entire album.

The LP featuring Eric Bloom (vocals), Albert Bouchard (drums), Joe Bouchard (bass), Allen Lanier (keys), Buck Dharma (Guitar) remains a little cracker and should be sought out by both fans and those looking to investigate BOC's work.



**BLUE ÖYSTER CULT**

**Fire of the Unknown Origin  
Music on Vinyl**

AUDIOPHILE VINYL

**“A**ll the way from

Israel...!” Isn't that the sort of thing they say when introducing an artist on stage? Well Cohen is certainly that and this is his fourth outing for the German label. The band he offers for your entertainment here is actually one that had its roots in 2013 because they met back then in Israel. So I'm talking about Uzi Ramirez on guitar and Yonatan Albalak on electric bass. There are drummers. Plural. They are Aviv Cohen and Ziv Ravitz. Ravitz also dabbles in sampling.

The music here is nicely accessible but don't let that term put you off if you're looking for complex, supremely played and arranged jazz. There's that too. What Cohen does here is to combine both complexity and skill and forge that lot into a

palatable dish. Hence, even music fans who don't normally like jazz will find something of interest here.

The rhythmic nature of a track like Teardrop means that it's easy for the ear to become lost in the sweep and the ambience of the arrangement. The purity of the Cohen trumpet flies across the soundstage with effortless ease, extends the range in musical and also dynamic terms while minor chords add emotion and richness to the story.

'Honey Fountain' is almost two tracks in one where the backing band noodle away in a gentle jazz rock reverie while Cohen hovers over them all in a trumpet-powered drone, flying smoothly over the music, observing rather than interfering. The band seemingly proceeding on their own course while Cohen almost makes notes about the progress below.



**AVISHAI COHEN**

**Big Vicious  
ECM**

# Dial A Dealer Directory

directory of Hi-Fi Dealers throughout the UK and Ireland.

**divine audio**

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

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

Refreshingly different



01865 790 879  
www.oxfordaudio.co.uk

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

9 High Street, Hampton Wick,  
Kingston upon Thames, Surrey KT1 4DA  
Open: Tuesday - Saturday 10am - 6pm  
**0208 943 3530**

**Infidelity**  
MUSIC & CINEMA SYSTEMS

NAIM, LINN, REGA, ARCAM, B&W 800 SERIES, PMC, FOCAL,  
DYNVECTOR, KUDOS, VELODYNE, STAX, LYRA, OPPO,  
TANGERINE AUDIO, TELLURIUM Q.

**SEE AND HEAR THE VERY BEST**

CEDIA MEMBER clarity

**iBasso Audio DX220**



5.0 inch 1080P Sharp Full Screen/Dual ES9026PRO/On Cell Touch Panel/Octa Core CPU/Android 8.1 OS/MQA/XMOS USB-DAC/Femtosecond Oscillators/Quick Charge/Replaceable AMP Card

Available to order from AMP3.  
Hi-Fi World readers: 5% off the DX220 using voucher code  
HIFIDX220 at amp3.co.uk

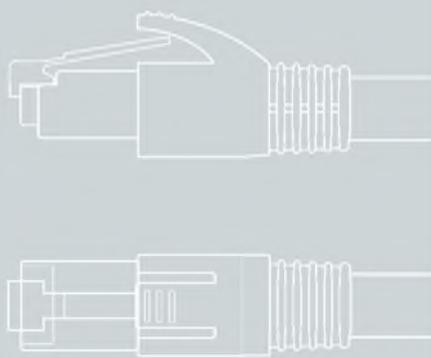
TO ADVERTISE HERE  
PLEASE CALL  
JOANNA HOLMES ON  
+44 (0) 7958 602347  
OR EMAIL:  
joanna@hi-fiworld.co.uk



**Equatorr**  
Streaming

DESIGNED & HANDMADE IN SCOTLAND

Precision audio engineering.



**ATLAS**  
the performance connection  
atlascables.com

# HI-FI WORLD

## ON THE APP STORE

App Store > Entertainment > audio web publishing ltd

**Hi-Fi World** 4+  
audio web publishing ltd

Details Ratings and Reviews Related

Screenshots iPhone iPad

**HI-FI WORLD**  
SEPTEMBER 2015 UK £4.50  
FREE READER CLASSIFIED ADS IN THIS ISSUE!

**contents**

**SEPTEMBER 2015**  
VOLUME 30 NO 7

**TOP IN-APP PURCHASES**

1. Hi-Fi World Dec 2015 £3.99
2. Hi-Fi World Subscription £8.99
3. Hi-Fi World August 2015 £3.99
4. Hi-Fi World September 2015 £3.99
5. Hi-Fi World June 2015 £3.99
6. Hi-Fi World May 2015 £3.99
7. Hi-Fi World December 2015 £3.99
8. Hi-Fi World February 2015 £3.99
9. Hi-Fi World November 2015 £3.99
10. Hi-Fi World December 2014 £3.99

**Description**

Hi-Fi World brings you the best in hi-fi...from around the world!

- We listen and measure products in depth, at our London offices.
- Expert opinion from a team of renowned writers, musicians and engineers.
- International standard measurements using Rohde & Schwarz test equipment....

**Information**

Developer	audio web publishing ltd
Category	Entertainment
Updated	7 Dec. 2014
Version	1.0
Size	9 MB
Rating	Rated 4+
Family Sharing	Yes
Compatibility	Requires iOS 5.0 or later. Compatible with iPhone, iPad, and iPod touch.
Languages	English

**DOWNLOAD OUR APP ON APPLE AND ANDROID  
DOWNLOAD FROM iTUNES OR GOOGLE PLAY**

**iPad, iPhone, iPod, Tablets OUT NOW!**

# IAN HARRISON HI-FI SALE!

HIFI AT DISCOUNT PRICES. FREE NATIONWIDE DELIVERY  
Email: [ian.harrison@mercian.myzen.co.uk](mailto:ian.harrison@mercian.myzen.co.uk)

**SPECIAL OFFERS!! SALE! UP TO 40% OFF!!**

**CARTRIDGES UP TO 30% OFF PHONOSTAGES UP TO 25% OFF TURNTABLES & TONEARMS UP TO 25% OFF CABLES UP TO 40% OFF**

VAN DEN HUL MC10S £775, ORTOFON CADENZA BLUE £950, ORTOFON QUINTET BLUE £299

#### TONEARMS

AMG  
CARTRIDGE MAN  
GRAHAM  
HADCOCK  
HELIUS  
MICHELL  
MOERCH  
MOTH  
ORIGIN LIVE  
ORTOFON  
PRO-JECT  
REED  
ROKSAN  
SUMIKO

#### HEADPHONE AMPS

CREEK  
FIDELITY AUDIO  
GRAHAM SLEE  
ICON AUDIO  
LEHMANN  
PRO-JECT  
SUGDEN

#### AMPLIFIERS

CREEK  
EAR/YOSHINO  
ICON AUDIO  
QUAD  
SUGDEN  
TOM EVANS  
VALVET

#### ACCESSORIES

DIGITAL STYLUS GAUGES, RECORD CLEANING MACHINES, CLEANERS, AUDIO CASSETTES

#### CARTRIDGES

AIR TIGHT  
BENZ MICRO  
CARTRIDGE MAN  
DECCA LONDON  
EMT  
GÖLDRING  
GRADO  
HAMA  
IKEDA  
MY SONIC LAB  
NAGAOKA  
ORTOFON  
SUMIKO  
VAN DEN HUL  
ZYX

#### SPEAKERS

ACAPPELLA  
CABASSE  
EPOS  
HARBETH  
ICON AUDIO  
OPERA AUDIO  
Q. ACOUSTICS  
QUAD  
TAYLOR ACOUSTICS

#### CD PLAYERS

CREEK  
EAR/YOSHINO  
ICON AUDIO  
QUAD  
SUGDEN

#### PHONOSTAGES

EAR YOSHINO  
GRAHAM SLEE  
ICON AUDIO  
LEHMANN  
MUSICAL  
SURROUNDINGS  
PARASOUND  
PRO-JECT  
PURE SOUND  
QUAD  
ROTHWELL  
TOM EVANS  
TRICHORD  
WHEAT AUDIO

#### CABLES

BLACK RHODIUM  
IXOS  
KUBALA-SOSNA  
PEERLESS  
PRO-JECT  
QED  
SUPRA  
WIREWORLD  
ZENSATI

#### RECORD CLEANING

PROJECT  
MOTH  
WIRELESS  
BLUESOUND

#### TURNTABLES

ACOUSTIC SIGNATURE  
ACOUSTIC SOLID  
AMAZON AUDIO  
INSPIRE  
LUXMAN  
MICHELL  
MUSIC HALL  
PRO-JECT  
REED  
ROKSAN  
SRM TECH  
THORENS

#### HIFI FURNITURE

ALPHASON  
ATACAMA  
CUSTOM DESIGN  
HI FI RACKS  
MUNARI  
MUSIC TOOLS  
NORSTONE  
QUADRASPHIRE  
SOUNDSTYLE  
TRACK AUDIO

#### HEADPHONES

AUDEZE  
BEYER  
ERGO  
GRADO  
SENNHEISER  
ULTRASONE

\* PHONE FOR TERMS. 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. SUPPLIER OF HIFI PRODUCTS & ACCESSORIES SINCE 1986 MAIL ORDER ONLY FROM: IAN HARRISON, 7 MILL HILL, REPTON, DERBY, DE65 6GQ. TEL: 01283 702875. 9am - 9pm INCLUDING SUNDAYS.

**criterion audio**

Criterion Audio is a premium hi-fi dealer in Cambridge. From vinyl and valves to the latest in streaming and headphones, we can help you find the perfect audio system to suit your budget and needs. Call us on 01223 233730 to arrange a demo.

Criterion House, Oakington Road, Cambridge CB3 0QH  
[www.criterionaudio.com](http://www.criterionaudio.com) [info@criterionaudio.com](mailto:info@criterionaudio.com)

## HANA ML & MH

**M Series Deluxe Models**

**HANA EL & EH**  
Low (EL) and High (EH) output Moving Coil models

**HANA SL & SH**  
Low (SL) and High (SH) output Moving Coil models

High output moving coil is for use with a MM phono stage.

'The Hana ML in particular and the MH trailing close behind are every inch high end super cartridges, only without the high prices. As it stands, this is the best £3,000-£4,000 cartridge you can buy ... for £995.00p'

HI>FI+ ISSUE 172 REVIEW, HANA ML/MH

**hi-fi+ HIGHLY COMMENDED 2019**

«AIRaudio» Telephone: 01491 629 629 or for dealer list, visit: [www.airaudio.co.uk/dealers/](http://www.airaudio.co.uk/dealers/)

# Library Secrets

Music you hear and love but don't know about. Paul Rigby reviews a book on hidden music.

## Unusual Sounds - The Hidden History of Library Music

Author: David Hollander

Editions

Price: £32.99



**A**n unusual book about an unusual archive of music that flew underneath the radar of public awareness for many years. Even this book, sub-titled 'The Hidden History of Library Music' seems, at times, reluctant to pass on too many secrets. The cover is low key and stylistic in a nondescript manner. You don't know who has even written the thing until you open the cover and flip over the page, whereupon Hollander's name is there, at the bottom of the page, in the corner.

The book is, therefore, symptomatic of the entire genre.

Library Music was never meant to be consumed by the public. At least not directly. Indirectly, yes – and from that direction library music will not only be familiar but, at times, wholly iconic.

As Hollander himself states, Library Music was created to serve as incidental music for TV, film and radio either to run alongside or completely replace an original musical score.

Library Music you might know includes famous TV themes such as the former BBC Saturday sports programme 'Grandstand' and its ITV competitor 'World of Sport', the football programme 'The Big Match', the 'Wimbledon' tennis TV theme, a heap of music including the UK cop show *The Sweeney*, 'The Two Ronnies', the detective show 'Van der Valk', 'People's Court' in the USA and their 'Monday Night Football' programme, Australia's 'World Series

Cricket' plus many films and TV advertisements.

Library Music was popular to film makers because it was cheap. Original scores cost a packet, Library Music could be had for a fraction of the price.

Cult horror fans of George Romero's 'Night of the Living Dead' will have heard lots of library music, for example because he had almost no budget.

Europe was king in Library Music terms. Britain produced many libraries including KPM, Themes and Amphonic and featured talents such as Ron Geesin (who worked with Pink Floyd), BBC Radiophonic workshop lady and creator of the 'Dr Who' theme Delia Derbyshire, plus stalwarts Keith Mansfield, Alan Hawkshaw, Alan Parker and ex-Shadows man, Brian Bennett.

Europe had many music libraries too, Germany (Sonoton, Coloursound, Gerhard Narholz, etc), Italy (CAM, Omicron, Flipper, etc), France (Montparnasse 2000, Tele Music, Yan Tregger, etc) while the USA also had a few. Top stars also produced Library Music, the late Ennio Morricone being one of the most notable.

Library music ranged from orchestral music to electronica. Much of it was instrumental but vocals appeared now and again. Before 1959 that music appeared on 78rpm LP but afterward on vinyl – and generally in sleeves sporting standardised or stylistic covers. KPM, for example, featured the same green cover for many years with only

minor text information betraying the actual contents.

Why? Well again, this was music for an industry. Not the public. They didn't have to sell it in shops.

The quality of the music itself though is quite sublime. Library music featured some of the most talented musicians the world has ever seen – at any time and in any format.

This book is a textual and visual history of the genre split into national origin, and then companies within each. It arrives as a soft back, spans 332 pages in a relatively large 265 x 205mm format and is packed with both textual history and glorious images of well over 400 LP sleeves, studio images and mugshots.

On that basis, the history turns into an art book with attendant captions because the sleeves provide a sumptuous array of styles, but there is plenty of insight from the people who were there and involved in the day-to-day production. Most of the insights tend to come from surviving UK artists although there are European contributions too. The rest features interesting company and personal histories from the author.

A wonderful tome to read, to admire and gaze at, it also provides a perfect companion for any aspiring collector. **PR**

# Enjoy the Music.com<sup>®</sup>

Reviews News Show Reports And More...



hear the music . . . not the equipment

- **WDKT88** 32 watts per channel ultralinear push pull stereo amplifier. Single input power amp or integrated with multi-input relay switching
- **WDKEL84** 15 watts per channel ultralinear push pull stereo amplifier. Single input power amp or integrated with multi-input relay switching
- **WDPhono3** All triode passive equalization valve phono-stage. Dual input option, MC step-up transformers available. Requires WDPSU3 power supply
- **WDPre3** Transformer coupled single ended valve pre-amplifier. Low output impedance. Multi-inputs utilizing relay switching. Requires WDPSU3 power supply
- **WDPSU3** High performance choke power supply
- **WDHD3S** Transformer coupled single ended valve headphone amplifier. Multiple settings for headphone impedance matching.



Kits and Components for the Audiophile Community  
07972 055492 sales@world-designs.co.uk

[www.world-designs.co.uk](http://www.world-designs.co.uk)

# free reader Classifieds

**TERMS AND CONDITIONS:** Only one advert per reader. No Trade adverts. This section is strictly for readers selling secondhand hi-fi equipment only. Maximum length per advert is 30 words, Adverts over 30 words will not be accepted. Telephone numbers and E-mail addresses are treated as one word. Model numbers are treated as one word i.e. Quad 303 = two words. Email your advert to; [classifieds@hi-fiworld.co.uk](mailto:classifieds@hi-fiworld.co.uk) or fill in the form on page 97 and post it to Hi-Fi World Free Readers Ads, Studio 204, Buspace Studio, Conlan Street, Notting Hill, London W10 5AP. Sorry, we cannot accept adverts over the telephone. The Publisher reserves the right to judge submissions.

GARRARD 401 turntable One owner from new Domestic use only 1967, like new Working order SME 3009 arm. Hand built SME sprung plinth Mahogany Offers. £800 No time wasters Tel: 01472 690 844

GARRARD STYLUS balance, boxed, complete, £25 Denon DRR M30 Midi cassette deck, auto reverse, £40. Sony PVM 9220 ME, eight inch TV monitor Offers Naksaki one metre interconnect, gold plated, £30 Tel: 01708 457 691

MARANTZ PM6006UK CD, black, £230. Yamaha R-S202D amp, black, £150. Audio Technica AT-LP120XUSB, black, £130. Kef Q350 speakers, black, £330 As new, boxed. Buyer collects Tel: 01298 812 070 (Derbyshire)

BRINKMANN-EMT-ti-moving coil cartridge. Excellent condition Fully serviced by Northwest Analogue Asking price £995 Tel: 01584 819995 or Email: [pat.tranter@yahoo.co.uk](mailto:pat.tranter@yahoo.co.uk)

WANTED FAULTY or non working Nakamichi 581 or 582 cassette deck. Contact Mike 01758 613790

WANTED: Top quality Hi Fi separates and complete systems, Naim, Linn, Cyrus, PMC, Audio Research etc. fast, friendly response and willing to travel/pay cash Please call me on 0781 5892458 or email me at [pogsonp@aol.com](mailto:pogsonp@aol.com)

THE MISSING Link Cryo Reference interconnects. Half metre pair with pure silver Eichmann bullets. Comes with Certificate of Authentication. £180 Tel: 07835 902 176 (Oldham)

ARIAND FV34B valve integrated amplifier with pre-in, mint, £395. Epos Epic 5 floorstanding loudspeakers, mint condition, cherry finish, £395 All boxed. Sale due to upgrades Text 07743380657, or Email [hi-fi@rodtheobaldforce9.co.uk](mailto:hi-fi@rodtheobaldforce9.co.uk)

QUAD 2 valve tuner. In fair condition £80 Tel: 01584 819995 or Email [pat.tranter@yahoo.co.uk](mailto:pat.tranter@yahoo.co.uk)

DENON DL110, £130. Original Audio Technica AT95E (30 years in a drawer), £25. Set (4) Valvo EL84, £95. Audionote Japan Kondo Silver interconnect, £430. Cogan Hall interconnect, £495. Tel: 0113 2579 043

KENWOOD KX9010 three head cassette deck, £150. Aiwa AP2600 Direct Drive turntable, £200. Target two shelf turntable stand, £50. QED DiscMaster phono stage, battery/mains, £40. Tel: 01708 457 691

TOTEM ARRO speakers, cherry finish in excellent condition. Buyer collects. £500 Tel: 07944 594 705

YAMAHA MDX 793 MiniDisc, £55. New, unused MiniDiscs, offers. Carbon Fibre record brush, sealed packet, £7. Tangent Amp 100 amplifier, £55. Thorens TD166 Mk2 record deck, £95. Buyer collect only Tel: 01708 457 691

HARBETH M30.1 speakers, rosewood, mint condition, original boxes. Little use. £1800. Selection of cables, Black Rhodium, interconnect and speakers, Atlas interconnect, Kimber interconnect. Call for details. Tel: 07962 784 449

WATERFALL AUDIO Iguascu floor-standing 'glass' speakers (1 pair). Brand new, open box. Absolutely stunning. Total giveaway Yours for £1,450. Shipping with insurance at cost. Email: [paulheath72@gmail.com](mailto:paulheath72@gmail.com)

TEAC PDH600, AGH600NT, high quality Midi system (£1000 new). Boxed. £400. Pioneer A502R amplifier, two tapes, split pre power, £60. Audiophile magazines 1990's. Wanted: Pioneer remote ADX 7456. Tel: 01708 457 691

SIX PAIRS of one metre long RCA to RCA interconnect cables. For sale at half price or more. All in mint condition. Wireworld Luna 7 boxed £35. Morrow Audio MA-2 £50. Chord Company Cobra Vee 3 £50. Black Rhodium Symphony £65. QED Van Damme classic pro patch £10. Atlas Elements Integra Superior 0.5 metre boxed £55. Will sell separately or bundled. Tel: John 01483472650 (Woking Surrey)

LINN LP12, Ittok LVII, fitted Ortofon Quintet Red cartridge. Recent Hercules power supply and motor. New Cirkus bearing, sub chassis and armboard. Afrosia fluted plinth and lid. Spare new belt. Serviced by House of Linn. S/N 43.XXX. £1650 ono. Tel: 01691 610 589

LINN SONDEK, Cirkus, Trampolin, new motor 2010. Regularly serviced. Ekos upgraded 2014 DV20X-2 cartridge 2019. Little use. Lingo Mark 1 Linto phono stage. Boxes. Buyer auditions and collects. £3000. Tel: 01245 250 375

MACKINTOSH MA8000 integrated amplifier. Original box with Manuals, hardly used, excellent condition £6000, open to offers. Tel: 07500408416 Email: [richardotlet@me.com](mailto:richardotlet@me.com) (Bristol)

WANTED: NAKAMICHI 581 or 582 cassette deck working or non working. Tel: Mike 01758 613790.

HIGH QUALITY perspex turntable lid size 490mm x 400mm x 165mm. Buyer collects (Leeds) £30 Email: [a.beal@btinternet.com](mailto:a.beal@btinternet.com)

WANTED: TDL Studio 1 Tweeter. The tweeter for my TDL Studio 1 is broken, looking for an original to replace. Someone may have a broken speaker, in which case it is easy to remove the tweeter. Email: joel@counselling-london.co.uk Tel 020 8579 8110

WANTED Cyrus PSX-R in Black finish. Will pay up to £200. I'd also be interested in 2 of the same. Would pay up to £350 for the 2. Email: [paulfarrar@btinternet.com](mailto:paulfarrar@btinternet.com)

MERIDIAN RARE black 101b pre, 104 tuner, 105 (2xmono amps each with power supply) so stacked 3 high in pairs £625. Southport 01704 628968 or 07968769595

AUDEZE DECKARD Headphone Amp/USB DAC, mint condition and boxed, cables and accessories included plus Atlas Integra Superior 0.75 mts interconnect worth over £70 sale for £475 o.n.o. Telephone 01732 490492

WALKER CJ61 suspended chassis belt drive turntable with arm board for Rega arm £100, buyer collects (Leeds); Shure M44E cartridge £20 inc. p&p; set of new unused springs for Linn LP12 turntable £8 inc. p&p. Email: [a.beal@btinternet.com](mailto:a.beal@btinternet.com)

OPPO 205 with Fidelity Audio linear power supply £3000. Ram LS3/5a's £800. Collect from Oxford or may deliver. 07948275212

MARANTZ PM6006UK Edition amp in black, as new boxed £200. Tel: 07583078744 Notts/Derby area.

QUAD 66 Preamp & control unit just serviced by Quad. 3 interconnects, MM and MC phono boards £350. Quad 606 power. £450. All in excellent condition, manuals, original boxes. Tel: 01204 847 404

CANADIAN GUTWIRE Synchrony 3 metre length speaker cables. Superb - totally new condition. £700. (Synchrony Interconnects available separately). Email: [stephen.adolphus@gmail.com](mailto:stephen.adolphus@gmail.com). Tel: 07787 574784.

FOR SALE: EAR 834L line pre-amp by Tim de Paravicini. Excellent and well looked after condition. £650 ono. Tel: 07505 057 414 or Email: [zylandaroya@yahoo.com](mailto:zylandaroya@yahoo.com)

LEAK TROUGHLINE and Hi-Fi World valve decoder set up by Tim de Paravicini less than a year ago, one of the finest tuners anywhere! £700. Tel: 07940 507215 or Email: [rtodes@gmail.com](mailto:rtodes@gmail.com)

NEAT MOTIVE 1 Loudspeakers Cherrywood excellent speakers, condition and sound bargain, only £475! London, 07957384795 (Evan)

# NEXT MONTH

## OCTOBER 2020 ISSUE



### LEAK STEREO 130 & LEAK CDT

After years of deliberation, IAG have finally decided to revive the revered Leak brand name. One of the world's first manufacturers of high quality audio amplifiers – we're talking 1934 here – Leak paved the way for all others, achieving 0.1% distortion in 1945.

Fittingly then, the new Leak Stereo 130 amplifier seeks to continue the goal of highest quality, but in a classically Leak retro-styled package. Don't miss our review of this revival amplifier, along with an accompanying CDT1 CD player.

Alongside will be our unique Leak history, informed by Chief Engineer Ted Ashley and our own knowledge of Rank Leak products.



Also, we hope to bring you –

**KLIPSCH THE FIVES POWERED MONITOR**

**ASTELL&KERN AKT9IE EARBUDS**

**ASTELL&KERN SE200 DMP**

**CHORD ULTIMA 6 POWER AMP**

**BRICASTI DESIGN M3 DAC**

...and much more.

This is a selection of what we hope to bring you, not a complete list. We regret that due to a wide range of issues, we cannot guarantee that all products listed above will appear.

**PICK UP THE OCTOBER 2020 ISSUE OF HI-FI WORLD ON SALE AUGUST 28TH 2020, OR SUBSCRIBE AND GET IT DELIVERED TO YOUR DOOR: SEE PAGE 40**

**ADVERTISERS INDEX**

Absolute Sounds OBC  
 Advanced MP3 Players 90  
 Air Audio 92  
 Atlas Cables 90  
 Black Rhodium 66  
 Chord Company IFC  
 Chord Electronics 56,57  
 Criterion 92  
 Decent Audio 18,19  
 Divine Audio 90  
 Enjoy The Music.com 92  
 Exposure 18  
 Hard To Find Hi-Fi 62,63  
 Henley Audio 6,46,70,82,86  
 Ian Harrison 92  
 Icon Audio 32  
 Infidelity 90  
 Jordan Acoustics 34,35  
 Music First 68  
 Naim 17  
 Oxford Audio 90  
 Quadral 72  
 SCV 16,60  
 Select Audio IBC  
 Sound Hi-Fi 68  
 Spondor 20  
 TelluriumQ 84  
 World Designs 92

# FREE READER CLASSIFIED ADS ORDER FORM

**STOP PRESS**

**TERMS AND CONDITIONS:** Only one advert per reader. Maximum length per advert is 30 words, Adverts over 30 words will not be accepted. No Trade Adverts. This section is strictly for readers selling secondhand hi-fi equipment only. Telephone numbers and E-mail addresses are treated as one word. Model numbers are treated as one word i.e. Quad 303 = two words. Sorry, we cannot accept adverts over the telephone. The Publisher reserves the right to judge submissions.

You can email your advert to us at: [classifieds@hi-fiworld.co.uk](mailto:classifieds@hi-fiworld.co.uk) or write or type your advertisement copy in block capitals with one word per box and post it to us at:

Hi-Fi World Free Readers Ads,  
 Studio 204,  
 Buspace Studio,  
 Conlan Street,  
 London W10 5AP

**We cannot accept adverts over the telephone**

1	2
3	4
5	6
7	8
9	10
11	12
13	14
15	16
17	18
19	20
21	22
23	24
25	26
27	28
29	30

Name: \_\_\_\_\_

Address: \_\_\_\_\_

\_\_\_\_\_

Post Code: \_\_\_\_\_

Daytime Tel: \_\_\_\_\_

**FREE READER CLASSIFIED ADVERT COPY DEADLINE FOR OCTOBER 2020 ISSUE 12TH AUGUST 2020**

# THE IDLE RACE

## THE BIRTHDAY PARTY GRAPEFRUIT



"beautifully melodic, always well crafted and arranged with hooks a-plenty"

**P**urveyors of pop and psyche, this band's life ranged from 1966 to 1972. As an entity, The Idle Race didn't have the best of times and never really took off, despite hanging around for a some time. Many of the band members did take off – in career terms, that is. They included one Jeff Lynne (and my goodness, he does look fresh faced here) and Roy Wood, while a later incarnation of the band would transform into the Steve Gibbons Band. Even Roger Spencer, the drummer, would transform into Ollie Spencer and would have raving success as a stand-up comedian!

It's no surprise that, with Lynne in the band, this album – The Birthday Party – has a definite Beatles-pop presentation and early ELO-esque sounds (plus George Formby, according to Lynne).

In fact, the band were able to see the Fabs working on The White Album at Abbey Road for all of 10 minutes before they were all thrown out. The songs on The Birthday Party are often beautifully melodic, always well crafted and arranged with hooks a-plenty.

Jeff Lynne was the youngest member of the band when the LP was released so he was pushed forward to add a sense of the hip and trendy to the band's persona.

Dave Pritchard, guitarist, commented that "Jeff was easy going and very talented, so fitted the bill perfectly. Just what we were looking for".

Actually, for Jeff Lynne, joining the band was a great thing, a dream job instead of 'just a job'. "I was a professional musician and I was getting £15 per week instead of £4 a week when you went to work" said Lynne. So when my mum used to say 'You can't do that, you can't be one of them, you've got to get a job and do proper work, not that rubbish' you know, she wasn't into it at all. And it became a bit of a joke. She'd come bounding up the stairs 'Come on you lazy bugger, get out, get to work'.

This one time she came up to my room and had a shock. I was holding the sheets down going. 'Nope. Listen mum. I've never

got to get up, ever again. I'm a professional musician now. Ha ha ha!' That was the greatest feeling, because I was so fed up with (bang bang bang) 'Get up you lazy git!'"

Remember Lynne's attitude then. Remember where he's just come from and his thoughts and feelings, if you hear this album. There's sheer joy of being part of a band from Lynne in this album. Energy and – well – true happiness.

Despite the lack of success of the band as a whole, this is a lovely LP. Full of fun and frolics, great songs and energy, it's a great little album.

For example, there's a real sense of exploration here. Take the track 'Imposters of Life's Magazine' which is positively edgy in presentation. The reason? Co-producer, Eddy Orford. "Eddie was a tremendous engineer" said Pritchard. "He used to cut up bits of tape with razor blades and swap them 'round, run them backwards or paste them into different sections".

Jeff Lynne penned this track. He was a proud man too – a real songwriter now. Big achievement. Yet, original label Liberty showed their overall lack of care and attention in how they presented the credit for this track. "So we finally got a record deal and I wrote this song. And I can't wait for this thing to arrive in the mail, this record that I've made. And it's going to have my name on the label. The thing comes and I look at it and I go 'What the hell is that?'. It says 'Imposters of Life Magazine by G.Lynn' without the 'e' on the end. And 'G'? Who's that? Gordon? I was very, very disappointed. Very upset because it was my big moment and it just turned to s\*\*t!"

The original stereo album is joined here by this recently released CD issue on Grapefruit which includes alternative versions, stand-alone singles and the first-ever official CD release of the original, substantially different mono version of the LP, taken from the original masters.

The pathetic sleeve art of the album was not going to sell records on behalf of the band. But the music speaks for itself. **PR**

Hi-Res.grade Network Audio Components

*fi data*

Network Audio Server

The ultimate in audio quality, from a brand that lives up to the meaning of its name : “reliability”

Today's high-resolution audio files deliver quality that approaches that of master recordings by incorporating an enormous amount of data. With the debut of network audio, consumers quickly have become familiar with the immersive experience made possible by that level of quality. Introducing *fi data*, a family of network audio components that lives up to the meaning of its name: “reliability.”

Welcome to the world of ultimate sound.



**HFAS1-XS20U**



**HFAS1-S10U**

MADE IN JAPAN

[www.selectaudio.co.uk](http://www.selectaudio.co.uk) Tel +44 (0)1900 601954

**selectaudio**®  
exquisite audio products

# pure innovation.

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



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

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

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

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

 **absolute sounds ltd.**

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

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

W: [www.absolutesounds.com](http://www.absolutesounds.com) E: [info@absolutesounds.com](mailto:info@absolutesounds.com)

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

**audio research**  
HIGH DEFINITION®