

hi-fi news

THE HOME OF REAL HI-FI

& Record Review

HEAVY METAL MASTER

Exclusive: Avid's Acutus Reference SP turntable rocks



PATTI SMITH
We ride the Horses LP

'FM radio beats DAB'

Keeping analogue alive, p14

Group test: Top tuners

Five FM favourites dialed-in

Desktop divas

Harman's 'crystal' speakers

Wadia's PowerDAC

The DAC that drives speakers



• **PLUS** 14 pages of music features • **VINYL RE-RELEASE** Joy Division's *Closer* on 180g LP
• **AUDIO MILESTONES** Spondor BC1 loudspeaker • **HI-FI @ HOME** High-end in Hong Kong
• **VINTAGE** Radford STA 15 III reviewed • **READERS' CLASSIFIEDS** Scores of hi-fi bargains

UK £4.00 US \$9.99 Aus \$9.95



MUSICAL FIDELITY

M6i Integrated Amplifier

200wpc integrated amplifier. Balanced inputs. USB. Home theatre bypass.

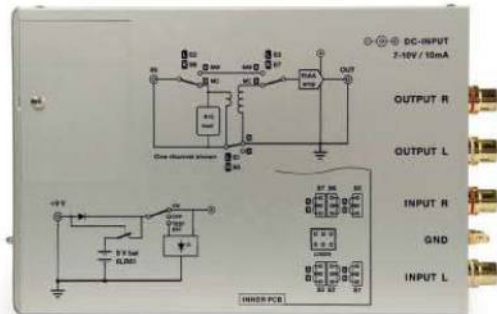
M6CD/DAC

24bit/192k true upsampling CD player. 3 digital inputs.

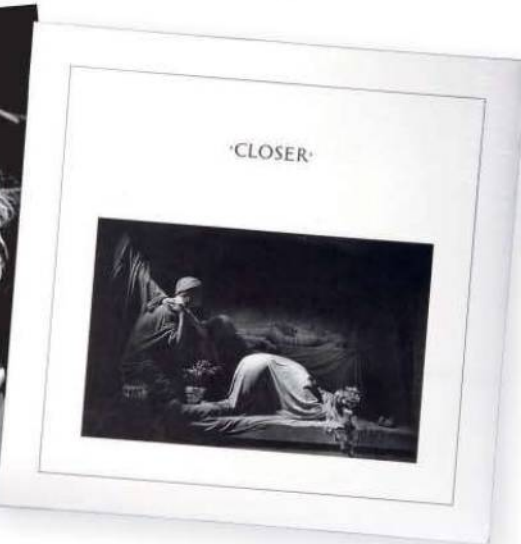




ABOVE: HDMI 1.4 and seven channels of ICEPower lie inside Pioneer's very latest AV receiver. Turn to p48 for a tour of its features and performance



LEFT: Nagra's pocket-sized, battery-powered MM/MC phono stage is reviewed on p52



VINYL: Patti Smith's *Horses* is our Vinyl Icon (p68) while we discover the personal story behind Joy Division's re-released *Closer* on p66

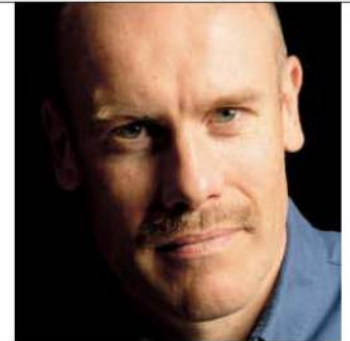
Video may have killed the radio star, in some quarters at least, but analogue FM is certainly alive and kicking in your favourite hi-fi mag this month. We set Steve Harris on the trail of the long-awaited 'analogue switch-off' only to discover the (last) government's schedule is not going precisely to plan. If this means we can all wait a little longer before being obliged to endure excruciatingly low-bit rate digital radio, then you'll find no dissent here. You can read our in-depth Investigation starting on p14.

As if to confirm that FM radio is not going anywhere anytime soon, you might be surprised to find just how many hi-fi tuners are still available and how many new models are being quietly launched into the market. So we

'You'd be surprised how many FM hi-fi tuners are still being launched'

decided to scan the airwaves ourselves and collect five of the finest affordable AM/FM separates for this month's group test (p39). For many enthusiasts this could be the perfect opportunity to re-engage with a unique source of live music.

Modern tuner front-ends offer higher sensitivity than ever but there's still no substitute for driving your radio from a decent external aerial. A length of damp string will only get you so far – rather like using a £5 MM pick-up



on a high-end turntable. As ever with our passion, it's always possible to go to extremes.

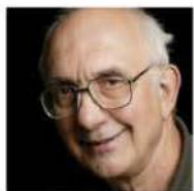
The most fundamental tuner upgrade I ever made was 25 years ago when I had a massive Galaxie 17 FM rig anchored to my roof by Ron Smith Aerials. Offering a useful 15-16dB gain but highly selective, this rig really came into its own when we installed an electric rotor linked

to a compass in the listening room. This was the ultimate radio gadget – just sit back and dial-up your choice of transmitter with pin-point accuracy. Classic tuners from Sequerra, Revox and Marantz had never sounded so good in my room.

If you are interested in the very best 'twigs' then visit www.ronsmithaerials.com. And while you're there, please ask how to keep the pigeons off...

PAUL MILLER EDITOR

HI-FI NEWS' EXPERT LINE UP: THE FINEST MINDS IN AUDIO JOURNALISM BRING THEIR EXPERIENCE TO BEAR ON ALL AREAS OF HI-FI & MUSIC



BARRY FOX
Investigative journalist supreme, Barry is the first with news of the latest developments in hi-fi and music technologies



JOHN BAMFORD
JB brings huge industry experience, a penchant for massive speakers and a love of hi-res audio in all its diverse guises



KEN KESSLER
is currently our Senior Contributing Editor and almost singularly responsible for the renaissance in valves and 'vintage hi-fi'



KEITH HOWARD
has written about hi-fi for 30 years, and edited *Hi-Fi Answers* for nine. KH performs our speaker and headphone lab tests



STEVE HARRIS
Former Editor of this very title from 1986 through to 2005. A lifetime in audio and a love of jazz makes Steve a goldmine



JOHN HOWES
Foremost collector and archivist of vintage hi-fi, famous for the UK's bi-annual Audio Jumble, John shares his experience with *HFN*



STEVE SUTHERLAND
Worked on *Melody Maker* and then edited *NME* from 1992-2000, the Britpop years. Steve brings a unique slant to our Vinyl Release pages

FURUTECH

Pure Transmission Technology

*Refinement has a new name...
Debuting Furutech's Top-of-the-Line Flux Cable Series*

Flux Cable Series



Speakerflux



Lineflux (XLR)



Lineflux (RCA)



Powerflux-18UK

Furutech α (Alpha) OCC Pure Transmission conductors terminated with beautifully-engineered high-performance rhodium-plated connectors. The substantially-built extremely nonresonant connector bodies are finished in layered carbon fiber and non-magnetic stainless steel providing improved mechanical damping for greater resolution, clarity, and powerful dynamics.



Jumperflux-S



Jumperflux-B



Flux-50 filter

Furutech High End Performance Connectors

FI-50 (R) Piezo Ceramic Series IEC Connectors



Carefully chosen and tested "active" materials mechanically and electrically damp Piezo connectors as they "interconvert" thermal, mechanical, and electrical energy for the finest Furutech Pure Transmission signal imaginable.



FP-1363-S FP-1363-D

High End Performance BS-1363 wall sockets with Pure Copper conductors. Rhodium or Gold plated.



FI-UK1363 (R) FI-UK1363 (G)

High End Performance UK mains plug, straight or angled.



FI-8N (R) FI-8N (G)

High Performance C7 IEC connector Make a More Powerful Connection with Furutech!

Make a More Powerful Connection with Furutech!



Sound Foundations

25 New Road, Blackwater
Camberley, Surrey, GU17 9AY Great Britain
Tel : +44(0) 1276 501 392
info@soundfoundations.co.uk

Furutech Co., Ltd. Tokyo Japan

service@furutech.com www.furutech.com

CONTENTS

SEPTEMBER 10

VINYL & RECORD REVIEWS

- 64 Vinyl Frontier**
Chris Heard of Classic LPs brings you the best of the new re-issues and re-releases on premium vinyl
- 66 Vinyl Release**
Ex-NME editor Steve Sutherland revisits Joy Division's *Closer*, available as an LP for the first time in 10 years – and on 180g vinyl
- 68 Vinyl Icon**
Patti Smith's *Horses* topped the NME's list of '20 Near-As-Damn-It Perfect Initial Efforts'. Chris Heard has the story behind its making
- 74 Music Reviews**
Our selection of audiophile LP and digital releases reviewed by our specialists alongside the latest rock, jazz and classical albums

DEFINITIVE PRODUCT REVIEWS

- 22 Wadia 151PowerDAC mini**
Not just a DAC but an integrated amp too, and the perfect for match for the company's 170iTransport
- 26 Avid Acutus Reference SP**
The deck that launched the brand 12 years ago now gains SP status thanks to a new power supply
- 30 Croft Series 7**
Croft is back with a stripped-down stereo power amp employing MOSFETS married to a single valve
- 34 Heco The Statement**
Forgiving of rougher recordings and boasting a big spacious sound, this flagship is high on value
- 39 Group Test: Analogue FM tuners £200-£650**
With no firm date set for the big analogue switch off perhaps now's the time to enjoy the tried-and-tested sound of FM radio. We put five mid-priced tuners to the test
- 48 Pioneer SC-LX83**
Pioneer takes on a tough market with an AV receiver now boasting



Patti Smith

- 52 Nagra BPS**
Compact phono stage that's an ideal add-on to the PL-L preamp – but check it's a match for your cartridge!
- 56 Restek MPre+/Mamp**
Another mini-sized marvel, this time in the form of a fully-functioning preamp and matching monoblocks
- 60 Harman Kardon GLA-55**
Outrageous looks perhaps, but when it comes to pure sound quality these high-end PC desktop speakers impress

VINTAGE

- 108 Vintage Review**
How does the classic kit of yesteryear measure up today? This month it's an all-time British classic on test – the Radford STA 15 Series 3 power amp
- 114 Audio Milestones**
Like the LS3/5A, Spondor's BC1 was designed to meet BBC standards. Yet it was to prove even more influential over the decades that followed

NEWS AND OPINION

- 06 News**
Sonus faber launches limited-edition flagship speaker; Anthem's high-end preamp/AV processor; Italy's Ktema loudspeaker; plus new phono stages from Sutherland and AMR

- 10 Show Blog**
Ken Kessler roots around the stalls of a vintage audio event in Bracknell and finds rare classics among more modern secondhand electronics
- 14 Investigation**
Will it be 2013, 2020 or beyond? Steve Harris seeks some answers as to the date when the UK's analogue radio signal is to be switched off
- 91 Opinion**
Insider comment on the hot audio topics of the day from Paul Miller, Barry Fox, Jim Lesurf, Steve Harris and, writing from the US, Barry Willis
- 101 Sound Off**
Letters from our mailbox, including talk of a US turntable idler drive, praise for SACD, a Naim confusion explained and LP cleaning machines
- 138 Off The Leash**
'Hello, my name is Ken Kessler. I'm an anachronism...' Vinyl and valves tossed into landfill have KK pondering the passage of time

HI-FI PEOPLE

- 84 Hi-fi @ Home**
This month it's hi-fi Hong Kong style with limited-edition Marten speakers, Soulution electronics and a cherished, original Linn LP12



ABOVE: Analogue FM tuner group test, p39
BELOW: Hi-fi @ Home – the art of sound, p84



RIGHT: 'Simple to use and a clear, engaging sound'. Restek makes its mark with this pint-sized pre/power combo. See p56...



Sonus faber Fenice

VENICE LAUNCH FOR ITALIAN FLAGSHIP SPEAKER DESIGNED TO REDEFINE HIGH-END PERFORMANCE



While the grandeur of a world launch does not necessarily correlate to the importance of the product, in the case of Sonus faber's new flagship, the pomp was warranted: Fenice signals a new era for Italy's most influential speaker manufacturer. Its name means 'Phoenix', though the company has *not* arisen from any particular pyre.

Rather, the setting for this break from the past was the arrival in 2009 of a new CEO, Mauro Grange, who brought with him a concept of scale usually denied the world of high-end audio. What he unveiled is a state-of-the-art floorstander of which only 30 pairs will be produced.

At the Palazzo Grassi, a suitably elegant art gallery, an audio/video presentation preceded the unveiling of a model that continues a Sonus faber tradition, in that it heralds a new shape. Its cross-section is that of a lyre, just as the Guarneri and Amati were inspired by the lute.

The form incorporates dual curvatures in a carcass made of cross-grained, double-thickness, marine-grade plywood. The enclosure is decoupled from the floor through a complex suspension with resonances controlled by the 'Anima Legata' system. This consists of two massive, CNC-machined aluminium clamps that form the speaker's top and bottom, connected by a steel rod called the 'Soul Pole'. This 'concentrates the vibrations to the Multiple Tuned Mass Damper' – another device used to dampen structural resonances, by oscillating in anti-phase.

Described as a 3.5-way system, Fenice employs a 25mm hybrid Neodymium/Samarium-Cobalt Larsen/Goeller ring radiator tweeter, visco-elastically decoupled from the main baffle. This is attached to a natural wood labyrinth rear chamber, with a mechanical anti-resonator. Middle frequencies are covered by 6.5in cone driver with 1.5in voice coil, the cone fashioned from traditional cellulose pulp with papyrus and other natural fibres. It is driven by a Neodymium magnet system, and its basket is fully CNC-machined from solid billets of



two different metals. The combination of the metals allows the chassis to cancel out any mutual resonance. As with the tweeter, the mid is decoupled from the main baffle.

Low frequencies are handled by two sandwich-coned 10in woofers made up of a high-tech syntactic foam core covered by coated cellulose pulp skins, to provide the same sonic characteristics of the midrange cone. The woofers are augmented by a side-firing 15in bass driver, also using a sandwich structure, but with skins made of nano-carbon-fibre on the syntactic foam core.

At the rear is the Sound Field Shaper, which looks like someone fitted a small two-way Sonus faber model to the back. It controls the direct/reverberant radiation of Fenice, and the module can be adjusted for both azimuth and SPL. Its tweeter is a ring radiator dome derivative, with the 'peculiarity of optimized off-axis radiation.' A crossover similar to that of the Cremona M and Liuto range matches it to a 4.5in mid-woofer. Its cone uses the same paper pulp/papyrus/natural fibres as the front mid.

And why would Sonus faber hold such a huge event for a speaker that will only be offered to 30 clients? A brief demonstration showed it to be world-class, even with unfamiliar material. And a private conversation with CEO Grange revealed that it will be followed by a family of models using the same technologies... at lower prices.

Absolute Sounds Ltd,
0208 871 3909
www.sonusfaber.com

Sutherland Phono

SUTHERLAND ENGINEERING LAUNCHES NEW 20/20 PHONO PREAMPLIFIER

'Everyone wants the advantages of AC power line isolation offered by battery operation,' says Ron Sutherland of Sutherland Engineering, 'so the 20/20 is for the person who wants those advantages, but does not want to mess with batteries.' In practice, this new phono stage is derived from the best of its Hubble and battery-

powered Ph3D phono stages [HFN, April '10], designed as two entirely separate mono preamps in one box. The 20/20 features two power supplies, each with 11 electrolytic reservoir capacitors, and even two IEC mains inlets – this is dual mono *in extremis*.

The RIAA section of the 20/20 is based on the Hubble

and offers a combination of switchable gain (40dB, 46dB, 52dB, 58dB and 64dB) together with 100ohm, 200ohm, 475ohm, 1kohm and 47kohm loading modules to suit a wide variety of MM and MC pick-ups. Price Stateside is \$2200.

The Musical Design Company, 01992 573030; www.sutherlandengineering.com



HI-FI NEWS' NUGGETS

SCIENCE OF SOUND

To highlight its 'scientific approach to research, testing and product development', Harman Kardon has launched a new website, see www.harmankardon.com/scienceofsound

MUON SELLS OUT

KEF says that its iconic flagship loudspeaker, the 2m-high Muon, launched in Aug 2008, has now almost sold out and only a few of its original limited edition 100 pairs remain [HFN, May '08].

AMR GOLD FUSES

Premium gold/silver alloy fuses are available from AMR at £30 for a box of three. www.amr-audio.co.uk

Ktêma sets sail

ANOTHER ITALIAN FLAGSHIP FLOORSTANDER...

Five years after departing from Sonus faber, the company he founded back in 1983, Franco Serblin is back with a new loudspeaker under the banner 'Ktêma'. According to Serblin, who has been closely involved with Yter cables in the interim, the project occupied him 'for several years, an original concept based on a design that has been registered since 2008.' Its form is said to create sound that approximates that of a classical proscenium.

The Ktêma is a four-way, five-driver floorstander measuring 25x560x1110mm. Bass comes from two custom-made 9in metal cone woofers which are compression-loaded and room-interfaced at the 28mm soft-dome tweeter and two custom-made 4in mids. All internal wiring is by Yter.

The shape is curvy and elegant, with an ultra-narrow baffle flaring to a wide rear section. The speaker will be priced in the region of £25,000.

Franco Serblin,
+39 (0)444 240475
www.francoserblin.it



Musical Fidelity AMS100

'MOST ADVANCED' CLASS A AMPLIFIER ANNOUNCED

Building on the successful and fully balanced circuit design of its AMS50 Class A power amplifier, Musical Fidelity has upped the ante still further with a truly massive 100W version in the AMS100. Seen here tastefully modelled alongside Sandy in the MF loading bay, this gargantuan amplifier features separate power supplies for each half of the bridge. Each supply benefits from a dedicated 'dual bifilar' choke regulator and 16 reservoir capacitors – that makes 32 per stereo channel.

Named after MF's founder, this flagship of the Antony Michaelson Signature series is rated at 100W/8ohm and 200W/2ohm with 'ultra low distortion' from 20Hz-20kHz. Weighing in at 100kg, the AMS100 comes with its own wooden crate. 'We don't expect to sell many' AM told *Hi-Fi News* although at a not-inaccessible-to-all £13k, the AMS100 may attract more audiophiles than MF suspects.

Musical Fidelity,
0208 900 2866
www.musicalfidelity.com



pass



How Much Class A?

Our meters don't go to zero like other meters. They show the current draw of the amplifier's circuit, which has a fixed minimum known as the bias. When the meter isn't moving, you are in the Class A region. When the meter moves, you have moved into Class AB.

Class B circuits have no bias current, and they enjoy severe distortion due to the abrupt transition between the positive and negative halves of the output stage. Class A circuits run so much bias current that they have no transition, but they run hot as hell. Class AB amplifiers are a compromise, where a moderate bias current smoothes the transition, and they operate in Class A until the output current exceeds twice the bias current.

How much bias do you want? As much as you can get. The amplifier's distortion is inversely proportional to the bias current. Most Class AB amplifiers operate as Class A for a small fraction of a watt. At Pass Labs, the least of our amplifiers operates Class A to 15 watts, and our biggest amplifier peaks the 400 watts in Class A.

And that's why our meters don't go to zero.

If you would like to know more, Nelson has written a detailed article on the subject of bias at www.passlabs.com

AE's new Neos

UPDATED STANDMOUNT AND FLOORSTANDER

Revised crossovers, drivers and a more contemporary finish all lie behind this re-launch of the Neo speaker series from Acoustic Energy. The Version 2 range remains very affordable indeed from the standmount Neo V2 One at £219 through to the floorstanding Neo V2 Three at £399, all benefiting from high quality polypropylene capacitors and air-cored inductors in their crossovers plus a 'rounded' cabinet design.

The Neo brand takes its name from the Neodymium magnet assemblies used to power all the bass/mid and treble units in its range, assemblies that are further beefed-up in this V2 series. So while the bass/mid units have also been cosmetically enhanced, their longer throw and open chassis design is said to stretch their bandwidth by another half octave over the original models.

The series is complemented by the sealed-box Neo sub, priced at £399 and featuring a 220mm driver and 200W amp. **Acoustic Energy, 01285 646586**
www.acousticenergy.co.uk



Legacy phono amp

NEW HIGH-END PHONO STAGE WITH 'OPTIEQ'

Perhaps the ultimate in backwards compatibility for vinyl lovers, AMR (Abbingdon Music Research) has, following a lengthy period of R&D, announced its PH-77 phono equaliser. This product features two valve gain stages sandwiching an all-passive record equalisation. The gain stages use a mix of new old-stock Mullard ECC81/12AT7 triodes with a Philips 5687WB while the equalisation is not simply 'RIAA' but a combination of 22 different EQ curves.

Catering for almost every popular historical vinyl format, the different curves may be dialed-up by remote control according to the legacy of the vinyl disc. Among the

replay curves/eras supported, AMR lists the original Mercury 'Living Presence' series (Decca EQ), the original Miles Davis records (Columbia EQ) and the original Deutsche Grammophon Classical records (Decca EQ).

Jazz fans will be delighted with its support of Verve Jazz records, with performers like Charlie Parker, Count Basie, Ella Fitzgerald, Nina Simone, The Righteous Brothers and The Dave Brubeck Quartet all appearing on vinyl cut with Columbia & AES EQ.

Available now, the price of this vinyl tour-de-force is an equally heady £7995.

Abbingdon Music Research, 0870 420 5505
www.amr-audio.co.uk



AV 'Master' from Anthem

STATE-OF-THE-ART PREAMP/PROCESSOR FOR TOP-END CINEMA

Following in the footsteps of the EISA Award-winning D2v processor comes the Audio/Video Master 50v – no less comprehensively specified, and certainly no shorter on buttons! A grand total of £5999 buys you a full 7.1 channel AV processing solution with eight HDMI inputs, broadcast-quality video handling (from a Sigma Designs VXP chipset), Dolby and DTS HD audio decoding plus Anthem's proven Room Correction regime.

This hugely sophisticated design employs six- and eight-layer PCBs for the DSP, A/D and D/A sections along with a total of 14 independently regulated power supplies. A total of eight 192kHz-capable DACs drive the analogue outputs, the main L/R stereo channels also being available via balanced XLRs. Driving the AVM50v is assisted via a dedicated on-screen menu and full remote control.

Anthem AVS, 01825 750858
www.anthemavs.co.uk



HI-FI NEWS? JUST ASK...

If you can't always find a copy of this magazine, help is at hand! Complete this form, hand it in at your local store and they'll arrange for a copy of each issue to be reserved for you. Some stores may even be able to arrange for it to be delivered to your home. **Just ask!**

Please reserve/deliver my copy of **Hi-fi News** on a regular basis, starting with issue.....

Title.....First name.....

Surname.....

Address.....

Postcode.....

Telephone number.....



IF YOU DON'T WANT TO MISS AN ISSUE...



Upcoming Events

IMPORTANT DATES FOR YOUR HI-FI DIARY

- 3-8 SEPT** IFA 2010, Berlin Messe, Germany
www.ifa-berlin.de
- 25-26 SEPT** Audio Show 2010, Silverstone, www.chestergroup.org
- 10 OCT** Audiojumble, Angel Leisure Centre, Tonbridge, Kent
www.audiojumble.co.uk
- 16-17 OCT** Sound & Vision Manchester 2010
www.manchestershow.co.uk

Audio Fayre Bracknell 2010

Words & pictures: Ken Kessler



This one had plenty of us scratching our heads, a super-clean Micro-Seiki Solid-1 belt-drive deck, until its vendor pointed out that the plinth was custom-made. This handsome LP spinner features a 4-pole synchronous motor offering 33.3 and 45rpm, the platter is 30cm die-cast aluminium and the arm is a no-brainer to set up. It was priced around £250.



One of two Nagras that appeared, this well-used but clean Nagra III open-reel monophonic portable was up for grabs for only £390. At that price, it was worth buying as a working model or if only for spare parts, with even the dust cover in pretty good nick.

Small it may have been, but the first Thames Valley Audio Fayre in Bracknell was bursting with desirable kit. More than once I regretted lacking the funds/space to take advantage of some rarely-seen treasures, especially a pair of AR-4xas, a JBE turntable and a pair of Tannoy Berkeleys.

As with anything related to antique hunting, there's a moral to the story: never skip a show – however remote or obscure – if you're an inveterate hunter for the esoteric. Every table held a

treasure or two, from a superb Sugden pre/power combination to an ultra-rare professional monoblock from Amcron (aka Crown). Yes, there were plenty examples of the usual suspects, including enough Rogers, Quad and Leak to keep Anglophiles happy, but I also espied a rare ADC turntable, a Fergus Fons, a handful of interesting tonearms – even a new Chinese valve amp I'd never spotted at a conventional hi-fi show. For future dates, see www.thamesvalleyaudiofayre.co.uk.



A smattering of American classics turned up at Bracknell, including this beauty, which I wish I had grabbed: a Rappaport PRE-1A preamp. This was one of the hottest audiophile products in the USA in the 1970s, and it turned out to be the bargain of the show at a meagre £160! This was the two-chassis edition with outboard power supply, by-passable filters and tone controls, phono stage and inputs for two tape decks.



I may be wrong, but I think the 20A was the last open-reel tape deck made by Tandberg. It was certainly one of the nicest domestic decks with a mode that allowed you to enter 'record' without having to hit 'play' and 'record' together.



Aaah, vintage Sugden! This is the P51 power amp with control unit, the latter providing phono, switchable filters and various mono settings. Note power amp accepts DIN inputs, can be mono'ed and feed slave amps. Minimalism? Feh!

SHOWBLOG First sight of new products & technology



Someone got seriously lucky: if I'd had the space and the cash, I'd have snapped up this pair of very clean Tannoy Berkeleys from the mid-1970s, with their cabinets and grilles in very good condition. Within are HPD-385A dual concentric drivers, above a pair of ports hidden by the lower grilles. At 33x21x12in (hwd) and weighing 90lbs each, not exactly what you'd expect to pick up as a casual purchase, but whoever did grab 'em acquired a classic pair able to do justice to any current electronics.



Amcron was the UK name for US high-end amp maker Crown, and this is its giant-killer M-600, a 600W monoblock. Alas, there was only the one on sale at the Fayre, but someone walked away with a killer centre-channel amp, or the heart of an amazing mono system!



Radford's wonderful 'period' SC24 control unit employed sliders to handle bass, mid, treble, balance and volume level. Press buttons dealt with the selection of five sources, the adjustable filters, mono plus L-only/R-only, and mute for using headphones via the 1/4in socket.



Here's the PS-1 power supply to the Rappaport preamp pictured on P10 – itself quite rare as the preamp could also be purchased with on-board P/S. The rear features power-out to preamp, power out to an MC step-up and aux sockets for other components.



For £15, I should have grabbed this rarity, regardless! The Napolex QA-10 Quadraphonic Adaptor allowed users to add a second pair of speakers for surround sound duties while switching allowed a choice between stereo and 4-channel 'surround' or 'hall', with the rotary setting the rear levels.

Coherent

Systems: *bringing it all together - for you!*



Cabasse Artis
La Sphère

Cabasse Artis
Karissima



Cabasse Artis
Baltic Evolution

Cabasse

ORACLE AUDIO

Introducing the new *Black Ravioli*

BIG FOOT

The ultimate in isolation





More rare Americana, a pair of DCM Time Frame TF-350 loudspeakers, smaller sisters to the iconic Time Windows. These were floorstanders sold in mirror-image pairs, with each enclosure containing a 6.5in woofer and 3/4in tweeter, in a chassis standing 38in tall, with a footprint of 15x6in. Part of the design included foam covering for the surfaces beneath the cloth pullover sleeve. The DCMs were known for their freedom from boxiness, and £110 for the pair seemed like a painless punt to me! (I'd have loved to match them with the Rappaport...)



An unused pair of Lowther drivers is enough to cause palpitations amongst any gathering of anachrophiles with a penchant for DIY cabinetry, as did the UK-made horns seen at Bracknell. Shown is one of two still-in-the-box, utterly new and virginal PM2Cs, an 8ohm model good for 98dB/1W!



One of the most controversial turntables of the Great Turntable Wars of the 1970s and 1980s, this direct drive JBE featured a slate plinth and silent running. The model on offer had an SME cut-out and a price of only £250. Its condition was excellent, with even the dustcover being in great shape.



Well-worn as far as the cosmetics go, but no-less desirable for it, was this Revox PR99 III, at a silly £200! Fully serviced, so it was not being sold 'just for spares', the PR99 represents to some the pinnacle of Revox's open-reel tape decks: full logic control, arguably the safest tape handling of any semi-pro machine and proper microphone facilities and cueing so precise that you'd swear it was digital. Along with the Fayre's other Revoxes, Nagras, Tandbergs, etc, and a table selling spares such as 10in spools, and blank and 'slightly used' tapes, are these more evidence to herald an open-reel tape deck revival?

Next
month

We reveal the winners of
the EISA Awards 2010-2011

The analogue switch-off

So, when is it *really* going to happen? Steve Harris seeks some answers...

TOP RIGHT: An oldie but a goodie – the DaySequerra FM Reference tuner from 1991. But when exactly will the UK's FM service be switched off, rendering all analogue tuners redundant?

RIGHT: The first DAB hi-fi product arrived in the autumn of 1998 in the form of Arcam's Alpha 10 DRT tuner. It cost £800

It's hardly to be compared with pernicious private pension plans or evil endowment policies, but the launch of DAB digital radio did involve the teeniest bit of 'mis-selling', or at least overselling.

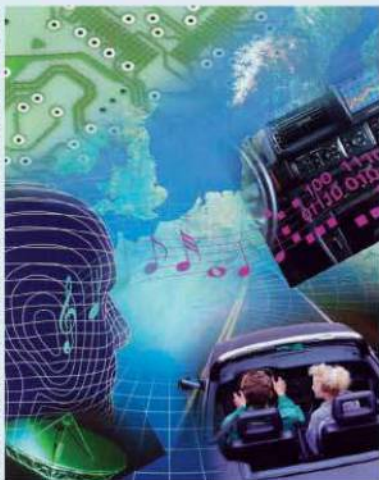
Digital Audio Broadcasting was officially launched in the UK in 1998, with the promise of 'CD sound quality', better reception than FM whether in your car, in your living room or even in the shower, more stations to choose from, and extra features even extending to video content. We weren't exactly promised 'perfect reception forever', but that was the message.

Now here we are, 12 years on, with DAB still used by only a small fraction of the total UK radio audience, with its sound quality generally compromised by lower bit rates, its coverage still not matching that of FM, and reception problems by no means completely banished.

If you are an analogue enthusiast, no-one can stop you listening to your own LPs. But the government does have the power to stop us, sooner or later, listening to national stations on analogue radio.

EUREKA MOMENT

But to begin at the beginning. Eureka-147, a Europe-wide consortium of manufacturers, network operators and research institutions, with governmental support, was established in 1987, with the BBC among its founder



RIGHT: Promo leaflet from Eureka-147, a Europe-wide consortium established in 1987 to develop a specification for DAB. It was this specification that was adopted as the world standard in 1995



members. Eureka-147 developed a specification for DAB, which was standardised by the European Telecommunications Standards Institute in 1994, and approved as a world standard in 1995. Like other post-CD digital audio and video systems, DAB made use of a clever lossy-compression or data-reduction coding and decoding scheme (codec) to reduce the amount of data that had to be transmitted.

In this case, the codec was MP2 (or MPEG-1 layer II), which had been finalised in late 1991. All such 'perceptual coding' schemes rely on the fact that some elements of the audio signal can be omitted without this being audible to the listener. In practice, the perceived sound quality will be improved or degraded in accordance with the chosen bit-rate. This would become a major bone of contention later, when broadcasters used much lower bit-rates than the 256kbit/s regarded as desirable.

BBC test transmissions started in September 1995, and commercial stations, including Classic FM and Virgin, conducted DAB trials during 1996 and 1997.

By spring 1998, the BBC was able to claim that its terrestrial

transmitters gave DAB coverage for 60% of the population, with coverage of the main motorway routes. This was important, as in-car use showed the biggest benefits. DAB could save motorists having to retune while driving, also potentially providing extra information services and navigation assistance.

UK LAUNCH

At the launch press conference in the July, the BBC's Director of Radio, Matthew Bannister, introduced representatives of Blaupunkt, Clarion, Grundig, Kenwood and Pioneer, each with a real in-car DAB product. Clarion had a complete £999 DAB radio ready to fit into the standard dashboard cut-out, while the other four provided add-on DAB boxes costing £500 or more.

Then came the first DAB hi-fi products. In the autumn of 1998 Arcam announced its Alpha 10 DRT tuner at £800. This was the first fruit of Arcam's collaboration with Roke Manor Research, a UK development company controlled by Siemens. In the heat of competition, Arcam was almost pipped to the post by the small Cymbol company, which based its £899 C-DAB-i tuner on a Grundig DAB module. Yet after

the launch, digital radio stagnated for a year or two. A few pricey hi-fi tuners and a handful of esoteric car radios weren't going to help DAB become mainstream, let alone replace FM. Public attention had turned to the much bigger issue of digital television, and digital radio was often misunderstood, ignored or simply forgotten.

PURE GENIUS

It was rescued from these doldrums by the efforts of one manufacturer, which quickly became the market leader. The UK's first commercially-available portable digital radio came from Pure, which had previously marketed its DAB radio tuners under its old Videologic name. Then, in 2002, came the truly epochal Pure Evoke-1, the first DAB radio to sell at under £100. And it really did sell, too, through outlets ranging from Argos to John Lewis to Harrods as well as audio dealers. Finally, DAB had reached a wider public. Digital radio sales for 2003 were said to be 444% up on the previous year.

Pure's price-breakthrough products opened up the market and also showcased the technology of its parent company. Pure is a division of Imagination Technologies, which develops and licenses System-on-Chip intellectual property. Imagination itself works in partnership with semiconductor supplier Frontier Silicon, founded in 2001. The single-chip DAB/audio processor first used in the Evoke-1 was supplied by Frontier and based on Imagination's intellectual property. Since then, Frontier has become the main supplier to consumer electronics brands that need a DAB solution.

Although DAB home radio sales continued to grow, DAB showed no

sign of taking over the in-car market as its proponents had hoped. There was a *Catch-22* situation here. Without a big installed base of DAB car players, it wasn't possible to contemplate switching off FM. But without a firm switchover date, car manufacturers were reluctant to fit DAB to new cars instead of FM.

In the end, most people's awareness that FM really could be switched off in their lifetimes began in July 2007, with the press reporting of a speech at the Radio Festival, Cambridge, by Ed Richards, chief executive of the radio and telecomms regulator Ofcom.

At pains to emphasise the need for consultation, and the dangers of trying to switch off FM too quickly,

or conversely of ending up with a 'hodge podge of analogue and digital for decades to come,' Richards pointed out that

a 'pre-condition to any road map will be the alignment of the end dates for existing FM licences,' and said that Ofcom had suggested 'an FM review in 2012.'

Richards also referred to the burdensome cost of dual transmission and to 'the lack of a shared understanding about the future, which is reducing the incentive of individual groups or stations to make the transition to digital services knowing that others are not necessarily committed to doing the same.'

Richards' speech is quoted in full on the website www.digitalradiotech.com, along with the ensuing headlines, including '150m radios face being switched off for good' from *The Times* and the *Telegraph's* 'Drive hastened to switch off analogue radio.'

But a definite statement of intent came with the Government's

'Could it really happen by 2015? A debate began...'



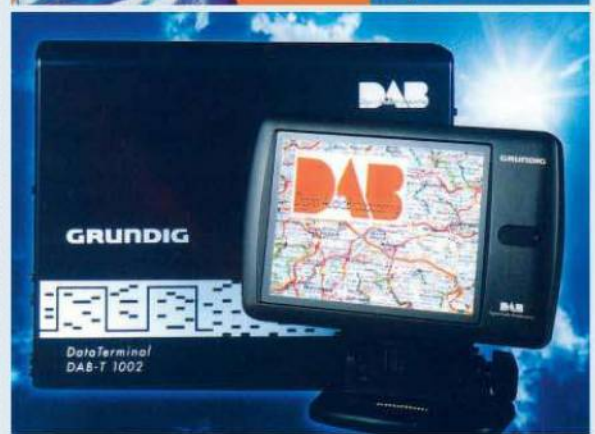
The BBC's leading the way

The BBC has always taken a leading role in the advance of radio and is committed to pioneering digital radio development. We began transmitting Radio One, Two, Three, Four and Five Live digitally in September 1995. By the end of spring 1998, 60% of the population will be able to enjoy BBC digital broadcasts.

The UK's main motorways and major cities in England, Wales, Scotland and Northern Ireland will be covered by the end of spring 1998.

Digital also allows the BBC to serve listeners better by introducing new and exciting services. We have more plans to bring you what you've told us you like best: more sport, more music and more news.

UK DAB Coverage Spring 1998



TOP: BBC DAB brochure from early 1998 announcing that 60% of the UK population would be able to receive DAB broadcasts by the end of spring that year

ABOVE: Early prototype DAB receiver with full-colour screen. A fully integrated system was envisaged, where DAB traffic information would inform the instructions given by the navigation system

LEFT: Despite talk of an analogue switch off, many companies still offer FM tuners in their range. Here Myryad's £450 Z132 sits atop Arcam's £600 T32. Turn to p39 for more

Digital Britain white paper in June 2009. This proposed that national radio stations should be DAB-only from 2015, and continued: 'To that end, the Government is looking to the BBC to extend national DAB coverage so that it is at least comparable to FM radio coverage, and to the supply chain to deliver a range of DAB radios at the key sub-£20 price point that makes swap-out economic.'

THE DEBATE BEGINS

With the Digital Economy Bill, passed by Parliament in March this year, many of the proposals in *Digital Britain* gained legislative substance. There followed more intense media coverage of the issue, mainly voicing opposition to switching off FM. And debate began over whether it really could happen as early as 2015.

In May this year, Pure launched its own downloadable 'FAQ' guide called *Digital Radio Switchover - Your Questions Answered*. Naturally, the first answer succinctly explained the Government's intended 2015 switch-off date:

'It is planned that digital radio switchover will take place no less than two years after certain criteria have been met. The criteria are: National digital radio coverage to match FM coverage; local



INVESTIGATION

digital radio to reach 90% of the population; 50% of radio listening to be on digital platforms.

'The *Digital Britain* report gave an aspirational date of 2013 for meeting these criteria. The exact date that the criteria will be met is not certain at this point and plans are being put into place by the radio industry led by DRUK (Digital Radio UK) to accelerate the meeting of these criteria.

'However, even after upgrade, FM will continue to be used by local and community stations.'

TWO QUESTIONS

Asked if he'd add anything to this in the light of the continuing controversy, Pure's marketing director, Colin Crawford said:

'There is one thing I would add. There's been debate in general, in the press and even among some of our competitors, talking about "the date" for switchover, saying 2015 is not achievable and so on.

'From my side, I think that responsible manufacturers need to be very, very clear to both their retail partners, and to consumers where they can. Not talking about the date, because the date is



'DAB+ has raised further questions...'

irrelevant to be honest. The key issue is not when it will happen, but the fact that it will happen. And that, it seems to me, is what is not really coming through.

'People aren't being clear that it will happen, they are just creating confusion about when.

'How I get there, and I've had this discussion with key broadcasters, and there's agreement, is that you ask yourself two questions.

'The first question is, does radio have a future if it stays analogue in a digital world? Will it stay vibrant, will it live or will it slowly die? And the answer is, that if it doesn't go digital, it will slowly die. So if you answer that question correctly, the next question is, is there any other

way to deliver radio, other than DAB?

'And yes there is, there is IP. But can you deliver radio solely through the internet? The answer

is very definitely no. Technically, it's just not feasible to deliver that quantity of data to those millions and millions of people over IP.

'The capacity isn't there, and it's also a massively inefficient way to deliver streamed audio. IP is there, absolutely, for on-demand and interactivity. But you need a digital backbone to do the mainstream delivery. We're massive supporters of the hybrid future, but it will be hybrid, not IP only.

'So, it has to go digital, IP can't handle it, it's got to be DAB. So, yes, the switchover has to happen. 'And the minute you get to that, really it's our responsibility to make that clear – because people are going out and buying radios, and if anyone is persuaded by arguments in the press or anywhere else that it might not happen, we'd be doing them a disservice if they buy an analogue radio. People expect a radio to last for ten or 20 years. And so in the lifetime of that radio, something's going to go.'

But from Professor Alwyn Seeds, head of Electronic and Electrical Engineering at University College London and an erudite observer of the broadcast technology scene, comes a rather less upbeat view.

'I think the driver for FM switch-off is that DAB has been fairly unsuccessful, and the industry – or



ABOVE: Pure's Evoke-1 from 2002, the first DAB radio to sell at under £100 and the product that kickstarted the public's interest in DAB

at least those bits of it that have invested in the infrastructure – would like to get something out of it. I think the idea is that by forcing everybody to have DAB, the commercial attractiveness of DAB, the commercial DAB stations, will have some value again, because everybody will have a DAB receiver.

'And of course the problem with DAB is that coverage of DAB in buildings is poor. Most portables even in urban areas don't work well in parts of the house, whereas with FM, in most places at least it works, even if only in mono.

MORE TRANSMITTERS

'The only way to fix that is to build a lot more transmitter infrastructure for DAB, which is costly. I think that getting to the point that there'll be some place in many houses where you can get some reception, 90% by 2013 could be achieved. But in terms of providing the same kind of coverage you have with FM, I don't think it's likely at all.

'There's another point. Arqiva, which has a monopoly on terrestrial broadcast infrastructure in the UK, is busy rolling out digital TV, doing the digital switchover. They won't want to be messing with this until they've finished that job. What I expect is to see them finish digital switchover of TV, and then start on radio.

'And therefore I think in practice, the changeover will be extremely slow. Especially with the economy the way it is.

'I think the average person will get their radio off the internet. And of course that's the most energy-inefficient method of all. But that's what I think will happen.'

The emergence of DAB+, already adopted in some other countries ☺

LEFT TOP: Pure's marketing director, Colin Crawford – 'it has to go digital... it is our responsibility to make that clear to consumers... we'd be doing them a disservice if they buy an analogue radio'

LEFT: Prof Alwyn Seeds of University College London – 'in practice the changeover will be extremely slow. Especially with the economy the way it is'

A y r e

the missing link

The Ayre QB-9 digital to analogue converter, in combination with your personal computer, will transform your audio collection in to a new musical experience. Simply store CD's or high resolution downloads on your computer and enjoy the convenience of your entire music collection at your fingertips. You can even use your favourite music playback software to create personal play lists.

The QB-9 features proprietary asynchronous technology to ensure jitter free data transfer of your music files. Advanced opto-isolators provide complete separation of your computer from your audio system, resulting in exceptional sound reproduction.

The Ayre QB-9 brings you closer than ever to your favourite artists, changing the way you listen to music.

 symmetry

t: 01727 865488

e: info@symmetry-systems.co.uk

w: www.symmetry-systems.co.uk



and using a more modern and more efficient AAC codec instead of the old MP2, has raised further questions. There are no plans to introduce DAB+ to the UK, but in the longer term this must be seen as very possible. Many current DAB models and probably nearly all future receivers will work with DAB+ too. But older ones, probably most of the nine million DAB receivers said to be in use in the UK today, won't.

FURTHER QUESTIONS...

As for the sound quality argument, even Pure's Colin Crawford can sympathise with hi-fi enthusiasts who bought into DAB on the promise of better sound and then were disappointed, when it turned out that broadcast quality was being limited by low bit rates. He accepts that FM at its best can be hard to beat, but says that this will only be experienced by a small number of real enthusiasts who are prepared to take trouble with their equipment and aerial. For the mainstream, and even for the majority of hi-fi users who want a simpler installation, DAB provides a better solution, he maintains.

Meanwhile, Alwyn Seeds is critical of the current BBC quality, even on Radio 3 in either medium. 'Overall, I'm not sure which I prefer. Perhaps I vaguely prefer it on FM, compressed and grotty as it is!'

Ironically, his parting shot echoes exactly what the late Reg Williamson was saying so enthusiastically, when

writing in *Hi-Fi News* back in the 1990s, before terrestrial DAB had become a reality.

'I think that *Hi-Fi News* readers who want to hear good quality broadcast audio should invest in a satellite receiver and listen to what the other European broadcasters provide. Many of them broadcast in surround sound too.'

Arcam's founder John Dawson would be the first to point out that the first Arcam Alpha DAB tuner was a big team effort, but it was clearly his own personal enthusiasm and deep technical understanding that brought the project to fruition. In an interview a few years later, he revealed some disappointment that the quality potential of DAB was generally unrealised in the UK.

'Would we do it again? Knowing what we know now, and how the broadcast people would degrade the potential performance of the system with low bit-rates, I'm

honestly not sure. There are so many advantages to the system, that it's very frustrating when the quality gets thrown out to some degree

'FM at its best can be hard to beat'

by the pressures for programming and more content. If I were a broadcaster, I'd want more content too. But they didn't think this through very well when the system was introduced. It was designed to be very good quality, and it's much more spectrum-efficient than FM, but I suspect even if it was all changed again to go to a

ABOVE RIGHT: Arcam founder John Dawson has revealed some disappointment that the potential of DAB in terms of sound quality has generally been unrealised in the UK, highlighting low-bit rates as the reason



RIGHT: Online site Digital Radio Tech is a comprehensive resource for all things radio. Find it at www.digitalradio.tech.com



more modern codec which could cram more down the pipe, all that would happen would be that the broadcasters would reduce the data rate again, to get more variance of programmes down.'

WAVING GOODBYE?

None of this gives very much comfort to those who just want to go on listening to FM into their dotage, even though some pundits suggest that switchover will be delayed until 2020. We just don't know whether 'Save FM' protests will have any effect on our new government. We can't guess for how long the need to save money by not building new transmitters might outweigh the need to save commercial radio.

If the proposals for local radio are fulfilled, everyone can still make use of an FM radio as well. But no-one buys a Day Sequerra or Magnum Dynalab just to listen to a low-budget community radio station.

Online site www.digitalradiotech.co.uk aims to keep radio enthusiasts up to date with developments for the switch off. Meanwhile, if you're in the market for that 'final FM tuner', turn to p39 where we've five of the best current models on test. ☺

LEFT: Audiophile tuners and receivers still typically employ analogue FM rather than digital radio front-ends, as Magnum Dynalab's £5000 MD 209 illustrates





A class above

Prepare yourself for a giant leap in acoustic performance. The great sound upgrade starts this September.

www.kef.com

GP Acoustics (UK) Limited, Eccleston Road, Tovil, Maidstone, Kent, ME15 6QP U.K. Telephone: + 44 (0) 1622 672261 Fax: + 44 (0) 1622 750653



Jordan Acoustics

freephone:

0800 121 4771 / 4772

e-mail:

ask@jordanacoustics.co.uk

web:

www.jordanacoustics.co.uk



The most powerful integrated amplifier **mcintosh** has built to date

Designed to deliver a continuous 250 watts per channel, the massive MA7000 Integrated Amplifier is the most powerful integrated amplifier McIntosh has ever offered.

A properly designed Integrated Amplifier can offer many inherent advantages over a separate pre/power amplifier combination.

The MA7000 employs the famous McIntosh Autoformer.

Designed and manufactured exclusively by McIntosh, the Autoformer helps the MA7000 deliver optimum performance with any loudspeaker.

Whether your speakers are 2, 4, or 8 Ohms the McIntosh Autoformer ensures that your speakers will always get all of the power that they need, regardless of the type of music you play.

For further details or to arrange your demonstration please call us on **0800 121 4771**.

“ Big, powerful, reliable, and endowed with the sonic chops necessary to ace the performance parameters audiophiles have come to know and expect, the MA7000 is a fantastic integrated that is hard not to love. Couple its sonic accomplishments with its intuitive layout, noiseless operation, and rock-solid build, and you’ve got the kind of piece worth rushing home to after a day of hard work. For those of you shopping the upper leagues of hi-fi in search of a final destination from of a one-box design, the MA7000 may be one of the most compelling solutions to have come around in a long time. Very highly recommended! ”

Sonic Flare Review, Apr '09

**0% FINANCE OPTIONS*
AVAILABLE**

McIntosh

**Officially the UK's No. 1
Specialist Dealer
for McIntosh**

*subject to conditions

0% FINANCE OPTIONS*
AVAILABLE

Systemdek 3D

Back to the future

Going back to the drawing board with a clean sheet, the Systemdek 3D utilizes some extraordinarily clever engineering to ensure it is as free from external feedback as is currently possible.

At the heart of the Systemdek 3D is a unique main bearing, mirror finished and rumble free complete with a magnetically oil damped contactless thrust bearing. The bearing is mounted directly to a solid carbon fibre sub-chassis, itself mounted in a mass damped 'hung' chassis. Due to the unique spring configuration and mass loading, setup is both simple and straightforward for any 9" - 12" arm. Other features include a beautiful Swiss precision DC motor, bespoke control box housing and any colour imaginable allowing you to match your Systemdek 3D turntable to your particular surroundings or taste.

Jordan Acoustics are both proud and honoured that the Dunlop's have chosen us as the UK's exclusive sales agent for the all-new range of Systemdek 3D turntables. It is a true testament to our position as the high-end retailer for specialist hi-fi across the UK.

For further details or to arrange your demonstration please call us on **0800 121 4772**.

SYSTEMDEK



**Jordan Acoustics
- EXCLUSIVE -**

0% FINANCE OPTIONS*
AVAILABLE

DMD Technology

Uncovering the Key To Superlative Diamond Sound

We think that the NEW Dancer Be Diamond range of speakers offer almost unparalleled performance for the money. The Be-10 and 20 have what we refer to as 'the whole package' - both visually and sonically.

Dancer Be-10

Often considered to have the best midrange in the world, the critically acclaimed **BE-10** is now equipped with the **incredible USHER Diamond DMD tweeter**. Whilst capable of retrieving the last bit of music information in the recording and reproducing a stunning sound stage and palpable imaging, the **BE-10 Diamond DMD** captures the thrills of the performance and presents the music with such purity and sweetness like no other could.

Dancer Be-20

With the addition of a second woofer, implemented in **Usher's** proprietary configuration, the **BE-20 Diamond DMD** possesses an ease and authority in ultra low bass reproduction that's difficult to match even by speaker systems several times larger in size. For those seeking the final word in ultra low bass reproduction, and those who have a large listening room. **Magnificent!**

USHER

*subject to conditions

Wadia 151PowerDAC mini (£999)

It's the perfect match for the company's acclaimed 170i transport, but best of all this compact digital amp will drive your speakers directly – and all for under a grand
Review: **Keith Howard** Lab: **Paul Miller**

Once an audio signal is in digital form there's a strong argument for keeping it that way until the last possible moment. True digital loudspeakers are in development that one day may perform the digital-to-analogue conversion process acoustically but, for the present, that last opportunity exists within the power amplifier, immediately ahead of the loudspeakers.

Wadia, one of the few truly great names in the development of digital audio replay, has history here. In 1991 it filed a US patent, granted in 1993, describing 'Direct power output digital to analogue conversion', a concept which was to materialise in product form later that decade as the original Reference PowerDAC. In essence it comprised a conventional multi-bit digital-to-analogue converter but incorporated a digital volume control and, crucially, a linear power amplifier within the current-to-voltage converter (transimpedance amplifier) stage, rather than the more normal op-amp. This allowed the PowerDAC's outputs to be connected directly to a pair of loudspeakers, thereby eliminating a conventional preamp and power amp and associated cabling.

A NEW DIGITAL BREED

Although it appeared at various shows, the Wadia Reference PowerDAC never went on sale. Instead the spotlight swung round to the original TacT Millennium, a new breed of amplifier that could justifiably be called digital in that a switching, Class D amplifier was made an integral part of the conversion process. Such amplifiers are still relatively rare in serious audio circles and remain controversial, particularly because of the radio frequency interference they generate and the sensitivity of their frequency response to load impedance variation. But the enhanced efficiency of

RIGHT: Neat, uncluttered internal layout is on a single printed circuit board, with switched mode power supply to the right and PCM-PWM converter and Class D power amplifier to the left

switching amplifiers means they are here to stay, in the wider audio market if less so in the rarefied atmosphere of high-end hi-fi.

Enter the Wadia 151PowerDAC mini on review here, which carries the name of its aborted forebear but is actually a very different product. First because, in the TacT mould, the linear power amplifier of the original PowerDAC has been replaced by a Class D PWM (pulse width modulation) design, and second because this is not the second-mortgage product that would have been, but a scaled-down Wadia for the masses which costs just £999, measures only 203x69x203mm (whd) – about the size of two house bricks laid side by side – and is particularly intended for use with the equivalently sized and matchingly styled 170i iPod dock that has garnered so many plaudits worldwide.

Four digital inputs are available – two coaxial S/PDIF via phonos, one Toslink optical and one USB – and can be toggled between either via a button on the fascia or an equivalent on the unusually substantial IR remote control. All support data resolutions up to 24/192 with the exception of the USB input which is limited to 96kHz but supports 24-bit. No provision

is made for analogue input signals. One pair of output terminals is provided per channel, in the form of binding posts that will accept 4mm plugs, pins, spades and bare wire connections.

Other push-buttons on the fascia, running right from the input selector, alternate output polarity (absolute phase), mute the output and control volume down/up. Again these are duplicated on the remote, with the addition of two further

buttons that control channel balance. Playback controls are also provided for an attached Wadia transport, if used. Volume setting is displayed – as a number and, during

adjustment, as a bar graph beneath – in the small white-on-blue dot-matrix display at the left of the fascia, which also identifies the selected input channel.

Internally all digital inputs, whatever their sampling rate, are upsampled to 384kHz (4x96kHz) using Wadia's familiar DigiMaster spline upsampling algorithm that combines carefully controlled time domain performance (ringing) with rapid frequency domain attenuation to suppress images. To judge by the square wave oscillogram in a white paper that Wadia

'It carries the name of its aborted forebear but is a very different product'



provided, the filtering is linear phase. Note that while 176.4/192kHz sources are compatible, as the Ed's Lab Report shows [see p24] their full bandwidth capability is not realised due to the action of the PWM amplifier's output filtering.

Two key circuit components in the PowerDAC mini are outsourced: the PCM to PWM converter (which generates time quantised, fixed amplitude pulses to match the fixed time interval, variable amplitude representation of the digital input signal), this provided by Korean company Pulsus Technologies, and the H-bridge MOSFET output stage which comes from Texas Instruments (TAS5162). Wadia has sought to get the most out of these by paying close attention to the design of the switched mode power supply and to the second-order LC (inductor-capacitor) filter which integrates the PWM amplifier's output pulses into the desired audio waveform. Both these components have a major influence on a Class D amplifier's overall performance.

In use the PowerDAC mini could hardly be simpler. Connect up your digital source or sources, select the desired input, adjust the volume and away you go. As a way to entice neophytes into the sometimes intimidating delights of high quality audio, the user experience could not be simpler.

USB VERSUS COAX

As with all DACs that feature a USB input, the first item on my listening 'to do' list was to compare the PowerDAC mini via this input and coax S/PDIF. As I've described in these pages before, USB inputs – for all their utility when you want to use the device to play music from computer – are more often than not a disappointment. The one exception in my experience thus far has been the asynchronous mode USB link developed by dCS, although Ayre's equivalent – and others using Wavelength Audio's Streamlength asynchronous USB solution – promises to be just as good.

DIGITAL – OR NOT?

The earliest usage of the term 'digital amplifier' was marketing fibbery for a conventional linear amplifier with a built-in DAC to accept digital inputs. Since the arrival of the TacT Millennium a decade or so ago, though, it has been more properly applied to amplifiers, like the PowerDAC mini, that perform direct numerical conversion of a PCM input to a PWM output. There are those who contend that the term is still inappropriate, that all Class D amplifiers are analogue. Certainly that was the case with early PWM designs, where the length of the output pulses was continuously variable. So 'switching amplifier' is not the same as 'digital amplifier'. But if digital is taken to mean 'quantised', then amps like the PowerDAC mini are indeed digital. PDM – pulse density modulation – alternatives have been developed, but to date have proven inferior.



Comparing the PowerDAC's S/PDIF and USB inputs – the former driven from the S/PDIF output of an RME Fireface 800 FireWire audio interface – wasn't helped by there being a level difference between them but it didn't take much listening to decide that the S/PDIF option was superior. There's a freshness and vitality of sound via the S/PDIF interface that is missing from the USB link. So I'd recommend that the latter only be used where USB is the only available interface option.

Luckily, many non-audiophile users who might not suspect that there's any such difference will feed the PowerDAC from the company's 170i iPod dock, in which case the superior S/PDIF option will be forced upon them in any case.


I wasn't able to perform the comparison of the coax S/PDIF and Toslink optical inputs but – as someone who has never been a fan of the latter, despite its galvanic isolation – I'd expect the outcome to be much the

ABOVE: While the PowerDAC doesn't have to be mated with Wadia's matching iPod dock, this is how many buyers will use it. Operation is a breeze via facia buttons or remote control

same. Wadia's view on this seems pretty clear: it could have fitted the 170i with an optical output but chose not to.

I try not to bore you with the same old test tracks every month so I began the rest of my listening to the PowerDAC, fed via the coax S/PDIF input, with some tracks ripped from the Mobile Fidelity limited edition CD release of Linda Ronstadt's *Simple Dreams* [UDCD 785]. But all I learnt from that – apart from a reacquaintance with that wonderful line in 'Poor Poor Pitiful Me' about the Waring blender – was that what I disliked about this (over-Aphexed?) recording 30 years ago had nothing to do with LP replay, it was on the master tape.

So I turned instead to another new, albeit very different, acquisition: Bach's *Italian Concerto* played, as it should be, on harpsichord (spare me the piano transcriptions, thanks). Specifically, a 24/96 download of Francesco Cera playing the piece, on the ARTS label, from Linn Records' website. This is one of the pieces I 'studied' for O-level Music – and, against the odds, that didn't put me off it.

Harpsichord is a difficult instrument to reproduce convincingly, even when recorded as well as it is here. And, as it happens, it exposed what is the PowerDAC's principal sonic weakness: that it can sound a bit sparse and 'mechanical', although more obviously so on some 

DIGITAL AMPLIFIER

WADIA 151POWERDAC MINI (£900)



ABOVE: Digital output from your iPod courtesy of the 170i (top) with two coaxial, one optical and USB digital inputs provided on the 151PowerDAC mini (below)

tracks than others. Comparing it, admittedly, with a much costlier DAC and amplifier combination, the PowerDAC's sound on the concerto's opening Allegro proved to be a little unrelenting and lacking in harmonic subtlety and 'air'. A bit uncouth, if you like.

A BETTER JOB...

High Definition Tape Transfers recently released a new 24/96 download of Stravinsky's *A Soldier's Tale*, replacing the original which was both upsampled and dynamically compressed. (HDTT denies the former though my spectrum analysis suggests otherwise.) On this altogether superior version the PowerDAC did a better job than with the Bach but again sounded a bit lacking in light and shade, a tad monochromatic. And not obviously like a hi-res recording, albeit of an old analogue original. The best high sampling rate, 24-bit material conveys a natural sense of ease and spaciousness that even the best 16/44.1 recordings lack, and more than once I felt that the PowerDAC does less than full justice to the difference.

The classy jazz-funk of 'A Go Go', the opening track of John Scofield's collaboration of the same name with 'avant-groove' trio Medeski, Martin and Wood [Verve 539 979-2], aligned rather better with the PowerDAC's character. Although the rendering wasn't quite as infectiously funky as with the very best systems, the little Wadia conveyed 90% of what this get-under-your-skin track is all about. So too with 'Midnight Sugar', the title

track of the Tsuyoshi Yamamoto Trio's audiophile jazz recording [CD layer of SACD 035]. Yes, some of the live feel that makes this so compelling was diluted by the PowerDAC and the acoustic bass that opens the piece wasn't quite so believable, but the forthright piano sound it delivered with conviction.

While it's normal to use well known pieces of music when reviewing, it's often instructive to listen to something unfamiliar to contrast the initial impressions it makes on a receptive but not yet accustomed brain. Which is how I came to try the opening two movements of Michael Tippett's *The Rose Lake* on Chandos [24/88.2 download from HDTracks]. Again the hi-res feel was a little suppressed by the PowerDAC, removing a little of the electric atmosphere of a quiescent symphony orchestra. But enough was left of this intriguing music to encourage a second visit. ☺

HI-FI NEWS VERDICT

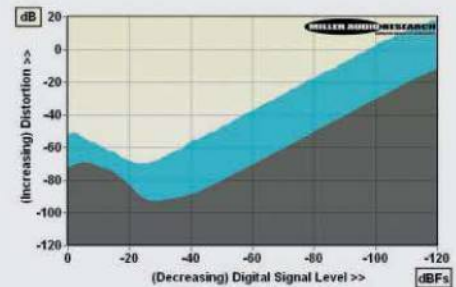
In hard-nosed hi-fi terms the PowerDAC is good but not great. On music that benefits from subtlety it sounds too matter of fact to be a complete success. But bear in mind its keen price, its small size and that it will most often be coupled with the matching iPod dock. Many buyers will use the combination to play mostly data compressed pop/rock, on which the PowerDAC's shortcomings won't be obvious.

Sound Quality: 75%

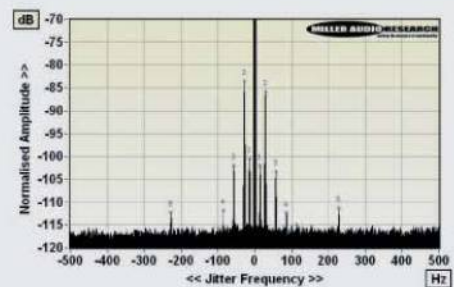


While its volume control stretches to 80 (or 'Max') the PowerDAC's maximum output of 55W/8ohm and 75W/4ohm is achieved at '66' with a peak level (0dBfs) digital input, substantially in excess of Wadia's own 25W/50W 8/4ohm specification, I might add. This is delivered through a 0.39ohm output impedance, maintained up to 2kHz before increasing to 0.65ohm at 10kHz, 1.45ohm at 20kHz and 13.6ohm at 45kHz (96kHz digital input). This is not vanishingly low and will exert some influence on the HF system response depending on the impedance trend of your speakers, but it's entirely typical of the inductive nature of a PWM output filter.

The moderate distortion, falling as low as 0.006% (left) and 0.016% (right) at 1W/8ohm increases to 0.05% at 20kHz along with a slight swell of ultrasonic requantisation noise. The full trend at 1kHz and 20kHz is plotted below [Graph 1] with 0dB representing 55W. By way of illustration 1W is at -17dB on the horizontal (x) axis. The 151 does accept 24-bit/192kHz inputs and may well feature '384kHz Digimaster upsampling' but the practical response with 192kHz or 96kHz inputs is limited to 45kHz with a slight treble boost of +0.5dB/20kHz and +1.9dB/42kHz. Jitter is high at ~3160psec [see Graph 2, below] but this is almost solely due to a single modulation at ±29Hz. This very 'clean' jitter is usually linked to a modulation between two clocks and may, in this instance, have no serious subjective consequence. 24-bit/96kHz inputs are another matter, however. Readers may view a comprehensive QC Suite test report for the Wadia 151 PowerDAC by navigating to www.hifinews.co.uk and clicking on the red 'download' button. PM



ABOVE: Distortion versus digital signal level over a 120dB dynamic range using 24-bit data at 1kHz (black) and 20kHz (blue). 0dBfs = 55W/8ohm



ABOVE: High resolution jitter plot, 48kHz/24-bit data. Note zoomed frequency axis - no higher sidebands

HI-FI NEWS SPECIFICATIONS

Power output (<1% THD, 8/4ohm)	55W / 75W
Output impedance (20Hz-20kHz)	0.388-1.45ohm
A-wtd S/N Ratio	79.5dB (re. 0dBW)
Distortion & Noise (20Hz-40kHz, 0dBW)	0.0041-0.15%
Frequency response (20Hz-20kHz)	-0.0dB to +0.53dB
Digital jitter (48kHz/96kHz; 24-bit)	3160psec / 12900psec
Resolution @ -100dB	±0.4dB
Power consumption	8W
Dimensions (WHD)	203x69x203mm

IT'S COMING...

QUAD

Elite

Avid Acutus Reference SP (£12,000)

Now in 'SP' guise featuring an improved bearing and twin drive belts, Avid's Acutus turntable with Reference power supply is a worthy flagship for the marque

Review: **John Bamford** Lab: **Paul Miller**

You've got to take your hat off to Avid Hi-Fi. Its top-of-the-range Acutus deck, first introduced 12 years ago and enhanced with the launch of the Reference outboard power supply in 2006, is certainly one beast of a turntable. Resplendent in black and silver chrome that's polished to a mirror finish, it makes for an imposing sight atop any audiophile's equipment rack. Want to make the ultimate statement? The deck is also available to order finished in polished 24K gold plate, though for this you'll have to add an extra 35% to the price.

During the past year or so the company has been introducing 'SP' upgrades across its entire range of turntables. What we have here, then, is the latest incarnation of Avid's flagship, the Acutus Reference SP. Like all of the firm's decks with 'SP' nomenclature its external power supply (that provides electronic speed switching between 33 and 45rpm) is a new design dubbed the 'DSP Vari-Speed supply' featuring on-board digital signal processing to control frequency generation. Also common to Avid's 'SP' decks is a twin belt drive system that claims to better control platter dynamics and stability under load.

BUILT FOR SPEED

As the name implies, the power supply now allows fine speed adjustment. On this top-of-range Reference supply for the Acutus, for example, there are three buttons on the fascia. One starts and stops the platter, the other two are for selecting the speed. Pressing and holding both speed selection buttons simultaneously moves the unit into speed adjustment mode, where one button speeds up the platter in fine increments and the other slows it down. You'll need a strobe disc to set it accurately, of course. Once the desired speed is reached, pressing both buttons together once more stores the speed setting in memory.

RIGHT: It's Avid's massive Reference power supply with 1000VA transformer – the size of a chunky amplifier – that differentiates this flagship from the standard Acutus turntable

While certainly looking every bit a super-heavyweight, with its 45cm-tall 10kg platter and chunky suspension towers, the Acutus is actually a fairly compact design with a modest 410x360mm footprint (wd), so you'll have no difficulty accommodating it on the top shelf of any standard-sized audio equipment rack. But don't forget you'll need a substantial shelf to house the Reference power supply that sets this deck apart from the 'standard' £8000 Acutus. The supply alone weighs just over 20kg.

If you choose to install it yourself rather than have your dealer set it up for you, opening the substantial packing carton reveals a 'kit of parts' that is initially rather daunting. But the design is beautifully thought out, and thanks to the explicit assembly instructions the Acutus can be assembled in a matter of literally a few minutes. It's the fitting of your chosen arm and accurately aligning your cartridge that takes the time...

Comprising a main chassis of cast aluminium with levelling feet that holds the deck's three suspension towers, and a separate motor unit that is easily fixed in place with a rubber O-ring in a matter of seconds, the separate subchassis sports three downward-facing 'legs' that simply locate into each tower containing a suspension spring. Each of the Acutus's three springs is the same, but adjustable so that the frequency of movement is

the same independent of load. Spring adjustments are accessed through holes in the top of the towers using a supplied Allen wrench. Rubber O-rings fixed to the three towers work as lateral damping, and quickly return the platter to the vertical plane to provide a truly pistonic up/down movement of the subchassis and platter, with a resonant frequency of 2-2.5Hz.

BEARING FRUIT

The Acutus' AC synchronous motor is a custom-designed hand-built unit that Avid says is around ten times more powerful than the norm at 140mNm (milliNewton metre), housed in its own pod and positioned just behind the front-left spring tower. Recent enhancements to all Avid decks include the use of a 'dry' bearing that requires no maintenance; in the Acutus a stainless steel inverted bearing shaft is tipped with a single-point self-lubricating tungsten carbide ball that sits in a sapphire cup. Care is required to avoid shock and potential damage to the bearing when installing or removing the platter.

The only fiddly aspect of the deck's set-up concerns installing the two round-section drive belts, first to the sub platter section milled out on the underside of the platter while the platter is inverted, holding the belts in position with the aid of a small locating pin, and then turning the platter right-way-up, placing it carefully





on the deck and looping the belts over the motor pulley. It takes a couple of attempts to acquire the knack.

You'll need to get accustomed to the correct procedure for using the record clamp too, the clamp being integral to the design. Playing records without it is not an option as the brass top section of the bearing housing [pictured overleaf] sits slightly proud of the platter's bonded polymer surface. Consequently an unclamped record 'flaps around' as it fails to mate properly with the platter. This is quite deliberate, as the purpose of the clamp is to secure the record directly to the Acutus' main bearing.

Our review sample was fitted with an SME Series V tonearm, into which we installed Ortofon's sublime ruby-cantilevered Cadenza Blue moving-coil cartridge. Auditioning was undertaken using my resident Sensor Prelude phono

stage made by RCM Audio (imported by Select Audio) and Mark Levinson No.383 amplifier driving Townshend Audio 'Sir Galahad' loudspeakers.

SQUEAKY CLEAN

The Acutus Reference's overall presentation appears tightly focused and controlled. Leading edges of notes, from the soft and delicate to the loudest, most explosive crescendos, were sharply delineated and squeaky clean.

Jan Garbarek's 'Molde Canticle, Part 3' from his 1990 album *I Took Up The Runes* [ECM 1419] sounded bold and powerful while possessing a beguiling coherence and effortless, relaxed feel. The melodic lines delivered by bass maestro Eberhard Weber were uncommonly easy to follow, where on lesser record players the subtle touches and inflections in his playing become all too easily blurred by the over-prominent subsonic thumps of

ABOVE: The substantial platter is 45cm tall and weighs 10kg. Meanwhile, the deck's chrome details, polished to a mirror finish, contribute considerably to the Acutus's 'wow factor'


Manu Katche's kick drum. And although Garbarek's wailing soprano saxophone can often become jarring in digital ECM recordings such as this, the sound remained

lucid and actually rather silky – even when Garbarek let rip during crescendos.

And this is not because the deck sounds smooth and mellow. Far from it, as it displays plenty

'Ethereal vocals were delineated within a cavern of eerie blackness'

of attack and zest. Sounding fast and authoritative partnered with the SME tonearm, there was joyous alacrity to Sly 'n' Robbie's rhythm section on Joe Cocker's *Sheffield Steel* [Island ILPS 9700], while his gruff vocal delivery stood out from the production with uncommonly fine diction and projection. There was nothing bloated about the sound of this turntable combo, everything appearing tight, sharp and lucid, which allowed you to hear deep into the mix of complex multitrack recordings to pick out the subtlest of details.

When listening to 'Couldn't Bear To Be Special' from Prefab Sprout's *Swoon* album [Kitchenware, KWLP1] the low frequency 'thunder' effects had the kind of control one usually associates with CD replay, without an ounce of spare flesh artificially colouring the sound. The Acutus Reference 

UPDATE THAT DECK..

Founded in 1995, Avid Hi-Fi boasts in-house CNC lathes for making its own precision parts. Its Cambridgeshire workshops are kept busy supplying components for medical and automotive companies too. We visited Avid's factory last year; see *HFN* April 2009 for a breakdown of the company's history.

As with any specialist manufacturer catering for a niche market, Avid ensures that all upgrades are retrofittable to its decks. If you want the very latest, your pride and joy turntable need never be out of date as it can always be upgraded. Prices for upgrades are not unreasonable. For example, if you bought an Acutus Reference four years ago and want it brought up to today's 'SP' specification, the cost of the changing the power supply, swapping to the latest bearing and changing the motor pulley to accommodate the twin-belt drive system is £895.

TURNTABLE



BELOW: The subchassis revealed to show dry-running bearing housing, motor and three damped suspension towers

makes vinyl sound not only clean but articulate too, Prefab Sprout's Paddy McAloon appearing frail and exposed as the halo of reverberation around his voice was portrayed vividly within the stereo image. The low-level swirling of electronic keyboards in the recording, together with the percussion fills and ethereal backing vocals, were delineated clearly within a cavern of eerie blackness, sound images seemingly locked in tight focus between and beyond the boundaries of the loudspeakers.

NOTHING FORCED...

It's funny how the cosmetic appearance of a turntable can sometimes lead one to second-guess how it might sound. The svelte, delicate look of Oracle's drop-dead-gorgeous Delphi turntable, for example, gives an impression of refinement – and curiously it does rather sound like that – but you'd be wrong if you thought this grand and imposing Avid Acutus Reference SP might be all about blood 'n' guts and thunder, with heroic bass to blow your socks off. Not so. Its bass performance is impressive sure enough, Tony Levin's thumping bass 'stick' on King Crimson's *Beat* album [EG Records, EGLP 51] demonstrating noble power and 'slam', but the Acutus' main sonic character is best described as a 'stately coolness' – where nothing appears forced or over-lit.

The sound is ultra-clean, with fast, tight bass and lucid midband combined with equally fast treble and superb detail retrieval. Somehow it has the ability to sound explicit without a trace of harshness

or over-etching, so the weeping electronic guitar of Crimson's Robert Fripp was exposed without ever becoming brittle.

As you'd imagine, female voices were beautifully served too. I found myself captivated by the richness and detail in lead singer Martha Johnson's voice when listening to Martha And The Muffins' 1981 LP *This Is The Ice Age* [Dindisc Records, DIN 10] despite Daniel Lanois' typically dense production. The combo did seem to extract all the information it possibly could from the record's 30-year-old grooves.

Given its fast, vivid sound and exemplary build quality, is there anything not to like about the Acutus Reference? Well, it goes without saying that you need to be able to afford the lofty price tag. Moreover, you should budget a further £350 for an acrylic dust cover. As with all 'oil-rig' type skeletal decks such as this, there's no plinth and lid supplied to keep the dust at bay. ☹

HI-FI NEWS VERDICT

With its fabulous detail retrieval and focused sound, the Acutus Reference SP delivers a captivating performance. Moreover its elaborate suspension makes it immune to the vagaries of positioning – not something that can be said about most turntables. Beautifully made, compact, easy to set up and maintain, the only reason not to want it is the high-end cost. **Aaah... the price of luxury.**

Sound Quality: 86%

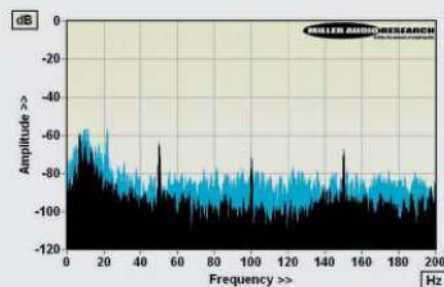


AVID ACUTUS REFERENCE SP (£12,000)

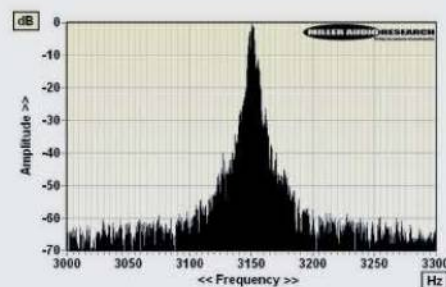
As supplied, our sample of the Acutus Reference SP was running about -0.4% slow, a minor oversight easily rectified by recourse to the incremental speed control offered by the Reference SP power supply. The wow & flutter spectrum [Graph 2, below] illustrates the precise pitch accuracy achievable from this supply and the powerful 24V AC synchronous motor. In other respects, and despite the significant differences in bearing and suspension technology, the W&F spectrum itself is comparable with that obtained from the equally massive Clearaudio Innovation [HFN, Sept '09]. Both decks show a very low-level discrete wow of 0.04%, in this instance at ±2-3Hz which is probably close to the resonant frequency of the three-point suspension. The 0.02% flutter is vanishingly small.

This combination of a 10kg platter and stainless steel shaft, carbide ball bearing and sapphire thrust pad delivers a similar and impressively low rumble of -71.8dB (DIN B-wtd, re. 1kHz at 5cm/sec). The unweighted spectra both from an unmodulated LP groove and through the bearing itself are revealed below [Graph 1, blue and black respectively] with the principal components revealed at 5Hz, 11Hz and 16Hz. The peaks at 50Hz, 100Hz and 150Hz are more likely induced in the test cartridge and/or through the SME V tonearm wiring than picked-up as vibrational components. Either way, Avid's massive power supply should certainly be placed as far from the pick-up area as possible!

Readers are invited to view a full QC Suite report for the Avid Acutus Reference SP, by navigating to www.hifinews.co.uk and clicking on the red 'download' button. PM



ABOVE: Unweighted bearing rumble from DC-200Hz (black infill) versus silent LP groove (blue infill) re. 1kHz at 5cm/sec



ABOVE: Wow and flutter re. 3150Hz tone at 5cm/sec (plotted ±150Hz, 5Hz per minor division). Speed may be electronically adjusted, as illustrated here

HI-FI NEWS SPECIFICATIONS

Turntable speed error at 33.33rpm	33.35rpm (+0.04%, adjusted)
Time to audible stabilisation	4sec
Peak Wow/Flutter	0.04% / 0.02%
Rumble (silent groove, DIN B wtd)	-68.8dB
Rumble (through bearing, DIN B wtd)	-71.8dB
Hum & Noise (unwtd, rel. to 5cm/sec)	-58.3dB
Power Consumption	25W
Dimensions (WHD)	460x210x400mm

THE ULTIMATE DESKTOP SOUND

NOW EASIER TO REACH

The great sound upgrade for a whole £140 less.

We've improved our standard desktop sound system by combining our award winning, more dynamic speakers, the TD508II with the renowned TDA501II amp to create the 'Ultimate Desktop System'. What's more, it's at a promotional price that saves you £140.00. What better reason to upgrade today.



ECLIPSE TD SERIES
Just for the pure performance.

SPECIAL PRICE
£679.99
RRP £820
Offer valid 1.5.2010 - 28.9.2010
See www.eclipse-td.net for details.

Croft Series 7 (£700)

Everyone's favourite British hair-shirt minimalist/tube purist is back, with a knock-out stereo power amp... and it's a valve/MOSFET hybrid for only £700!

Review: **Ken Kessler** Lab: **Paul Miller**

For 25 years, this magazine – and this writer – have been happy to support the quirkiest brand in all of hi-fi-dom. It was enough that Glenn Croft's earliest line-up included, at one end of the catalogue, the most basic and simplified preamp on the market short of a passive pot, while the other extreme consisted of OTL amplifiers. It was clear that Glenn marched to the beat of his own drum. What sealed it for this scribe was simple: however oddball/wacky/*Whole Earth Catalogue* Glenn's approach, everything he has offered for review sounded simply terrific. Even more impressive: the prices were always sane.

But there was a problem: Glenn was not (and probably still isn't) the most dynamic, hungry nor ambitious of businessmen, and the urban myth was that GC could only be bothered to produce his hand-built wonders when he needed the cash to service his elderly but much-loved Porsche 911. Whatever the publishable truth may be, sightings of Croft gear were irregular and usually unannounced, while the products themselves exhibited equally unanticipated details: weird faceplates, two rotaries because Glenn didn't believe in ganged controls, *ad nauseum*.

In a world where slickness is mandatory, Croft's entry-level models (if not the big OTLs) were so industrial and elementary that you could probably build one yourself from parts in a Radio Spares catalogue – right down to the off-the-shelf casework. And yet here we have an all-new Croft concern, with a similar business model – if that's not too lofty a term for Glenn's approach, which is more reminiscent of a roadside vegetable stand with seasonal stock and generic carrier bags.

The difference is not in the approach *per se* but in the reduction of the number of models. The totality of the zero-glam appearance and the blissfully low pricing

RIGHT: A view familiar to Croft fans: no filler. Generic box is dominated by a toroidal power supply and is notable for an absence of PCBs – a Croft *bête noire*. Glenn prefers hard-wiring

ensure that this is hi-fi for the green, recyclable era.

It's easy to see why: Glenn comes across like a fusion of Peter Walker and Peter Fonda: an electronics genius whose mind-set is late-1960s counter-culturalist. His world view, then, is a delicious mix of audio purist and granola-muncher. Having abandoned excess, his new line-up is in some ways the antithesis of 'old Croft' (which sounds like a type of sherry), while remaining as down-to-earth as the Basic and Micro preamps which launched a love affair between impoverished audiophiles and Croft's wares.

THE PERFECT VALVE

If the new preamps will be familiar to anyone who ever took the lid off a Micro, it's the power amplifier featured here that encapsulates Glenn's new world view. Instead of a scary OTL device with big-ass tubes to scald the unwary, the new amplifier is a cool-running, relatively drama-free hybrid. 'Actually,' says Glenn, 'the hybrid route is a no brainer: no phase splitter, no output transformers, no heaters. And MOSFETs don't wear out.'

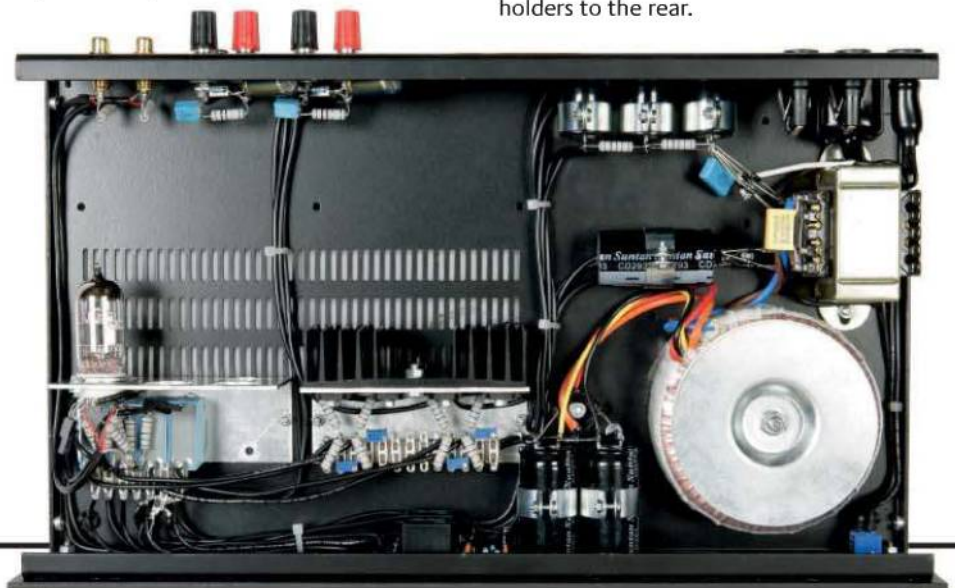
To quell any horror in his older, devoted following, who all-but-demand glassware, Glenn adds that, 'the audio MOSFET operates very much like a perfect valve.'

The circuit has just one voltage gain stage using a triode valve and one coupling capacitor to each output MOSFET; there is no negative feedback. The signal path can't be much shorter than that and it cannot be corrupted by back EMF from the speaker via a feedback loop. Due to just having one stage of gain the amp does invert overall phase: the line stage in the preamps also has the one stage of gain, so if used together the overall phase will be correct.'

Though not reviewed here, Croftophiles should note that the new preamps are, according to Glenn, '100% valve designs developed from the original Micro but with improvements: the RIAA equalisation is now passive, there are better components and the line stage now has a small amount of gain using a better circuit.'

Unpacking the £700 Series 7 stereo power amplifier from its unmarked box, one immediately thinks 'home-made', but in a nice way – like a granary loaf that you just couldn't get in a supermarket. There's really so little to the 405x270x70mm (wdh) 'black box' that you might mistake it for someone's pre-production prototype.

A plain case, the barest minimum of details: an on/off switch and LED on the front, multi-way binding posts for a single pair of speakers, gold-plated phono sockets for line-in and three user-accessible fuse holders to the rear.





Remove the lid, and it's as devoid of filler as his older models, containing only a large toroidal transformer, the barest minimum of components, a lone ECC83 valve for input duties, high quality MOSFETs for the output stage and hard-wiring throughout. The whole shebang only weighs 5kg, and it's about as physically non-intrusive as hi-fi equipment can be.

BACK TO EARTH

While I used the Audio Research Ref 5 for preamp duties, I did borrow a Croft Line Stage, which brought me swiftly back to earth when Glenn provided a reality check. Please, be in no doubt that there remains a sense of 'adventure' with Croft gear. I received this e-mail prior to its arrival: 'Don't switch this preamp on or off when the power amp is on – this will blow fuses in the power amp. The Basic does without the muting relays that the more expensive preamps have.'

Thanks to Glenn's warning, there were no mishaps. The rest of the system consisted of PMC DB1+, Tannoy Mini Autograph or Sonus faber Cremona Auditor Elipsa two-way speakers. None proved beyond the Croft's driving capabilities. Sources included a Linn LP12/Ekos/Arkiv analogue front-end into an Audio Research PH5 and my Marantz CD12/DA12 CD player, while wiring was Yter and Kimber.

Music included Mobile Fidelity's new pressing of Little Feat's *Dixie Chicken*, the vinyl and CD remasters of the Rolling Stones' *Exile On Main Street*, ample Alicia Keys to gauge vocals and piano, and Michael Nesmith's delicious 'Rio'. Juxtaposing a £700 amplifier with a

turntable and a preamplifier with a combined cost some 25 times as much is daft, but they precede the unit in the chain, so I was merely feeding it as pure a signal as I could muster. At the receiving end were speakers more likely to find themselves hosting the output of the Croft than, say, Wilson Sophias, so there is method to my madness. Additionally, I remember countless displays of what would qualify as audio perversity, when I used Basics and Micros as the control units in hugely expensive systems.

What this purports to show is that, prosaic *mien* aside, Croft hardware performs like thoroughbred equipment of far loftier pricing and considerably more refined form. I cannot help but imagine an analogy wherein a poorly-constructed and fragile (yet stupendously pretty) Lotus Elan would run rings around spectacular GT cars, or how I always turn to manual-wind, stainless steel wristwatches instead of *haute horlogerie* masterpieces. There's much to be said for humility in these trying times.

MAGNIFICENT SEVEN?

Slithering, seductive rhythms, composed to evoke a torrid Brazilian night, characterise Nesmith's 'Rio', and its Latin warmth betrays any system plagued by artifice. The Croft 7 – note the use of the same number that marked other great, affordable '7s' such as the Austin and the Lotus – could easily exceed the demands

ABOVE: Utterly minimalist, the new Croft chassis serves the whole range to save costs, requiring only drilling to make it a preamp fascia

of the now-passé PRAT test, itself based on the imagined pace/rhythm/timing criteria of reviewers possibly far too familiar with another South American influence. There are no strictures to the flow, no sully of the swaying, lilting bass.

Because Croft has never been anally-retentive about detail or precision, those solid-state marks of Cain, his designs have never been guilty of causing listener fatigue. And yet detail is there aplenty,

with the sort of layering that almost encourages the wrong (!) sort of listening: paying too much attention to the parts rather than the whole. Croft units, and this amplifier is included in the family description, are always coherent,

with no emphasis on one element over another. An overly-analytical stance is almost anathema to the pleasure they provide. Even so, the backing vocalists lined up behind Nesmith to illustrate that exceptional stage depth and an openness that allows you to focus on the lead singer.

Rhythmic concerns also rule with Little Feat, the move to *Dixie Chicken* not being that much of a departure from 'Rio'. Little Feat, however, had their own characteristic New Orleans-y grumble 'n' growl, with syncopated percussion few can mimic, let alone match. (Damn, do we need Lowell George more than ever....) While 'Rio' isn't short of complexity, especially the very life-like cocktail party noises, Little Feat manage to sound tight and 'together', while also suggesting three different bands playing at the same time. Wholly mesmerising, it's a brutal test of a system's cohesiveness. But the Croft proved as much a master of the rhythm section as even the astonishing Quad II-eighty all-tube monos, which excel in this area.

But this is not to suggest that the Series 7 works a miracle of the level that the old Micro did amongst preamps. It does have its limitations, and I have no doubt that those with an aversion to MOSFETs will ➔

'Croft hardware performs like equipment of far loftier pricing'

CROFT CIRCA 2010

For Glenn Croft, the company bearing his name had lost sight of its roots: 'There were 50 different, increasingly complex products on the books, but customers were still given the option of changing the spec of any of these. It meant that practically every amp was a one-off. So, after having no holidays or weekends off for 13 years I decided I wanted a life.' Glenn went for 'a complete new start, to do exactly what I want.' For Croft, who was never comfortable with high-end excess, it means a small selection of affordable and simple amplifiers: 'a preamp and power amp for £700 each and a cheaper preamp which is useful in the recent recession – the Line Stage Basic at £300. The Basic with the phono stage is only £400.' Glenn is proud to add that, 'all the casework comes from Birmingham and all the custom transformers are made in Mansfield.'

POWER AMPLIFIER



ABOVE: Nothing extraneous: those fuse holders are easily accessible because they may need access more often than you might think. Classic multi-way speaker terminals and gold phono sockets show that Croft doesn't cut costs where it matters

detect the deception – however benevolent a deception it may be. The 7 can be overdriven, and it clips more in the solid-state manner, with a bit of a rasp, than in the less offensive, if flatulent style of a valve.

Both editions of *Exile On Main Street* taxed the Croft in this area, and not necessarily with the raucous tracks one might have expected to prove the culprits. 'Sweet Virginia', an anthemic chant of the paralytic-on-moonshine, *Deliverance* hillbilly sort, sounded sloppier than usual, but that just may be the way the Stones intended it.

What would lead you to pair this with sensitive, yet wide-ranging speakers would be the vicious guitar work of 'Rip This Joint', and the LP's more excessive sax breaks. For such tracks, the Sonus fabers were a no-go, while the PMCs dealt with it in their stride.

STONED IMMACULATE

But then a golden moment appeared. If reviewers were to provide a service to both their readers and to manufacturers/retailers, it would be to share with them demo tracks that show not only a product's weaknesses, but also what it can do when all is well with the world: 'R' in the month, red-at-night-sailor's-delight – whatever augurs best for your karma.

For the 7, it's the recording of the Rolling Stones' 'Wild Horses' found on Alicia Keys' *Unplugged*, a duet with Adam Levine, and a version which must surely qualify as one of the 'Best Stones Covers Ever'. The quiet, solo-piano opening, the build-up with bass and percussion, the open, airy feel of a live session: it just struck the 'right note', if that's not too obvious a way of stating how it balanced dynamics, space, tonal concerns and even transients. Hell, if Croft Acoustics were a huge firm instead of virtually underground,

it could license the track as a CD single and slip it in every box.

OUT OF THE BOX

Moments like that were nakedly retro in their emotional content, for I have many hundreds of hours of my life invested in sessions driven by Croft hardware. As, I'm sure, do many of you. No, it did not change my life, nor will it alter the lives of others in the way that the Basic and the Micro made affordable and populist the sound of high-end preamplifiers so many years ago. The Series 7 will not allow you to run a line through your 'wants list' where it says 'Audio Research Ref 110' or 'Air Tight ATM-2001' or 'Ayre MX-R'.

What it will do, however, is spare you any anguish if you, or someone you know, is desperate for sublime sound and can stretch to no more than £700 for the amplification. Yes, that will pay for a 42in LCD panel, six bottles of the 2004 Ornellaia or a nice pair of shoes. We all have our priorities. Just know that the LCD will be obsolete in six months, the Ornellaia needs probably a decade before it's ready to drink and shoes are for girls. The Croft thrills you straight out of its anonymous box. ☺

HI-FI NEWS VERDICT

If Croft was motivated by 'the new austerity', then the Series 7 arrived just in time for an era when belt-tightening is the norm. As in the past, Glenn has shown how minimalist, no-frills designs can, for those able to forego luxury, deliver great sound with panache. Yes, it's rudimentary, but for the money, it's hard to find a more musical way than the Series 7 to power up a system intended to deliver *music*.

Sound Quality: 82%



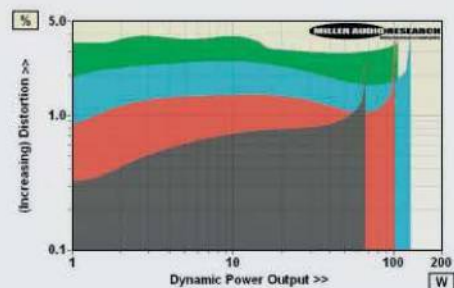
CROFT SERIES 7 (£700)

While this elegantly simple design marries a valve line input with a MOSFET power output stage, its performance has more in common with an all-out tube amp than a typical hybrid. The Series 7 offers a total +31dB gain and is powerful enough to drive moderately sensitive speakers with its ~50W/8ohm output, increasing to 65W, 100W and 125W under dynamic conditions into 8, 4 and 2ohm loads [see Graph 1, below]. Nevertheless this is achieved at higher levels of distortion than might be expected, from 0.3% at 1W to a fairly consistent 0.7-0.8% above 10W/8ohm. Naturally, distortion increases further with decreasing loads although it remains impressively constant with changing frequency [see Graph 2, below].

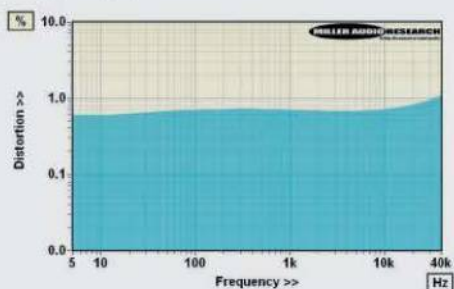
Subjectively, this is usually a good sign particularly when it's allied to a very wide S/N ratio (the Series 7 achieves an above-average >90dB, A-wtd re. 0dBW). Channel separation (just 38dB at HF) and channel balance (0.4dB) are a little less impressive, however.

Nevertheless, possibly as an aid to stability with reactive cable/speaker loads, the Series 7 is fitted with a substantive RC network at its output. This contributes to its high (by solid-state standards) 1.5ohm output impedance. So, while the amplifier's response is impressively flat at -0.05dB/5Hz all the way up to +0.15dB/100kHz into a purely resistive 8ohm load, in practice the combined amplifier/speaker response will be modified by the latter's impedance trend. As a result, the Series 7's ultimate tonal balance may depend on your choice of speaker.

Readers can view a comprehensive QC Suite test report for Croft's Series 7 hybrid power amplifier by navigating to www.hifinews.co.uk and clicking on the red 'download' button. PM



ABOVE: Dynamic power output versus distortion into 8ohm (black trace), 4ohm (red), 2ohm (blue) and 1ohm (green) speaker loads



ABOVE: Distortion vs. frequency from 5Hz to 40kHz (10W/8ohm). Distortion is high but consistent

HI-FI NEWS SPECIFICATIONS

Power output (<2% THD, 8/4/2ohm)	52W / 65W
Dynamic power (<2% THD, 8/4/2ohm)	67W / 100W / 125W
Output impedance (20Hz-20kHz)	1.46-1.56ohm
Frequency response (20Hz-100kHz)	-0.0dB to +0.15dB
Input sensitivity (for 0dBW/40W)	80mV / 510mV
A-wtd S/N ratio (re. 0dBW/40W)	92.5dB / 108.5dB
Distortion (20Hz-20kHz, 10W/8ohm)	0.62-0.72%
Power consumption (Idle/Rated o/p)	20W/160W
Dimensions (WHD)	405x70x270mm

IsoTek®

The power to deliver 'clean' power



Aquarius replaced the companies GII Mini Sub and is the latest product in IsoTek's unique range of multi-award winning power conditioners that are designed and hand made in England using the finest materials and built to the highest of standards.

Formed in July 2001 IsoTek's vision has been to create high-quality mains power conditioners that stretch beyond current conventions. Through careful market analysis and extensive research, IsoTek has been able to launch products that dramatically improve the performance of all components used within an audio or visual environment, a fact that has been proved by countless international reviews and over 25 audio awards.

"IsoTek is the leader in mains conditioning products"

HI-FI NEWS

"IsoTek is the UK's biggest name in mains filtration"

HI-FI CHOICE

"Not all mains conditioners are created equal... IsoTek has built itself a reputation as a purveyor of mains conditioners that actually improve (as opposed to just alter) the sound"

HI-FI WORLD

For more information and to obtain your free IsoTek brochure please call:

01276 501 392

info@soundfoundations.co.uk

www.soundfoundations.co.uk www.isoteksystems.com

"The whole auditioning process took about 30 seconds. Play a piece of music on GII Mini Sub. Play it again on Aquarius and wonder why you were so attached to the GII Mini Sub." "Very highly recommended"

HI-FI PLUS, ISSUE 68.



SIRIUS



ACCESSORIES



ORION



VISION



SIGMAS



TITAN

Heco

The Statement (£3500)

A heavyweight speaker combining a half century of know-how with plenty of up-to-the-minute tech
Review & Lab: **Keith Howard**

Just as *The Gramophone* famously did in June 1969, Heco's The Statement is going to have to shed its definite article. We can't keep referring to it as the The Statement, so from here on it will simply be the Statement. You get Heco's message, though: this isn't any statement, it's *The Statement*.

Germany has some large, successful speaker manufacturers which are big not only on their home soil but elsewhere in mainland Europe too. Still, they've struggled to make a great impact in the UK. Our market is stubbornly unique as well as amply populated with native products, not to mention well-established imports, already doing a fine job.

MAGNAT TO THE RESCUE

Heco has a long history – it was founded in 1949 – but went out of business in 2001 before being rescued by another German speaker manufacturer, Magnat. (Famous, you may recall, for selling an ionic tweeter in the 1980s, based on an updated design by the inventor of the original Ionophone, Siegfried Klein.) In charting a new course for Heco, which is now based in a hi-tech facility near Cologne, Magnat looked backwards as well as forwards and decided to attempt to recapture some of the best elements of earlier generations of drive unit from names like Saba and Graetz.

The result is the Statement, a speaker that combines new and old in an unusual fusion. A black piano lacquer finish (high gloss silver is available too alongside more conventional rosewood, cherry or beech veneers), a split crossover which provides for bi-/tri-wiring or bi-/tri-amping and carbon fibre dust caps on the twin 200mm bass drivers are features that bespeak a

RIGHT: Statement is a three-way with four drivers, the two bass units working in parallel. Bass and mid units have paper cones, the latter sporting an Alnico magnet and pleated surround

modern design, as do the technologies used in its creation. But the 170mm midrange driver has a large Alnico magnet, is fitted with a pleated rather than roll surround and, like the bass drivers, has a paper cone – all features of drive units of yore. Moreover it is not fully enclosed but open at the rear, via a grille, and so operates as a dipole.

Not, it should be said, that paper is the low-tech cone material it may seem to modern eyes, or that Heco has used just any pulp. On the contrary, paper performs well as a diaphragm material and Heco has, it says, gone to considerable lengths to investigate a wide range of formulations, settling on a Kraft paper with wool added to increase the self-damping. The Kraft process, which treats wood chips with a mix of sodium hydroxide and sodium sulphide, is superior to alternative forms of paper production because it removes most of the lignin to produce a pulp of almost pure, undamaged cellulose fibres which then form hydrogen bonds that increase both the tensile strength and tear resistance of the paper.

METAL FLARES

As so often with today's floorstanders, the Statement employs reflex bass loading to combine good sensitivity (93dB is specified but see Lab Report) with useful bass extension. There is an unusual aspect here, though, in that the back panel accommodates not one, not two but three flared ports, and the flares are made of cast metal rather than the usual moulded plastic. As importer Guy Sergeant of Pure Sound says, this allows you to use them as a hand-hold when moving the speakers about – they weigh 43kg apiece – without the risk of incurring a sickening plastic cracking sound. But whether you (ab)use the ports this way or not, the metal flares add a distinct air of class – even though they're normally out of sight.





One disappointment about the Statement – if you listen carefully you can hear me trotting up on an old hobbyhorse at this point – is the provision of wide-angle cone feet instead of proper spikes. These are fine on a hard floor – matching cups are provided to prevent damage – but little use on carpet since, even with the Statement's weight behind them, they are too blunt to penetrate to the floor beneath.

I solved the problem by deploying a pair of spiked MDF platforms I've built for the purpose, but Guy also supplied a pair of Breckland Audio speaker plinths. Apparently these can help quell the bass if it proves to be over-exuberant in your room.

More conventional tone control is also available via a choice of positive input terminals which provide either 'flat' or '-2dB' settings for the midrange driver and 'flat' or '+2dB' tweeter settings – a much better implementation, I'd say, than providing the same adjustments via a switch. Link cables are provided, rather than link bars, to accommodate these options with single-wire speaker connection.

VOCAL APPEAL

Let's begin the listening with something the Statement does really well: vocal recordings from the 1950s. Such as Frank Sinatra's 'In The Wee Small Hours' [Capitol CDP 7 96826 2], with its big vocal sound and wonderfully lush, utterly apposite Nelson Riddle orchestral accompaniment. With

the midrange at '-2dB' and the tweeter 'flat' – the favoured option in my room as it offset the Statements' slight presence band suckout to give a more vivid delivery overall – this became music to sweep you up and carry you away on a wave of nostalgic sentiment, not that the theme of lost love is any less relevant now than 50 years ago.

Or, by way of a contrasting message, Ella Fitzgerald's wonderful 'Reach For Tomorrow' [Verve 839 838-2], a song of dogged optimism that the Statement delivered almost as convincingly. Both were reproduced with an enviable sense of spatial scale, natural timbral warmth and, most important of all, line of sight to the emotional core of the music.


SLOW DRIVE

Take your time machine a decade or more forward, though, and the Statement turns out not to fare so well on rock music.

Free's 'I'll Be Creepin'' [Island CRNCD 2 5 18 456-2] was lacking in

drive – this with the Naim CDX2/DAC/XPS source combination I so enjoyed [HFN June '10] – and I experienced a curious sense of the lowest bass being detached from the rest of the frequency range.

The Beatles' 'Come Together' [Parlophone 0946 3 80789 2 0] fared similarly, with a blunted sense of the bass drive that should propel it, so I triple-checked by playing Gwyneth Herbert's 'Annie's Yellow Bag' [naimcd 135] which also puts a premium on bass precision and rhythmic coherence: same result.

Although in none of these cases did there seem to be too much bass, I tried the Breckland Audio plinths – shallow, bottomless boxes with plastic foam inside that provides some decoupling from the floor – to see if they might effect a cure. They did help a little but not to the extent that the bass could ever be described as 

'Here was a line of sight to the emotional core of the music'

PAPER: READ ALL ABOUT IT...

The best diaphragm materials for moving coil speakers combine high tensile stiffness (Young's modulus) with low density. Together, these two properties help force the first bending resonance as high as possible in frequency – ideally, above the driver's passband. It also helps if the material has appreciable internal loss, to provide some self-damping of breakup resonance when it occurs. Paper has something of a low-tech image because of its association with speakers of yesteryear but actually it holds up well in these respects against the plastics and metals more commonly used today, principally because of low density rather than high tensile modulus. Historically, paper's problem has not so much been its performance potential as maintaining consistency in its production.

LOUDSPEAKER

HECO THE STATEMENT (£3500)

Heco quotes a high 93dB sensitivity for the Statement but we couldn't match that, our pink noise figure being just over 88dB. This ties in with subjective comparison against a speaker known to have 90.6dB sensitivity and squares with the Statement's fine bass extension, which is a low 29Hz (-6dB re. 200Hz, diffraction-corrected near-field measurement), and with its relatively amplifier-friendly impedance. The minimum modulus of 3.8ohm – only a tad under Heco's spec. of 4-8ohm – occurs at a low 34Hz where, despite some impedance correction in the crossover, the phase angle is also high, leading to a minimum EPDR (equivalent peak dissipation resistance) of 1.9ohm at 28Hz. But at HF the load becomes increasingly benign, with an EPDR minimum of 3.0ohm at 117Hz.

Measured on the tweeter axis, nearest to typical seated ear height, the frequency response [Graph 1, below] is slightly concave, with a mildly recessed presence band. Nevertheless the frequency response errors, 200Hz-20kHz with 9th-octave smoothing, were low for each speaker at ±3.0dB and ±2.3dB respectively. Not so good was the pair matching error which is on the high side at ±2.1dB across the same frequency range. That said, the largest disparities are narrow-band at close to 1kHz and 2kHz – elsewhere the matching is much tighter. Despite the Statement's soft dome tweeter, ultrasonic response is comfortably maintained to beyond 40kHz. The CSD waterfall [Graph 2, below] shows a difference between the passband of the midrange unit and that of the tweeter. The tweeter displays fast decay and little indication of resonance; the midrange unit suffers a variety of breakup modes. KH



ABOVE: Split crossover allows bi-/tri-wiring or bi-/tri-amping, and includes separate positive terminals for lowering midrange or boosting tweeter output by 2dB

punchy, so I'm forced to conclude that the Statement just isn't for rock aficionados.

It was back in its comfort zone again, though, with J J Johnson's *El Camino Real* [Verve 314 537 321-2], a very fine modern big band jazz recording by Jim Anderson. Loudly played trumpet is never an easy instrument to reproduce but the Statement did an excellent job with the brass section here which, whether playing muted or unmuted, rasped convincingly without tipping over into harshness.

Johnson's trombone fared well too, and the whole band was portrayed in a big, spacious acoustic – just as Jim Anderson intended although, as anyone who attended his AES UK lecture last year will know, that's not quite how the recording was made.

KEY OBSERVATIONS...

Results on piano were mixed. Gonzalo Rubalcaba's contemplative 'Silencio' (Blue Note 0946 3 55534 2 0, another Jim Anderson recording) worked well, with a big acoustic and a piano sound that was percussive without being hard. Only the odd extreme-LF goes on in this recording troubled the Statement somewhat. But the more energetic Volodos Schubert, which I enthused about in the Naim review [Sony SICC 70, Japanese import], wasn't as spot-lit as I'm used to and as a result was not so captivating either as a recording or as a performance.

Dynamic contrasts were softened and there was a slight clouding of significant detail.

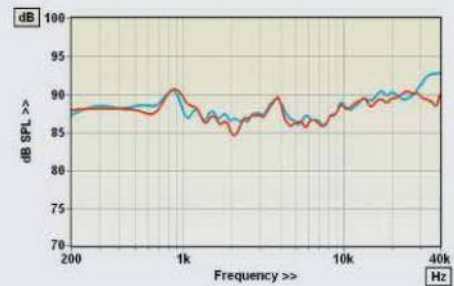
The Statements also did a good job with the quirky combination – and somewhat quirky recording – of Julian Bream on lute and George Malcolm on harpsichord playing transcriptions of Bach trio sonatas [BMG 09026-61603-2]. The 'jangle box', as Malcolm often referred to the harpsichord, is another difficult instrument to reproduce and can easily sound unrelenting and clangy. The Statement's slight softening prevented this.

But that softening went too far on Suppé's *Light Cavalry* (Mercury 470 638-2), homogenising the string sound a little and removing some vital bite and interest from this stellar recording of the late 1950s. Ⓜ

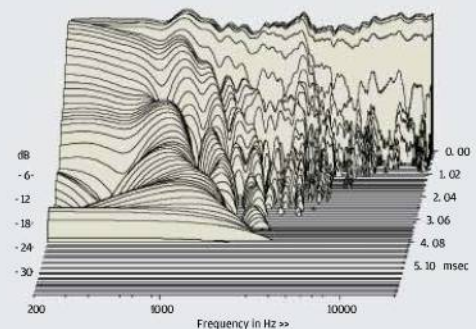
HI-FI NEWS VERDICT

This is a product that will clearly suit some listeners better than others. If you demand the ultimate in transparency and must have a speaker that is rhythmically adroit, the Statement probably isn't for you. Whereas if you place a premium on spaciousness and even welcome a little softening of rough textures, it will be much more to your liking. If so, then the Heco offers a lot of loudspeaker for the money.

Sound Quality: 81%



ABOVE: While there's some loss of 'presence', its response extends strongly into the ultrasonic



ABOVE: Waterfall shows a disparity in the speed of decay between midrange and treble drivers

HI-FI NEWS SPECIFICATIONS

Sensitivity (SPL/1m/2.83Vrms – Mean/IEC/Music)	88.4dB/88.1dB/87.7dB
Impedance modulus min/max (20Hz–20kHz)	3.8ohm @ 34Hz 18.9ohm @ 21Hz
Impedance phase min/max (20Hz–20kHz)	-54° @ 25Hz 21° @ 162Hz
Pair matching (200Hz–20kHz)	±2.1dB
LF/HF extension (-6dB ref 200Hz/10kHz)	29Hz >40kHz/40kHz
THD 100Hz/1kHz/10kHz (for 90dB SPL/1m)	Not tested
Dimensions (HWD)	1230x298x435mm

TICKETS NOW AVAILABLE FOR DOWNLOAD ONLINE AT
WWW.CHESTERGROUP.ORG

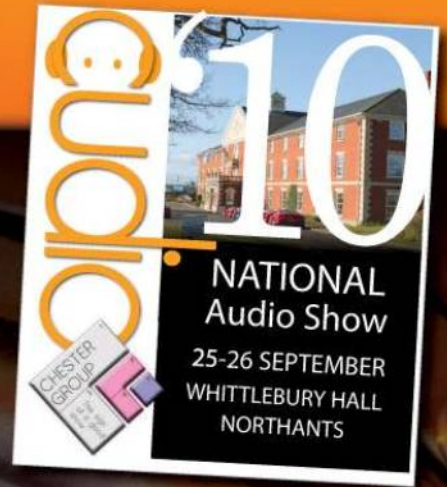
HAVE YOU GOT YOUR TICKET YET? SEPTEMBER IS FAST APPROACHING!

**NOW OVER 75 DEMONSTRATION SUITES
 OVER 2 FLOORS**

Plus another 30 mixed stands and Acoustic Suites in the
 Brooklands Trade Hall

STOP PRESS. OVER 70% OF ROOMS NOW CONFIRMED!

Two EXCLUSIVE CONCERTS in the Grand Prix Suite:
 Friday 24th and Saturday 25th



OUR LATEST LIST OF EXHIBITORS

- Absolute Sounds
- Advanced Acoustics
- Alternative Audio
- Angel Sound
- Artisan Audio
- Astintrew
- Atacama Audio
- Audio Epilog
- Audio Italia
- Audio Note
- Audiofreaks
- Aurousal
- Avid Hi-Fi
- BADA
- Black Rhodium
- Burmester
- Claro Precision Audio
- Coherent Systems
- Creek
- Cymbiosis
- Cyrus
- Deltec Precision-Audio
- Diverse Vinyl
- E.A.R Yoshino
- Epos
- Focal JM Lab
- GT Audio
- H.G Rapkin
- Henley Designs
- HiFi Plus
- Hi-Fi Racks
- Hi-Fi World
- Icon Audio
- Ikon Audio-Consultants
- Inspire Hi-Fi
- Jordan Acoustic
- Kudos Audio
- Loricraft Audio
- Music First
- Nordost
- NVA LTD
- Origin Live
- Palmer Audio
- Revolver
- Russ Andrews
- Sim2
- Stamford Audio
- Sonos
- Sound Hi-Fi
- SRM Tech
- Studio AV
- Supra Cables
- Symmetry
- The Missing Link
- The Right Note
- Tom Tom Audio
- Triangle
- Vertex AQ
- Zouch Audio



Shuttle Bus

New Improved Show Shuttle now runs every 1/2 hour from Milton Keynes Station.

By Rail

Milton Keynes Station & Northampton Station
 For information on train operators and times phone National Rail Enquiries on 0845 7484950.

By Air

Birmingham International Airport (56 miles)
 Heathrow Airport (70 miles)
 Luton Airport (48 miles)
 East Midlands Airport (60 miles)



The Whittlebury area abounds with things to do ...
 Golf (on the doorstep), outlet village, various sports activities, beautiful walks, Silverstone Race Circuit, Historic Towcester, National Trust properties so you really could make this a complete and most enjoyable weekend away.



justin@chestergroup.org | steve@chestergroup.org
 +44(0)1244 559 033 | +44(0)1244 559 034
 Show organisers. Intellectual rights reserved.



ALSO COMING SOON
NATIONAL SOUND & VISION SHOW '10
 30 - 31 OCTOBER - CROWNE PLAZA - DUBLIN
 VISIT WWW.CHESTERGROUP.ORG NOW FOR MORE INFO



TRIANGLE
MANUFACTURE ELECTROACOUSTIQUE

Magellan

by TRIANGLE



TRIANGLE products are available in the UK through our four authorized dealers :

THE MUSIC ROOM

JACK LAWSON
Glasgow, Scotland
0845 4000 400

MAYFLOWER SOUNDS

PETE DUNSTAN
Scrooby, South Yorkshire
01302 711 528

KRONOS AV

DAVID CAMPBELL
Dungannon, N. Ireland
0288 775 3606

AUDIO IMAGES

TIM DEARING
Lowestoft, Suffolk
01502 582 853

www.triangle-fr.com

hi-finews GROUP TEST

If DAB is on the decline and the great analogue switch off is being pushed back, perhaps now's the time to sit back and enjoy the tried-and-tested sound of analogue FM radio

FM TUNERS £200-£650

TESTED THIS MONTH

ARCAM FMJ T32	£615
CREEK DESTINY	£650
DENON TU-1510AE	£200
MYRYAD Z132	£450
ROKSAN KT-1 MK III	£645



Cutting-edge gear, cherry-picked by the *Hi-Fi News* editor



The pinnacle of sound quality within its peer group



Great sound, great value and a cut above its rivals

• CD PLAYERS • TURNTABLES • CARTRIDGES • AM/FM TUNERS • AMPLIFIERS • HEADPHONES • SPEAKERS •

Many years ago, Naim Audio launched its high-end stereo tuner with an amusing ad campaign. Radio was the ideal source for music, the ads suggested, because someone else puts the records on for you.

This can't have gone down very well with the UK's turntable manufacturers, but it highlighted the real joy of FM radio listening. It's been said many times, and it's still true, that if you're not in control of what comes next, the effect is psychologically, if not sonically, much more like a live performance.

So, for this month's group test, we've compared five tuners to see which does best at bringing FM music to life in your system.

THE LINE-UP

Arcam's T32 is the company's only current stand-alone stereo tuner. For the UK it's normally supplied complete with a DAB module, though this was disabled on our review sample.

From Creek comes the Destiny tuner, with less comprehensive facilities, but clearly aimed at

maximising sound quality with a suitable system.

Next is the much cheaper Denon TU-1510AE, included here to see how a low-cost but seemingly high-tech model from a leading maker would compare with the pricier UK offerings. Denon's TU-1800 offers FM and DAB for not much more money. But the claim for the new, analogue-only TU-1510AE is that it gives good results on FM even in crowded urban areas.

Somewhere in the middle on pricing comes the rather elegant Myryad Z132. Myryad offers DAB elsewhere, in its 'all-in-one' Mi product, but not in either of its hi-fi separates ranges.

Through evolution rather than revolution, the tuner in Roksan's Kandy range eventually became the KT-1 Mk III. Like the Creek, it sits at the top of our price range but has basic facilities, and so must stand or fall by its sonic performance.

Assessing tuners on real radio broadcasts is obviously problematic, as the programme is constantly changing. In the end, BBC Radio 3 provides the best source, especially with the BBC's own live relays and

concert-hall recordings. The sound is still far less compressed than with commercial stations, while classical music works can give consistent sound over a long enough time to make comparisons possible and meaningful. For this review I enlisted the help of a colleague with a decent external FM rig, allowing us to audition the tuners optimally.

MUSIC USED

A Radio 3 *Lunchtime Concert* from Wigmore Hall with soprano Dorothea Röschmann and pianist Malcolm Martineau provided fine live sound. Another item, one that you would hardly choose as a hi-fi demonstration but which proved very illuminating, was a 1940s recording of Giseking playing the Schumann piano concerto. Later, I tuned in to two recorded QEH recitals by the Takacs Quartet playing Beethoven string quartets. We also compared all the tuners on rock and pop stations, and came to some very intriguing conclusions, as you will see in the next few pages. ➔

REVIEWS BY STEVE HARRIS
LAB TESTS BY PAUL MILLER

• CD PLAYERS • TURNTABLES • CARTRIDGES • AM/FM TUNERS • AMPLIFIERS • HEADPHONES • SPEAKERS •



Arcam T32 (£615)

Arcam's T32 has more front panel controls than any of the other models here, and it does have more facilities. But actually, the row of seven buttons under the display are just for instant selection of its 14 FM or AM presets, the first giving 1 or 8, the second one 2 or 9, and so on.

Anyway, even for those who never look at the manual before trying to get sound out of a product, it's all straightforward. Arrow-labelled up and down keys select waveband or input, which means AM, FM, DAB, Sirius (for the USA) or iPod, as revealed by the large and clear green display. A Menu button accesses further options, such as mono/stereo FM reception, RDS text on or off, and setting the unit's phono input sockets either for iPod input via Arcam rDock or rLead, or as a normal 'aux' input.

While the Disp button cycles through display settings of bright, dim and off, Info gives the option of RDS text, or just displaying the station name along with the frequency and a bargraph indication of signal strength.

Accessories include the usual AM and FM indoor antennae, and the Arcam CR90 'universal' or learning remote, which can control up to eight devices. As well as being programmed for the T32 and other Arcam products, its code library enables it to operate thousands of other makers' products, including set-top boxes and TVs.

OPEN AND REVEALING

Homing in on a Radio 3 *Lunchtime Concert* soprano recital from Wigmore Hall, the Arcam gave an



immediately favourable impression, offering good stereo width and a natural tonal balance. The soprano voice sounded unforced and not over-bright. On a 1940s piano concerto recording, the Arcam seemed open and revealing enough, giving you the 78 'surface' without exaggeration, to make it acceptable rather than annoying. The sound was detailed enough for you to try to hear into the transcription setup, and to hear the way the piano would break up slightly on the loudest treble passages.

Listening to a recording of the Takacs Quartet playing Beethoven at the Queen Elizabeth Hall on Radio 3, the Arcam sounded expansive yet well balanced. Here it was notably brighter-sounding than the Roksan, not sounding over-relaxed and managing to create a good impression of the space in the venue. It did not emulate the obviously rich and gutsy effect of the Creek, but gave a more open, sophisticated and even lighthearted presentation.

Turning to Smooth FM, the Arcam kept its composure, revealing the station's strongly compressed sound but sounding more than acceptable.

Sound Quality: 80%

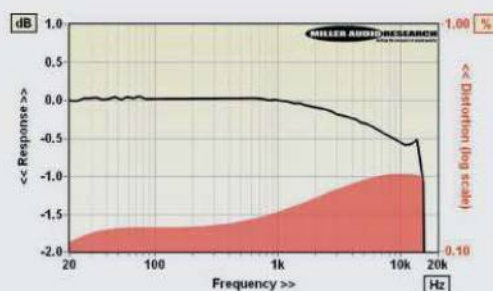


ABOVE: With more buttons than most tuners, this Arcam model still offers a nice-to-use rotary tuning control

HI-FI NEWS LAB REPORT

Arcam's FM signal strength meter spans a slightly limited 12dBµ-38dBµ range with the maximum position (about 0.1mVRF) delivering an A-wtd S/N ratio of some 53dB. The stereo muting threshold is set to a fairly standard 26dBµ or 20µVRF (about halfway along the indicator) but there's a worthwhile improvement in noise performance with higher (55dBµ or 0.56mVRF) signal strengths where the S/N ratio approaches 65dB. Optimum performance occurs at >70dBµ where the A-wtd S/N ratio achieves a full 70dB (20Hz-16kHz).

Distortion is also impressively low at ~0.1% through the midrange beyond which there's an acceptable increase to 0.28% right up to the effective cut-off point at 15kHz. Without doubt, the T32 is the 'cleanest' of our five tuners and although there's a slight shelving of high treble (-0.6dB/10kHz) its stereo FM response is otherwise very flat and well extended into the low bass [black trace, below]. Moreover, while the T32 requires slightly more RF to achieve its best performance, it offers a wider 55dB stereo separation as a result. **PM**



ABOVE: FM frequency response [black trace] with distortion vs. frequency [red infill] at 60dBµ (1mVRF at 75% modulation)

Maximum output level/Impedance	1.27V / 256ohm
Muting threshold/Sensitivity (65dB SN)	20µV / 710µV
Distortion vs frequency (20Hz-16kHz)	0.09 to 0.28%
Pilot/Subcarrier suppression	69.3dB / 85.0dB
Ultimate A-wtd S/N ratio (75% mod)	69.8dB
Frequency response (20Hz-15kHz)	+0.05dB to -1.1dB
Stereo separation (1kHz)	55dB
Power consumption	11W
Dimensions (WHD)	430x85x290mm



ABOVE: In addition to its two pairs of outputs, the T32 has a pair of phono inputs, primarily for iPod use.; to the right are both DAB and FM antenna inputs

Creek Destiny (£650)

Creek's upmarket FM/AM tuner has an uncluttered look, a small display window and brightly-polished tuning knob balancing a simple array of four buttons on the left. While the Band button provides the obvious AM/FM switch, pressing Scan sends the tuner searching the chosen band for the next available station. Up to 80 stations can be preset. To memorise the station you are tuned to, you press Store, followed by Mode, then use the tuning knob to select the desired preset number, from 01 to 80, for that station, finally pressing Store again. AM preset numbers are given an 'A' suffix, FM stations 'F'. Turning the tuning knob while in preset mode brings up stored stations in preset number order, first on one band and then the other.

Once a station is playing, the display shows the preset number and frequency for a few seconds, then switches to the station name if available. On the downside, the display is too small to be read from any great distance. Also, it does not provide RDS text messages.

A basic AM loop antenna is supplied along with a single-wire aerial for FM, and Creek's SRC2 'system remote' handset, which offers remote control operation of other matching Creek products as well as the Destiny tuner.

DEPTH AND CHARACTER

Catching a live soprano and piano in the BBC's *Lunchtime Concert*, the Creek immediately seemed to give depth and character to the piano, which had bass weight and power and a general feeling of firmness



and presence. The soprano voice had more presence too, though for my taste the sound could become a little to strident. While the performers were if anything more forward than with any of the other tuners here, the Creek did give an arrestingly airy impression of the recording venue as a big space.

When Radio 3 played the transfer from a 1940s Giseking piano recording, the Creek gave a feeling of a strong bass foundation, with forceful dynamics. With the recorded sound of the Takacs Quartet at the Queen Elizabeth Hall, the Creek tuner quickly showed its gutsy bottom-end sound, with generally darker string colours.

It could be fiercer-sounding in the upper mid than either the Arcam or the Myryad. Yet it succeeded, arguably better than the others, in delivering the performance with an enhanced sense of occasion. The biggest contrast was with the Roksan, which was unemphatic and recessed by comparison.

On Smooth FM, the Creek seemed to give more bass than the other models, and was also more forward or bright in the upper ranges.

Sound Quality: 70%



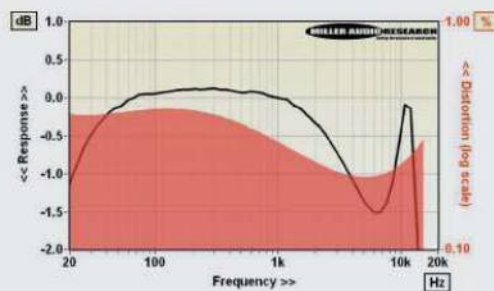
ABOVE: Rear panel view shows just the usual pair of phono audio outputs, along with a 75ohm FM antenna socket and clip connectors for the AM loop antenna

ABOVE: This display is a little small to be read across a room, but shows station names. Up to 80 presets can be stored

HI-FI NEWS LAB REPORT

To judge by its very conservative specifications, the Destiny tuner is somewhat under-rated by Creek. Sure enough it's not quite as sensitive as suggested, but a stereo muting threshold of 20µVRF is more than adequate, while the rated 56dB S/N ratio is clearly exceeded in practice (70dB is achieved at Creek's specified 60dBµ/75% modulation while its ultimate 71.8dB figure is the widest of the group). This tuner also has the highest analogue output of 2.5V which further benefits from a usefully low 100ohm source impedance. Unlike the Roksan tuner, for example, the Destiny has clearly been equipped with an output stage more commonly associated with a good CD player.

The Destiny's -1.4dB presence dip and HF peak at 12kHz prior to the 19kHz pilot filter [black trace, below] is a slightly exaggerated version of that seen with the Myryad and Denon tuners. All three tuners show evidence of demodulated sidebands within the audio range but Creek's implementation has the lowest harmonic distortion of ~0.4% through bass and lower midrange, falling to ~0.2% at HF [red infill, below]. PM



ABOVE: FM frequency response [black trace] with distortion vs. frequency [red infill] at 60dBµ (1mV RF at 75% modulation)

Maximum output level/Impedance	2.5V / 100ohm
Muting threshold/Sensitivity (65dB SN)	20µV / 400µV
Distortion vs frequency (20Hz-16kHz)	0.21 to 0.41%
Pilot/Subcarrier suppression	77dB / 102dB
Ultimate A-wtd S/N ratio (75% mod)	72.1dB
Frequency response (20Hz-15kHz)	-1.2dB to -3.1dB
Stereo separation (1kHz)	48dB
Power consumption	4W
Dimensions (WHD)	430x75x330mm

Denon TU-1510AE (£200)

Slim and compact, the Denon TU-1510AE has a seemingly minimal control layout with just four buttons and a small tuning knob. You can choose manual tuning and you can set presets manually too, but this convenience-oriented tuner is really designed to do everything for you automatically.

With FM selected by the Band button, a press on Auto Preset will start the tuner scanning the FM band for stations and automatically storing them as presets, numbered in ascending frequency order. Up to 100 stations can be stored. If you want to store weaker stations that get passed over in the scan, you can choose to create presets manually.

RDS functions, selected via the Menu button, include the scrolling display of programme type (PTY) and radio text (RT) messages, and the ability to search for traffic programme (TP) stations.

Along with the usual basic aerials, Denon's package includes a simple dedicated remote handset, the RC-1144. This covers all the front panel functions, while its numeric keys access the presets by direct entry, once you've used the Shift key to select among the 'A' to 'J' blocks.

CLOSED IN

Listening to the *Lunchtime Concert* soprano recital on the Denon, I rather missed the feeling of space and atmosphere that can be so enticing in the BBC's live relays from Wigmore Hall. It seemed that the stereo image was spread rather thinly between the speakers, sounding closed in rather than conveying a generous sound picture. There seemed to be a lack of bass



weight to the piano sound, while the soprano voice was thinned rather than full bodied.

With the *Performance On 3* presentation of the Takacs Quartet, the Denon did not manage to be as spatially convincing as any of its more expensive competitors here. Although it could give a stereo soundstage that spread reasonably well between the speakers, the instruments seemed somehow bunched up together rather than inhabiting their own audible space.

In the fast and furious parts of this music, the Denon just didn't make it so easy for the ear to differentiate between instruments as did the Arcam or Myryad. Furthermore, it really only gave the faintest impression of the hall ambience during the performance, which by contrast was well portrayed by the Myryad, for example. Also, with a bass end that was conspicuously less weighty than that of the Creek here, the Denon made the cello sound less authoritative by comparison.

Switching to Smooth FM, the Denon gave an undeniably thin sound, with a tendency to sound 'one notey' in the bass.

Sound Quality: 60%

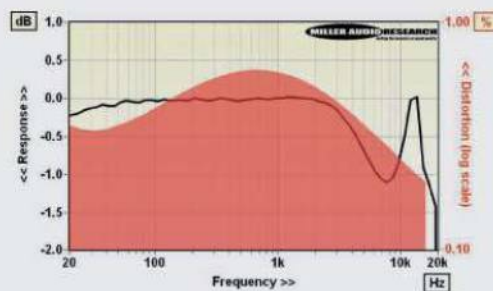


ABOVE: Extensive features here include full RDS text display and automatic scan-and-store for preset stations

HI-FI NEWS LAB REPORT

Our entry-level tuner is also very sensitive, requiring just 19.5dBµ to break out of muting and deliver a useable stereo S/N ratio. Some 53.5dBµ (470µVRF) is required to achieve a full 65dB A-wtd S/N ratio – a modest figure to match the widest practical S/N of today's FM broadcasts. The maximum 70dB S/N ratio is achieved with around 1mVRF of signal, which is perfectly possible with a decent aerial, although the slightly weak 40dB channel separation suggests some blending is taking place. Nevertheless, and in common with the Myryad Z132, while the TU-1510AE offers great reception in difficult areas, its decode is not entirely 'clean' with modulation sidebands visible on the FFT spectra [click on the red 'Download' button at www.hifinews.co.uk to locate the full QC Suite report, including more graphs].

Distortion is principally 3rd harmonic in nature and, unusually, is highest at ~0.6% (60dBµ at 75% modulation) through the midrange rather than low bass or treble frequencies. The FM response is very extended (-1.2dB/17kHz) but shows a broad depression of about 1dB through the presence region. PM



ABOVE: FM frequency response [black trace] with distortion vs. frequency [red infill] at 60dBµ (1mVRF at 75% modulation)

Maximum output level/Impedance	0.81V / 290ohm
Muting threshold/Sensitivity (65dB SN)	10µV / 450µV
Distortion vs frequency (20Hz-16kHz)	0.17 to 0.61%
Pilot/Subcarrier suppression	55dB / 107dB
Ultimate A-wtd S/N ratio (75% mod)	69.9dB
Frequency response (20Hz-15kHz)	-0.05dB to -0.95dB
Stereo separation (1kHz)	40dB
Power consumption	5W
Dimensions (WHD)	434x73x286mm



ABOVE: Rear panel fittings are standard, except that the mains input is via a 'figure of eight' two-pin connection, rather than the more usual IEC receptacle



Myryad Z132 (£450)

Though dedicated to analogue reception, the Myryad Z132 looks and feels like a modern digital product. There is no tuning knob, and the neat blue display gives you clock time and even, if you have a compatible Myryad amp, an alarm.

You can use the two arrow keys to tune manually, but a press of the Mode button will switch to 'search' mode, in which the arrows send the tuner quickly to the next station up or down the band. If you find a station you want to memorise, press Store, then use the arrow keys to assign a preset number. Up to 39 FM and 19 AM stations can be stored.

After this you can make use of the 'preset' tuning mode, selected again via its Mode button. Now the display will read 'Pre01' for example, with AM or FM indicated in the small, lower display line.

Other options, such as clock and alarm setting, or clearing memory, are found in a control menu accessed by pressing Select. More obvious in their function are the remaining two single-function buttons, for AM/FM band selection and FM Mono.

Like Arcam, Myryad supplies a simple 300ohm FM ribbon aerial with a balun connector to fit the 75ohm socket on the tuner. Myryad's remote, obviously a generic item, looks similar to Arcam's too, but although it controls other current Myryad products, it has no pretensions to learning.

BRIGHT AND LIVELY

With the live soprano and piano in a Radio 3 *Lunchtime Concert* broadcast, the Myryad gave an



immediate feeling of correctness and precision. The piano sound was convincing, highlighting the harmonic richness of the instrument. It just had 'more overtones'.

Similarly, on the 1940s Giseking piano concerto transcription, the Myryad was both clean and revealing, laying bare the surface noise in the transcription.

On the Beethoven quartets as recorded by the Takacs quartet, the Myryad had a balance that was bright and lively, bringing out the string sounds with a feeling of plentiful inner detail. It did not have the feeling of presence emphasis given by the Creek, though.

It certainly sounded much more spacious than the Denon, and on this music in particular, it made the laidback balance of the Roksan sound incorrect. Compared with the Arcam, the Myryad created a good sense of space with this broadcast and, even if not as clean or smooth, conveyed the energy of the music well in the most bustling passages.

With Smooth FM, the Myryad did its best to bring the compressed sound to life. Indeed, it almost revealed some space in it.

Sound Quality: 80%

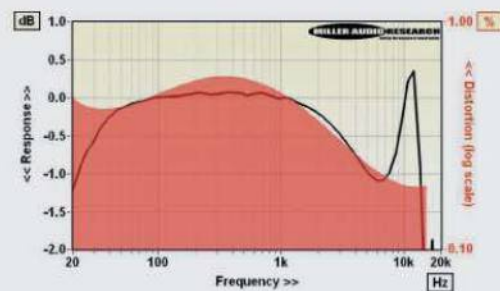


ABOVE: Not a tuning knob in sight. Manual tuning is via up-and-down buttons, but the Myryad proved easy to use

HI-FI NEWS LAB REPORT

Not unlike the Denon TU-15 10AE, this Myryad tuner offers a very high sensitivity – a useable S/N ratio is provided at just 21.9dBμ (12μV RF) while a full 65dB S/N is achieved at just 51dBμ (355μV RF). Once again there are some caveats, including a relatively weak 43dB stereo separation through the midrange and some obvious noise-like sidebands appearing on the decoded audio. Distortion is mainly 2nd and 3rd harmonic in nature, reaching ~0.65% through the upper bass and midrange [see red infill, below] while the 11/12kHz IM test reveals a modest 2nd-order distortion at 0.75%.

Myryad's steep pilot filtering looks to cause a peak in the top-end of the tuner's frequency response (+0.4dB at 12kHz) following a broad depression of up to -1.3dB through the presence region. I would not expect this to help sweeten its subjective treble quality, but at least the excellent 61dB pilot rejection and 102dB suppression of the 38kHz subcarrier will reduce the incidence of ultrasonic distortions folding back into the audio range with less-than-perfect amplifiers! **PM**



ABOVE: FM frequency response [black trace] with distortion vs. frequency [red infill] at 60dBμ (1mVRF at 75% modulation)

Maximum output level/Impedance	1.25V / 225ohm
Muting threshold/Sensitivity (65dB SN)	12μV / 355μV
Distortion vs frequency (20Hz-16kHz)	0.19% to 0.57%
Pilot/Subcarrier suppression	62dB / 102dB
Ultimate A-wtd S/N ratio (75% mod)	71.4dB
Frequency response (20Hz-15kHz)	-1.09dB to -2.5dB
Stereo separation (1kHz)	44dB
Power consumption	5W
Dimensions (WHD)	436x78x288mm



ABOVE: Extra phonos are for the My-Link comms bus, which can connect other Myryad components to give whole-system control via any one unit's IR receiver

Roksan KT-1 MkIII (£645)

Roksan's standard Kandy range casework gives the KT-1 MkIII a big and bold physique, while a generous mains transformer makes it the heaviest in the group at 7kg. It has a sensibly-sized blue display, but as it lacks RDS capability, this does not add station names or other information to the frequency readout. That engraved metal fascia is impressive, although as with the Creek Destiny, it has to be said that the tuning knob doesn't have the quality 'feel' to match.

Also similar to Creek's is the system for preset entry. You can use the tuning knob to tune manually, or after pressing the Autoscan button, have it find stations for you. Up to 99 presets can be stored, their numbers then being displayed with an 'F' or 'A' suffix to indicate FM or AM. To memorise a station, press the Preset button, turn the tuning knob to show any chosen preset number, then press Preset again to store.

With the tuner comes Roksan's Kandy Mk III system remote, which duplicates all the front panel controls except power on/off, and additionally gives direct selection of presets via the numeric keys.

LAIDBACK BALANCE

If one of these tuners could be said to have an immediately different presentation to all the others, it was the Roksan. Switching to the KT-1 MkIII during the live *Lunchtime Concert* song recital, both soprano and pianist appeared further behind the speakers. It was as if the listener had gone back 20 rows in the hall.

Yet while the soundstage could give an unusual impression of depth,



it didn't excel in width, with less impressive size and presence than the Arcam, Creek, or Myryad.

Even with Radio 3's vintage piano concerto recording, the essentially recessed character of the Roksan sound was a notable feature. With the BBC *Performance On 3* recording of the Takacs quartet, the Roksan once again sounded laidback or recessed compared with any of the others in this group.

The Beethoven string quartets did not seem to bring out the best in the Roksan, and here it did not match the lively singing quality in the treble, with a feeling of ambient reality, which the more affordable Myryad was able to reveal.

Its laidback balance seemed to be accompanied by a slight midrange cuppiness, so that the sound began to take on a subjectively almost hollow quality. This certainly did make it seem that the Roksan's sound is artfully tailored rather than aiming at strict neutrality.

Turning to Smooth FM, the Roksan's character made the station sound less upfront than the other tuners, and its tolerant nature proved beneficial here.

Sound Quality: 70%

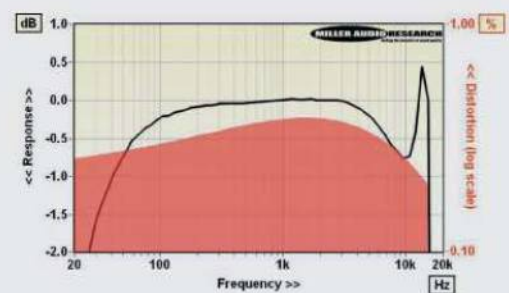


ABOVE: Roksan's display occupies a distinctively-shaped window, but does not provide RDS text display

HI-FI NEWS LAB REPORT

Together with the Arcam T32, Roksan's latest KT-1 is distinct from the other tuners in this test in enjoying a very smooth and distinctly 'analogue' looking noise floor. Whatever foibles it suffers, the KT-1 is free of the spurious tones and modulation artefacts visible on spectra derived from the Denon, Creek and Myryad [click on the red 'Download' button at www.hifinews.co.uk to locate the full QC Suite report, including more graphs].

The RF front-end is also very sensitive, producing a useable stereo S/N ratio from inputs as low as 10µV even if its ultimate A-wtd S/N ratio is a few dB off the best at 68.9dB. The pilot tone and subcarrier rejections are also adequate at 77dB and 89dB, respectively. The in-band impact of the first filter is evident from the presence dip and HF peak of its FM frequency response [black trace, below] but at least any distortion is almost purely 2nd/3rd harmonic and held to <0.4% across the audio range [red infill, below]. A pity the bass is so obviously rolled-off, however. Finally, the KT-1 will be more sensitive to choice of interconnect cable thanks to its too-high 2.3kohm output impedance. PM



ABOVE: FM frequency response [black trace] with distortion vs. frequency [red infill] at 60dBµ (1mV RF at 75% modulation)

Maximum output level/Impedance	0.98V / 2330ohm
Muting threshold/Sensitivity (65dB SN)	10µV / 500µV
Distortion vs frequency (20Hz-16kHz)	0.25 to 0.38%
Pilot/Subcarrier suppression	77dB / 89dB
Ultimate A-wtd S/N ratio (75% mod)	68.9dB
Frequency response (20Hz-15kHz)	-2.95dB to -0.02dB
Stereo separation (1kHz)	41dB
Power consumption	5W
Dimensions (WHD)	432x102x380mm



ABOVE: Making sure: on the back, Roksan's bold connection labels are repeated upside down, to make it easier to hook-up the unit in a rack installation

SME MODEL 30/12



A larger and more massive version of our well known Model 30/2, it will accept nine, ten and twelve inch arms but is especially directed at the exciting Series V~12. This offers performance 27% better than a nine inch arm in respect of angular error distortion. Its immaculate construction and finish stem from facilities and uncompromising quality control which have made the name SME a byword for engineering excellence.

With its dedicated arm, the Model 30/12A possesses a majesty I hadn't heard before. Bereft of absurd, self-aggrandising over complexity exhibiting nothing but sane engineering and producing sound that's impossible to fault.

Ken Kessler Review – *Hi-Fi News*, March 2009

SME LIMITED • STEYNING • SUSSEX • BN44 3GY • ENGLAND
TEL +44 (0)1903 814321 • FAX +44 (0)1903 814269 • www.sme.ltd.uk • sales@sme.ltd.uk

“The Truth, nothing more,
nothing less...”



Each Avid product is born of a passion for real music. The visceral dynamic of a live performance captured in a moment on vinyl is a special treasure. One which requires a superlative hi-fi system to convey realistically.

Turntables, amplifiers and accessories from Avid are dedicated to reproducing this realism.

To experience the truly sublime, please contact an Avid dealer to arrange your private audition.



Analogue Seduction, 4 Dragonfly Close, Hampton-Hargate, Peterborough, Tel: 01733 344768

Audio Workshop, 31 Prince of Wales Road, Norwich, Tel: 01603 61852

O'Brien Hi-fi, 60 Durham Road, West Wimbledon, London Tel: 020 8946 1528

Progressive Audio, 2 Maryland Court, Rainham, Kent, Tel: 01634 389004

AVID HIFI Ltd, Unit 52, 137 North Gate, Alconbury Airfield, Huntingdon., Cambridgeshire. PE28 4WX, ENGLAND, Tel: +44 (0)1480 457300 Fax: +44 (0)1480 457057 Website: www.avidhifi.co.uk, Email: info@avidhifi.co.uk



GROUP TEST VERDICT

• CD PLAYERS • TURNTABLES • CARTRIDGES • AM/FM TUNERS • AMPLIFIERS • HEADPHONES • SPEAKERS •

If your aim in choosing a tuner is simply to have one that visually matches your amplifier, you may not even have read this far. But if it's a sonic match you're looking for, then you'll discover some surprises in store.

Odd man out here is the budget Denon TU-1510AE. Anyone familiar with the ancient Japanese art of four-figure model numbers won't need telling that this new model updates the long-lived TU-1500, but its claimed advantages in reception are possibly more relevant to the US market than to UK conditions. Sonically, I felt it couldn't quite match the more expensive, enthusiast-oriented tuners here.

A complete contrast is Roksan's KT-1 MkIII, which remains the intended companion for current Kandy models, although it hasn't itself been moved on to K2 status. It doesn't offer RDS, but has more presets than you could ever need and makes it quite easy to enter and store them. Its recessed or laidback sonic presentation was notably different and could definitely sound a little odd on some music. Yet this balance could have a welcome and calming influence, if you like to listen to rock stations yet often find them too strident sounding.

A DATE WITH DESTINY

Aside from its plentiful presets, the Creek Destiny is also fairly low on 'extra' features, although it can display station names using RDS. Sonically, the Creek stood out for its subjectively strong and well-textured bass, and could give an impressively solid kind of stereo presentation. Yet although the Creek was impressive on first hearing, I felt that there was a certain slight mid/upper-mid hardness in the sound, and that it could have sounded more open.

Arcam has aimed to cover all the bases with the T32. It offers lots

of facilities, with a well-made and large tuning control highlighting its good build quality, while its 14 presets must be enough for any UK FM listener. Sonically, it is well-balanced and neutral, able to sound inoffensive on badly-compressed pop stations, while responding pleasantly to good source material on Radio 3. Generally, with its straightforward, seemingly low-distortion sound, it did not draw attention to itself or sound immediately impressive, and yet in the longer term it encouraged you to continue listening.

Although this review set out to assess FM performance only, the Arcam's overall quality standard and its inclusion of DAB/DAB+ make it better value for money than the Creek or Roksan. It has to be warmly recommended

Which brings us, finally, to the Myryad Z132. Though lacking a traditional rotary tuning control,

'Market pricing has turned the Myryad into a bargain'

this sleek design is easy to set up and use. Broadly similar to the Arcam, it did sound a little brighter, and could seem more lively. It seemed good at revealing the harmonic structure on piano notes, for example, and could give a good sense of space. As I listened to the Takacs bringing off each mini-climax in Beethoven's third Rasumovsky quartet, I found that the Myryad could give a good feeling of vibrancy and life in the violins, picking up the ambience of the hall in a lifelike way.

BIG DISCOUNTS

Returning to the question of value for money, it seems impossible to ignore the fact that the Myryad is currently being offered at big discounts. While the other tuners all have their strengths, market pricing seems to have turned the Myryad Z132 into an unexpected bargain. And, as long as it costs only a little more than the budget Denon model, it's an unexpected winner too. ⏻



ABOVE: It's the Myryad Z132 (top) that takes the honours here thanks to a vibrant and revealing sound topped off by a heavily discounted market price; as for FM sound alone, Arcam's T32 is recommended with its balanced and involving presentation

• CD PLAYERS • TURNTABLES • CARTRIDGES • AM/FM TUNERS • AMPLIFIERS • HEADPHONES • SPEAKERS •

Pioneer SC-LX83 (£2000)

With an improved PQLS 'clocking' system, Bluetooth functionality, multifunction RF remote controller and digital connection for an iPod, this AV receiver is fully loaded
Review: **John Bamford** Lab: **Paul Miller**

Such is the rapid development of home entertainment technology you've only to turn your back for a moment to find that what was new last season is already old hat. Early last year we tested a group of four multichannel receivers equipped with the (then) latest HDMI 1.3a inputs and HD audio decoding and concluded that they offered astonishingly good value [see *HFN*, Feb '09]. Included among them was Pioneer's £1400 SC-LX81 with seven channels of Class D ICEpower amplification under its bonnet. Since then there's been a better-spec'd 'LX82 to replace it, while that too is now superseded by this 'LX83 sporting no fewer than six HDMI 1.4 inputs (and two outputs) ready for the 'new age' of 3D TV and 3D BDs, along with more comprehensive video up/down scaling.

Loaded with features, its LAN terminal allows access to internet radio stations and streaming of music files from a server across a network. Compatible file formats include FLAC as well as WAV (and, of course, compressed WMA and MP3) but unfortunately it's limited to two-channel 24-bit/48kHz WAV and 16-bit/48kHz FLAC files. No doubt streaming of higher-resolution audio is on the road map for future models.

Meanwhile the 'LX83 sports a host of new gizmos including a supplied Bluetooth receiver dongle. Transmission of audio via Bluetooth is fraught, Pioneer claiming unique circuitry under the bonnet designed to reduce invasive transmission noise. Pioneer's Multi-channel Acoustic Calibration System (MCACC) has been enhanced. Stored data for viewing graphically on a PC can now be transferred to a 'stick' plugged into the USB input on the receiver's front panel. One need no longer connect a PC to the RS-232 port.

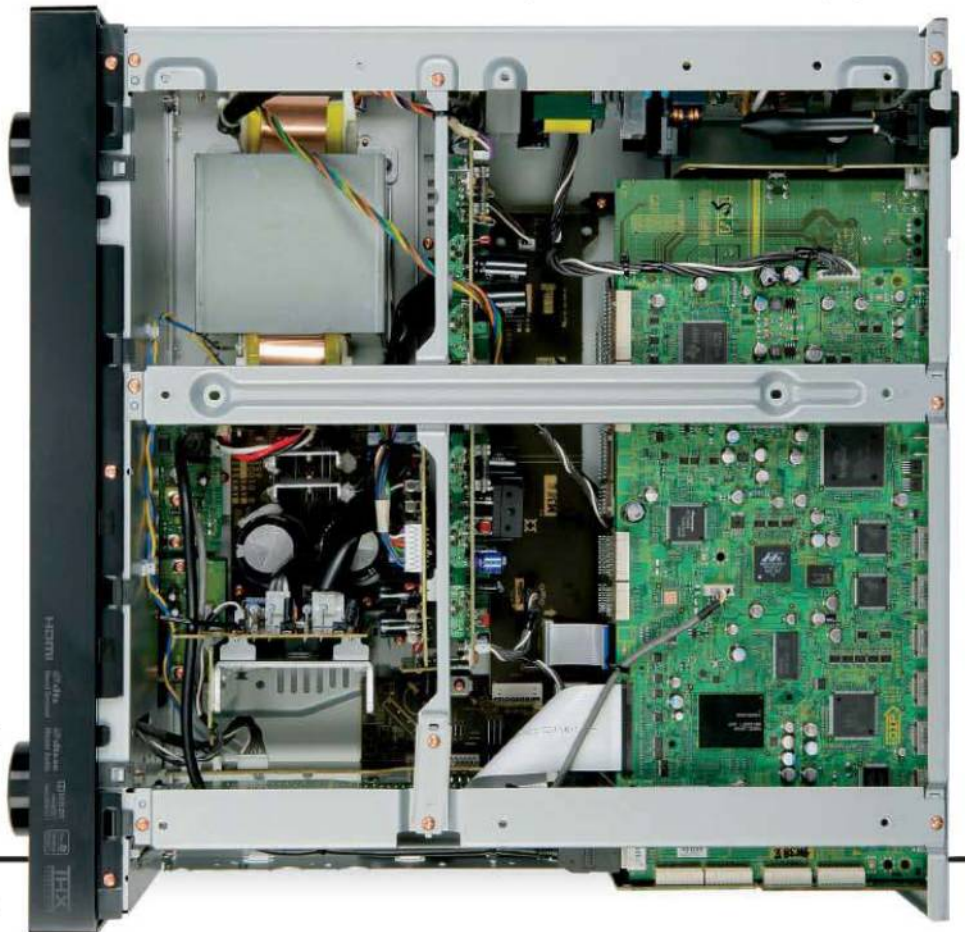
RIGHT: B&O ICEpower Class D modules are still employed by Pioneer, now with a combination of Freescale and TI Aureus microprocessors for the core DSP engine and PQLS system

Also included is a new multi-function (and learning) illuminated handset that can operate via RF as well as infra-red. Likely to cost £350-£400 as an option with cheaper Pioneer receivers, it sports a small OEL panel to show information fed back from the SC-LX83, replicating key status information shown on the receiver's display. Pioneer's iPod connectivity also deserves mention. The USB ports on its receivers provide a direct digital link with iPods – yes, a digital connection – with no need for a dock. Even a connecting cable is provided among the receivers' accessories. The receivers' handsets control iPod navigation, enhanced in this new 'LX83 with the addition of album cover art displayed on an attached TV or projector. All this and I haven't even mentioned the free-of-charge 'app' for controlling

the SC-LX83 via an iPhone, iPod touch or iPad. See Pioneer's website for a demonstration video of how cleverly it works. The receiver can be operated via a web browser as well...

CLOCK THIS...

Also upgraded is the Precision Quartz Lock System (PQLS) whereby digital audio from a Pioneer BD player is governed by the receiver to minimize jitter over HDMI. Two years ago it was limited to CD audio, last year it was improved to operate with 24-bit/192kHz multichannel PCM on BDs, and now it works with Dolby TrueHD and DTS-HD Master Audio bitstreams too. But you'll need a new BD player for compatibility. Older Pioneer BD players cannot be upgraded. Read more about PQLS in PM's Opinion column this month on page 91.





Learning to 'drive' the SC-LX83 is akin to familiarising oneself with the flight deck of an Airbus. There are several quirks that become apparent once you're living with it. When using the front USB port, streaming music, or using the Bluetooth connection, a 'Sound Retriever' DSP function is *always* automatically enabled. Sometimes you'll want it, as it adds 'body' to flesh out the sound of heavily compressed MP3s. But often you won't. It can be disabled without recourse to the on-screen GUI by pressing the Audio Parameter button on the handset (duplicated under the flap on the SC-LX83's fascia) and scrolling through the options to turn it off. But you have to go through this rigmarole every time you select the input(s).

Also, while the receiver's default settings are mostly sensible (eg the tone controls are set to 'bypass' and Midnight/Loudness is Off) the Dynamic Range Control (DRC) designed for listening to movie soundtracks at low volume is set to Auto. You'll want to disable that too using the Audio Parameter button.

As with all Pioneer receivers of recent years, the 'Direct' mode is not quite what it appears as it leaves the MCACC DSP in circuit. To hear the 'naked' amplifier and one's music sources unadulterated by any DSP you must engage the 'Pure Direct' function. Also ensure the receiver's built-in X-Curve treble EQ is defeated via the on-screen display, under Home Menu>System Setup>Manual SP Setup>X-Curve>Off.

STEREO FIRST

Initially the receiver was auditioned as a direct substitute for a Mark Levinson No.383 stereo amplifier driving Townshend 'Sir Galahad' loudspeakers. With all DSP functions disabled and using an analogue input for hooking up a 'legacy' Pioneer DV-868AVI universal player (that I maintain in my system for playback of DVD-Audio and SACD media – and it's no bad CD player either), the reduction in sound quality

'Combined with a BD player the 'LX83 delivers one heck of a bang for the buck'

ABOVE: The front panel sports the USB input and an HDMI input for the temporary hook up of camcorders. Hairline finish is less prone to fingerprints than previous models' glossy fascias

was nothing like as severe as one might expect having just replaced a purist, audiophile amp with an AV receiver costing less than one-third the price. The powerful drums and gut wrenching bass riff on 'Gone Buttlefishin'" by James

Newton Howard and Friends [Sheffield Lab CD-23] had plenty of dynamic impact and tremendous clout, observed to be 'fatter' and rather warmer in the bass than with the Levinson. Tonally

it displayed something of a golden hue: rich, and fruity, charming but a little soft.

Similarly 'Private Investigations' from the 1996 re-master of Dire Straits' *Love Over Gold* [Mercury 8000882] sounded 'lush' and sweet in tone, with a touch of softness around the edges of transients. The sound was nothing like as good when I changed to using an S/PDIF coaxial connection. Pioneer might claim the SC-LX83's AK4480 32-bit Delta-Sigma DACs from AKM Semiconductor are the latest and greatest, but think again if you were hoping you might upgrade the sound of an ageing CD player by using it as a transport and using the 'LX83 as a rather posh DAC/amplifier. 'Private Investigations' lost its analogue-sounding charm and was more coarse and fatiguing, with a brittle 'digital edge' when using the DV-868AVI purely as a

HIGH-END AND THE HIGH ST

'We're still in the display business,' quipped a Pioneer representative when extolling the virtues of the cute little OEL status display built into the SC-LX83's remote handset. His witticism referred to last year's shock announcement that Pioneer was ceasing manufacturing its class-leading PDP TVs. It may have built the best TV sets money could buy, but it seems the more Pioneer sold the more Pioneer lost money. So it quit, resulting in factories being sold and Pioneer reducing its global workforce by many thousands. This leaves Pioneer to focus on its core audio and automotive businesses. Its G-Clef 'pure audio' stereo components show that it is perfectly capable of making audiophile gear, however it's the recent introduction of iPod docking systems and the like that will keep Pioneer in consumers' eyes on the high street.

FULL HD AV AMPLIFIER

PIONEER SC-LX83 (£2000)



ABOVE: Set-up options allow various speaker configurations (such as using surround back channels to bi-amp the main front pair instead) along with two additional zones if desired. A phono input (MM-only) is a rare find on today's AV receivers

CD transport. The power chords on electric guitar sounded thin and lacked 'body', while the usually joyous assault on the piano sounded noticeably less grand.

ALL CHANGE...

The sound changed markedly again when listening to the same CD played on a Pioneer BDP-LX52 Blu-ray player over HDMI. It sounded 'faster' and noticeably more vivid, with air and space that allowed the recording to breathe. Returning to the James Newton Howard track was an ear-opener. Instead of the warm tubbiness observed with the analogue connection, percussion now sounded explicit with cymbals crashing and decaying in sharp focus. Bass was fast and agile, with less 'oomph' but more 'slam'.

My system might not have had quite the finesse and delicacy I'm accustomed to from the high-end Levinson amp, the tonality appearing a little bleached, but this was a tremendously engaging sound nonetheless.

Turning the PQLS on and off is a five-second demonstration of its efficacy, by the way. Without PQLS the HDMI-connected BD player demonstrated a similar steely sharpness to that heard when using the universal DVD player via a coaxial digital input, with blurring of low frequencies and a consequent loss of image focus overall. All this and I'd still only been listening in stereo, through a pair of high-end loudspeakers...

For auditioning multichannel BDs, furniture was rearranged to accommodate a set of Pioneer 'EX' speakers with an accompanying

S-W250S subwoofer for 5.1. Dave Matthews and Tim Reynolds' *Live at the Radio City Music Hall* Blu-ray disc – with 24/96 multi-channel soundtrack encoded in Dolby TrueHD – demonstrating sensational atmosphere and the feeling of 'being there'. Again, the difference with and without PQLS was clearly obvious while enjoying a more intimate hi-res recording of Jane Monheit and John Pizzarelli performing the Gershwin classic 'They Can't Take That Away from Me' from the *Legends of Jazz with Ramsey Lewis: Showcase* compilation BD. This recording sounds so sumptuous that it didn't sound awful with PQLS disengaged, but with it switched on the sound image clearly gained an added sense of three-dimensionality, with deep, textured bass and delicate, crystal clear high frequencies. Combined with a BD player the SC-LX83 delivers one heck of a bang for the buck. ☺

HI-FI NEWS VERDICT

As its capabilities don't extend to the streaming of high resolution audio files it doesn't *quite* tick all the boxes as a 'hub' suitable for a progressive audiophile. Nevertheless if you spent £2000 on a 'straight' stereo amp or pre/power combo and got this level of sound quality you wouldn't be wholly disappointed. Given its comprehensive feature set, then, it can only be considered fabulous value for money.

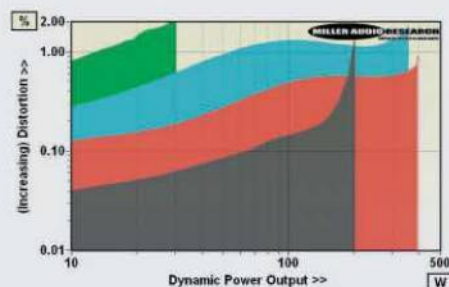
Sound Quality: 78%



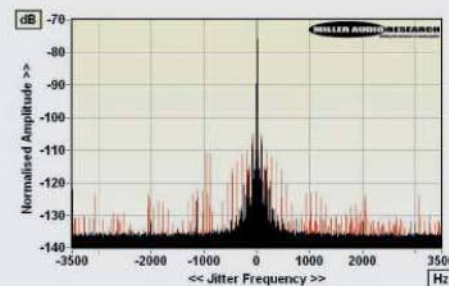
Comparisons with Pioneer's earlier SC-LX81 model [HFN, Feb '09] are very instructive for while this latter amplifier was 'digitally proficient' it did suffer from demodulated RF noise within the audio range – presumably related to the ICEPower Class D amps – which may, in turn, have been the root cause of its poor showing in our listening tests. The SC-LX83 offers broadly the same power output at 2x195W and 7x130W/8ohm with a dynamic capacity up to 400W into lower impedances [see Graph 1, below] but has a poorer S/N ratio (75.5dB vs. 80.2dB re. 0dBW) and higher distortion (0.05-0.18% vs. 0.003-0.02% from 1-100W/8ohm) than the SC-LX81. Nevertheless, these differences appear to be side-effects of Pioneer's successful efforts to rid its amplifier of any RF-related artefacts. The fact that the SC-LX83 is free of any wandering demodulation may be the single most important factor in its improved subjective performance.

The digital performance of the SC-LX83 enjoys a wider 106dB A-wtd S/N but the DAC/oversampling is slightly poorer with mildly increased distortion (0.001-0.004% vs. 0.0005-0.001%) and a poorer rejection of stopband images (-49dB vs. -99dB). Jitter is also far higher via S/PDIF (570psec vs. 40psec) and HDMI (365psec vs. 37psec). Graph 2, below, shows much the best result over HDMI with PQLS engaged, without which jitter increases to ~1500psec [see Opinion, p91]. Bass management is unchanged, incidentally.

Readers are invited to view comprehensive QC Suite test reports for the Pioneer SC-LX83's analogue, digital, Dolby and bass management performance by navigating to www.hifinews.co.uk and clicking on the red 'download' button. PM



ABOVE: Dynamic power output versus distortion into 8ohm (black trace), 4ohm (red), 2ohm (blue) and 1ohm (green) speaker loads



ABOVE: High resolution jitter spectrum comparing 24-bit/48kHz data over S/PDIF (red) and HDMI (black)

HI-FI NEWS SPECIFICATIONS

Power output (<1% THD, 8/4ohm)	2x195W, 5x145W, 7x130W / 2x255W
Dynamic power (<2% THD, 8/4/2/1ohm)	200W / 395W / 360W / 30W
Output impedance (20Hz-20kHz)	0.029-0.005ohm
Frequency response (20Hz-100kHz)	+0.65dB to -0.5dB (Analogue)
Distortion (20Hz-20kHz, Analogue/Dig)	0.014-0.036% / 0.001-0.0035%
A-wtd S/N ratio (Analogue/Digital)	75.5dB / 105.9dB
Digital jitter (S/PDIF / HDMI)	575psec / 366psec (with PQLS)
Power consumption (Idle/Rated o/p)	99W/1.1kW (5x150W/8ohm)
Dimensions (WHD)	420x200x460mm

a lifetime of listening pleasure awaits you



Wadia



Ayre

Davone STAX

DR. FEICKERT ANALOGUE

almarro

QUADRASPIRE

AUDIO ACOUSTICS



THIEL

Grand Prix Audio



MUSIC ARCH

hi-fi specialists in musical architecture

www.musicarch.co.uk | discover@musicarch.co.uk

01273 607 983 | brighton | east sussex

DEMONSTRATIONS BY APPOINTMENT ONLY PLEASE

Nagra BPS (£1650)

For those who chose Nagra's PL-L line-level preamp instead of the phono-equipped PL-P, the teensy BPS MM/MC phono stage is an ideal add-on for analogue access
Review: **Ken Kessler** Lab: **Paul Miller**

Ah, if the audio gods were benign, we should all have to suffer such choices: Nagra PL-L or PL-P? The former control unit is a line-stage, the latter also offers phono. Other differences define them, the former having more inputs and mains-only operation, the PL-P enjoying battery juice, but the absence of a phono stage is the main concern. It was inevitable that Nagra would introduce suitable phono amplification for PL-L owners, and they decided to offer two: the dearer, valve-based VPS (for 'Valve Phono Stage') and the affordable, compact battery-power alternative, which is on review here.

Dubbed the BPS (for Bipolar Phono Stage), it is, indeed, bipolar in the current clinical, psychological sense. On the one hand, it's so 'right', so instantly appealing, so beautifully formed and so cleverly developed that you'll want it as much as an *objet d'art* as you would for its phono stage functions. On the other hand, in displaying a bipolar behavioural disorder, it can be an ornery little fellow, because – in its straight-out-of-the-box, factory-default form – its necessarily high gain and dependency on battery power from a lone 9V MN1604-type battery make it a challenge to match with many modern cartridges.

Its basic description is as simple as the unit is petite: the 110x27x160mm (whd) machined aluminium case contains a single PCB bursting with components, and the front panel but one control: a toggle to choose on/off and 'test', to show the battery status. At the back are the requisite phono sockets for signal in/out, a useless earthing tag – too small, too fiddly – and a mains input. As no AC adaptor was supplied, and I didn't want to fry someone else's £1650 worth of kit, I stayed with battery power.

RIGHT: Dual-mono layout, top-flight components, crammed into a case smaller than a paperback novel. Rectangle in lower right-hand corner covers the PP9 battery

And no, you won't draw me on Duracell-vs-Kodak-vs-Eveready, nor which brand of battery will exceed the estimated 100 hours playing time. So here's a caveat: it's *very* easy to forget to switch this off. The battery will drain and you'll be ticked off when you want to listen, the battery's dead, and there isn't a spare MN1604 in the house.

So, if you find yourself in possession of a BPS, discipline yourself.

PLUG-IN AND PLAY

A view of the innards reveals Nagra's familiar in-house designed and built, custom-wound transformers, as found in the PL-P and VPS phono stage. Nagra states that the BPS is based on concepts which formed the VPS, including user-changeable loads built onto small plug-in devices with six pins that nestle into a block behind the input sockets. These come with the BPS, in its superb carry case, the modules resting in a cut-out, along with a MN1604 battery and two different Allen keys – one for the battery cover and another for the entire lid.

Even with the plug-in modules, Nagra exhibits the Swiss obsession with detail: most makers would be happy to have you simply slip them in place, assuming – probably with good reason – that

pressed home on their six legs, they'll be secure. Not so Nagra: they add a little fixing screw to ensure that the module stays in place. The fixation doesn't stop there: even the rubberised underside is special. The non-slip material is cut out in the shape of a Nagra logo. And the lid? It contains an image of the basic circuit – a Nagra feature that dates back to its tape recorders.

Sharing space with the switches and transformers on the single motherboard are 'discrete and military-specification' components, while the amplification stage employs individually selected and matched bipolar transistors. Nagra has never scrimped on component choice: the capacitors in the signal path are described as 'of audiophile quality' and the precision resistors are MELF (Metal Electrode Leadless Face).

With the lid off to enable a view of the insides, the user can access set-up options that optimise the performance to high-on-perfection: different loads for MCs with the supplied modules, movable jumpers that select 47kohm MM or MC, and jumpers to set MC for balanced or unbalanced operation (also identified as 'symmetrical' and 'asymmetrical'). The choice is determined by the presence of hum, which was undetectable in my



set-up, so my use of the Nagra was in asymmetric mode.

Inserting the modules changes the input impedance of the BPS to values of 100, 150, 220, 330, 470, and 1000ohms. I tried so many variants with so many cartridges that at first I ended up leaving the lid off, but soon found that it sounded different open-vs-closed (damn, I hate writing those words), so it was four tiny screws back in place every time. Lid-on sounded quieter than lid-off.

Because the BPS only weighs 480g, stiff or robust cables will lift it off a table. I used it with Yter and Kimber Hero, the former being thin and light, the latter wonderfully flexi-y and floppy. The unit was fed into an Audio Research Ref 5 preamplifier, and compared to the Audio Research PH5, as well as step-ups from Ortofon, Pro-Ject and EAR. Amps included the Croft Series 7 [see p30] and Quad II-eighty, while speakers included the Sonus Faber Cremona Elipsa Auditor and Wilson Sophia II.

As for cartridges – whew: using the SME 30/2 with Series V arm and the Linn LP 12 with Ekos, I sampled the following: Shure V-15 V for MM listening, Koetsu Urushi, Transfiguration Orpheus, Linn Arkiv, Blue Angle Mantis and Air-Tight PC1 for moving-coil. The remarks which follow are an attempt to describe the unit's overall character, though it's clear that some cartridges were simply of too high an output to operate without tweaking.

MAKING SENSE

In order to make some sense of the plethora of cartridges and the BPS' options, I had to focus on what was consistent from set-up-to-set-up, and LP to LP. Little Feat's *Dixie Chicken*, the new



ABOVE: The on/off/test toggle is the only control. Don't forget to switch off: battery drains quickly. Note circuit diagram on lid

LP of Keb' Mo's *Peace... Back by Popular Demand*, Peggy Lee's *I Like Men!*, a fresh pressing of the Rolling Stones' *Exile On Main Street*, the Dave Clark Five's *Greatest Hits* the recent Nirvana reissues and the Beatles' *Abbey Road*.

How Swiss this is: once I was confident that I had the BPS adjusted for each specific cartridge, I was able to hear, time and again, clarity and transparency that might antagonise the

'Where the BPS excels is with its portrayal of air and space'

tube faithful. How much of this has to do with battery power I can't say, although in my little mind that addresses noise, which in turn enhances clarity and transparency. But then there are mains

phono stages which are hardly slouches in that area. The two virtues manifested themselves repeatedly with the leaner, less cluttered recordings, especially numerous tracks on the Keb' Mo' of close to 'unplugged' spirit.

Where the BPS excels is with the portrayal of air and space. Interestingly, it doesn't do this with scale, for the soundstage is slightly smaller than, say, that of the PH5's. It's all down to neutrality, an absence of grunginess or any near-diaphanous layer between you and the music. What recalls previous experience with other Nagra products

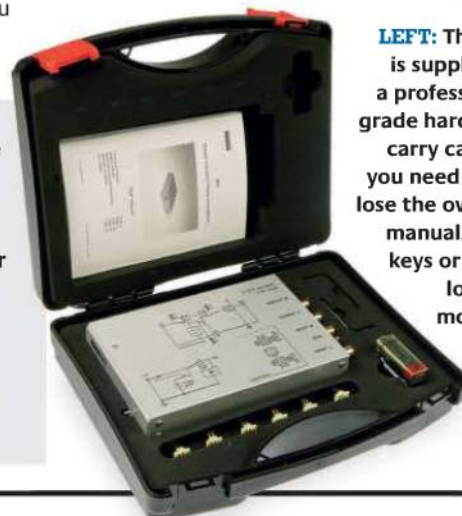
is that the BPS does this without sounding too finely etched or aggressive.

If, however, you feed a brash cartridge into the BPS, one with high enough output to exacerbate the problem of too-high gain and knife-edge dynamics, and the music is raucous, the sound might turn brittle. Half of the Stones LP sounded to transistor-y and artificial to enjoy – I suspect the VPS would cure this – while the more thrashy moments from Nirvana bordered on white noise. (Note, however, that a bombastic, wall-of-threatening-sound may have been the desired effect from Cobain and co, so the BPS is just doing its job.)

NEEDLE MATCH

Please, don't let me misguide you into thinking that the BPS only works with certain cartridges and certain LPs: it's all about matching. It's simply that this is less forgiving, less generous than the EAR 834P, the PH5 or even the tiny Pro-Ject tube phono stage. If you find a way to tame the level of the Urushi, you can savour the textures of Peggy Lee's voice with the added benefits of the

LEFT: The BPS is supplied in a professional-grade hard-shell carry case, so you need never lose the owner's manual, Allen keys or those loading modules



NAGRA ICONOCLASM

Most manufacturers anticipate the need for their products to work with those from other brands. Nagra exists as if in isolation, yet they openly admit on p9 of the owner's guide, without the least hint of apology or even pity: 'If you are using high output level cartridges (MM or MC), it is possible that the high gain of the BPS generates distortion on the output stage. You would then hear unpleasing distorted sound. In this event, your BPS needs to be modified to match your cartridge level, please contact your local dealer.'

Unfortunately, what Nagra regards as high output is far lower than the current norm: nearly every MC in my arsenal taxes this device. So, an open appeal to Nagra: *please* ship this as standard to work with 'typical' cartridges, not just absurdly low-output MCs like Ortofon SPU's and Audio Note's Io.

PHONO STAGE



ABOVE: Minimalist back panel filled with high-grade gold-plated phono sockets for signals in/out, the inputs flanking an unnecessarily tiny and fiddly earthing tag; socket at right awaits the forthcoming AC adaptor

open-window sensation that the BPS possesses when not being overdriven. It's not as seductive as a valve-based phono amplifier, but it's pretty close – almost as mock-valve-like as Croft's Series 7 power amp.

Throughout the lower registers, the BPS shows exceptional control and fluidity, quality over quantity. With the fatter-sounding moving-coils, it manifests itself as a tightening of the sound, especially beneficial with the Little Feat recordings, which can often sound too rich – not the music I'd ever subject to single-ended triode amps powered by 300Bs.

With the bass-heavy stereo take of the Dave Clark Five's 'Glad All Over', the BPS exploited all of the available extension, while allowing the listener to separate the sax from the bass, and from Clark's overly exaggerated, often overwhelming drum sound.

SHEER COMPETENCE

For the two almost mutually exclusionary extremes – the DC5's mechanical plod, Little Feat's liquid Crescent City-inflected ebb and flow – the Nagra maintains its composure, and presents a wonderful opportunity to the listener. Here is a device which can exploit all that vinyl offers, without succumbing to any of the nasties that a bit of rumble or groove noise might excite. For sheer competence and freedom from irritating artefacts, this is almost a poster child for battery operation. The only caveat is that, more than any other phono stage I recall using, it requires undue attention to its gain levels.

Lest panic ensue back in the land of the cuckoo clock, this is not an omnipresent worry, and it is as much music-dependent as it

is cartridge-driven. I do *not* want any of you to be too discouraged by the BPS' posh-Mayfair-club attitude toward which cartridges it will or won't allow to flourish. Dynamic squashing will make its presence known when fast and wide contrasts, with lightning quick attack and a robust increase in level, tax the BPS' capabilities. I suspect huge orchestral works will cause more trouble than, say, the constant level of a rock recording: the above issues with the Rolling Stones and Nirvana had as much to do with the heavily-distorted-by-design sonic textures of the material as they did with levels.

I am loathe to tell you which cartridges work best, because that would be to deprive Nagra itself of performing factory settings suitable for whatever transducer you prefer. Rather, I would ask that, should you find an opportunity for a demo, keep the above in mind: you may be hearing a mismatch, and *not* a deficiency in the BPS.

And when they get it right, you'll find it hard to hang onto your £1650. ☺

HI-FI NEWS VERDICT

Despite the matching issue, Nagra's BPS rewards obsessive analogue addicts with a smooth, detailed, open sound. It is not as warm (nor user-friendly) as my personal sub-£2500 choice, the Audio Research PH5, but comparing them is apples-vs-oranges: they are wholly dissimilar beasts. If you favour battery-power silences and jewel-like build-quality, BPS for you will mean 'Brilliant Phono Stage'.

Sound Quality: 85%

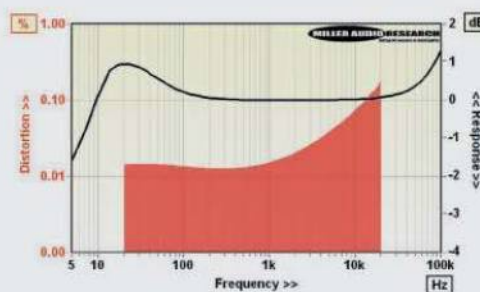


NAGRA BPS (£1650)

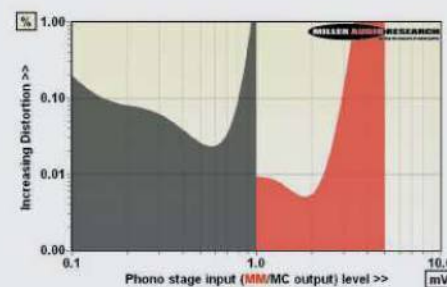
Tucked away in Nagra's little BPS booklet is the following comment: 'If you are using high output cartridges (MM or MC) it is possible that the high gain of the BPS generates distortion on the output stage'. Interestingly, it does not give a value to 'high output' nor does its 'Technical Specifications' mention either the BPS's maximum output or maximum input (overload margin). It does show us the frequency response [identical to that illustrated by the black trace in Graph 1, below] and distortion, rated anomalously at <0.15% and easily met from 20Hz-20kHz [red infill, Graph 1 below]. Its 76dB A-wtd S/N ratio is also close enough to the 77dB quoted by Nagra.

Nevertheless, Nagra does not spell out that the BPS's maximum output is just 1.4V even with a very fresh 9V Duracell Plus (MN1604) cell installed. While this is more than sufficient to drive any modern amplifier, the accurately-specified +52.6dB and +63.7dB gain (MM and MC) means this output is achieved with inputs of only 3.4mV and 0.93mV, respectively [see red and black infills, Graph 2 below]. With many modern MCs delivering 500µV at 5cm/sec, this represents a headroom of less than 6dB, which is insufficient to accommodate even moderate peak groove modulations. To achieve a headroom of 20dB (ok, 19dB) without causing the output THD to exceed 1%, you'd need to employ an MC with a staggeringly low 100µV output at 5cm/sec. Nevertheless, it's worth bearing in mind that this overload is gentle and progressive, not a hard clip.

Readers are invited to view a QC Suite test report for Nagra's BPS MM/MC phono amp by navigating to www.hifinews.co.uk and clicking on the red 'Download' button. PM



ABOVE: RIAA corrected frequency response from 5Hz-100kHz (black trace) and distortion versus frequency from 20Hz-20kHz (red infill)



ABOVE: Distortion versus input level showing limited overload margin for MC (black) and MM (red) options

HI-FI NEWS SPECIFICATIONS

Input loading (MM/MC)	47kohm/100pF / 100-1kohm
Input sensitivity (MM/MC re. 0dBV)	2.3mV / 0.65mV
Input overload (MM/MC)	3.4mV / 0.93mV
Maximum output (re. 1% THD)	1.4V
A-wtd S/N ratio (re. 500µV in MM/MC)	75.2dB / 76.2dB
Frequency response (20Hz-20kHz)	+0.93dB to +0.08dB
Distortion (20Hz-20kHz, re. 0dBV)	0.012-0.18%
Power consumption	9V cell (100 hours battery life)
Dimensions (WHD)	110x27x160mm



High End. Redefined.

Welcome to the ultimate in high end connection.

Atlas Mavros and Atlas Asimi.

A range of pure copper and pure silver interconnects, available fully balanced with XLR or pseudo balanced with RCA plugs, together with speaker cables that will quite simply astound you.

Visit www.atlascables.com or call us now on **0800 731 1140** for more information and to find your nearest stockist.

Plug in, sit back and enjoy the experience.

ATLAS | Cables
atlascables.com

Restek MPre+/Mamp (£1295/£1530pr)

Since launching its original Mini Amp back in 2003, Restek has moved the concept on from 'mini' to 'midi' with this latest full-function preamplifier and matching monos...

Review: **Steve Harris** Lab: **Paul Miller**

Germany has many small companies that started building specialist hi-fi by hand long ago, and still proudly keep the production wholly in their own country. One of these is Restek, known for its big amps and at one time even seen as a German answer to Krell. But Restek's scaled-down M-Series amplifiers look like an attractive proposition too.

Adrian Elscht co-founded Restek 35 years ago and, he says, is doing his best to make sure the business will continue to thrive after he retires in a few years' time. That was the main idea behind the M-Series. Incidentally, although Restek UK was originally set up to represent the line in this country, this distribution company no longer has any connection with Restek of Germany or its products.

'Our problem, actually the problem of the whole industry,' says Adrian Elscht, 'is that we've gone through the ceiling in pricing. So the youth of today just cannot catch up with high-end audio. It's simply too high a level, too high a price for them to get started. So we introduced this range for young people who can't afford very high end products. We're hoping, of course, that they will move later to the higher end!'

BELOW: No surface-mount technology inside this traditional bipolar mono power amplifier

'People often ask us how we do it for the money? Well, all the series have the same front plate, the same transformer, the same power supply. We're copying the automobile industry by modularising production. We can save a lot of money because instead of buying 200 of each part, we can buy 1000. So, for example, the phono stage has a very oversized transformer, but it's still cheaper for us to buy it that way.

'Of course, the casework is not so well done as with our high-end Exclusive Series. For those models, the casework is made with an aluminium/steel/bitumen sandwich construction. For the M-Series we thought we should spend more money on the acoustic performance. People can invest in racks, special feet and so on if they want to improve resistance to microphony. We also saved money by using less expensive cinch connectors; the Exclusive has WBTs.'

MADE TO MATCH

Matching M-Series products include a CD player and DAC, the phono stage, satellite and cable receivers and an FM/DAB tuner, all uniform with the Mini Pre+, or MPRE+. This standard casework is the width of a pair of Mini Amp monoblocks, now designated MAMP, while the earlier Mini Pre, at 140mm wide, was the same size as one of them. The Pre+'s wider

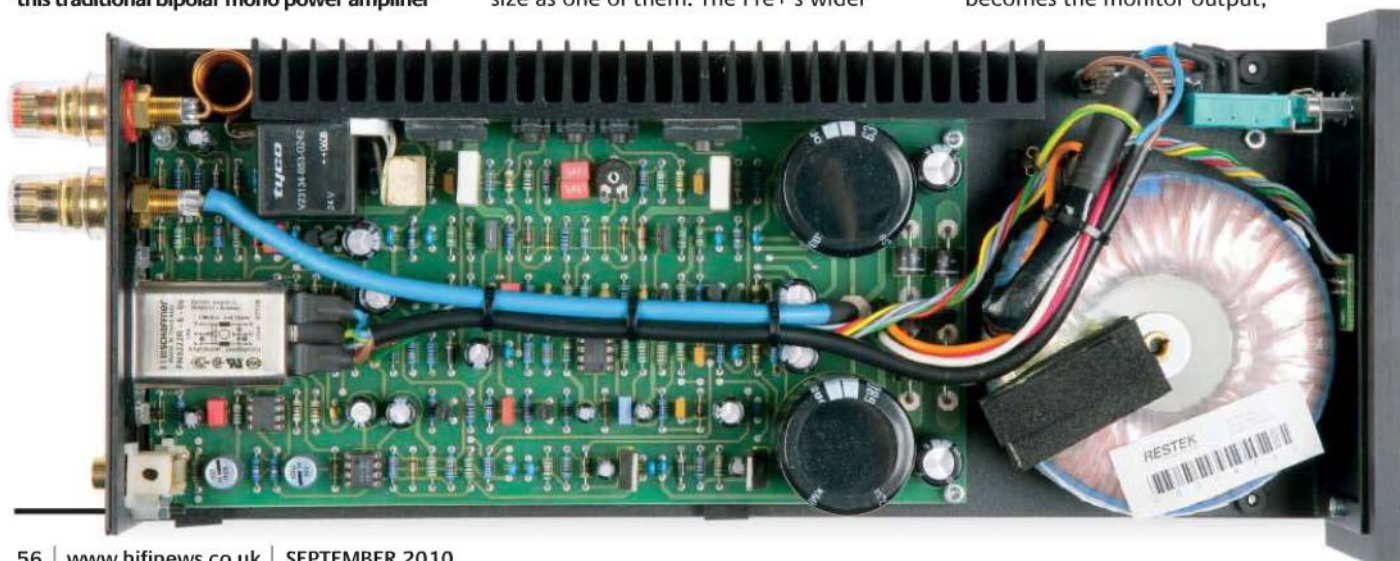
back panel has room for seven line inputs, compared with four on the old Mini Pre, and it has a far bigger power supply along with circuit improvements.

And the preamplifier is a lot more comprehensive than you'd first think when you see that single control. Described in German as a Multifunktionsknopf, this is a combined push button and rotary control. You push to step through the menu, turn to choose your option in each line, then push to select it and move on. On our sample the display was red, but you can choose green or blue when ordering.

First up in the menu is input selection, and once you've set this, the control becomes a volume knob, and the display shows the volume level in arbitrary units from 0 to 99.

After this, if instead of just listening to the music you continue down the menu, you will find Display Off and Display Dim options, and Balance, which gives a nominal $\pm 3\text{dB}$ left/right adjustment, enough to compensate for room or speaker placement asymmetries.

Next, assuming you don't need all seven inputs for different sources, you can select what Restek calls Split mode. This provides a tape monitor or external processor loop, with Inputs 1 to 5 operating as normal while Input 6 becomes the monitor output,





with any selected input routed to it, and Input 7 becomes the return, 'tape in' or processor input.

Following this are three menu items that act specifically on a previously-selected input. Volume On/Off allows you to defeat the volume control and turn the chosen input into a home theatre bypass for connection to an AV processor. 'Text' lets you name the inputs 'CD', 'Phono', 'Tuner' and so on, the names then replacing the numbers in the display. 'Sense' gives a $\pm 6\text{dB}$ gain adjustment for each input, to allow level matching between different sources.

Finally, with 'Auto On' or 'Auto Off', you can choose whether the unit becomes fully operational as soon as it is powered up, or whether it starts in standby mode. One touch of the button or one of the remote's numeric keys will bring it out of standby.

REMOTE AND LEDs

Once set up, you will operate the Mini Pre+ mainly from the remote. This is a generic system controller with a host of buttons that will accommodate the

most complex M-Series systems available. Otherwise, a dedicated remote with fewer buttons could arguably be a bit more pleasing to handle.

There's not so much to say about the Mini Amp. On the front, along with the push button on/off switch, there are three LEDs, but you will normally only see the middle one light up. The other two indicate overload, or over-temperature or a DC fault condition. On the back of the amp are two phono inputs connected in parallel and a single pair of speaker socket/binding posts.

Chrome or acrylic front plates for all the units are available at extra cost.

LOUD 'N' CLEAR

Once I'd penetrated the mysteries of the menu, I found the combination easy to set up, and after leaving it on overnight I sat down to listen to some CDs.

With pianist Mitsuko Uchida in Debussy's *12 Etudes* [Philips 464 698-2], the Restek combination caught my

ABOVE: Like other M-Series components, the Mini Pre+ or MPRE+ is as wide as the two Mini power amps. Their upper and lower LEDs will only come on to indicate a fault

ear immediately with a sound that was quite fresh and attractive, with a real quickness and an appealing coherence of imagery across the soundstage. It was bright rather than especially well textured, but it managed to sound bright and clear rather than bright and harsh. It got through the most brilliant

and demanding treble passages in this almost laughably reverberant recording without sounding nasty to the ear.

Returning to Uchida after another 24 hours settling-in,

I felt that the Restek's sound was now more full-bodied and that there was now a clearer sense to the way the piano sat (or perhaps swam) in the Snape acoustic.

Any acoustic you hear on Jennifer Warnes' *Famous Blue Raincoat* [Classic RTHCD 5052] is artificially created in the studio, but it's important to the music. Starting with 'First We Take Manhattan' in the first session, I'd felt that the Restek pre/power could present a big backdrop of sound spread around the vocal, but didn't really bring out the depth that's possible. Neither did it give you a sense of sparkling detail.

But again, after another 24 hours burn-in, the sound seemed to have gelled. It was as if what had seemed previously like only potential virtues of speed and clarity were now realised. Background instruments in 'Bird On A'

'The little Restek amps were a model of clarity and cohesion'

FROM MERIDIAN TO MINI

Even with good old analogue technology, there's no reason why a moderately powerful amplifier has to take up a lot of shelf space. Back in 1977, Meridian first took the logical step of trading width for depth with its tablet-shaped 101 preamp, 103 monoblock power amp and 104 tuner. Each unit measured 300mm from front to back, with a front plate just 140mm wide by 52mm high. A couple of years later, Crimson introduced a chunkier version of the long-box format, even narrower but twice the height, but it was the elegant Meridian 100 series which effortlessly achieved classic status. First seen in around 2003, the Restek Mini Amp monoblock has dimensions that could hardly be closer to those of Meridian's 103. Restek's matching Mini Pre came in the same format, but it is now superseded by the bigger Mini Pre+ preamp, reviewed here.

PRE/POWER AMPLIFIER



ABOVE: With seven line inputs, the Mini Pre+ can be configured to provide a theatre bypass and processor or 'tape monitor' loop if this is required. Each mono power amp has a single pair of speaker outlets and two paralleled inputs

Wire' now seemed to fill an almost hemispherical space around the singer, while the overall effect was coherent and dynamic, with enticing detail.

QUICK AND CONVINCING

One of my favourite Chesky discs, Marta Gomez and *Entre Cada Palabra* [Chesky JD301], is another recording where the effect of the recorded acoustic presents a real challenge to the system. On the opening 'Maria Mulata' the Restek combination didn't seem quite able to control this number's unruly bottom end. Things get sorted out as the album progresses, though. On later tracks you began to appreciate the sheer beauty and sweetness of the singer's voice. The amp was quick and convincing on the treble sounds of Latin percussion.

By comparison, my usual workhorse amplifier, the big Classé CAP-2100 integrated, gave a more obvious feeling of the proportions of the venue, and perhaps a better controlled sound to that big and blobby bass. Yet the Restek could give a better feeling of immediacy and vocal presence.

Turning to *Rickie Lee Jones* [Warner 256 628], the sound produced by the Restek was surprisingly refreshing. On 'Easy Money', it gave you a clean, rhythmically engaging presentation of the instruments, with a realistic piano and a nicely tinkling celeste, while Rickie's vocal delivery was so well conveyed that it gave you an immediate flash of how she must

have sounded as a hip poetry reader before she got that big recording break.

You might think I'd have been sated with female vocals by now, but I turned to Katia Guerreiro and *Fado* [Milan 399 269-2]. I felt that the Restek gave a very pleasing presentation of the voice, crisp without any trace of hardness.

With Ry Cooder's *Bop Till You Drop* [Warner 7599-27398-2] the little Restek amps were a model of clarity and cohesion, this recording's impeccably clean and dry recorded bass coming through with weight and solidity.

With the rather more soulful sound of Eric Bibb and *Get Onboard* [Telarc CD-83675], the Restek allowed the singer's warmth to come through well, and revealed the subtlety of his arrangements, with an attractive presentation of all the instrumental timbres. ☺

HI-FI NEWS VERDICT

Despite their compact size and outward simplicity, these units have an excellent, clear and engaging sound. Enthusiasts will find the preamp easy to use, though it may remain beyond the ken of other family members. Thanks to our weak pound these 'entry level' products aren't so cheap, but do have all the sonic refinement and class you'd hope for from a high-end marque. The finish options may appeal too.

Sound Quality: 85%

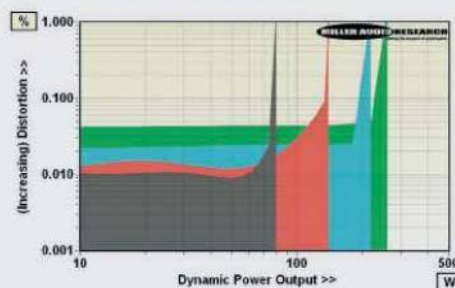


RESTEK MINI PRE+/AMP (£1295/£1350)

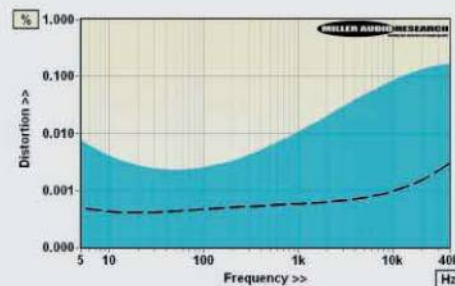
This is a cracking pre/power combination – not a powerhouse or suitable for driving the most difficult loads but still very, very capable when partnered with speakers in the 88dB+ sensitivity bracket. The Mini Pre+ preamp offers a gentle treble roll-off (-0.1dB/20kHz to -2.0dB/100kHz) allied to a usefully low output impedance of just 10ohm with a drive capability of 8.5V and an input overload of a full 6.5V. Distortion is impressively low at 0.0004%-0.003% from 5Hz to an ultrasonic 40kHz [dashed line, Graph 2 below] while the A-wtd S/N ratio is a full 95dB re. 0dBV. This is one very clean little preamp.

The matching Mini Amp monoblocks are only fractionally more 'colourful'. Distortion, for example, is a very low 0.002%-0.013% through bass and midrange but kicks-up to 0.13% at 20kHz where there's less feedback by way of compensation [blue infill, Graph 2 below]. Importantly, however, these distortion levels do not vary with power output, retaining the same quality from 1W through to the rated 50W. The high frequency response 'shape' of the monoblocks is very similar to that of the preamp, but the former offer a slight low bass lift, amounting to +0.3dB at 20Hz and +0.9dB at 5Hz.

And power output? In practice it's possible to realise 55W/8ohm and 80W/4ohm with 80W, 140W, 215W and 260W achievable under dynamic conditions into 8, 4, 2 and 1ohm loads [see Graph 1, below]. Output impedance is a low-ish 0.01ohm. Readers are invited to view comprehensive QC Suite test reports for Restek's Mini Pre+ and Mini Amp pre/power amps by navigating to www.hifinews.co.uk and clicking on the red 'download' button. PM



ABOVE: Dynamic power output versus distortion into 8ohm (black trace), 4ohm (red), 2ohm (blue) and 1ohm (green) speaker loads



ABOVE: Distortion versus extended 5Hz-40kHz frequency, Mini+ preamp (1V out, dashed black) and Mini Amp (10W/8ohm, blue trace)

HI-FI NEWS SPECIFICATIONS

Power output (<1% THD, 8/4ohm)	55W / 80W
Dynamic power (<1% THD, 8/4/2/1ohm)	78W / 140W / 215W / 260W
Output impedance (20Hz-20kHz)	(Pre+ 10ohm) / 0.011-0.042ohm
Frequency response (20Hz-100kHz)	+0.0 to -2.0dB/+0.4 to -3.2dB
Input sensitivity (for 0dBW/50W)	143mV / 1015mV
A-wtd S/N ratio (pre/power)	94.7dB (0dBV) / 95.4dB (0dBW)
Distortion (20Hz-20kHz, pre/power)	0.0004-0.0015%/0.003-0.13%
Power consumption (Idle/Rated o/p)	7W/92W (Pre+ 4W)
Dimensions (WHD, pre/power)	285x55x330/140x55x350mm

audioemotion

www.audioemotion.co.uk

e info@audioemotion.co.uk

t 01333 425 999

Music is our Passion

- > Loudspeakers
- > Amplification
- > Digital
- > Analogue
- > Cables
- > System Infrastructure
- > Accessories
- > Pre Owned

PERFECT BALANCE



THORENS®

Thorens TD 309 Tri-Balance

The TD 309 sets new standards in sub-chassis technology. The innovative three-point-suspension ensures perfect balance. Form and function work in harmony to make it a turntable that is guaranteed to reveal the magic of analogue replay.

"An exceptional product, which is warmly recommended."
HIFI News - June 2010

Buy a
Thorens TD309
get 20% off any
Cartridge
(Maximum cartridge
value £1000)

PEACE OF MIND CHARTER

- 5 year first owner warranty on all new and pre-owned equipment*
- 14 day no quibble exchange plan
- 'Industry best' part exchange prices
- Free room optimisation consultation using our proprietary software
- Finance available on all products

* terms & conditions apply

- > Please ask about our unbeatable part-exchange programme.

Harman Kardon GLA-55 (£750)

Looking like props from the latest Indiana Jones movie, these 'crystal skulls' are actually sophisticated desktop speakers. And they're fashioned from acrylic, not glass
Review & Lab: **Keith Howard**

If the term 'multimedia' is often used pejoratively in the hi-fi world then 'multimedia loudspeaker' is almost always so. It brings to mind the nasty little transducers that accompany many an all-in computer package and which, all too often, soon find themselves in landfill – along with the unwanted joystick. But multimedia speakers don't have to be like that. Achieving good sound from desktop loudspeakers is a worthy aim, and a worthy engineering challenge too. You have to accept, though, that the end result is unlikely to be inexpensive.

Cue the Harman Kardon GLA-55, a multimedia loudspeaker that takes its task seriously on two fronts: sound quality and visual impact. Looking like something from an Indiana Jones set, its faceted transparent plastic 'cabinet' – although nothing could be less like the traditional veneered wooden box – cries out to be used on a minimalist glass-topped desk alongside an iMac. Which doubtless explains why the GLA-55 is available from Apple Store, and why Apple Store and Harrods are its biggest UK outlets.

Harman had hoped to call it the Crystal, for obvious reasons, but that proved impossible. GLA-55 may be a clever alternative – one that has already fooled some dozy online pundits – but this speaker is not made of glass: its three-part enclosure is moulded, painstakingly, from

ADAPTABILITY

Multimedia loudspeakers are often used in less than ideal acoustic circumstances. Lower frequencies are boosted by nearby surfaces and the desk will often be resonant, adding further coloration. To counter these effects upmarket powered speakers sometimes offer user-selectable frequency shaping options and at least one manufacturer, Genelec, provides a compliant base to achieve at least some isolation. The GLA-55 has only a bass level control.



ABOVE: Clear acrylic cabinet comprises three pieces that are bolted together. Solid, uninsulated conductors replace conventional wiring to link the two drivers to the integral amplification

clear acrylic. No wonder, then, that the instructions warn of not using solvents to clean its faceted surface.

CLASS D AMPS

As you'd expect, this is a powered loudspeaker with integral amplification – but the chromed plastic base that contains the electronics is so thin you'd be forgiven for disbelieving it. Rated power is 56W per satellite but that may well be a short-term figure. Connections are made to the right-hand speaker – distinguished by volume up/down buttons beneath the tweeter – with audio input via a plug-in lead terminated with 3.5mm stereo jacks either end. A flying lead from the left speaker carries signal and power across

via mini-DIN connector from the right speaker's base. Twin magnetically shielded drivers comprise a long-throw Atlas bass-mid unit with concave metal dome diaphragm, reflex loaded via a front-firing port beneath, and a 25mm convex dome tweeter incorporating Harman's deep anodised CMMD (ceramic metal matrix diaphragm) material.

As the GLA-55s are intended for use on a desktop, either side of a computer monitor, that's exactly how I used them – having first cleared my

desk to leave a rather less pristine scene of minimalist chic than envisaged above. Signal was provided by the FooBar 2000 player feeding an Asus Xonar D2 sound card, using the kernel streaming plugin to bypass Windows XP's KMixer.

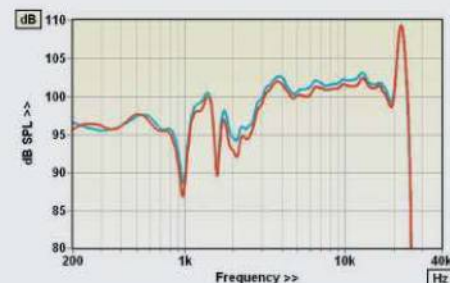
'Sinatra was as pitch-perfect as you'll hear him'

LAB REPORT

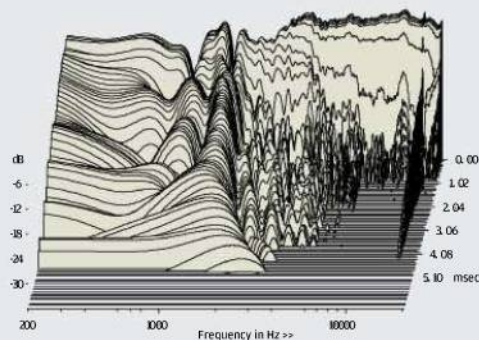
HARMAN KARDON GLA-55 (£750)

With its volume control set at maximum via the push buttons under the right-hand tweeter, the GLA-55 had a pink noise sensitivity of 99.2dB for 1Vrms input. According to HK's specification it delivers full power at a quarter this input level, suggesting that a pair will deliver a maximum SPL of about 94dB at a typical desktop listening distance. On-axis frequency response errors are high at ± 7.8 dB and ± 7.3 dB respectively principally because of a deep, narrow notch in output just below 1kHz, which is followed by a second, lesser notch at 1.55kHz [see Graph 1, below]. These and a peak between them interrupt what should be a smoother, ~ 5 dB step up in response towards treble frequencies which is to compensate for the speaker being used on a large, flat mounting surface.

Although the GLA-55 provides a subwoofer output it does a surprisingly good job itself of plumbing bass depths with a -6 dB frequency of 37Hz (re. 200Hz). Internal digital processing appears to be at a sampling rate of 48kHz as the ultrasonic response rolls off rapidly above about 23kHz. The cumulative spectral decay waterfall [Graph 2, below] confirms that the aforementioned response ripples are associated with significant resonant ridges. Given that the small metal bass-mid driver diaphragm should not enter breakup until much higher frequencies, it appears that these are due to resonances within the enclosed air and port – a supposition supported by the presence of high-amplitude resonant peaks within the port output. Distortion figures – which include amplifier distortion, of course – are good for a speaker of this size, particularly as it had to be driven quite hard to achieve 90dB SPL at 1kHz. KH



ABOVE: 5dB step between low and high frequencies is designed to account for its desktop placement



ABOVE: Waterfall clearly illustrates a major resonance from within Harman's undamped acrylic cabinet

HI-FI NEWS SPECIFICATIONS

Sensitivity (SPL/1m/1Vrms – Mean/IEC/Music)	100.9dB/99.2dB/99.3dB
Impedance modulus min/max (20Hz–20kHz)	N/A
Impedance phase min/max (20Hz–20kHz)	N/A
Frequency response error (200Hz–20kHz)	± 7.8 dB / ± 7.3 dB
Pair matching (200Hz–20kHz)	± 1.4 dB
LF/HF extension (-6 dB ref 200Hz/10kHz)	37Hz / 26.3kHz/26.0kHz
THD 100Hz/1kHz/10kHz (for 90dB SPL/1m)	3.6% / 1.1% / 0.2%
Dimensions (HWD)	304x125x304mm



ABOVE: All connections are made to the base of the right-hand speaker: DC in from an external power brick, audio in, left satellite out and optional subwoofer out

CRYSTAL CLEAR

Big band jazz is a severe test for any speaker, let alone one as diminutive as the GLA-55. But on the opening track of J J Johnson's *The Brass Orchestra* [Verve 314 537 321-2] – wonderfully recorded by Jim Anderson – it gave a fair account of itself. When you sit as close to a pair of them as you usually do at a desk the GLA-55s go amply loud enough for most tastes and deliver a wide-bandwidth sound with impressive bass, although vibrations in the desk can muddy that a little. Imaging is wide but arguably a little flattened, and rendition of detail is OK but not exceptional for what is, in effect, a near-field monitor.

The impressive bass extension was again in evidence in the *Love* album remix of The Beatles' 'Get Together' but this time the unwanted contribution from desk vibration was more obvious and caused the tempo to drag just a little. This effect will vary from desk to desk, of course, dependent on the solidity of its construction, mine being less than an exemplar in this regard. I was also aware of some mild clouding of vocal detail which it's tempting to associate with the upper-midrange resonances revealed in the lab test.

That clouding was also apparent on Laurence Hobgood's piano in 'Goin' Back to Joe's' from Naim's *True Stereo* sampler [naimcd080] – a track that's a stern test of

a speaker's ability to reach into a recording and tease out the essentials. Any shortfall in clarity is immediately obvious in the form of an overly warm, indistinct piano sound in the opening bars. Kurt Elling's classy vocal interpretation, though, was well conveyed.

So too was Frank Sinatra's 'I've Got A Crush On You' from the DVD-A release of *Live At The Sands* [Reprise 8122 73777-9]. If this track doesn't put a smile on your chops as Sinatra ad-libs with Basie's saxophonist then you know that either you're in a grim mood or the replay lacks vitality. Fortunately there was no problem with Harman's GLA-55s which left me smiling, and lapping up a relaxed, on-form Sinatra as pitch perfect as you'll ever hear him. ☺

HI-FI NEWS VERDICT

This speaker's startlingly modern good looks will probably seal the deal for most who buy it. But the GLA-55 isn't just a pretty face – it delivers a sound which is quite well balanced tonally and informative enough to make a wide range of music enjoyable. Even without a sub, the bass extension is certainly impressive but this top-flight desktop solution is still no substitute for a proper hi-fi system.

Sound Quality: 70%



SUBSCRIPTION OFFER

hi-finews

& Record Review

YES! I would like to subscribe to hi-finews & Record Review and save 25% on my subscription.

Overseas readers – Save 25%. Are you an overseas reader? We deliver subscriptions by priority mail to anywhere in the world, and you'll save a massive 25% off the cover price call **+44 844 848 0848** and quote code **11C**

Send to: hi-finews & Record Review Subscriptions, Freeport CY1061, Haywards Heath, West Sussex RH16 3BR

I would like to pay for my subscription by:

- 6 monthly Direct Debit – Pay only **£19.50** saving 25% off the full 6 monthly price of **£26**
- Annual Subscription – Pay only **£39** saving 25% off the full annual price of **£52**

Offer applies to a minimum one year subscription. See terms/small print*

YOUR DETAILS

Mr/Mrs/Ms/Miss: Forename:

Surname:
If you would like to receive emails from IPC and hi-finews & record review containing news, special offers and product and service information and take part in our magazine research via email please include your email below.

Email:

Address:

Postcode:

Home Tel No (including area code):

Would you like to receive messages to your mobile from IPC and hi-finews & record review containing news, special offers, product and service information and take part in our research? If yes, please include your mobile phone number here.

Mobile:

Year of Birth:

To pay by Direct Debit please complete your details below

Instruction to your Bank or Building Society to pay by Direct Debit

For office use only. Originator's reference - 764 221

A/C No.



Name of Bank: _____

Address: _____

Postcode: _____

Account name: _____

Sort code:

Account No:

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

Signature: _____

(I am over 18)

Date: _____

All subscriptions will begin with the first available issue. Offer only available to new UK subscribers. A minimum 12 month term applies on your subscription. Cancellations are not permitted until the end of this initial period. If you wish to cancel after the minimum term, please contact our customer care team in writing (see contact details below). The offer closes 30th October 2010. For enquiries please call: +44 (0)844 848 0848, fax: +44 (0)845123 9010 or e-mail: ipcsubs@quadrantsubs.com. Hi-finews & Record Review, published by IPC Media Ltd (IPC), will collect your personal information to process your order. Hi-finews and IPC would like to contact you by post or telephone to promote and ask your opinion on our magazines and services. Please tick here if you prefer not to hear from us . IPC may occasionally pass your details to carefully selected organisations so they can contact you by telephone or post with regards to promoting and researching their products and services. Please tick here if you prefer not to be contacted . IPC would like to email you with offers from carefully selected organisations and brands, promoting and researching their products and services. If you want to receive these messages please tick here .

Code:11N



PLUS ENJOY THESE GREAT SUBSCRIPTION BENEFITS

- **25% introductory discount**
- **FREE** direct delivery to your door every 4 weeks
- No price increase throughout your initial subscription period even if the cover price goes up

THE DIRECT DEBIT GUARANTEE

- This Guarantee is offered by all banks and building societies that accept instructions to pay Direct Debits
- If there are any changes to the amount, date or frequency of your Direct Debit IPC Media Ltd. will notify you 10 working days in advance of your account being debited or as otherwise agreed. If you request IPC Media Ltd. to collect a payment, confirmation of the amount and date will be given to you at the time of the request.
- If an error is made in the payment of your Direct Debit, by IPC Media Ltd. or your bank or building society you are entitled to a full and immediate refund of the amount paid from your bank or building society – if you receive a refund you are not entitled to, you must pay it back when IPC Media Ltd. asks you to.
- You can cancel a Direct Debit at any time by simply contacting your bank or building society. Written confirmation may be required. Please also notify us.

Pay only

£19.50

EVERY 6 MONTHS

when you
subscribe to

hi-finews
& Record Review

SAVING
25%

Order online, by phone or post (see coupon opposite)



www.hifinews.co.uk/ihfcm

OFFERS ONLINE
MAY VARY FROM
THOSE SHOWN HERE.



+44 (0)844 848 0848

OFFER CLOSES:
30TH OCTOBER 2010

Please have your payment details ready when you call. Quote code: **11N**. Lines open 7 days, 8am to 9pm (UK time).

Vinyl Frontier

BEHIND THE MUSIC WITH HI-FI NEWS & RECORD REVIEW

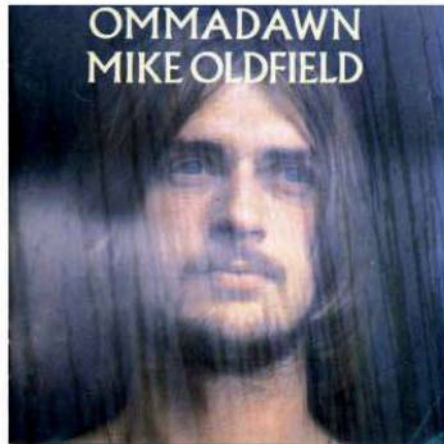
This month **Chris Heard** welcomes a 'vinyl makeover' for Kate Bush, a lavish set of live Velvet Underground recordings and coloured vinyl discs from Big Star

It's the most widely admired rock record ever recorded by a British female artist – and at long last the subject of a high-grade vinyl makeover. *Hounds Of Love*, released in 1985, was Kate Bush's fifth album and did a lot to change the perception of her among many mainstream record buyers who'd previously thought of her as little more than an eccentric figure somewhere at the margins – that kooky girl in the leotard parodied by Pamela Stephenson on *Not The Nine O' Clock News*, all flailing arms and pretentious posturing.

Bush had burst on to the pop scene like a whirlwind eight years earlier with the theatrical 'Wuthering Heights', but had yet to hit her stride in terms of a truly cohesive long-player. All that was to change with *Hounds Of Love*, a staggeringly confident and expansive collection of experimental songs with intense arrangements – all her own work – that tackled some pretty big themes, among them childhood fantasy and trauma, conflict and sexuality.

The album is a natural for vinyl, being split thematically into two sides, side one featuring the more radio-friendly stuff such as the hits 'Running Up That Hill', 'Cloudbusting' and 'The Big Sky', as well as the title track. And on side two 'The Ninth Wave', named after a Tennyson poem in which Bush mixes samples and acoustic instrumentation to thrilling effect.

The scary-fairy tale aesthetic of Bush's earlier works was still very much to the fore, but *Hounds Of Love* saw her reach new heights of lyrical expression and



➔ One of two classic Mike Oldfield albums now on limited edition vinyl

studio atmospherics. With the album being self produced and recorded at a private 24-track facility near her home, the singer could work at her own pace and control costs after her previous record, *The Dreaming*, went way over budget. Twenty-five years ago it felt brooding and magnificent, and today its footprints can be detected in the work of new generations of female acts, from Florence And The Machine to Joanna Newsom. This 180g limited, numbered Audio Fidelity re-issue, remastered by Steve Hoffman, is the best way to hear it now.

AFTER TUBULAR BELLS

Whether he likes it or not, Mike Oldfield will always be defined by the enormous success of *Tubular Bells*, his 1973 debut album which launched Richard Branson's Virgin record label and helped to usher in the New Age movement for enlightened post-hippy types. But skulking in the moonlight shadows of this monumental work are two mid-1970s Oldfield albums, which also offer plenty of multi-instrumental pleasure to the uninitiated. *Hergest Ridge* was released in autumn 1974, topping the charts more than a year after the sudden impact of *Tubular Bells*. Like its predecessor it is a symphonic two-movement piece, this time inspired by the rolling pastoral beauty of Herefordshire where Oldfield led a notoriously reclusive lifestyle at his country hideaway. The artist deploys his impressive full arsenal of instruments, including

CHRIS HEARD

Chris Heard is co-owner of Classic LPs, one of the UK's biggest in-stock retailers of vinyl re-issues and new releases. With his wife Rachel, he also runs Three Black Feathers Records, the UK's newest audiophile vinyl label. See www.classiclp.co.uk and www.threeblackfeathers.co.uk for more information on the online store and the label.



glockenspiel, sleigh bells, oboes, mandolins and a chorus of 90 multi-tracked guitars.

Better still was the 1975 follow-up *Ommadawn*, a project which predicted the emergence of world music with its combined elements of African Jabula drumming, Eastern European and Irish folk influences. This is regarded by many fans as Oldfield's creative peak, drawing on the influence of Celtic music with collaborators including Paddy Moloney of The Chieftains, Clodagh Simonds, Bridget St John and Oldfield's sister Sally. Both are out now in limited edition pressings on Universal's Back To Black imprint.

THE EXPERIMENTAL COLTRANE

Coltrane Jazz and *Coltrane Plays The Blues* marked a period of prolific creativity for Coltrane, and they represent a generally heady era in modern jazz history. Having cut his teeth with the Miles Davis Quintet in the mid to late '50s, Coltrane went on to work with Thelonius Monk and recorded the classic *Blue Train* before rejoining Davis in 1958, playing on the sessions for Davis's *Milestones* and *Kind Of Blue*, and the live recording *Miles and Monk At Newport*. His first Atlantic release was the acclaimed album *Giant Steps* on which he developed a style he had pioneered with Monk and Davis, playing rapid runs cascading in hundreds of notes per minute – a technique dubbed 'sheets of sound'.

Working in a line-up stabilised around pianist McCoy Tyner, Steve Davis on bass and Elvin Jones on drums, *Coltrane Jazz* followed in the same vein, while the sessions also yielded the album later released as *Coltrane Plays The Blues*. Coltrane's experimentation involving improvised melody and harmony would carry on for a few more years, culminating in his 1964 spiritual masterpiece *A Love Supreme*. This brace of Atlantic 180g albums may not be the very pinnacle of his output, but if *Giant Steps* is his Chelsea FC and *A Love Supreme* his Man Utd, then these are at the very least his Liverpool and Arsenal. Goal!



➔ Kate Bush's *Hounds Of Love* on vinyl at last: and the best way to hear it



THE GREAT RAY CHARLES

atlantic 1259

➔ 1957 purely instrumental album reissued by Atlantic: 'versatile'

PLUSH VELVET

Velvet Underground fans may find it hard to resist *The Quine Tapes*, a mouthwatering 6LP box of 1969 live recordings from Sundazed Records, featuring three gatefold-sleeve double albums with inserts and rare photos. The Velvets never made any official live recordings, leaving fans with the handful of live tapes that have emerged over the years. This collection recorded by Robert Quine captures them on stage in San Francisco and St Louis between May and December 1969, following the departure of John Cale, featuring the final line-up of singer Lou Reed, guitarist Sterling Morrison, drummer Moe Tucker and bassist Doug Yule. Tracks include 'I'm Waiting for the Man', 'What Goes On', 'Sunday Morning', 'Femme Fatale', 'White Light/White Heat', 'Venus in Furs', 'Heroin', 'New Age', 'The Black Angel's Death Song' and 'Rock and Roll'.

While the post-Cale Velvets output may lack the menace and derring-do of earlier studio albums, this is still some fairly high-octane rock 'n' roll poetry delivered with a studied nonchalance, marking the beginnings of the solo adventure Lou Reed was about to embark on at the turn of the decade. The box set features new cover art, Verve label reproductions, poster/handbill inserts, and liner notes by *Rolling Stone's* David Fricke. Re-mastered by Bob



➔ The Velvets live on *The Quine Tapes*, a 'mouthwatering' 6LP boxed set



Irwin from the original source material, it's pressed on high-definition virgin vinyl.

MELANCHOLIC UNDERTOW

The death of Big Star singer Alex Chilton in March, aged 59, has offered the world another chance to appraise the legacy of these Memphis power-pop legends – and, let's face it, it has given the record company another opportunity to market their two substantive albums, 1972's *#1 Record* and *Radio City* from 1974.

Like the Velvets, they sold a relatively small amount of records in their time (a result of frustrating distribution problems), but they influenced almost everyone who heard them, including a young Michael Stipe, and their impact on the indie and alternative rock scenes of the 1980s and early '90s was significant. *#1 Record* remains their greatest achievement, a bittersweet collection of Beatles-inspired pop that is sunny on the surface but riven by a melancholic undertow that hits you right in the gut. By turns delicate and forceful, sensitive and raw, its appeal hinges on its chiming Byrdsian guitars and harmonies, subtly framed by the fertile musical backdrop of the band's hometown. *Radio City* is a more muted affair, lighter on the melodies and less immediate than the debut, yet it contains some of Chilton's finest rockers in 'September Gurls', 'Mod Lang' and 'Back Of A Car', and makes for a

'Earlier Bush had burst on to the pop scene like a whirlwind'

➔ *Coltrane Jazz* and *Coltrane Plays The Blues* marked 'a period of prolific' activity for the great saxophonist

grimly fascinating document of a cult band approaching its painful demise. Limited yellow/red pressings on Concord Records.

AT THE APEX OF COOL

Bobbie Gentry occupies an eternal place at the apex of cool, defying easy categorisation and securing a vaunted position somewhere between blue-eyed soul sophistication, down-home good ol'

girl innocence and hip MoR pop. On her 1967 debut *Ode To Billie Joe*, she is at the top of her game, channelling the renegade cowboy spirits of Lee Hazlewood and Tony Joe White, and replicating the élan of

Memphis-era Dusty Springfield for a torchlit procession of smoky country-soul ballads such as 'Mississippi Delta', 'Chickasaw County Child' and the timeless title track. It's out now on Pure Pleasure Records.

THE GREAT RAY

Finally, *The Great Ray Charles*, a 1957 instrumental-only collection showcasing Charles' jazz piano style as part of both a trio, and a sextet selected from his big band, is re-issued on Atlantic. Some of his best interpretations are here, including 'Black Coffee', 'My Melancholy Baby' and Quincy Jones' 'The Ray'. Smokin'! ☺

Vinyl Release

BEHIND THE MUSIC WITH HI-FI NEWS & RECORD REVIEW

STEVE SUTHERLAND

Steve edited *NME* from 1992-2000, the Britpop years, launching *NME.com* and reviving the *NME Awards*. Previously he was Assistant Editor on *Melody Maker*. Among his many adventures he has been physically threatened by Axl Rose, hung out awhile with Jerry Garcia and had a drink or two with Keith Richards...

Joy Division: *Closer* (180g vinyl)

It was to be the band's second, and last, studio album. Now the LP is out on premium vinyl, **Steve Sutherland** looks back on one of music's darker moments...



Phenomenal.
That's what the *NME* critic called them.
'Phenomenal.'

Unfortunately, I begged to differ.

Where the critic saw 'sombre power', I heard harsh monotony.

Where the critic bore witness to 'physical hard rock', I heard turgid heavy metal. Where the critic delighted in discovering 'a totally distinctive, cohesive sound', I staggered under the weight of a baffling, muddy onslaught.

And where the critic was thrilled to announce the arrival of 'the spirit and the feeling' (whatever the bejiggers that meant!), I beat a hasty exit to the nearest pub with the dreaded word 'Hawkwind' thumping loudly in my brain.

But we're getting ahead of ourselves.

We are reading a review of a gig that took place on the second of August 1979 at the Prince Of Wales Conference Centre, in a tiny hall with an atmosphere akin to a school canteen tucked two floors under the YMCA on the corner of Tottenham Court Road and Great Russell Street in central

London. The gig was part of a week-long celebration of revolutionary new sounds which, on other nights, showcased the likes of Prag Vec, Ludus, Clock DVA, Red Crayola, Throbbing Gristle, Cabaret Voltaire, Scritti Politti and other such intense, artfully self-conscious and kinda industrial-ish outfits. They were enjoyed by a bunch of pseudo-intellectual readers of the weekly music press referred to disparagingly as the long raincoat brigade and only remembered now, surely, by the spoddiest of greying disciples of a largely joyless, dysfunctional and up-its-own-arse movement known somewhat vaguely as 'post punk'.

THE CRITICS

The reason I'm banging on about the review, penned with evangelical ardour by one Adrian Thrills, is that it was pretty much the first time that I'd been to an actual gig that was subsequently reviewed in the hallowed pages of the music press. Why the big deal? Well, because way back before the

internet allowed us aural access to every song for free weeks up front of it going on sale and Youtube became a treasure trove of gig footage, available pretty much as soon as the shows are over thanks to the zeal of video-toting fans, the music press would write something and we would act immediately and unquestioningly upon those pregnant words of wisdom.

Album reviews were taken seriously as guides to what you should, or shouldn't, buy if you wanted to boast a cool record collection. And, if you bought a record on a crit's recommendation, it was you, not they, at fault if you didn't get its genius.

Likewise, bands on the road would be subject to emotional and intellectual critiques that transformed their performances into

essential rites of passage and woe betide you and your hip reputation if you even considered failing to attend.

In other words, we thought those writers were gods and their reviews were the tablets of stone upon which the codes of credibility were carved. Well, that's the way I felt anyway, until that fateful August night when Mr Thrills and I stood in the very same room, saw the very same band and yet contrived to witness extremely different goings-on.

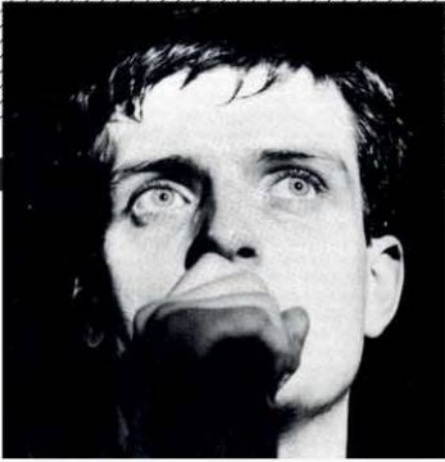
I guess you could say it was the night I lost my rock crit virginity.

Whatever, I wasn't even there to see Joy Division – for it is they of whom we now write. My mate Nigel and I were under the YMCA because we'd read in the *NME* great things about two new young Liverpool groups making their London debuts – Echo & The Bunnymen and Teardrop Explodes – and both turned out to be every bit as much fun as the Scouse stringer had promised. Echo were druggy and intense and reminded us of Neil Young when they played something called 'Villiers Terrace' about rolling around on carpets and biting string. Teardrops were poppier, a cuddly,

'The record sounds like a deliberate suicide note'



Joy Division pictured in July 1979 (l-r) Peter Hook (bass), Ian Curtis (vocals), Stephen Morris (drums), Bernard Sumner (guitar, synthesizers)



➔ Ian Curtis (1956-1980); the 180g re-release of *Closer* is available from www.classiclps.co.uk

fresh-faced Julian Cope bopping about like the Andrex puppy.

Monochrome Set, who we had no interest in seeing, were supposed to headline but pulled out for some reason so we were left with Joy Division, who appeared to be a bunch of slightly frayed at the edges bank clerks with a singer who barked off-key like a bad Jim Morrison impersonator and did a lot of what we used to call back in the pre-punk hippie daze, idiot dancing.

Subsequently it has been revealed that what the singer, Ian Curtis, was going through that evening was an unconscious simulation of an epileptic attack – a condition to which, as the band’s career progressed, he became increasingly prone. He was also a mess emotionally, his personal life unravelling towards a divorce which would lead to fatal consequences.

MONUMENT TO DESPAIR

The album we’re here to talk about – *Closer* – came out about a year after the YMCA gig, on 18 July 1980, exactly two months after Ian Curtis had hanged himself in the kitchen of his house in Macclesfield in the early hours of May 18. The two events – the album and his death – are now inextricably entwined in rock history.

Up until then, Joy Division had been highly regarded by the music press as futurists, a band pushing into the unknown resisting the temptation to leech off past clichés like everybody else. The papers generally accepted that they had rejected the faux-anger of punk for an altogether more resigned and realistic reaction to the Sex Pistols’ proclamation that there was ‘no future’ – futility. The man on the Clapham omnibus continued his journey through life blissfully unawares.

But what Ian Curtis’ death achieved – apart from exposing the band to wider public curiosity – was to throw into stark relief the fact that, whilst those supposedly in the know had been looking at the band and seeing the big picture, the singer had actually been looking inward and

expressing his own, personal angst. Never before or since has a record sounded more like a deliberate suicide note than *Closer*.

It’s no great exaggeration to say it’s a monument to despair, every chord burdened with melancholy’s heavy load. Bernard Sumner’s guitar is endlessly distorted and wraithlike, Peter Hook’s bass a profundity of mournful melody, Stephen Morris doesn’t so much keep time as crucify it with his repetitive drum patterns and producer Martin Hannett instinctively emphasises the emptiness, deliberately keeping every ingredient isolated and apart so as to deny even the smallest promise of succour or crumb of comfort.

And then, of course, there is Ian Curtis, his voice both wracked and distracted, delivered dry and brittle as if he’s trapped on the outside looking in. ‘Just for one moment,’ he states in ‘Twenty Four Hours’, ‘I thought I’d found my way/Destiny unfolded/I saw it slip away.’

Every other song on the album – the harrowing ‘Atrocity Exhibition’, the glacial ‘Decades’, the suffocating ‘Heart And Soul’ – says pretty much the same thing. These are songs delivered from a man psychologically adrift from his own being, like an epileptic whose brain calmly registers what’s going on whilst his body is in anguish. A man, not to put too fine a point on it, already psychologically cold in his grave. A man already dead.

And yet, despite his epilepsy and deep depression, his bandmates didn’t seem to notice. They assumed the whole depressing lyrical schtick was an act in homage to one

of their heroes, David Bowie, from whose track ‘Warszawa’ on 1977’s *Low* album, the band took their pre-Joy Division name, Warsaw. Of course, Bowie had only been acting, using a geographical shift to a post-cold war vibe to extricate himself from an image he’d grown bored with.

But Ian Curtis was no actor.

‘Looking back,’ said Stephen Morris recently, ‘how could I have been so bleedin’ stupid. Of course he was writing about himself, But I didn’t go in and grab him and ask, “What’s up?” I have to live with that.’ As voyeurs, enthralled to die vicariously through Ian Curtis, so do we all.

And within months, the British Isles were engulfed in a new morbid phenomenon: Goth. The show, as they say, must go on. ◊

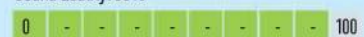
‘CLOSER’



RE-RELEASE VERDICT

Re-mastered from the original tapes, this 180g vinyl re-issue allows producer Martin Hannett’s sparse and spacious production to shine. He was obsessed with drum sounds, often mixing them with synthesisers, while pushing both bass and guitars through numerous digital filters. The bleak aural assault that results echoes the lyrical content of the album perfectly. Hannett was a perfectionist and his production only yields greater detail and texture the better the system the LP is played on. Highly recommended. **HFN**

Sound Quality: 88%





Patti Smith *Horses*

She was an intellectual, a feminist and a performance poet and her debut LP, released some 35 years ago, was to help change the direction rock music was to take over the decades to follow. And it's up there with the best when it comes to sound quality, too

Words: **Chris Heard**

Relatively few albums from the punk era have braved the ravages of time unscathed to achieve classic status. So what makes *Horses* so singularly great?

Born out of arty New York bohemia, Patti Smith's 1975 masterpiece goes beyond the simple three-chord thrash associated with many acts of the era to embrace the singer's obsessions: beat poetry, '60s garage rock, free association, hero-worship, jazz, and – gulp – even the French symbolists.

Don't let that put you off, though. At its heart *Horses* thrives on raw, gutsy rock 'n' roll – centred on Lenny Kaye's primitive guitar, left perfectly unpolished by producer John Cale. It is this combined with Smith's mesmerising vocal performances, bursting with frenzied literary torrents and outsider-bravado, that made this record such a shock to the system. After 35 years it retains its capacity to excite and surprise. Over the same period, photographer Robert Mapplethorpe's grey cover shot of an androgynous Ms Smith dressed in a man's suit has earned its own place in rock iconography – but more of that later.

A NEW VOCABULARY

On its release amid the white-heat of the fermenting US punk scene, *Horses* rewrote the language of rock music. There had simply been nothing on record that sounded or looked quite like it. In a rare full-page review in *The New Musical Express*, critic Charles Shaar Murray stated that the album 'introduces an artist of greater vision than has been seen in rock for far too long.'

From the opening track, a frantically energised reworking of Van Morrison's 'Gloria', to the closing Hendrix tribute 'Elegie', the intent was clear: this was



➔ Smith sings songs from the album on stage in Copenhagen in 1976

➔ Her first single, from 1974; it featured the *Horses* line-up and was financed by Robert Mapplethorpe

➔ 30 years later and Smith performs at the 2006 MIT festival in Rio de Janeiro

➔ The band (l-r) Richard Sohl (piano), Lenny Kaye (guitar), Ivan Kral (bass), Jay Dee Daugherty (drums)

going to be something different, a thrilling coming-together of flowing verse and pared-down garage rock that would capture the zeitgeist as Smith claimed her crown unopposed as the high priestess of punk.

The singer's album-opening growl of 'Jesus died for somebody's sins but not mine' was something of a mission statement: Smith, a childhood Bible student and daughter of a Jehovah's Witness, was slaying sacred cows, exorcising her past. Simultaneously she was treading a fine path between expressing the reverence she felt for her 1960s rock heroes and reinventing the genre for an explosive new youth culture, desperate for idols of its own.

The record's influences were not always immediately obvious. Some critics suggested Smith as a natural heir to Jim Morrison's poet-shaman shtick; others dismissed her as pretentious, self-indulgent and a fake. Some, no doubt, were troubled by the gawky, boyish-looking figure on the sleeve who challenged all the stereotypes of women in music. Here was a radical, strident woman rocking down-and-dirty with the boys in

the band one minute, performing fragile ballads the next, then jumping on stage and speaking in tongues in a dazzling whirlwind of jaw-dropping intensity. Smith was difficult to pigeonhole, and this made her feared among some in the industry who just did not know what to do with her music.

'The album stunned the critics on its release in '75'

ON THE SPOT

One executive with no such qualms was Clive Davis, boss of the Arista record label, who witnessed one of Smith's shows

at the CBGB club in New York where her band was engaged in a spring 1975 residency alongside fellow Manhattan art-rockers Television. Davis, accompanied by Smith's friend Lou Reed, was entranced by what he saw and offered her a multi-album deal on the spot.

So just how did Smith, a former factory worker and self-confessed misfit, become the toast of the new wave, and what informed her long-playing tour-de-force?

Born in Chicago in 1946, Patricia Lee Smith grew up in Pitman, New Jersey, graduating from high school



VINYL ICONS

PRODUCTION NOTES

Smith spent several months choosing a producer for her debut album, and eventually settled on former Velvet Underground musician John Cale. Cale had produced the first Stooges album six years earlier, capturing a raw primeval energy that had proved hugely influential on the CBGB generation of which Smith was a part. She was gaining a reputation for her exciting live shows, and Arista Records boss Clive Davis wanted someone at the desk who could guide her performance-poet spontaneity into a lasting form.

The sessions were characterised by tensions between artist and producer as the alpha-female wannabe rock star and the seasoned avant-garde performer locked horns. 'It's like "A Season In Hell";' said Smith during the recording, referencing her idol Rimbaud's classic poem sequence. 'John's a fighter, and I'm a fighter, so we're fighting.' There were even claims that Smith had completed the final mixes herself. But despite – perhaps because of – the disagreements, the results were groundbreaking.

'[Cale] respected Smith's primitivism in a way that later producers did not,' said *All Music* critic William Ruhlmann, 'and the loose, improvisatory song structures worked with her free verse to create something like a new spoken word/musical art form.'

The album was made at Electric Lady studios in Greenwich Village built in 1970 by another of Smith's heroes, Jimi Hendrix, shortly before his death. While recording the jazz-inspired track 'Birdland', Smith said she imagined the late guitarist's spirit watching her. She composed a suitably spiritual memorial to Hendrix, 'Elegie', to close the album.



in 1964. Three years later she moved to New York where, in thrall to the beat poems of Allen Ginsberg and the songs of Bob Dylan and The Rolling Stones, she fell into a *demi-monde* occupied by kindred spirits such as rock musician-turned-playwright Sam Shepard, Warhol Factory artist Gerard Malanga and photographer Robert Mapplethorpe.

Smith found that Manhattan offered anonymity and embraced her offbeat

personality in a way that had been unthinkable in small-town New Jersey. 'Everyone at school thought I was weird when all I was was romantic,' she said.

'But no-one stared at me here. New York was like a huge cathedral. I could come here and hide. It was the only place that accepted me.'

A POET FIRST...

Smith began winning parts in underground theatre productions, doing poetry readings and co-writing plays. Soon her poems were being published and she was making a name for herself as a performance-poet, inspired by the written works of Ginsberg and the 19th Century French Libertine Arthur Rimbaud.

She teamed up with rock critic Lenny Kaye, a like-minded soul who accompanied her rhythmic readings on his guitar with complimentary stabbing chords and howls of feedback. 'There was no one else doing anything remotely like us at the time,' he said.

As well as dabbling in rock journalism, Smith began writing lyrics for albums by Todd Rundgren and Blue Oyster Cult. Then in 1974



she recorded a debut single, a cover of the Hendrix hit 'Hey Joe' which devolved into a prosaic rant about heiress Patti Hearst; coupled with the remarkable 'Piss Factory', a spectacular free-spirited rap over jazzy piano chords that chronicled her unhappy days in blue-collar New Jersey and charted her life-affirming switch to the metropolis. Like a proto-punk 'Born To Run', it signalled the arrival of a spectacular lyrical talent steeped in East Coast rock 'n' roll mythology, setting the template for the album, *Horses*.

PROTO PUNK

Released in November 1975, the LP stunned critics getting to grips with such an unforeseen hybrid of beat poetry and three-chord rock.

The loose yet disciplined playing of guitarist Kaye, bassist Ivan Kral, drummer Jay Dee Daugherty and pianist Richard Sohl

combined with Smith's emotional powerhouse to fuel an incendiary debut, anticipating the punk revolution by at least a year.

REM singer Michael Stipe, who bought the record aged 15 while still at high school, said it 'tore my limbs off and put them back on in a whole different order. I decided then that I was going to start a band.'

The famous cover picture of Smith was taken by her friend Mapplethorpe, whom she had met



← Smith on stage at New York's Bowery Ballroom, New Year's Eve, 2007

← Plan view of Studio A at the Electric Lady studios in Greenwich Village, where *Horses* was recorded

← John Cale, brought in to capture on tape Smith's live energy

← Still from *Dream Of Life*, a film portrait of Patti Smith by Steven Sebring, released in 2008

You can find the right combination at Unilet

All the best brands, in stock and available for demonstration. Give us a call.



Unilet Sound and Vision Ltd. 35 High Street, New Malden, Surrey KT3 4BY

Tel: 020 8942 9567 Email: sales@unilet.net www.unilet.net

The Pick of the Crop Acoustic Energy • Arcam • Audio Lab • B&W • Bryston • Chord • Chord Cable • Denon • Dynaudio • Dynavector
Electrocompaniet • Esoteric • Heed • KEF • Leema • Lehmann • Marantz • Meridian • Michell • Mission • Mordaunt Short • Musical Fidelity
Onkyo • Ortofon • Panasonic • Pioneer • Plinius • PMC • Primare • ProAc • Pro-ject • Quad • REL • Roksan • Rotel SME • Sonos • Spendor
Stax • Tannoy • TEAC • Wilson Benesch • Wharfedale • Yamaha - *Cables, Home Installation, Vinyl Records, Bespoke Aerial, Satellite & Freesat Installations*





TANNOY



ASR



LUXMAN



SOULLUTION



audioaero



SYNERGISTIC



McIntosh

don't dream
talk to us

and see
how we can help..

“ we give shockingly
good part exchange
/ trade-in deals. ”

“ web site is updated
daily with used
product bargains. ”



Brighton Hi-Fi Exchange www.hifiguy.co.uk

T: 01580 879 880 | M: 07734 436 180 | E: dave@hifiguy.co.uk

Alternate Format Discography



➔ Smith in another scene from *Dream Of Life*; the film follows the singer over a period of 11 years

in the late 1960s while working in a city bookstore. The pair became closer after Smith returned from travelling in Europe, living together near the Chelsea Hotel.

Mapplethorpe, later notorious for his explicit homoerotic images, took the picture using natural light in a penthouse in Greenwich Village. It depicts an unsmiling Smith, her tall, skinny frame bolt upright, in loosened tie with a man's jacket draped on her shoulder. In its own way the message is every bit as subversive as that of David Bowie's Ziggy Stardust, another groundbreaker in its portrayal of an ambiguous sexuality. The record company did not like it, but Smith was defiant and it has become one of rock's most durable images.

CALLING CARD

The success of *Horses* gave Patti Smith an international platform. She was feted by the British music press, which ran her eloquent anti-establishment quotes as a calling-card for the burgeoning punk scene, while her heroes Lou Reed and Bob Dylan paid court at her live shows.

As the decade ended, Smith recorded three further albums, each progressively more commercial, and she faced accusations of selling out to stadium rock as punk's initial firestorm receded. She remained spiky, articulate and occasionally spellbinding. But she would never recapture the earthy alchemy that made *Horses* so unique. ☺



Horses may not have had the commercial clout of some of Smith's later works, such as her 1978 worldwide smash hit 'Because The Night', but it remains the purest expression of her art, and the fans' and critics' favourite.

ORIGINAL LP (1975)

At least eight known issues were pressed on vinyl on the Arista label (or one of its licensing offshoots) in various territories during the album's first incarnation. Arista, a US label owned by Sony Music Entertainment, was set up by former CBS executive Clive Davis in 1974. Named after a New York school honour society, the label became a hugely lucrative home to acts such as Barry Manilow, Whitney Houston and the discredited Milli Vanilli.

The first US print of *Horses* [AL 4066] charted at No 20 in the US Billboard 200 in 1976. Its UK counterpart [Arty 122] is a sought-after punk artefact – in its original guise with a blue Arista label – fetching £20-plus in prime condition. Later copies go for between £8 and £10.

JUGOTON LP (1977)

Back in the good old days of the Berlin Wall, access to decadent western music was curtailed by the authorities behind the Iron Curtain amid fears it would corrupt and deprave. Russian Beatles/Paul McCartney records are fairly common, while ideological apparatchiks such as Billy Bragg were tolerated in the old East Germany, but it was the relatively liberal former Yugoslavia that birthed the most dynamic of all the Soviet bloc state labels in Jugoton, home to strictly licensed recordings by everyone from David Bowie and the Rolling Stones to Iron Maiden, Kraftwerk and Madonna. *Horses* appeared in 1977 on Jugoton [LSAR 70859].

Quality could be an issue, and this is probably one for hardcore collectors only.

LATER VINYL ISSUES (1978-80)

One of the countries that took to Smith immediately was France, elevating her to the status of cult artist and later issuing several collectable singles and EPs in picture sleeves.

Horses was re-issued in France by Arista in 1978, and in the same year Pathe Marconi EMI put out a limited edition grey vinyl pressing [C 066-97.237, DC 14], a version easily identifiable by a large round yellow sticker on the sleeve. It was a random number 14 in a series of collectables, and would nowadays probably relieve you of about £30 at a Paris record fair.

Between 1979 and 1980 the album was further repressed in European territories including Germany, Portugal and Spain.



CASSETTES (1975, 1979)

An early tape of *Horses* is documented as existing in Australia in 1975, released on EMI Music (Australia) [TC AL 4066]. This evidence would chime with the Aussies' embracing of all things spiky-haired – at about the same time Brisbane's The Saints were being hailed alongside the Ramones as one of the seminal proto-punk bands.

A later cassette of *Horses* was made in Germany in 1979 [Arista 401 112], printed by Mohndruck Graphics of Guetersloh, in case you were wondering.

Like all bona fide pre-recorded cassettes of the era it featured the Dolby B noise reduction system, a mini-revolution at the time.

ORIGINAL/REMASTERED CDS (1988-1996)

Horses appeared on CD for the first time in the US and Europe in

1988, a straight analogue-to-digital transfer of the eight-track album, weighing in at approximately 45 minutes in length.

Fans had to wait a gruelling eight years before Sony BMG got around to re-mastering it under the heading of 'The Patti Smith Masters', a 20-bit digital re-fresh from the original master tapes carried out at Sony's New York studios by engineer Vic Anesini (The Byrds, Santana).

The disc featured a bonus live track – a cover of The Who's 'My Generation' recorded at The Angora, Cleveland, Ohio, in January 1976 with John Cale on bass – as well as liner notes by the artist and previously unseen archive photos by band associates including cover-photographer Robert Mapplethorpe.

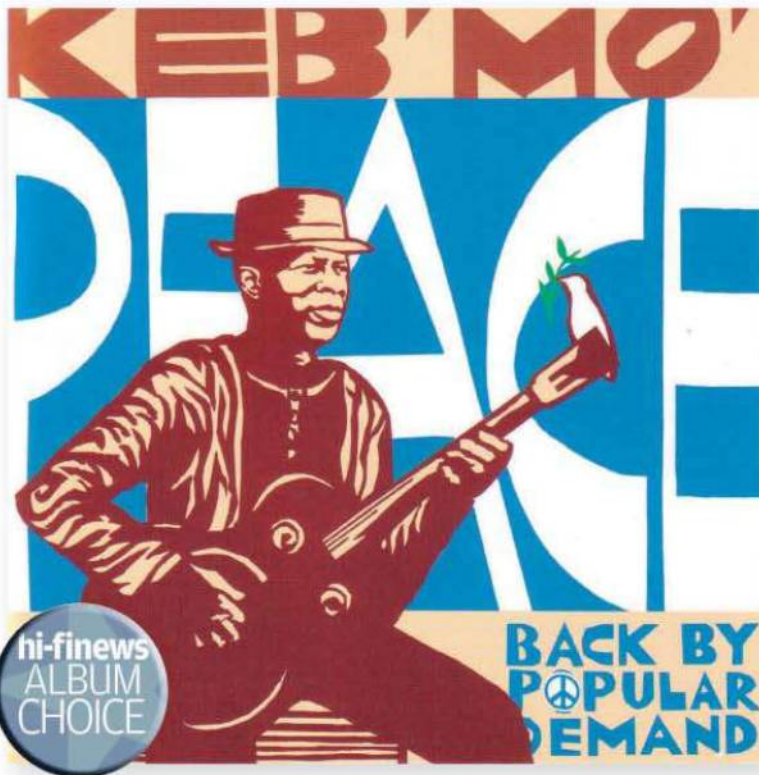
LIVE VERSION (2005)

In the summer of 2005 Patti Smith was curator of the Meltdown Festival, the South Bank's annual celebration of some of the more leftfield musical artists, in which she showcased acts whom she liked and admired or who had influenced her own career.

Alongside a rare outing by Smith's contemporaries Television, the highlight was a live performance of *Horses* in its entirety by The Patti Smith Group (with guest contributions from Tom Verlaine and Flea), recorded for posterity on June 25 at the Royal Festival Hall, thanks to production/mixing gurus Emery Dobyns and Tony Shanahan.

The results were issued by Columbia Legacy in November 2005 [82876 711982], exactly 30 years after the album's first release, with the studio mix on CD one and the concert on a second disc, climaxing in a blistering 'My Generation'. A fitting way to close the book on a legendary work.





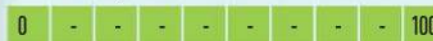
KEB' MO'

Peace... Back By Popular Demand

Pure Pleasure PPAN92687 (180g vinyl)

Yes, an LP of the CD I've been boring you with for six years. While probably a digital original, the album lends itself beautifully to the analogue medium because it's just so damned rich: perfectly-recorded piano; fluid guitar, Dobro and bass; Keb' Mo's textured vocals. This was his 'covers album', the bluesman choosing nine peace 'n' love folk and rock classics, mainly from the 1960s, like 'Get Together', 'Imagine' and 'For What It's Worth'. They serve as a statement that's as relevant in 2010 as when the songs were new. So good is Pure Pleasure's transfer that it can now serve as my favourite 'demo disc' for two formats. One of the nicest records you'll ever hear, sonically and spiritually. *KK*

Sound Quality: 93%



MAJOR HANDY

Direct-To-Disc

Analogue Productions AAPO 010 (direct-to-disc, 180g vinyl)

Practitioners of Zydeco – the black, bluesy, more rocking cousin to swampy Cajun music – serve a select audience, for the genre rarely produces crossover hits. But if you get bitten by the bug, it's irresistible. Major Handy is one of Zydeco's younger, more active performers, born in the heart of the Louisiana region that gave birth to the sound, and a veteran who played with Rockin' Dopsie. Chad Kassem's crew has captured the swing and the feel of the genre, while showcasing an instrument that's key to Zydeco but hardly an audiophile staple: the accordion. This six-track set is as undiluted as it gets, and it just might make you a convert. *KK*

Sound Quality: 87%



THE MERRY-GO-ROUND

You're A Very Lovely Woman Live

Sundazed LP5332 (180g vinyl)

A heartbreaker, as it's the sole LP from one of the finest of the wave of mid-1960s US bands who wished they were the Beatles. Like the equally fragile Left Banke (yes, that's how they spelled it) with their leader Michael Brown, this group boasted a song-writing genius in Emmitt Rhodes, and gave off a whiff of 'Sunny Afternoon', Kinksian Englishness that permeated the whole LP. While 'You're A Very Lovely Woman' is equally well remembered, their biggest hit – 'Live' – had the kind of catchiness that made songs like the La's 'There She Goes' so memorable. Yes, it was *that* good. A must if you subscribe to *Shindig* and used Steve Marriott as your fashion template. *KK*

Sound Quality: 90%



THE TEMPTATIONS

Cloud Nine

Speaker's Corner GS939 (180g vinyl)

Although most would credit Sly & the Family Stone or Funkadelic's empire for inventing acid-dripping, hard funk, back in '69, the super-smooth Temptations were getting spacey, too. Sharp suits metamorphosed into the kind of garb that Elvis Presley would copy for his Vegas era, and track times would extend beyond the AM-friendly norm of Motown. While fans may have been taken aback by the wicked title track, the Temps had already shown an experimental streak with 'I Know I'm Losing You'. And we certainly owe thanks to this LP for the later 'Psychedelic Shack', and of course, the immortal 'Papa Was A Rollin' Stone'. Motown would never be the same. *KK*

Sound Quality: 90%





COMPACT DISC



SUPRAAUDIO



DVD



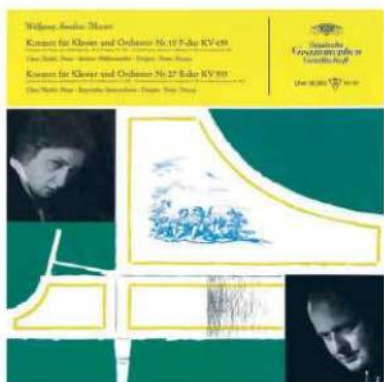
BLU-RAY



VINYL



DOWNLOAD



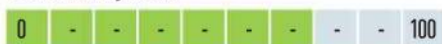
MOZART

Piano Concertos 19 in F, K459; 27 in B flat, K595
Clara Haskil, BPO/Bavarian State Orch/Ferenc Fricsay

Speakers Corner DG LPM 18383 (mono; 180g vinyl)

The frail Romanian pianist was not always so lucky with her recording conductors. In these 1955 reissues she is partnered by Ferenc Fricsay, a significant figure in the postwar DG catalogue. In an essay written shortly before his early death he described Mozart as 'a golden-feathered messenger of God'. Haskil's unerring, needle-sharp fingerwork suggests no less a messenger of this composer. Fricsay had clearly worked hard in preparing the last Concerto, yet the BPO (K459) proves the superior orchestra. Both are recessed in favour of the soloist and the dated sound has a character not unlike a Decca *ffrr*: part of its charm? *CB*

Sound Quality: 70%



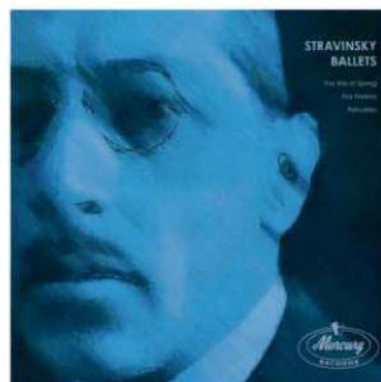
R STRAUSS

Also Sprach Zarathustra
Michel Schwalbé, BPO/Herbert von Karajan

Speakers Corner DG 2530 402 (180g vinyl)

Kubrick's *2001 A Space Odyssey* prompted a flourish of LPs excerpting the timpani and organ pedal opening of *Also Sprach...* One wonders how many non-Straussians would stomach the whole Nietzschean epic! In fact, Karajan's Decca version was used for the film. This one is from 1973, his first of two Berlin remakes (both engineered by Günter Hermanns), and perhaps the most satisfying. With close balances, the rich-textured sound rivalled the audiophile 1962 Reiner/RCA. However, Speakers Corner has made a remarkable recut, raising the level and eliminating some obvious compression which marred DG's own 1974 LP. *CB*

Sound Quality: 88%



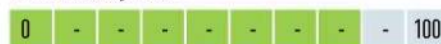
STRAVINSKY

Firebird; Petrouchka (rev. 1947); Rite of Spring
LSO/Minneapolis SO/Antal Dorati

Speakers Corner Stravinsky Ballets (three discs; 180g vinyl)

Dorati's extensive experience as a ballet conductor is set out in his *Notes Of Seven Decades*. He left a substantial Mercury catalogue – the late producer Wilma Cozart Fine had once been his secretary – with his complete LSO *Firebird* (Watford Hall, 1959) ever after an audiophile choice. One hopes Speakers Corner will issue it separately. The Minneapolis *Le Sacre*, excitingly fast, has an air of authority. *Petrouchka* is efficient but hardly seduces the ear. Spread over two sides, albeit with an unfortunate side-break, it does sound better than the 'Universo' first UK release copies. These fine pressings are replica-sleeved within a stout slipcase. *CB*

Sound Quality: 76%



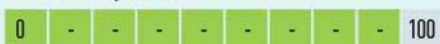
LISZT

Piano Concertos 1 and 2
Sviatoslav Richter, LSO/Kyril Kondrashin

Speakers Corner Philips PHS 900-000 (180g vinyl)

After finally being allowed to come to the West in 1960, Richter soon made LPs for CBS, RCA, DG, EMI and Philips. Extraordinary! His UK debut with Kondrashin was at the Albert Hall in July '61 in Chopin, Dvorak and Liszt; the two Liszt Concertos (which you can find 'live', with the *Hungarian Fantasy* and *Andante Spianato and Grande Polonaise*, on BBC Legends 4031-2) were then produced over three days at Walthamstow Assembly Hall, by a Mercury team. With more than nine hours of tape to hand, the pianist asked for a complete retake of the First Concerto, most of which was used for the edited master. The results subsequently have become the benchmark coupling. *CB*

Sound Quality: 87%



PHILIPS AN ORIGINAL 35 MM FILM RECORDING PHILIPS AN ORIGINAL 35 MM FILM RECORDING STEREO PHS 900-000

SVIATOSLAV RICHTER LISZT CONCERTO NO.1 CONCERTO NO.2 LONDON SYMPHONY ORCHESTRA KYRIL KONDRASHIN

hi-finews ALBUM CHOICE



COMPACT DISC



SUPERAUDIO



DVD



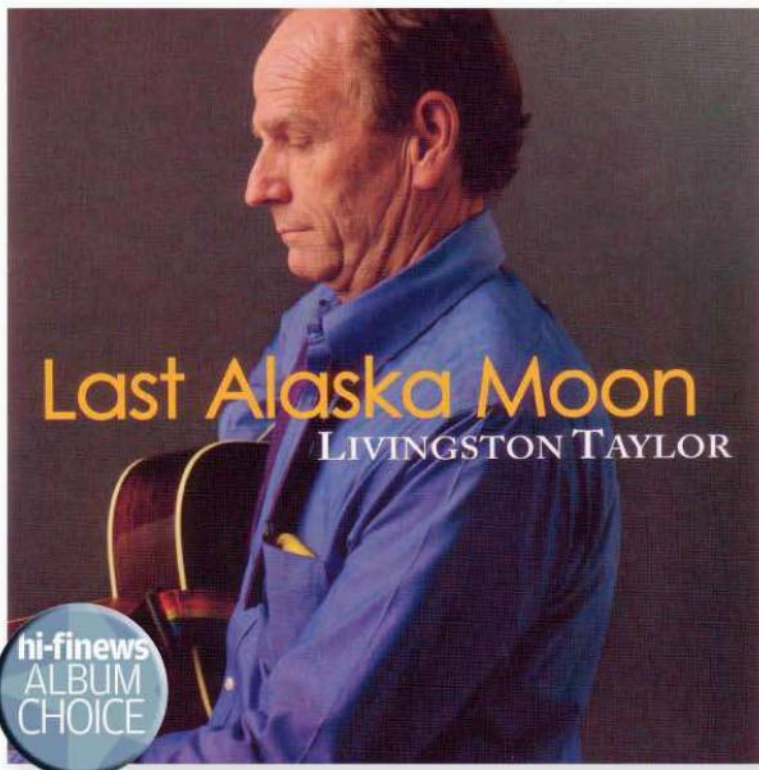
BLU-RAY



VINYL



DOWNLOAD



LIVINGSTON TAYLOR

Last Alaska Moon

Chesky/Coconut Bay JD350 (audiophile recording)

Like a pair of favourite slippers, a Livingston Taylor CD is a blue-chip cert if you want to relax. OK, so the audiophile equivalent of comfort food might not seem challenging, but his easy-going balladry is delicious – not least because Taylor called on members of Alison Krauss' band Union Station to enhance it with a thread of bluegrass. As it was recorded in Tennessee, you can subtitle this his 'Country Album'. Other guests include Steve Gadd, one of the greatest drummers in rock, country giant Vince Gill and Leland Sklar, bassist *par excellence*. And there are surprises: some funk, some horns, even a Michael Jackson cover. Let's hope brother James' biggest release in years (with Carole King) helps it along. *KK*

Sound Quality: 88%



LOUIS ARMSTRONG & HIS ALL-STARS

Newport Jazz Festival 1960

Wolfgang's Vault Download (16-bit/44.1kHz FLAC)

A renowned gig with Satchmo celebrating his 60th birthday at one of the world's greatest jazzfests, backed by Billy Kyle (piano), Barney Bigard (clarinet), Trummy Young (trombone), Mort Herbert (bass), Danny Barcelona (drums) and Velma Middleton sharing the vocals – if you can't locate the CD, the silky, wider-than-Rhode Island stereo will qualify this download the best \$10 you ever spent on New Orleans sizzle. Classic material – 'Tiger Rag', 'Mack The Knife', 'St. Louis Blues', a brace of tunes from *High Society*, 'Stompin' At The Savoy', culminating in 'The Star-Spangled Banner' and 'Happy Birthday, Louis!'. 'Utterly joyous' is the only way to describe it. *KK*

Sound Quality: 87%



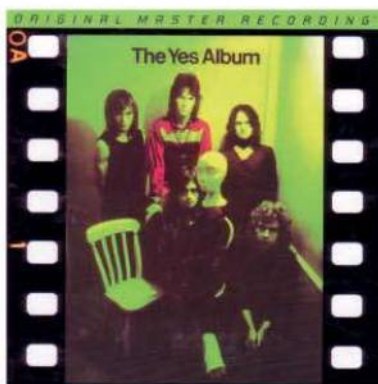
DOOBIE BROTHERS

The Captain And Me

Mobile Fidelity UDSACD 2042 (stereo SACD)

Talk about a breakthrough: by 1973 with this, album number three, the Doobies had metamorphosed from a quasi-boogie/rock outfit, looking like Allman Brothers wannabees, into a slick Left Coast outfit able to segue country rock into blue-eyed soul. This particular set, possibly a career best, alternated hard rockers with rootsy ballads, handing us enough AOR masterpieces to ensure permanent rotation on American FM wavebands: 'Natural Thing', 'Long Train Runnin'', the immortal 'China Grove' and the lush title track... Most bands would kill to produce something this accomplished. And this SACD let's you hear just how gorgeous it all was. *KK*

Sound Quality: 88%



YES

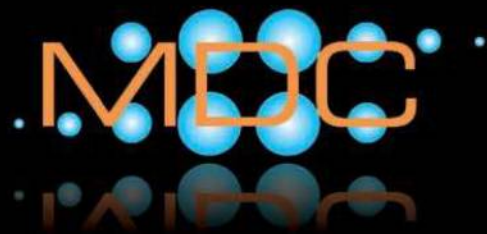
The Yes Album

Mobile Fidelity UDCD779 (Gold CD)

Although 'progressive rock' remains a smug oxymoron, Yes were the least aggravating of all the snots who smarmed their way across the music firmament from the late-1960s onward. This was their third, the 1971 set that proved to be a massive breakthrough, setting the stage for their masterpiece, *Fragile*. It's all here: virtuoso playing, airy harmonies, the sub-Tolkien/post-2001 mystical mumbo-jumbo. To play a track called 'Starship Trooper' with a straight face... who am I to deem a few million fans devoid of taste? But if my remarks on prog-rock seem harsh, never forget that we have to thank it for this: the backlash to the genre was punk. *KK*

Sound Quality: 80%





Official UK Distributor for:

- argentum acoustics
- sutherland
- wadia
- xlo electric

The Musical Design Company

t. 01992 573 030

www.mdc-hifi.co.uk

enquiries@mdc-hifi.co.uk

Stream Developed Mechanism*

Play your FLAC, WAV and MP3 files directly in the disc tray.

*W381/S7i PLAYERS



Model W381 shown

Input/output Cards (inc USB)

Create a high performance digital nucleus for digital sources such as – music servers, computers, and digital satellite/cable boxes.



Model W781i shown

Digital Volume Control

Connect your Wadia directly to a power amplifier without the need for a pre-amplifier.



Model s7i shown

Decoding Computer System

DigiMaster allows Wadia to generate an amazing amount of data with accuracy both in the frequency and (particularly) in the time domain.

Transforming the iPod into a Media Server

When the iPod docks with iTransport, the iPod transforms into an audiophile-grade media server that rivals many of the top performing digital source components available.

Re-defining the Digital Integrated Amplifier

A sophisticated combination of high performance DAC, surprisingly robust amplifier, and plenty of inputs for today's digital sources.



Model W922 and Model W931 shown



Model W170i shown



Model W171i and Model W151 shown

Wadia

user friendly world class digital replay!



COMPACT DISC



SUPERAUDIO



DVD



BLU-RAY



VINYL



DOWNLOAD



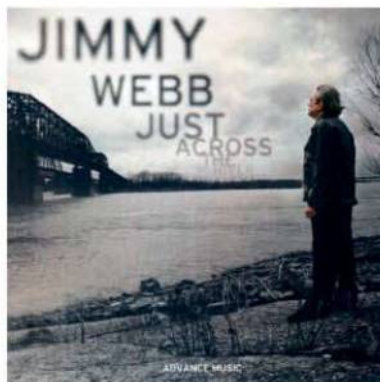
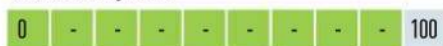
LIGHTS

The Listening

Sire 9362 49765 2

Despite my instinct to reject Valerie Anne Poxleitner, aka Lights, because of the overtly religious content of so many of her songs, this Canuck electro-singer-songwriter has won me over on purely musical grounds. Her synth structures are gorgeous, if derivative, and her voice has hints of Kate Bush that make even her frequent use of auto-tuned vocals acceptable. (Actually, if I'm honest, I have no problem at all with auto-tune, so long as it's used as a musical tool rather than as a repair kit). What I like most about *The Listening* is its fresh, innocent and disarming simplicity, like the very earliest electro-pop albums back in the late '70s and early '80s. *JBk*

Sound Quality: 88%



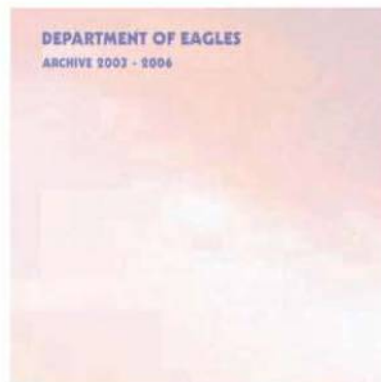
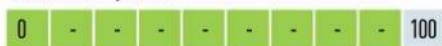
JIMMY WEBB

Just Across The River

E1 Music ECD2068

You don't need me to tell you that the Jimmy Webb songbook includes a bunch of timelessly great classics, like 'Wichita Lineman', 'By The Time I Get To Phoenix' and 'Galveston'. What Webb has done here is not just to re-interpret those songs with the assistance of superstar chums Billy Joel, Glen Campbell and Lucinda Williams, but also to take the opportunity to accord the same treatment to some of his lesser-known compositions, most notably 'PF Sloan' as a duet with Jackson Browne, and 'If You See Me Getting Smaller' with Willie Nelson. It's not consistently wonderful, largely because Webb has never had much of a voice, but at its best it's pretty darned wonderful. *JBk*

Sound Quality: 90%



DEPARTMENT OF EAGLES

Archive 2003-2006

Isota Records DAD112

This is a charmingly odd collection of tracks recorded (and rejected) by eccentric New York folk-rock experimentalists Department Of Eagles prior to making their second album, *In Ear Park*. They were laid down in January 2006 in far from ideal conditions but, nevertheless, the collection boasts several appealing melodies with imaginative lyrics and free-wheeling musical arrangements, interspersed with several wilfully odd snippets described as Practice Room Sketches. It's all very cerebral and sometimes sonically challenging but well worth wading through to get to sublimely bizarre moments like 'While We're Young', 'Brightest Minds' and 'Golden Apple'. *JBk*

Sound Quality: 80%



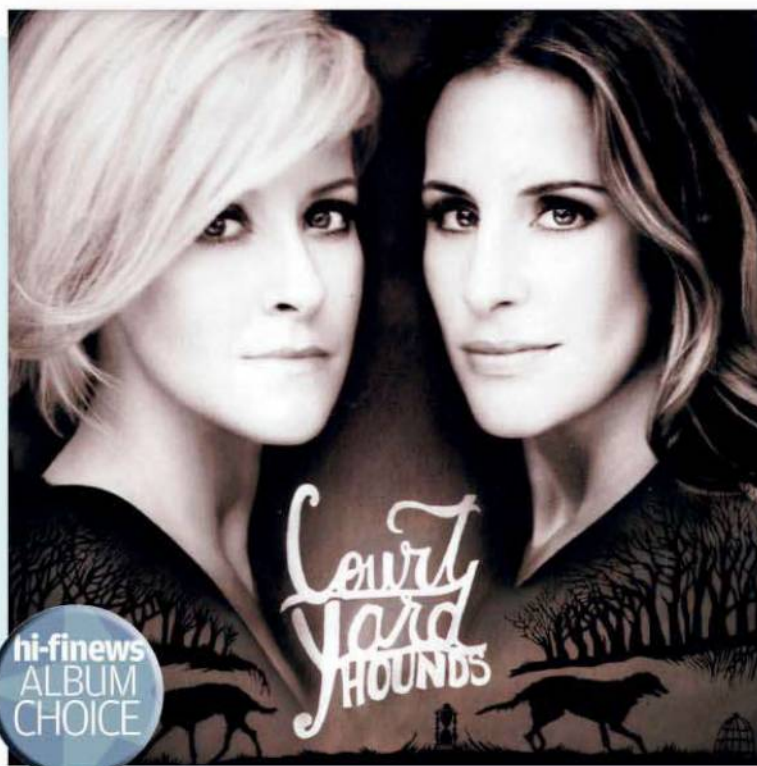
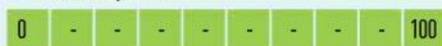
COURT YARD HOUNDS

Court Yard Hounds

Columbia 88697 52441 2

With The Dixie Chicks on a seemingly endless recording hiatus, two thirds of the band, Emily Robison and Martie Maguire, have emerged as Court Yard Hounds. It's hard to imagine any fan of the Chicks not enjoying this outing but, happily, Robison and Maguire have come up with something noticeably more intimate and personal than a Chicks album. There's a delightfully down-home quality to cuts like the Jakob Dylan duet 'See You In The Spring', and Robison's recent divorce seems to have pushed her into emotional spaces she might not have otherwise explored. The anger of 'Ain't No Son', the defiant spirit of 'It Didn't Make A Sound' and the touching honesty of 'Fear Of Wasted Time' make this pretty damned irresistible. *JBk*

Sound Quality: 95%



hi-finews
ALBUM
CHOICE

when it
comes to
really great
hi-fi, you
could say
**that we
specialise
in smiles
and
giant
grins!**



Tel: 01865 790 879

Fax: 01865 791 665

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

info@oxfordaudio.co.uk
www.oxfordaudio.co.uk

Audio Research
Copland
Crystal Cables
darTZeel
Jadis
Krell
Martin Logan
Micromega
Prima Luna
Sonus faber
Wilson Audio

**Ask about our
popular BUY Now
PAY Later scheme**

**Buy the product of your dreams
from Oxford Audio and pay
nothing for 12 months*.**

*subject to status/conditions.



COMPACT DISC



SUPERAUDIO



DVD



BLU-RAY



VINYL



DOWNLOAD



hi-finews
ALBUM
CHOICE

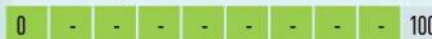
STACEY KENT

Raconte-moi...

Blue Note 5099962 682305

A Francophile who loves to sing in French, Stacey Kent had a big following across La Manche even before *Breakfast On The Morning Tram* helped her popularity explode in 2007. So why shouldn't she do a whole French album? She chose songs associated with the greats of French pop from Moustaki and Misraki to Biolay and Barbara, most just as catchy as 'La Venus Du Melo', now also issued as a single. As before, pianist Graham Harvey on piano and guitarist John Parricelli join Kent's sax-playing husband Jim Tomlinson to play his uncluttered, mood-enhancing arrangements. Hearing Parricelli and Tomlinson on 'C'est Le Printemps', they might as well be Byrd and Getz. That's the kind of standard they set. *SH*

Sound Quality: 90%



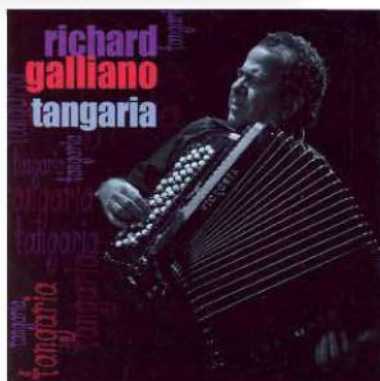
KEITH JARRETT/CHARLIE HADEN

Jasmine

ECM 2733485

Pianist and bassist hadn't worked together since the end of Jarrett's American Quartet in 1976, but after meeting in 2007 during the making of a film about Haden, they spent four days recording in Jarrett's home studio. 'It has a very dry sound and we didn't want to have the recording sound like anything but what we were hearing while we played. So it is direct and straightforward,' writes Jarrett. A far cry from the glossy, groomed perfection of so many ECM issues, it is intimate, immediate and communicative. 'I hope many of you can hear this on a good system,' Jarrett adds. This honest, musically satisfying album deserves to be heard that way. *SH*

Sound Quality: 90%



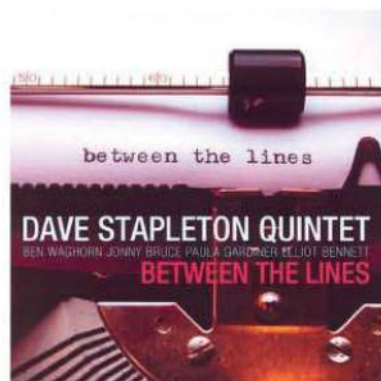
RICHARD GALLIANO

Tangaria

Milan 399 324-2

Clearly 2006 was a good year for the great accordionist. He'd just formed his brilliant Tangaria Quartet, and with mandolin player Hamilton De Holanda guesting, they wowed the audience at the Marciac jazz festival in August. September found the group in Sao Paulo and, again with stunning contributions from De Holanda, they recorded *Luz Negra*. It's actually the contents of that album that you get here, plus 'Tango Pour Claude' and 'New York Tango', which opened and closed the *Live In Marciac 2006* album. Great as the studio tracks are, the live cuts have something special, and I'd have liked more of them. But if you're new to Galliano, start here. *SH*

Sound Quality: 85%



DAVE STAPLETON QUINTET

Between The Lines

Edition Records EDN1017

After all these decades, the classic quintet lineup endures. Graduating from the Royal Welsh College of Music and Drama as a classical pianist in 2002, Stapleton based his own group on two luminaries of the same college, bassist Paula Gardiner and drummer Elliott Bennett, adding trumpeter Jonny Bruce, a 2006 graduate. Saxophonist is Ben Waghorn, who's been heard with Kasabian and Goldfrapp as well as in his own quartet. Stapleton often seems to be taking a back seat, but what holds this complex, disciplined music together is his ability as a composer, creating extended pieces that can move from bombast to lyricism with real structure and purpose. *SH*

Sound Quality: 85%



Walrus

11 New Quebec St, London W1



"my ears might be small but I can still hear the difference!"

even we admit there are times you may have to play cds for these occasions the **ear acute** comes in very handy in fact, after a while you hardly miss vinyl lps at all!



lyra cartridges - the best choice in mid to top-end pickups



sumiko blue point and blue point special - mc quality at mm prices



ortofon - a very wise pickup choice



stax SRS-2050 II system

***** the fantastic updated HL1 *****



the pure sound a30 - not very "sexy" but frighteningly good sounding!

please contact us for current prices, you will find us flexible

aspara acoustics



aspara acoustics HL1 "setting the standard" for high sensitivity 'speakers

we live tubes, breath tubes, eat tubes (well, almost)



walrus are valve amplifier sales and service specialists



the michell gyro se - what else to say?!



townshend rock 7 - the affordable rock with very little compromise

STAX



stax SR-007 omega system 2



stax SRS-4040 II signature system

- acoustic signature
- aesthetix
- air tight
- amazon
- amity
- amplifon
- amr
- apollo furniture
- aspara
- basis
- benz micro
- black rhodium
- bocchino
- brinkmann
- cartridge man
- cawsey
- clearaudio
- consonance
- croft acoustics
- decca london
- duvel
- dynavector
- ear yoshino
- emt
- funk firm
- gershman acoustics
- goldring
- graham (tonearms)
- graham slee
- hadcock
- harmonix
- heco
- heed audio
- horning
- incognito
- isolda
- jadis
- john blue
- kibri
- koetsu
- luxman
- lyra
- lyra connoisseur
- mcintosh
- melody
- michell engineering
- mit cables
- morch
- musical fidelity
- nordost
- nottingham analogue
- origin live
- ortofon
- pro-ject
- pure sound
- rcm
- rega
- reimyo
- ringmat
- roksan
- shun mook
- shanling
- sme
- solid tech
- something solid
- stax
- stirling broadcast
- sumiko
- tannoy
- tom evans
- townshend audio
- transfiguration
- trichord
- usher
- van den hul

* Please ask about our ex-demo stock; many items are virtually as new but with large reductions.

We deliver by Business Post 24hr service (subject to stock availability), and internationally by DHL, TNT or UPS. Major credit/debit cards accepted, even known to take cash on occasions! Please visit our website for product, technical and ordering info.

tel: 020 7724 7224

fax: 020 7724 4347

mail@walsys.demon.co.uk

www.walrus.co.uk





COMPACT DISC



SUPERAUDIO



DVD



BLU-RAY



VINYL



DOWNLOAD



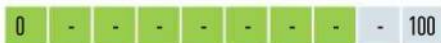
DVORAK

Symphonic Poems
Czech PO/Sir Charles Mackerras

Supraphon SU 4012-2

Some will recall the 17s 6d Supraphon LP of two of these grisly narrative poems – Czech PO/Chalabala, musically unsurpassed. Mackerras's long association with Czech music virtually guarantees a recommendation here: *Water Goblin* and *Noonday Witch* (2008, live); *Wild Dove* (studio, 2009); and a reissued *Golden Spinning Wheel* (studio, 2001). Dvorak's wind-swept allegros, rustic tunes and careful orchestrations fire the unique-sounding Czech Philharmonic much as Elgar's or Walton's music does the LSO. The one spectre at the feast is the skating-rink acoustic of the Prague Rudolfinum. **CB**

Sound Quality: 78%



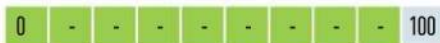
ELGAR

Violin Concerto; The Kingdom (Prelude); etc
Thomas Zehetmair, Hallé Orchestra/Sir Mark Elder

Hallé CD HLL 7521

A stirring (although not properly level-matched) *Kingdom* Prelude prefaces a midpriced version of the Violin Concerto altogether superior to the recent Znaider/Sony [HFN June]. Sir Mark Elder is flexible in the introduction and exposes unfamiliar details; the Hallé reveals a natural affinity with Elgar's writing escaping their Dresden rivals; and Thomas Zehetmair has a searching command of the solo part. Competition here for the earlier, less indulgent Kennedy recording! As fillers we have the *Gerontius* Prelude and, sung by mezzo Alice Coote, 'The Angel's Farewell' in a 1900 arrangement without chorus. **CB**

Sound Quality: 85%



MAHLER

Symphony 2 'Resurrection'
Yvonne Kenny, Jard van Nes, LPO & Ch/Klaus Tennstedt

LPO 0044 (two discs)

A Festival Hall recording originally made by Tony Faulkner in Feb 1989, for what is now called Music Preserved, this was one of Klaus Tennstedt's characteristic concert performances. And it is gratifying to see the transfer honouring Mahler's wish for a break after (i), here spanning a considerable 25m. His highly individual response to the 'Resurrection' (some will say related to his awareness of mortality) is apparent from the beginning, and never diminishes, although the very deliberate second movt will not suit all tastes. The 'Urlicht' is beautifully sung and Yvonne Kenny's later contribution no less considerable. **CB**

Sound Quality: 80%



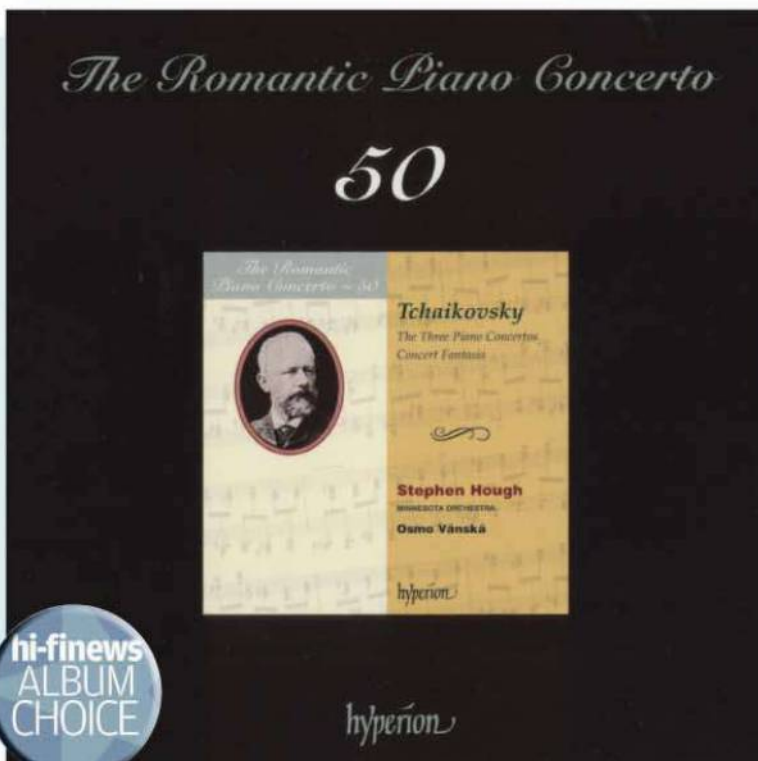
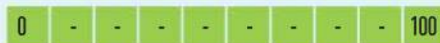
TCHAIKOVSKY

Piano Concertos 1-3; Concert Fantasia
Stephen Hough, Minnesota SO/Osmo Vänskä

Hyperion CDA67711/12 (two discs – sleeved with catalogue)

In 1988/9 former *HFN* writer Andrew Keener produced the Peter Donohoe recordings for EMI – Nigel Kennedy/Steven Isserlis, no less, in 2(ii). He's worked with Stephen Hough since his Virgin Classics debut and these Minnesota recordings form Hyperion's 50th set in its 'Romantic Piano Concerto' series. We have the full length slow movement for No.2, but also the disparaged Siloti cut edition and another of the pianist's own devising. Hough also plays two brief song transcriptions. His virtuosity here is breathtaking, especially in the way he throws off cascading velocities at the ends of Concertos 1 and 2. Poetry and repose too... Vänskä's support is equally wholehearted. **CB**

Sound Quality: 95%



SEVENoaks
SOUND & VISION

Save £s throughout August in the Sevenoaks Sale. There are huge savings on a wide range of TVs, home cinema, hi-fi and more! Supply is limited on some products so don't miss the chance to pick-up a bargain!

SALE

ROKSAN

CASPIAN SERIES M-1
PRE / STEREO POWER AMPLIFIER

ALSO CASPIAN M1 PRE / MONO POWER AMPLIFIER (PAIR) £2299
SAVE £2448 - LESS THAN HALF PRICE!

MORE ROKSAN SALE OFFERS AT SSAV.COM



SAVE
£156

SAVE
£156

TRADE-IN
OFFER

ARCAM FMJ

A18 AMPLIFIER CD17 CD PLAYER

£459

PRICE WITHOUT
TRADE-IN £615

£459

PRICE WITHOUT
TRADE-IN £615

PRICES SHOWN AFTER TRADE-IN DISCOUNT

ALSO A28 / A38 AND CD37 - VISIT SSAV.COM

SAVE
£50

SAVE
£50

MARANTZ

CD6003 CD PLAYER PM6003 AMPLIFIER

£249

£249

ALSO NAD AND ROTEL - VISIT SSAV.COM

SAVE
£550

SAVE
£550

LEEMA ACOUSTICS

STREAM CD PLAYER PULSE AMPLIFIER

£749

£749

ALSO LEEMA XERO SPEAKERS £399
(WALNUT OR LIGHT OAK FINISHES) SAVE £311

SAVE
£676

LESS THAN
HALF PRICE

ARCAM

SOLO CD/FM*
MUSIC SYSTEM

£649

ALSO SOLO MINI & NEO
VISIT SSAV.COM

*THIS IS THE FM ONLY VERSION AND DOES NOT INCLUDE A DAB TUNER

MARANTZ

M-CR502DAB
CD RECEIVER

£329

SAVE
£70

LAST
FEW!

DENON

D-M37DAB
CD RECEIVER

£169

SAVE £60

ALSO DENON D-M38DAB - VISIT SSAV.COM

SAVE
£150

CLAIM
QED CABLE
WORTH
£200

SAVE
£50



SPENDOR

A5 SPEAKERS

£1495



MONITOR AUDIO

BRONZE BR5

BRONZE BR1

£299

£129

ALSO B&W - KEF - MONITOR AUDIO RX / GS RANGES - VISIT SSAV.COM

EX-DISPLAY
OFFER

CYRUS

CD8SE CD PLAYER

£999

SAVE £300

8XPd AMPLIFIER

£1249

SAVE £300

MORE CYRUS EX-DISPLAY
OFFERS AT SSAV.COM

SONOS

BU250 BUNDLE
DIGITAL MUSIC SYSTEM

£ S S A V . C O M



OFFER

PLEASE NOTE: SOME BRANDS/PRODUCTS ARE NOT AVAILABLE AT ALL STORES. SALE OFFERS ARE NOT IN CONJUNCTION WITH ANY OTHER OFFER (NICWA00). ADVERT VALID UNTIL 31/08/2010. E&OE

more **OFFERS** at www.SSAV.com

SEVENoaks
SOUND & VISION

The word ‘immaculate’ comes to mind when entering this Hong Kong apartment, with its painting by Chinese artist Chen Yifei and simple, tasteful style. Likewise the hi-fi, with its monoblock amps and piano gloss speakers. And it all began – and continues – with a Linn LP12. **Nigel Smith** has the story

Away from the hustle and bustle of the Central and Mong Kok districts of Hong Kong lies the home of Joseph, a discriminating audiophile who has spent many years building the kind of high-end system that most of us can only dream about. But how did it all begin?

‘With a Linn LP12 of course!’ Joseph laughs. ‘I’ve been interested in music and audio since a very early age, an interest boosted by the fact that my father owned a decent system that included an LP12 with Hadcock arm, Supex cartridge, Meridian amps and Chartwell LS3/5A speakers. For my 12th birthday, my dad gave me a Perpetuum-Ebner record player with built-in tube amp and Alnico speakers.

‘My friends and relatives then started giving me LPs and that’s how my record collection began. Later, when I went to university, I put my savings into a Technics SU-8080 integrated amp, turntable and cassette, with Tannoy speakers and I kept up with all the latest developments by reading both *Hi-Fi News* and *Hi-Fi Answers*.

‘I’m in the fortunate position of having been able to indulge over the years in this passionate hobby of

mine but, although there have been a fair few changes along the way, my long-standing source has been an LP12. I have another LP12 in my study, but the deck you see here means a great deal to me. It’s actually from 1978 (it still has the original smoked cover) and was my father’s. I inherited it when he passed away in 2005 and I then wanted to make sure it was the best it possibly could be.

‘Through members of the online Naim forum, Peter Swain of Cymbiosis in Leicester was recommended to me and he has been servicing my LP12 for the past five years. During his second trip out to Hong Kong he fitted the deck with a Dynavector XV-1s cartridge, Ekos SE arm, Keel and Trampolin, all of which brought a very noticeable improvement to the sound quality. Surface noise was reduced, there was greater detail and dynamics and music gained greater authority.’

A DIGITAL DOUBLE

The Linn LP12 wasn’t Joseph’s only source component.

‘Around 2003, I upgraded my Burmester CD/Kondo DAC to a dCS Verdi, Elgar and Purcell, followed by the Verona Master Clock.’



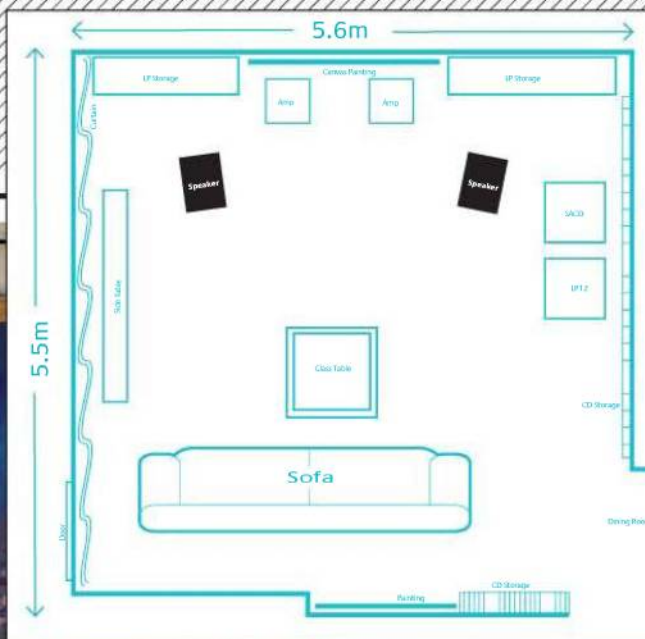
And this top-end player wasn’t to be Joseph’s only digital source...

‘I had wanted a Naim system since I was at university but could not afford it at the time. In later life there were so many other brands to choose from and I was a little scared of the “total systems” approach that was demanded to bring out the best in a Naim system. However, there was something different, something very special about the Naim sound, the way it boogied.

‘In 2004, I began my Naim experience with a NAC552, NAP500, and Neat Ultimatum 7 speakers. Within a year, I changed the speakers to ART Emotion Silver Signatures, which I continued to use until I switched to an active Naim set-up, comprising two NAP 500s, SNAXO2 and SuperCap power supply, driving a pair of Naim SL2s.

RIGHT: The LP12 and Klimax Radikal, Soudation 750 phono amp, 745 SACD player, 720 preamp and the PSU for the SACD player. Racks are Finite Element Pagode Master Reference. Attached to the wall, just to the right of the LP12, is a Vibratron – a room tuning device from Synergistic Research





MUSIC ROOM

Joseph enjoys a generously proportioned listening room that boasts a 9ft-high ceiling. He has combined hard and soft surfaces with the aim of bringing a lively acoustic to the space, rather than the 'deadened' sound so often sought by enthusiasts. To help him achieve this he also uses ART room tuning devices from Synergistic Research, inspired after a visit to Buddhist temples by its lead designer. These, together with the tried-and-tested practice of moving the rug around the room, help optimise the performance.



"I have another LP12 in my study, but the deck you see here means a great deal to me. It's actually from 1978, and it was my father's..."

'During this upgrade process to what became an all Naim set-up, it was a natural progression to relegate the dCS to my second system and buy Naim's top CD player – the CD555 with twin 555PS power supplies.

HIGH MAINTENANCE

'I enjoyed this bi-amped, active Naim system very much and indeed am still an active member of the Naim forum. However, there were several issues with the Naim set-up that I did not like. Unlike most equipment I have used, the Naim components needed to be powered up all the

time to sound their best, which is environmentally unfriendly.

'Secondly, there were too many boxes as each component needed a separate power supply, with each requiring its own Naim Frain in order to bring out the best in it. I also found that everything needed to be placed very exactly on the Naim Frain and that any one component out of kilter could make the system go 'off song' very easily.

Perhaps due to the extreme humidity in Hong Kong and the on/off nature of the air-conditioning here, within months of a full tune-up the bolts of the Naim Frain

tended to loosen, affecting sound quality. The Naim system gave excellent results, but needed high maintenance.

SPECIAL SPEAKERS

'I'd already bought a pair of Marten Coltrane speakers in 2007 and then listened to quite a few different components to replace the Naim amplification. In the end I decided to buy the cult Vitus L-101 line amp and M-100 power amp. Then a year ago, Marten's distributor phoned to let me know that it was introducing a very special pair of speakers – the Marten Coltrane Black Pearl – to

ABOVE:
A pair of Vitus M-100 monoblocks sit between Marten Coltrane Black Pearl speakers. To the right, the exquisitely engineered Solution 745 SACD player (top), 720 preamp and, at the bottom, the Linn Klimax Radikal power supply for the LP12

commemorate the 10th Anniversary of the Marten speaker company.

'Just ten pairs were made and I have the last pair. The Black Pearl weighs over 14lbs – more than a standard Marten Coltrane due primarily to the special drive units used, a much heavier, substantial crossover and higher quality internal cabling, which is from Swedish company Jorma Prime. They look and sound superb!

'Because of the relationship with Marten speakers – the Jorma cables are designed with the Marten Coltranes in mind – I then met the company's Jorma Koski, whose Prime cables are the finest I have ever used. Unfortunately they are ultra-expensive and so I started in 2008 with a 1.5m length of interconnect which I used between CD player and preamp.

'Gradually I've built up the complete cable system over the last two years. In addition to the interconnect, I have a 4.5m run of balanced Jorma Prime interconnect between the preamp and power amp, a 2.5m Prime bi-amp speaker cable and Prime power cords.'

ALTERNATIVE SOLUTION

Although the sound was now very good, Joseph was still looking for something better.

'I was introduced to Thomas Ho of Prestige Hi-Fi in Hong Kong and his 20 years' experience have been invaluable in helping my

system reach its current level of performance. He suggested the Soullution range of electronics and, after an intensive home trial last year, I bought the Soullution 745 SACD player. With the Vitus amps, this was an unqualified improvement over the CD555. For once, my CD source was sounding every bit as good as my LP12, which had never been the case before.

PREAMPS 'N' PLINTHS

'After the success with the 745, I decided to try the next stage up the line. I compared the Soullution 720 preamp to my Vitus L-101 line amp and bought it this March. I was won over by the greater crispness and dynamics, detail and scale afforded by the 720.'

And, in April, Peter of Cymbiosis made a return trip to Hong Kong.

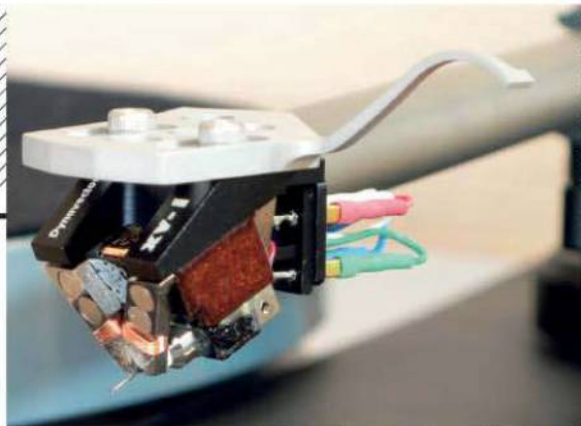
'Peter installed a range of items to bring my Linn right up to the

latest spec – a Klimax Radikal DC motor/power supply, a custom made plinth in maple by Chris Harban of Woodsong Audio and a Dynavector XV-1t cartridge [see *HFN* Nov '09].'

So why this rare Dynavector among the large range of different cartridges available?

'Well, I'd already moved from a Linn Akiva to the Dynavector XV-1s as I preferred the larger scale and dynamics of the latter. The XV-1t has this in spades but it's also warmer and more natural sounding. Imaging is truly holographic, with

'The Linn is designed like a good pair of John Lobb shoes'



TOP: The Dynavector XV-1t with Urushi-coated treated bamboo

ABOVE: The Jorma Prime speaker cable. For Joseph, this cabling allows his system to truly shine

BELOW: Joseph's top specc'd Linn, with SE arm and custom 'curly maple' plinth from Chris Harban

each voice or instrument having its own space – although it is around double the price of its predecessor.'

And of course, a top-level cartridge requires a more than decent phono stage...

'Peter had brought the Linn Urika phono stage with him but I thought it wasn't as detailed nor as open sounding as the phono stage built into the Soullution 720. So instead I put it to work with the Linn in my second system, which is in my study.

'When Thomas brought around the Soullution 750 phono amp, it only took the first few bars of a familiar recording to tell me it was raising the standard yet again. Minute details not noticed before were suddenly apparent and at comparatively lower listening levels. Music from LPs was once more the preferred source!'

PASSION TOO...

So far, the discussion had been more about the upgrade path that had led to Joseph's current system. The more we chatted and listened to some discs, the more his passion for listening to music and his enthusiasm and knowledge of hi-fi shone through.

'I've tended to buy products from people I've met – including Ivor from Linn. I need to feel they are just as passionate about audio and music as I am. With Thomas, for example, the enthusiasm he has for the business is obvious'.

'Timing hasn't yet enabled me to meet Cyrill Hammer of Soullution, but we have



Guildford Audio

Astintrew
Audio Analogue
Audio Research
Audiophile Base
Coplant
Crystal Cable
Dream Vision
EAT
Gamut
Grado
Heed Audio
Isotek

Jadis
Koetsu
Krell
Lavardin
Martin Logan
Micromega
Mimetism
Music First Audio
Musical Fidelity
Nordost
Onyko
Plinius

Prima Luna
PS Audio
Resolution Audio
Roksan
Shanling
Siltech
SME
Sonus Faber
Stands Unique
Stax
Sterling Broadcast
Stratton Furniture

Sugden
Sunfire
Theta
Transparent
Velodyne
Wadia
Wilson Audio
Yter
Z:Axis



W I L S O N A U D I O S O P H I A



Sophia Series 3 takes the Sophia name to a whole new level of performance. Whether you partner modest or extravagant equipment with the Sophia, it will get the best out of every system - effortlessly. To arrange your personal Sophia 3 audition, give us a call on 01483 537 577.

Drew Martin

run by professionals for professionals

t. 01483 537 577 | m. 07979 515577 or 07810 546103
e. sales@guildfordaudio.co.uk | www.guildfordaudio.co.uk



Introducing the new Olive 4HD. Choice without compromise.

The new ultra quiet 2TB Music server *



Store up to 20,000 high-resolution HD tracks in 24 bit. With more than 250 times the resolution of CD's, you'll hear the difference immediately.

Find the music you want - fast.



Use the high-resolution touchscreen to select by genre, artist or album; flip through album covers; do a quick search; or save internet radio stations as favorites.



To control your Olive 4 from anywhere in your home, get our iPhone remote app.



Connect multi-room Olive 2 Hi-Fi Players to a wired or wireless home network and you can access your music library and enjoy it in high fidelity in every room of your home.

Easily integrates with your current system.



Just insert a CD, tap import on the touchscreen and a few minutes later your music is appropriately tagged and neatly categorized in your music library. Your Olive 4 Hi-Fi Server holds up to 6,000 CDs in original quality.



Unlike listening to your music on a computer, iPod or MP3 music players, the Olive 4 Hi-Fi Server combines a high-resolution DAC, optimized circuit design, CD quality digital sound, ultra-quiet hard drives and passive cooling to eliminate fan noise to deliver the best possible hi-fi audio experience

olive

Distributed in the UK by;

Henley Designs

01235 511166

www.henleydesigns.co.uk

communicated extensively and he's a true enthusiast. Through innovative circuit design, which the company describes as reducing to nanoseconds the delay of the feedback loop, Soulution has married the musicality of tubes with the low distortion and speaker 'driveability' of transistors.

'I am very passionate about my whole system, particularly my favourite system component, the LP12. Naturally, there is the sentimental value attached to an item that was bought by my father when I was still in school. More importantly, perhaps, is the fact that it has been designed the old-school way, like a good pair of John Lobb shoes or a cashmere cardigan. While some people complain that the LP12 upgrades are expensive for what they are, I am happy that I am given the choice and the extent of the upgrade, and still maintain the general look of my deck.

VINYL VERSUS SACD

'Trust is important too, and a good dealer can provide added value and expertise in both introducing equipment and enabling a proper home audition. Thomas recognised that I was both serious and an enthusiast, so let me have a long assessment period – several weeks in fact – to enable the Soulution equipment to sell itself.

'The Soulution SACD player is so good that my beloved Linn is used much less than before. But if I do a direct comparison between the two sources, I still have a preference for vinyl. Indeed, at this high level of reproduction I find that the quality of the recording and/or pressing has a greater effect on the overall sound than the format on which it is accessed.

'For example, I have the original vinyl version on Island Records of Cat Steven's *Tea For The Tillerman* as well as the later Mobile Fidelity LP. I also own the Mobile Fidelity CD. I find that the MF CD is better than the Mobile Fidelity LP, but not as good as the Island LP!'

Having looked at the individual components, what additional thoughts does Joseph have on how to optimise the whole system?



ABOVE: A closer look at the Soulution 750 phono amp and, beneath it, the power supply for the Soulution 745 SACD/CD player

BELOW: One of only ten pairs ever made, the Marten Coltrane Black Pearl



'I guess the most important lessons I've learned over the years are the importance of setting the system up correctly and maintaining it so, room tuning, and system compatibility.

'By set-up, I mean ensuring that each component is properly installed to minimise detrimental interaction through sound vibrations – whether air or floor-borne – or from stray magnetic fields. For example, ideally cables

should be dressed so as not to touch each other or rest on surfaces. Careful thought needs to be made as to where each component goes on a rack and its likely interaction with other components in the vicinity. Power supplies should be placed as far away as practical from the equipment in use. My SACD power supply is on the lowest shelf of the rack holding my Linn LP12 and is switched off when the Linn is playing. The positioning of the speakers in relation to the listener and the room itself is extremely important to the overall sound quality of the system. Master Cheung, a local hi-fi guru and friend, who helps position my speakers typically takes over five hours to get things sounding their best.

COMMON MISTAKES

'Room tuning is a very difficult one to get right and takes a lot of trial and error to get anywhere close to a properly balanced sound. One of the most common mistakes is to use lots of soft furnishing,

thick curtains and wall-to-wall carpets in a bid to make the room sound lifeless. I prefer to have a proper balance between hard and soft surfaces, to enable the room to err on the side of being slightly lively rather than dead.

'I also use Synergistic Research ART room tuning devices to bring more 'life' to the room. The people who designed it came up with the idea after visiting temples in Nepal. These, together with moving the rug around, enabled me to achieve the right balance.

'As for system compatibility, taken on its own, any audio component can sound good in someone else's system. How it sounds in your own system is what counts. Always insist on a home trial. For example, my dCS CD/SACD system sounded rather ordinary when hooked up to my Naim 500 series system. Switching

to a Naim CD 555 made a dramatic improvement to the sound. On the other hand, when I tried both the Naim and dCS players in my Kondo valve pre

and power amp system, the dCS sounded significantly better.

'My LP12 is used less often these days, but I still prefer vinyl'

ALL ROUND HIGHS

So, how did it all sound? Simply superb. Unlike some extreme high-end systems, which excel in some respects but disappoint in others, this one provided a high level of performance across the wide range of music we listened to.

Just one example was the track 'Keith Don't Go' from *Nils Lofgren Acoustic Live* on CD. Few systems I've heard have come as close as this one to conveying both the acoustic space of the venue and the detail and natural attack of the strings on the amplified guitar. The system also works well whether the volume is turned up or set at lower levels – unlike some set-ups, which seem to require a very specific volume setting to hear each recording at its best.

At the end of my visit Joseph explained that it had taken him a lot of time to achieve this level of performance. But after my listening, and seeing the smile on his face, I could tell he wasn't alone in being very pleased with the results. ☺



audiolincs

...because the flame is worth the candle



ART AUDIO Full Range Available



REFERENCE 3a Full Range Available



BEL CANTO New Battery Power Range Available



CONSONANCE Full Range Available



AMR Full Range Available



SHUGANG TREASURE VALVES Full Range Available



TELLURIUM Q Loudspeaker Cables



HARBETH Full Range Available



ANALYSIS PLUS Full Range Available



MUSIC FIRST Full Range Available



FEASTREX Loudspeakers Please enquire



AIRTIGHT Full Range Available



HORNING Loudspeakers and SET Amplifiers

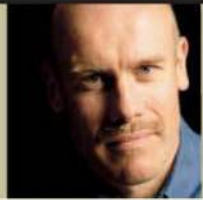


LUXMAN Full Range Available

audiolincs.com
Extraordinary Sound Systems

Phone: 01476 591090





Paul Miller
Editor

Technician and writer on all things audio for over 25 years, Paul Miller took over the editor's chair in 2006. He invented the QC Suite, used across the audio industry

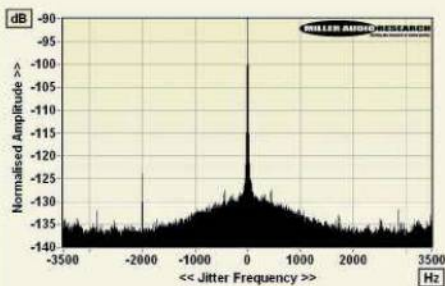
One step forward, two back

Modern digital audio products are packed with evolving, performance enhancing technologies. But technical gremlins, once solved, don't necessarily stay solved says **Paul Miller**

The High Definition Multimedia Interface, or HDMI for short, may have insinuated itself as far afield as high-end AV processors, flat panel TVs and mobile phones but its audiophile application is still far from being idealised. While companies are scrabbling to update their products with 3D-compatible HDMI 1.4 there's still been no progress in installing a dedicated audio clock.

THE POOR COUSIN

As a video-centric standard, HDMI carries audio almost as a cursory afterthought. Movies need sound, after all, but wasn't digital audio perfected years ago? That's the view of many multimedia software engineers at any rate. As a result, HDMI still uses the MPEG video clock to recover both picture and audio data in the receiving device, even if we only wish to enjoy two-channel LPCM stereo. And as we've seen, the levels of audio jitter are often an order of magnitude higher than with good old S/PDIF – the preceding digital interconnect standard that also failed to retain a synchronising clock between components. HDMI could have been a perfect opportunity to fix a 20-year-old problem.



ABOVE: Two generations ago, Pioneer's SC-LX81 AV receiver betrayed very little jitter over HDMI, even without PQLS being invoked



ABOVE: Based on Pioneer's flagship 'Susano' SC-LX90 [HFN, Nov '08] the SC-LX81 was its first mainstream AV receiver to utilise PQLS jitter-busting technology for audio over HDMI

Nevertheless, the more enterprising manufacturers have developed some ingenious methods for reducing audio jitter over HDMI. Sony has its HATS system [HFN, March '09] while Pioneer has PQLS. Pioneer's Quartz Lock System uses a clock in its AV receiver to regulate the flow of data from the (Pioneer) BD player's buffered HDMI output.

When first introduced in models like the BD-LX71 player and SC-LX81 AV receiver, Pioneer's alternative PQLS strategy only worked with 44.1kHz (CD) data. Any potential advantage was lost to 48kHz or 96kHz data from DVD or BD media. The irony was that those earlier Pioneer receivers were already squeaky-clean, suffering 10x or 20x less jitter *without* PQLS than their immediate competition [see Graph, left]. It seemed that Pioneer had invented a technology to solve a problem it didn't currently have. But now, two generations on, PQLS looks to be usefully flexing its digital muscles.

We missed the intermediate SC-LX82 model but between the '81 and SC-LX83 reviewed on p48, Pioneer has evolved

PQLS to accommodate stereo and multichannel LPCM plus both Dolby and DTS HD bitstreams. And a good job too, because the 'direct' HDMI route now suffers some 1500psec of jitter, realised as the broad swathe of sidebands depicted in the Graph below [red spectrum].

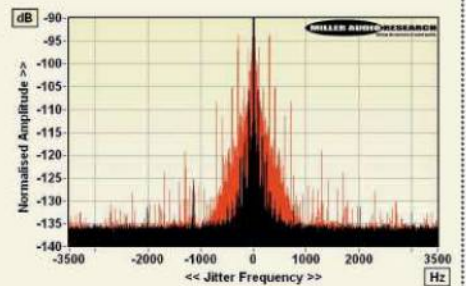
AN UPGRADE TOO FAR?

Interestingly, this jitter pattern looks very similar indeed to that measured from competing AV receivers one or two years back. The difference now, of course, is the 'upgrade' to HDMI 1.4 in its SC-LX83, a requirement if Pioneer is to earn its place on the 3D bandwagon.

Sadly, the PQLS function in Pioneer's older players is not recognised by its current AV receivers. So you'll need a new BDP-LX53 to realise the reduced 365psec jitter illustrated in the black spectrum [Graph, below]. I'm bound to say the SC-LX81 offered

'HDMI could have been the perfect opportunity to solve a 20-year-old problem'

better performance without the need for PQLS. Perhaps the moral, if there is one, is never to assume that familiar digital audio technology automatically retains its lustre from one generation to the next. ☹



ABOVE: Jitter over HDMI to Pioneer's latest SC-LX83 AV receiver [red spectrum, without PQLS; black spectrum with PQLS]

AUDIO WORKSHOP NORWICH

01603 618520

Turning Technology into Music...

07973 468141



Workshop Notes 13: A Tale of Two Turntables. British Brio versus German control.....

It is an irony, 30 years after it was supposed to lie down and die quietly, that vinyl sounds better than ever. Brilliant, if fanatical, designers like Conrad Mas and Helmut Brinkmann have pushed the performance envelope so far that vinyl still gives even the very best of digital not just a run for its money, but very often a good kicking. And that's before we factor in the thousands of LPs we vinylistas still own and the very special magic of it all. **AVID** have perfected the suspended, belt-driven design and their new SP spec double belts and upgraded power supplies are way ahead of anything else on offer. Joining the fray is a particularly interesting turntable from Germany the **Brinkmann Bardo** – no belts, no suspension, direct drive, mass loaded & with electronic speed control. Unsurprisingly, they sound markedly different. Which is better? That is for you to decide. These two outstanding, fresh-off-the-drawing-board designs are at Audio Workshop Norwich raring to go and eager for your attention. Please don't disappoint them.....Call me, Julian Musgrave, and hear the best that vinyl can offer.

31 PRINCE OF WALES ROAD. NORWICH. NR1 1BG. www.audioworkshopnorwich.co.uk .

Abbey Road. Advanced Acoustics. ATC. Atacama. Avid. Ayre. Bel Canto. Brinkmann. Creek. Dynavector. EAR/Yoshino. Esoteric. Exposure. Goldring. Grado. Krell. Martin Logan. Origin Live. NAD. QED. SME. Sonus Faber. Sumiko. Stax. Vertex AQ.

emillé

just for your musical bliss

AND THERE WAS CHA'AM



CONCEIVED AND PROUDLY HANDCRAFTED BY PASSIONATE AUDIOPHILES

Distributed in the UK by Angelsound Audio
www.angelsoundaudio.co.uk
Tel: 01923 352479

- Dealers

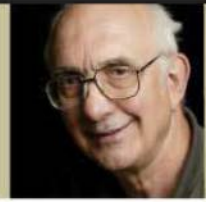
Midlands
Mayflower Sounds
Tel : 07931524266

Surrey/Hampshire
Blade Audio
Tel : 07843205374

West Sussex
Heatherdale Audio
Tel: 01903 872288

Northern Ireland
Kronos Audio Visual
Tel : 02887 753606

www.emillelabs.com info@emillelabs.com



Barry Fox Technology journalist

Barry Fox trained in electronics with the RAF and worked as a patent agent, but he gave that up to enter journalism. He is one of the world's top technology writers

A gentle reminder...

Have you forgotten how real instruments sound when played live? **Barry Fox** discovers a venue in London that offers the yardstick we all need to remind us how a home hi-fi system should sound

There aren't many places where live music is played in a good acoustic without offensive amplification, to provide the kind of audio yardstick we all need to remind us how a home hi-fi system should sound. So it's odd that a new concert hall with fine acoustics, and the first to be built in central London since the Barbican in 1982, should be unknown to so many, even people who work in the music business.

Kings Place Hall, tucked away in York Place behind King's Cross railway station, was built with private money. So it does not have the public cash for publicity that sloshes around Covent Garden. It also puts on music concerts that are out of the mainstream and don't draw huge crowds, or BBC outside broadcast vans. You won't hear Beethoven's umpteenth played by an orchestra of bored hacks, watching their watches under a conductor who would not play an encore to save his life.

You are more likely to hear a traditional New Orleans band and modern orchestra playing new and old compositions together. Sometimes it works and sometimes it doesn't.

INTO THE DEEP

Kings Place, which is actually two traditional 'shoebox' halls – one for rehearsals and small events and the other a 420 seater – was built

by private developer Peter Millican, with help from acoustic consultants Arup.

The concrete halls were built 25m deep down into the ground, and sprung on rubber to isolate them from external sound like the nearby Eurostar.

At a recent concert given by jazz singer Claire Martin and pianist/composer Sir Richard Rodney Bennett,

'The concrete halls were built 25m into the ground and sprung on rubber'



ABOVE: Two views of Kings Place Hall, which opened to the public in 2008 – amplification is hidden behind decorative grilles situated either side of the stage, but is used sparingly

Martin told the audience 'this is such a great place to sing, I want to be here every night and never go anywhere else.'

Claire Martin was also intrigued by the not-a-lot-of-people-know-that fact that the concrete is clad with oak veneer from a single 500-year-old oak tree called

Contessa that was felled in Bavaria on the full moon before Christmas in 2005, boiled for a week at 80°C and cut into 5m veneer panels.

The lively acoustic of the fully oaked walling was what let

the audience hear a pin drop when the first ever concert at Kings Place was played by a solo oboe, with no amplification. But the oak would be too lively for loud music so Arup put in 60m of 6m curtain drapes that can be pulled partly or fully over the walls to damp the acoustic.

Kings Place has a fleet of six Steinway grands, that are tuned before each

performance even though they only have to be wheeled a few feet onto the stage. Rodney Bennett and Claire Martin shared four mics – Schoeps and Neumann condensers – with two in the piano and one each for the voices.

HIDDEN AMPS

Don't be fooled by the speakers which hang high over the stage. These are there only to push a little audio into the balcony. The main amplification is hidden behind decorative grilles to the left and right sides of the stage.

The system comes from German company d&b (named after founders Jurgen Daubert and Rolf Belz) and is similar to that installed in the new Ronnie Scott club. There are around 2.5kW per stereo channel if anyone ever really needs it. Most of the time it's cruising.

I'd heartily recommend a trip to Kings Place for anyone who wants a reminder of how real instruments sound when played live. For a full programme of events, see www.kingsplace.co.uk. Ⓞ



Inspire Hi-Fi



HI-FI WORLD



"It's about enjoyment and emotion rolled into one, a rare combination at any price."

Adam Smith from Hi-Fi World

the magic of the studio recording in your listening room.

listen to vinyl playback as you've never heard it before...

Now introducing the brand new Apollo turntable. Same cutting edge British engineering, delivering outstanding sound at a price that will astound.

Apollo
TURNTABLE

eclipse[®]
TURNTABLE



Inspire Hi-Fi

Tel: 01246 827272 / 01246 568770 Mobile: 07932 367555

www.inspirehifi.co.uk

Part exchange possible

Buy the most talked about turntable direct from the UK manufacturer with no retail mark up!

Coming Soon from Pathos Acoustics



Download the brochure from www.ukd.co.uk today.



ETHOS



musteca



INPOIREMIX



FOR MORE INFORMATION PLEASE CONTACT:

t. 01753 652 669

mail@ukd.co.uk | www.ukd.co.uk



Barry Willis

Journalist for top American audio-video publications

While his main interest is high-end audio, Barry Willis also writes about the culinary industry, visual art and theatre for a huge variety of US newspapers and magazines

Second that Emotion...

Barry Willis re-visits a speaker manufacturer Stateside that not only uses test and measurement alongside subjective listening when designing products, but a good dose of human psychology too

In November 2007, I reported on breakthrough loudspeaker technology from a Nashville, Tennessee start-up called High Emotion Audio (HEA).

HEA's founder, J Craig Oxford, has invested many years and considerable capital examining the behaviours of sound-emitting transducers, addressing their flaws and developing new loudspeakers based not merely on measured performance and subjective listening, but on university studies correlating human emotional response to recorded music. HEA may be the only loudspeaker manufacturer to use such data in the design process.

ON THE ATTACK

Citing research done at Vanderbilt University and at Belmont University (both in Nashville), Oxford concluded that many standard tests of loudspeaker performance don't illuminate what's important. For example, the waterfall plots generated by popular speaker measurement programs are elaborate

depictions of frequency peaks and dips, cabinet resonance, and signal decay, but reveal little about signal attack.

This is the opposite of the correct approach, Oxford asserts. 'The limbic system doesn't care how a signal decays,' he explains. 'What the brain is looking for is a continuous stream of first impressions. Signal attack is what gives a sound its timbre, its identity – it's what tells us that what we hear is a violin, a snapping twig, mother's voice, or a nearby predator.'

With truth in signal attack as a first principle – 'Threshold of Authenticity' is an HEA registered trademark – Oxford's engineering team puts a premium on speed, not only in HEA's now well-publicised LET (Leading Edge Transducer) tweeters, but in midranges, woofers, and subwoofers that have an unrivaled ability to move substantial amounts of air in minimum time.

'Our mass-to-motor ratio is ridiculous,' Oxford says of HEA's cone drivers. Of his crossover networks: 'every component in the signal chain is chosen for the fastest release of energy.' Dense, inert cabinets and 'force-balanced' positioning of drivers aid this release, he claims.

In late May, I reprised my 2007 visit

to HEA with a short trip to the company's engineering facilities in Minneapolis, Minnesota, followed by two days in Nashville. HEA has moved beyond prototyping and now has a fully-realised line of

products – among them, pyramidal mini-monitors for use alone or with any of the company's subwoofers. The subs can be stacked for maximum impact. There's also a centre-channel speaker. Standard finish is automotive-grade semi-gloss anthracite.

In Nashville, I heard a two-channel system with HEA's Pyra Bella 7 atop stacked Bella Basso 28 subs, driven by Butler amps.

RIGHT: HEA's pyramid-shaped Pyra Bella 7 – a full-range two-way speaker – sits atop stacked Bella Basso 28 subs, each of which houses two mechanically opposed 8in woofers



The compact but massive subs sport 8in woofers front and rear – a design said to launch waveforms evenly throughout a 360° footprint, thereby 'taking the room out of the equation.'

HEARD FOR THE FIRST TIME

Shelby Lynne's 'Just a Little Lovin'' sounded stunningly realistic through the system in Oxford's home. As we were settling in to listen, Nashville singer/songwriter Charlie Taylor showed up. Shelby Lynne startled him too, but not

as much as his own CD, *For All I Am*, a collection of refreshingly sincere songs of love and nostalgia.

Taylor listened intently through the entire disc, then turned to

'What the brain is looking for is a continuous stream of first impressions'

Oxford and said, 'Craig, I want to thank you for that. I have heard every tune on this disc hundreds of times. Tonight I feel like I heard it for the first time. This was a revelation.' Praise doesn't get any more honest than that.

HEA is still working on a distribution strategy, but offers online sales. See www.highemotionaudio.com for more. ☺



ABOVE: HEA's Twin series – still in prototype form, the cabinets are laminated hardwood



Jim Lesurf Science journalist

Jim Lesurf has spent a lifetime in audio, both as an engineer at UK hi-fi company Armstrong and reader in Physics and Electronics at St Andrew's University

A journey into sound

Fancy exploring a little more deeply the reasons your system sounds as it does? With a suitable PC and some freely available software, you too can build an audio toolkit. **Jim Lesurf** explains...

The bad workman blames his tools. The good craftsman starts by building his own tools. For those interested in audio there are two kinds of tools: ears and measurement instrumentation.

'Trust your ears' is a good starting point. But by themselves they may only take you so far. They can tell you when there is a problem, or alert you to when two sound systems sound 'different'. But if you want to know the cause of any audible effects you generally need to employ more than just your ears.

To a large extent this is a matter of engaging the brain and thinking critically. Not just accepting the first or most apparently obvious 'explanation'. It sometimes also means being able to measure and analyse what is going on.

DIFFERENT COSTS

Personally, I've never been interested in the shouting matches between audiophiles where phrases like 'trust your ears' and 'meter readers' are thrown about like curses. I simply enjoy listening to the sound of music, and am interested in understanding how to improve audio kit to get a better result.

When I used to design audio equipment I spent a lot of time listening very carefully to try and detect any problems or changes. I also used the best measurement gear I could find. Oscilloscopes, spectrum analysers, distortion kits, etc.

Unfortunately, this used to be difficult if you were an amateur enthusiast because of the sheer costs involved. In past decades, equipping a decent test bench could have cost thousands of pounds. But there are also hidden costs – being willing to spend time and effort studying the technical side of how audio gear works, and the details of the ways we use recorded and broadcast signal patterns to represent the music. Plus you need to learn about the physiology of hearing and the psychology of how we react to music.

There is also another price which not everyone is happy to pay. This is being willing to doubt what others tell you about the 'reasons' for what you hear. And even being prepared to question your own conclusions about the causes.

The good news is that these days things are easier. Help has come from a direction that would have been a surprise a few decades ago. Now almost everyone has a home computer. The obvious impact this has had for the music lover is in the use of the PC as a music server or net radio. But there is another side to the coin that has exciting implications for the enthusiast. This is the role of

software that enables audiophiles to employ their computer as a flexible test bench.

AND IT'S FREE

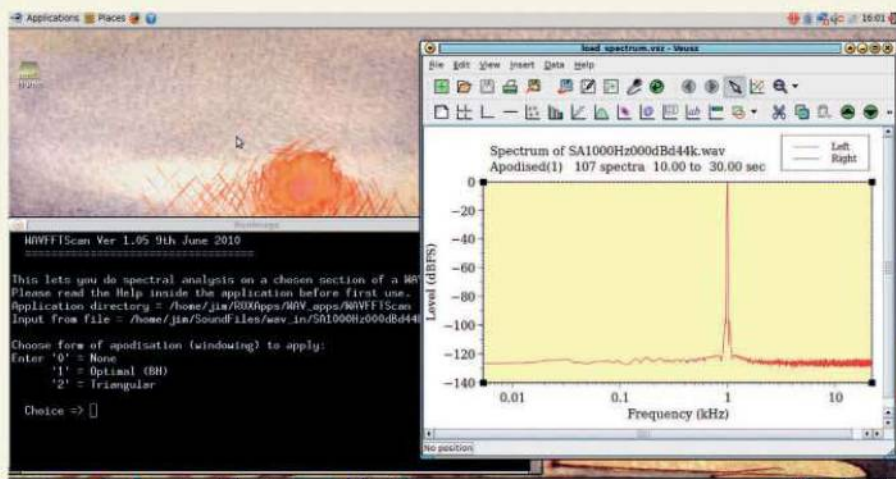
Given a suitable computer you can find free software

'You can use software to decide what changes might benefit your system'

to investigate and learn for yourself, then reach your own informed conclusions. In recent years I've been playing a tiny part in this process by writing my own simple applications. These have provided the basis of many of my articles, which have seen me investigating subjects such as clipping on CDs, signal levels on LPs, and even the performance of the BBC iPlayer.

Now I'm in the process of making versions of the software openly available (see www.audiomisc.co.uk/software/index.html). I plan to slowly add new software as and when my supply of 'round tuits' allows. The aim is to provide versions of most of the software I've used in recent years. This is so you can apply the same methods to check out your own equipment and recordings. You are also welcome to look at the software and adapt it for your own use as you prefer.

So now, by using computer software, you can build an audio toolkit of your own. You can then use it to discover the reasons for what you hear, and to help decide what changes (if any!) might benefit your audio system. Yes, you can still trust your ears, but you can also investigate more deeply if you choose. ☺



LEFT: Analysing a WAV file using the 'WAVFFTScan' software, available free from the author's site



Roksan

Warranty Notification

Effective 1st November 2009, all Roksan electronics and turntables supplied via authorised dealers are to be covered by a 5 year parts and labour warranty.* As a gesture to existing customers, this will also be extended to all current owners of K2 products.

In an age where product longevity and second hand resale values are constantly under threat, Roksan wish to reward their loyal customers by allowing their warranty to be transferrable from owner to owner. Thus, the warranty stays with the product from initial date of sale to 5 years old as long as it remains within the country of origin.

* terms available upon request



Distributed in the UK by;

Henley Designs

www.henleydesigns.co.uk,
sales@henleydesigns.co.uk, 01235 511166



Steve Harris
Contributing Editor

Steve Harris edited Hi-Fi News between 1986 and 2005. He loves jazz, blues music, vinyl and vintage hi-fi and anything that makes good music come to life

Multichannel maestro

Steve Harris talks to surround sound guru and Grammy Award winner Michael Bishop about present projects and the challenges of bringing new life to a soul legend's already sparkling set

We all breathed again when EMI's equity-fund owners said they wouldn't sell Abbey Road after all. But the episode signalled a sad end to the comfortable old epoch when record companies could afford to run their own big studio complexes.

In America, that era ended a year earlier, with the closure of Telarc's recording facility in Cleveland, Ohio. Fortunately, three members of the former Telarc team quickly set up in business as Five/Four Productions, to continue making recordings for Telarc and its parent group, Concord. Michael Bishop, Robert Friedrich and Thomas Moore are all vastly experienced and all multiple Grammy winners.

IMPOSSIBLE SURROUND

You'll know Michael Bishop's name if, like most audiophiles, you just had to get the latest Eric Bibb album. Or any album by the amazing pianist Hiromi Uehara. Recently I was lucky enough to get to talk to him about his work.

'On a project such as Hiromi's,' he says, 'I'm playing two roles, as both co-producer and engineer. She feels that the sound and the recording are every bit as important as the compositions and the performance.'

Hiromi's fusion-style albums really benefit from Bishop's SACD multichannel



ABOVE: Michael Bishop and Hiromi Uehara

expertise, and he's won many awards for surround work. In 2007 he made a spectacular success of what might have seemed impossible, creating an SACD surround version of the previous year's big hit, *Ray Sings, Basie Swings*. For the stereo album, Concord producer Gregg Field had audaciously added the current Basie band to vocals recorded live in the 1970s.

'That project was a heck of a lot of fun to work on and it also was a really huge challenge,' says Bishop. 'I was still part of Telarc Records when I got the promo. Right away, from the beginning of 'Oh What A Beautiful Morning', I thought, this was terrific, but I wondered if it was possible, if the tracks were there that I could fix up.

'I called Gregg Field to talk about it, and he thought it would be a really good surround project. Without hesitation, he just packed up a back-up drive from the project and sent it my way, and left it in my hands from there on!

'It was faith on his part, but he knew what I'd done in the past, and that it would be something worthwhile.

'Yet he had no idea what it was going to turn into, a very different release from the stereo, such a different experience. He has said a number of times that what I put into it as a surround disc has brought out more music. And it was a challenge, because of the smoke-and-mirrors aspect of that particular project.'

Ray's mono vocal tracks included a lot of band sound too. So the Basie band had duplicated the original arrangements beat-for-beat, to mask the band sounds coming through with the vocal. It can't have been easy to make that work in surround!

'It required a lot more work in the editing and attention to detail in the mix, to hide where one part left off and the other part came on. I had to handle Ray's



ABOVE: Ray Charles – remade in surround

vocal track very carefully, and make sure that nothing was going to "pop out" and surprise anybody. And all the time trying to keep faithful to the intention of the stereo mix.'

TRUE PRESENCE

Like most listeners, I'd found Ray's presence almost frighteningly intimate. It really is as if he's there.

'I'm glad it comes across that way on somebody else's system. A whole lot of reviewers and writers, a whole lot of people in general, can't be bothered to set up a good music surround system!

'Working with any artist – though in that case they were long gone! –

you can feel like you've got them on a psychiatrist's couch. You're hearing all of the bad parts too, but you show the artist in the best possible light.

'But in the case of somebody like Hiromi, boy, I mean I can't even recall anything that you could call a bad take. She comes in so prepared, so ready, it really doesn't matter. You just jump in, fasten your seatbelt and hang on!' ☺

"A lot of people can't be bothered to set up a good music surround system"

Cycling Weekly

UK's biggest selling Cycling magazine is the best source of breaking international and UK news, race reportage, reliable fitness advice, trustworthy product reviews and inspirational features for British cyclists.

www.cyclingweekly.co.uk



ON SALE EVERY THURSDAY

Cycle Sport

For fans of professional road racing. With the most in-depth interviews, knowledgeable feature-writing and the best photography cover the road racing scene

On sale every month



Cycling Active

The all new cycling magazine for today's bike rider. From complete beginner to expert we aim to inform and entertain with a mix of bike and tech reviews, commuting and health and fitness advice, how-to guides routes to ride and what's on info.



ON SALE EVERY MONTH

Britain's **BEST** Cycling Magazine's



Cycling Weekly Health & Fitness

A must have guide for riders of all levels to help with riding goals for each season of the year.

On sale quarter monthly



Tour

The unofficial user-friendly guide to the Tour de France.

On sale annually



Mountain Bike Rider

Just get out and ride! Britain's best mountain bike magazine full of ride guides, buyer's guides, tests and practical workshop advice

www.mbr.co.uk

Available at all good newsagents
Or online at www.cyclingweekly.co.uk/shop

44 HIGH STREET
ETON
BERKSHIRE SL4 6BL

01753 631000
www.studioav.co.uk
sales@studioav.co.uk

studio

AV

The latest reference products from Mark Levinson, Revel and the Focal Utopia range redefine the standards for music reproduction, forming stunning partnerships.

Music that stirs the soul

We are southern England's only official Mark Levinson and Revel reference dealer, and these fabulous products, together with Focal Utopia speakers, are on demonstration in our luxurious listening rooms.

We are exhibiting at the National Audio Show 2010, Whittlebury Hall, Northants on 25th and 26th September, and will be using these and other high end products throughout the two days.

Visit us in the Priory Suite on the first floor for your chance to hear music that stirs the soul.

FOCAL

mark
levinson

REVEL

RENAISSANCE
AUDIO



32-BIT POWER MOON 750D DAC

Classic styling, class leading performance.

Multi-award winning CD players, phono stages, integrated, pre and power amplifiers from Canada's finest – Moon Electronics.

DISTRIBUTED IN THE UK BY RENAISSANCE AUDIO 0131 555 3922 WWW.RENAISSANCEAUDIO.CO.UK



CHESHIRE
DOUG BRADY HI-FI / 01925 828009

N. IRELAND
KRONOS AV / 0288 7753606

DEVON
AUDIO DESTINATION / 01884 243584

EDINBURGH
LOUD & CLEAR / 0131 555 3963

LONDON
O BRIEN HI-FI / 0208 9460331

YOUR VIEWS

Sound Off!

Correspondents express their own opinions, not those of *Hi-Fi News*. We reserve the right to edit letters for publication. Correspondents using e-mail are asked to give their full postal address (which won't be published). Letters seeking advice will be answered in print on our Sound Off pages, but due to time constraints we regret we're unable to answer questions on buying items of hi-fi or any other hi-fi queries by telephone, post or via e-mail.

AMERICAN IDLER RIM DRIVE STILL ALIVE STATESIDE

I am amazed to be able to say Paul Miller is wrong, since virtually everything written in the magazine, particularly over the last few years, seems very well informed. Nevertheless, I am writing in reference to his Opinion piece in the July 2010 issue in which he states that the idler drive mechanism used to power turntables has been abandoned. Well, it still thrives in the form of the Teres Verus motor from American company Teres Audio. This can be added to any modern turntable that does not use suspension and which has sufficient space to the side to accommodate the driver.

I use the Teres Verus with my Nottingham Analogue Hyperspace deck (with the so-called 'heavy kit'). The result is a very fine sound indeed and confirms everything Paul Miller says in his article. I cannot imagine going back to using the belt drive supplied with the deck.

Dave, via e-mail

Paul Miller replies: I stand corrected. Partially. In fact while I had the Garrard 401 turntable on my test bench and while researching the history of this fabulously sensible mechanism I did come across similar implementations to the Teres. Transcription decks including the Rek-o-kut and Grays turntables both used outboard idlers, I believe, while the last fully-integrated idler design was the Epson-Seiko Sigma 5000mkII from Japan. This deck's 12kg brass and iron platter was driven by a brushless DC idler but it really represented the swansong for a mechanism rendered asunder by the onslaught of direct-drive alternatives. Even if the idler concept has not been entirely abandoned thanks to the likes of Teres Audio, there are still no new and complete idler-drive turntable solutions in production. If anyone knows otherwise, we'll review it!



ABOVE: Dave's deck with Teres Verus rim-drive motor (see www.teresaudio.com); the arm is an Origin Live Illustrious 3 while the cartridge is an Ortofon Jubilee

Send in your views to:
Sound Off, Hi-Fi News, Leon House,
233 High Street, Croydon CR9 1HZ or
e-mail your views to: hi-finews@ipcmedia.com -
please use 'Sound Off' in your subject field

Quad, KK and total satisfaction

THANKS FOR GETTING AMP REVIEW SO RIGHT!

I'm a long time reader of your magazine and just wanted to let you know how much I enjoyed Ken Kessler's review of the Quad II Classic Integrated amp [see *HFN* Jan '10].

After reading the article I went to my local dealer to audition it with my speakers (Sonus faber Guaneri Memento - another of Ken's favourite products). The amp had literally ten hours' use and I was instantly captivated by its non-'hi-fi' nature. I took a chance and bought it right then and there!

Now, more than a hundred hours of use later I am utterly captivated by this amp. It is the first component I have purchased over the last ten years that leaves me completely alone with the music. It's not about hi-fi, just music.

Thanks Ken and thanks *Hi-Fi News* for getting the review so right.

Dean Sholl, Australia

Extreme tweaks

BUT SUSTAINABLE ROSEWOOD CASES? COME ON...

Next month I'm having the house lifted so that a 10ft-deep pit can be dug beneath it, about 6ft larger all round than the ground floor. This hole will be filled with non-resonant, ellipsoidal pebbles taken from the gravel beds of the Tierra del Fuego, hand washed by the indigenous Indians of the region before being individually packed in sustainable rosewood cases and carried the length of the Andes by a team of organic Yaks.

The house will then be replaced on this raft of stones and I should at last be insulated from the rumble of the tube trains as they pass by on the Northern Line four miles away.

However, my first problem is this: although I have written to the local council and asked them to make arrangements to close off my street at each end when I turn on my system, they refuse to do so. Not only that, but they also refuse to speak to the Civil Aviation Authority, whom I want to enforce a quiet zone around my house when I am playing music - not to mention the parents of the local children who run past my window making noise all day.

If I can't get these measures enforced, how on earth am I meant to be able to enjoy my silver-glitzy, bisexually-orientated, cryogenically-aligned, otherwise-oxygenated, silk-covered, speaker cable which I bought at Mugsarus Hi-Fi during its spring sale for the bargain price of £2,499.99/m - a significant reduction from its usual price of £2,549.99.

Jonathan Briggs, London

Scheu

Scheu Analog turntables

Manufacturers of analogue music reproduction equipment

Analog



Ulla Scheu · Stöckerberg 13 · D-42651 Solingen · Phone: +49-212-38085830

Fax: +49-212-38085832 · ulla@scheu-analog.de · www.scheu-analog.de

audioutopia
by **amplitune**



www.amplitune.co.uk



Synergy
AV

Not just the UK's number one **Rega** Dealer

Tel : 01260 280017
Email : mail@synergyav.co.uk
Web : www.synergyav.co.uk
Open : 9.00 to 5.30 Mon - Sat
Address : 12a West St
Congleton
Cheshire
CW12 1JR



MICHELL ENGINEERING

AE ACOUSTIC ENERGY

A

KUDOOS

MAGNEPAN INCORPORATED

PIEGA SWITZERLAND

naim

MONITOR AUDIO

ARCAM

It's too loud!

SOUND FROM TV MAKES ME JUMP...

I have a Panasonic TV and DVD player. Both are fantastic, except for one thing – the sound. Let me explain: I set the volume when watching a TV programme to suit my normal hearing (not too loud) but when the adverts come on the sound goes up so loud it makes me jump. I wrote to Panasonic and, unsurprisingly, they told me that this was down to the broadcasters, who monitor their own sound levels.

I then wrote to the BBC's Newswatch (yes, I know the BBC doesn't show adverts, but I experience the same problem when they show trailers in between programmes) but to no avail. Obviously my pleas fell on deaf ears (excuse the pun).

Now, I do remember that in the 1980s there was a form of 'limiter' fitted into some cassette player/recorders which prevented you pumping too much sound into recordings and pushing the meters into the red. Why don't they invent a TV with a gadget inside that can intercept then lower sound from adverts that are broadcast too loud?

Richard Ingham, via e-mail

Barry Fox replies: There *is* technology that addresses this problem, Richard, and it's called Dolby Volume. The system was launched at CES in January 2007 as a cure for the curse of overloud adverts and I wrote that 'after years of trying to address the problem at the broadcaster level, Dolby has abandoned that approach and devised a way for broadcast volume-changes to be addressed within the receiving TV or radio.' Immediately I got a bewildering letter from Dolby's PR in the USA, asking for a correction to assure that Dolby hadn't given up hope on broadcasters mending their ear-offending ways. Perhaps this ambivalence explains why so little has been heard of Dolby Volume since then. But the system does seem to be incorporated in a few TVs and AV amps if you can be bothered to play detective. See www.dolby.co.uk/consumer/understand/volume/dolby-volume.html for more.

Naim: a confusion explained

IT CERTAINLY IS POSSIBLE TO USE POWER SUPPLY WITH NAIM DAC POINTS OUT READER...

The Naim CDX2/DAC article in your June issue contains some incorrect information, in that the reviewer – Keith Howard – wrongly states that the Naim 555PS is not compatible with the Naim DAC.

As well as the XPS power supply upgrade the 555PS is compatible with both the CDX2 and the DAC. When the 555PS is used solely with the CDX2 an XPS Burndy cable is used to connect the CDX2 (link plug removed) with socket 1 of the 555PS. The internal power supply of the CDX2 is switched off.

When a CDX2/DAC/555PS configuration is used the CDX2 internal power supply remains in use (link plug in place) and is connected to the DAC via one of the S/PDIF outputs. The internal power supply of the CDX2 is used to power the disc transport system.

In turn the DAC is connected to Burndy socket 1 of the 555PS (or XPS) using an XPS Burndy cable. The power switch for the DAC's internal supply remains switched on also. To quote the Naim DAC White Paper: 'When the PSU upgrade option is used with the Naim DAC, power supply separation is further increased by the use of a dedicated supply for the master clock circuits. It also provides a bigger toroidal transformer and bigger reservoir capacitors, and the DSP remains powered from the Naim DAC transformer to give even more separation from the analogue section.'

If your reviewer thought the CDX2/DAC/XPS sounded good he should hear it with the 555PS. It's another step change in all the characteristics he described.

I have enclosed a photograph of my system. For those interested the components comprise a Naim CDX2.2/DAC/555PS; Nat 05; Wilson Benesch Full Circle turntable and Ply cartridge feeding a Stageline N/SuperCap 2; NAC 552 (formerly 282/SuperCap); NAP 250.2; Grado RS1 headphones and Naim Headline headphone amp powered by a Hi-Cap. The loudspeakers are, of course, Naim Allaes, which are located on sand boxes and have detached crossovers.

As for cabling I use Naim Hi-Line on the DAC and DC1, Powerline on the 555PS and NACA5 speaker cable. I also have a dedicated 40A mains spur. Racks are Clearaudio Aspect, also on a sand box.

Graham Morris, via e-mail

Keith Howard replies: Graham, you are correct. It is certainly possible to use the 555PS to 'power' the CDX2 or the DAC. There would be no point in using a 555PS on the CDX2 if one was using a DAC. The XPS2 comes with the necessary XPS Burndy cable (for use with CDX2, CDS3 or DAC) while the 555PS requires that one buys it separately.

It may not appear to make sense but it does as the 555PS was originally designed to go with the CD555 head unit, which comes with the two Burndy cables needed.



ABOVE: Reader Graham Morris's system – he knows a thing or two about Naim...

Guitar

& BASS MAGAZINE

is now online at

www.guitarmagazine.co.uk

for all the latest:

● **Guitars and Gear:**

Full reviews, ratings and our unique product comparison feature, a must if you are thinking of buying a piece of new or second hand kit.

● **Industry News:**

Get the latest news on all things guitar and gear.

● **Video tutorials:**

Learn how to play like one of the greats.

● **Guitars and Gear directory:**

Looking where to buy a specific piece of kit, check out our directory, chances are we will have the information you need.

● **Competitions and giveaways:**

Win a dream guitar or piece of kit you alve always wanted, check out weekly to see what competition we are running.

● **Plus lots, lots more...**



www.guitarmagazine.co.uk

More praise for SACD

MULTICHANNEL IS MEANT FOR MUSIC AND NOT JUST HOME CINEMA

I read with interest Keith Howard's reply to the letter entitled 'RIP SACD' in the June Sound Off pages, especially following his remarks in the boxout accompanying the review of the Linn Majik DS-I, which appeared in the previous month's issue. There he says that he wished Linn provided hi-res multichannel downloads rather than just the SACD versions of tracks.

It seems to me that there is an important distinction to be drawn between SACD as a possibly superior alternative to stereo CD, and as a carrier for multichannel music. I'm currently sourcing a multichannel system primarily for music and

have been surprised by the downbeat reaction of the dealers I have approached. I expected them to be full of enthusiasm at the prospect of selling some extra speakers. The industry seems to have decided that 'hi-fi' means stereo and that multichannel means home cinema, as Keith Howard suggests.

I have been told several times that there are not many multichannel recordings around, but if you like classical, jazz or Scottish music there is an increasing number of multichannel SACDs to be found in the Linn

catalogue, as well as on specialist labels such as LSO Live.

Of course, there are some multichannel downloads available, for example, from Gimmell, and also from Linn before it stopped supplying them (for example the excellent *Acis & Galatea*). However, there is a dearth of audiophile multichannel D-to-A converters and so the easiest way to enjoy multichannel music is through either SACD or DVD-A.

Then, in the June edition, the Cambridge Audio 650BD received an Outstanding Product award for being a multichannel universal player that costs just £400.

So please, given that there is both the software and hardware about, can the hi-fi industry and the hi-fi press please stop being so negative about SACD, and instead see it as the most practical source of multichannel music. At least, that is, until Linn decides to produce a multichannel DS player.

Peter Froome, via e-mail

Keith Howard replies: The only thing I'd add, Peter, is that FireWire audio interfaces offer another route to hi-res multichannel playback, which is why we recently reviewed the Prism Sound Orpheus [see *HFN* Jan '10].



ABOVE: Multichannel capability from hard disk at up to 24/192 – the Orpheus from Prism Sound

LP cleaning advice

WHAT'S THE BEST WAY TO RID THOSE GROOVES OF DEBRIS?

I have a query which I think might be quite topical at this time. With the advent of eBay and other similar sites, many secondhand records are changing hands unseen, buyers relying purely on the sellers description.

I have purchased a number of discs in this way with little reason to complain. However, I have just bought a copy of Jim Halls' *Concierto*, an interpretation of Joaquin Rodrigo's *Concierto De Aranjuez* and an all-time classic. While a visual inspection of the disc shows nothing in the way of degradation, on playing it some light surface noise can be heard along with some irregular clicks and pops.

Due to the type of noise heard I suspect a good cleaning of the disc might

cure much of the trouble, the clicks and pops likely to be caused by minute pieces of debris in the groove. I contacted a local hi-fi dealer to enquire as to whether they had a record cleaning facility. The response was no, but they recommended a product called Permaclean. The same advice was offered following telephone calls to a couple of other dealers. Does Hi-Fi News recommend this, or another similar product? Or what general advice would you give when it comes to cleaning records.

I do not have a top-end system, though with a Little Pink Thing turntable upgraded with The Funk Firm's motor kit and Achromat (and an upgraded Moth arm fitted with a Dynavector 10x5 cartridge) I have a pretty decent source.

Geoff Howard, via e-mail

Steve Harris replies: Your record probably does need 'a good clean', which means using a cleaning machine, because this is really the only way to lift dirt and debris out of the grooves. There are many cleaning machines on the market, but all work on similar principles. Basically, the machine floods the grooves with a cleaning fluid and then vacuums it off again, taking debris with it and leaving the record completely clean and dry.

By contrast, the spray-on, wipe-off type of cleaning product cannot really remove matter that is embedded in the groove, and may make things worse by tending to seal it in there. Such treatment can make a record look nice and clean and shiny, but this only means that the lands between the grooves are clean. We must have all bought records that look great, but sound noisy, and this is the usually the reason.

Cleaning by machine can be quick and effective, but it has to be done properly. You should



ABOVE: Keith Monks machine

find a dealer who does offer a cleaning service with a caring approach. Two that we can confidently suggest in the London area are Grahams Hi-Fi (www.grahams.co.uk, 020 7226 5500) and Unilet Sound & Vision (www.unilet.net, 020 8942 9567). In either case, you should give a call first to discuss your requirements and the service offered.

Otherwise, contact Keith Monks (www.keithmonks-rcm.co.uk, 01983 857079), for a list of retailers offering a service using Keith Monks machines.

audioemotion

www.audioemotion.co.uk

e info@audioemotion.co.uk

t 01333 425 999

Music is our Passion

- › Loudspeakers
- › Amplification
- › Digital
- › Analogue
- › Cables
- › System Infrastructure
- › Accessories
- › Pre-Owned

TAKE THE TUBE

Designed by the 'Golden Ears' of Hong Kong - Alex Yeung, Eastern Electric products have won many awards and accolades around the world and are regarded as the best value for money products at any price point.

Eastern Electric

› PRICES FROM ONLY £495.00

Please visit our website for links to reviews and full specification of each of these stunning products.

PEACE OF MIND CHARTER

- 5 year first owner warranty on all new and pre-owned equipment*
- 14 day no quibble exchange plan • 'Industry best' part exchange prices
- Free room optimisation consultation using our proprietary software
- Finance available on all products

* terms & conditions apply

› Please ask about our unbeatable part-exchange programme.



M520 Integrated Tube Amp

Engineered for years of satisfaction with meticulous attention to detail, the highest quality parts and transformers made especially for this statement design. The perfect alternative to solid state, enabling you to relive that concert experience.

"The M520 impressed me with its handsome appearance, great build quality, low noise, wonderful neutrality and engaging musicality."

Fown-Ming Tien Revelation Audio Labs

MiniMax Pre Amp

This pre amp represents one of the best values in hi-fi today. Tweaked to the ultimate performance with added functionality, we believe it's on a new plateau all by itself.

"That rarest of products: an entry-level unit that looks and sounds like it costs so much more."

Hartmut Quaschik TNT Audio



MiniMax 6BM8 Power Amp

Beautifully contoured, rugged good looks combined with the presentation of accurately silky smooth voicing of instruments, musicians, and singers.

"The MiniMax is one of those rare tube power amps which are nearest to a piece of wire with gain."

I recommend it to all enthusiasts who want the benefits of tubes without their drawbacks. The Minimax is not only a Best Buy due to its price tag, but also excellent in absolute terms."

Hartmut Quaschik TNT Audio



MiniMax BBA

Designed to provide an optimal electrical match between any combination of audio components, perfect for those wanting to "mix & match" in an everlasting quest to achieve a combination of units that is "just right" in their own system.



MiniMax Tube CD Player

Its essence is high quality simplicity and attention to detail. It may well make you forget about your vinyl collection...



NEW Eastern Electric DAC

Designed with the Sabre ESS9018 Chipset with 12AU7 Output Tube.



MiniMax Phono Stage Pre Amp

A sophisticated all tube, high end phono stage with the highest quality permalloy core MC step-up transformers. All tubes are carefully selected and screened for low noise and microphonics.

"I don't think I've EVER heard vinyl sound so good."

Carl Man Audio Circle



Radford STA 15 Series 3

It's long been regarded as one of the all-time classic British amplifiers, but how will this 45-year-old design measure up today? Time to clear the test bench and find out...

Review: **Haden Boardman** Lab: **Paul Miller**

Confession time: I have more than a soft spot for the Radford Series 3 amplifiers. After all, an STA 25 III was my first 'proper' valve power amp. As a teenager I had built and purchased various transistorised amps, finally settling on a 100W MOSFET-based design. But this rather battered STA 25 simply blew it away; I was in shock – it was a life changing purchase!

Radford Electronics was set up in Bristol by Arthur Radford back in 1959. I have neither seen nor heard any of the company's initial models and it was the Series Two amplifiers, soon changed to Series Three, that put Arthur Radford's designs on the map.

In some ways Radford was a late starter in the world of high fidelity, especially compared to Peter Walker of Quad or Harold Leak, and the electronics reflect this. Indeed, Radford's designs are often described as being the most 'modern' of vintage amplifiers.

BEST OF THREE

The Series 3 range comprised two monoblocks – the MA 15 and MA 25 – plus two stereo versions, the STA 15 and STA 25. All variants were built around a common set of parts, which was quite a clever and unique concept for its day. The stereo chassis measures 14x10¾x8½in (wdh) and the mono 8¾x10¾x8½in (wdh) and performance from all models is very similar. In 1964, the MA 15 cost £25, the MA 25 £31 and the stereo versions £40 and £50 respectively. The matching SC 22 preamplifier was available for £32 10s. Common to most vintage amplifier sets, this unit 'scavenged' power from the power amplifiers, but Radford also offered a self-powered version for an extra £5.

The company also sold a fully transistorised amplifier called the SC4-10. The list price was £72 10s – identical to the cost of an STA 15 and SC 22 combined! There was also the IMA and ISTA range of

RIGHT: Under the lid and the heart of the Radford STA 15 III showing the high quality output transformers and modular construction



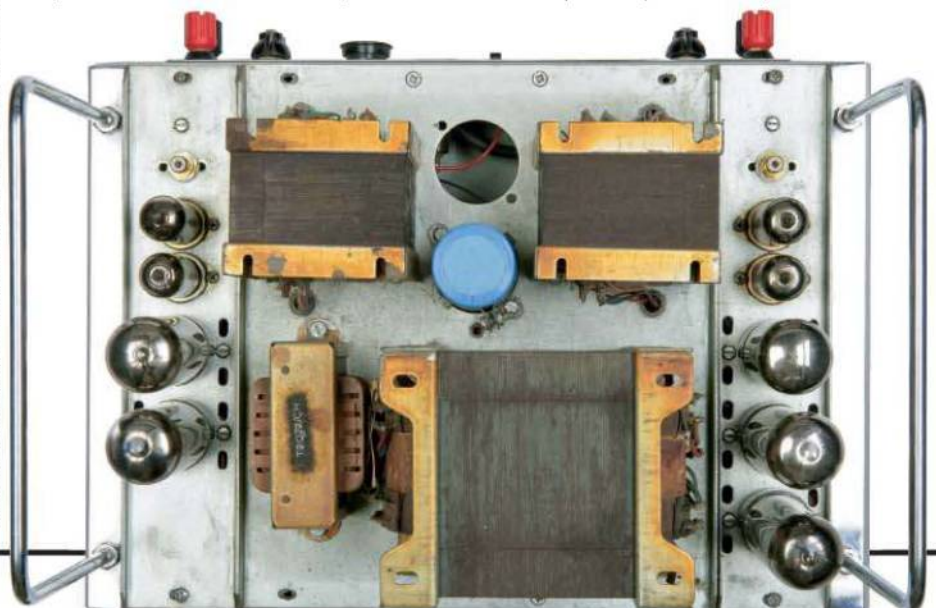
ABOVE: The literature that accompanied the Series 3 amps was certainly comprehensive and provided technical data aimed squarely at the professional, rather than domestic, user

valve amplifiers, more custom and bespoke, available as 30W and a 60W options using KT88 output valves. These were clearly aimed at the professional user and are rare to find. The only ones I have encountered have been in quite a poor state.

It is worth that noting Radford specified much higher quality passive components than any other British amplifier maker of the period. In addition, he was upfront in

declaring what he thought the life of the amplifier would be.

Specification-wise Arthur Radford made no outlandish claims for the Series 3. Distortion criteria are said to be less than 0.1% at rated output for the majority of the audio band while output is quite conservative at a claimed 15W and 25W [see Lab Report, p112]. Input sensitivity is 0.5V (500mV) for full output. However,





what is striking is Radford's interest in the amplifier's 'rise time' and square wave response – something that was pretty unique at the time.

As for connectivity, inputs are via normal phono sockets and outputs to the speakers are via five-way binding posts. Loudspeaker impedance is selected via a rotary switch, a mains switch is fitted, as is an 'octal' connector, which supplies power to the matching preamplifier.

CLASSIC CIRCUIT

Technically the amplifiers employ a variant of the classic Philips/Mullard '5-20' circuit with the first stage utilising a high gain EF86 pentode valve. In the case of the Radford circuit, a 6U8 (ECF82)

dual tube triode pentode valve is used as a phase splitter (the 5-20 uses an ECC83 dual triode here – a much more common arrangement) to drive the push pull EL34 pentode output stage. The output transformers use 'ultra linear' connections.

With subtle tweaks, Radford could maintain a much better square wave response, and with his own design of output transformers, maintain a higher level of performance. Internal build is a cross between hard wired and early printed circuit boards (PCBs). All passive components are located on PCBs, with the valves hard-wired to them. This is a great idea and aids the amp's reliability.

The difference between the 15 and the 25 models come down to power supply

and output valve bias arrangements. On the MA and STA 15, high tension power supply rectification is provided by a valve GZ34 rectifier, providing around 330V high tension. On the 25, a solid state rectifier bridge is used to provide 450V high tension. Output valves on the 15s are automatically biased via cathode resistors; on the 25 the output stage is operated in fixed bias with a negative grid voltage applied to the output valve, which must be adjusted to suit the output valves

with the aid of test points located on the amplifiers chassis (2.0V across the test point to chassis earth). These features apart, all models can be considered to be near identical.

The STA 25 has often been compared to the Dynaco ST-70 [see *HFN* Feb '10] as both amps use fixed bias, a 6U8 valve and EL34 pentodes. However, the Hafler-designed Dynaco uses a circuit based on the classic Williamson design, and is totally different from Arthur Radford's Series 3 amplifiers.

The stereo preamplifier is much more useable than the vast majority of vintage preamplifiers. The phono stage uses both valves and transistors to lower noise and give higher gain. Still, by 2010 standards, the 22 is a little out of kilter. As comprehensive as its input switching, tone controls and filters are, they are now a little outdated. For use with modern digital sources, a simple passive preamplifier leaves the 22 for dead.

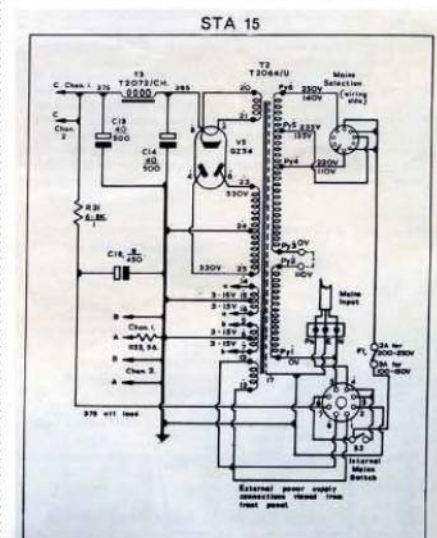
'Radfords are often described as the most 'modern' of vintage amplifiers'

ABOVE: Modern in both looks and sound, the Radford's roots can be traced back to the 1950s
BELOW: STA 15 III amp schematic

HADEN LISTENS IN

For auditioning purposes a system was assembled around a more modern preamplifier, an EAR 864. Speakers were period Tannoy Lancasters with 12in Monitor Gold drivers and a pair of up-to-date B&W 802Ds. Sources included a Technics SP10 turntable with Audio Technica AT1503 arm and Ortofon SPU Classic cartridge plus various digital sources via a Marantz Project D1 DAC.

The first vinyl disc to be played was Grace Jones' *Slave To The Rhythm* and the result was infectious through the big



VINTAGE HI-FI

Tannoy speakers with Trevor Horn's immaculate production revealed cleanly and clearly. Switching to a 'period' recording, Oscar Peterson *Trio Plus One* featuring Clark Terry, provided a similarly thrilling experience, with none of the little details and background 'mumbles' lost.

It's clear the Radford has its own sound – by anyone's standards the midrange is simply delicious. Smooth and liquid, it boasts a freedom from harshness and compression that stands out even by valve amplifier standards. Indeed, there is something unique about it. Very 3D-sounding, it truly is in a different class from most other amplifiers.

SILVER DISC

Switching to digital and some recordings from Ella Fitzgerald and Dinah Washington, the magnificent midband was further underlined. Whether it was a subtle track like 'Solitude' from Ella, or the show-stopping 'Mad About The Boy' from Dinah, vocals were powerful, accurate and intimate with plenty of texture to the fore.

Bass-wise, I felt the STA 15 to be a little less accurate. Although not overly warm, it certainly is a tad coloured-sounding. On the CD of Jimmy Smith's *The Cat* where double bass counters Jimmy's footwork on the Hammond organ, the tones of the two became subtly blended, making it difficult to fully separate them in the mix. Treble is clean and accurate, but in absolute terms could be described as a tad soft, and perhaps not as dynamic as the amplifier's midband performance.

Next, the Tannoys were replaced by the B&Ws. To my surprise, the little 15 did not struggle to control the modern speaker, despite the fact that it is a good 8-10dB less sensitive than the Tannoy. In fact, other than limited level, it worked remarkably well. The B&Ws can sound a bit cool and thin, something the Radford could not be accused of, and the two

RIGHT: Valves shown here (l-r) are an EF86, 6U8, and a pair of EL34s. Chrome carry handles were a popular and very useful feature

presentations made a fine marriage. Bass was still an area of contention, and the limited sound pressure level meant Alison Balsom's trumpet recording of Mozart's *Rondo alla Turca* soon ran the amp out of steam – as did some of the Drum & Bass torture tracks I reserve for testing. Still, it was a very interesting experiment.

The Radford also seemed to sound a lot better after an extended warm up period. I cannot advocate leaving a 45-year-old amplifier on 24/7, on both environmental and safety grounds, never mind valve life. Nevertheless, it has to be said that after a 24-hour session, the 15 really sang.

Niggles? Mechanical noise from the mains transformer and choke through the chassis means there is constant background noise from the actual amplifier, which can be heard when music is playing at a very low level. It's perhaps better described as a 'rattle' than a hum. I have owned around a dozen different 15 and 25 amps and all have exhibited this to a greater or lesser extent.

It is interesting to note the sonic differences between the 15 and 25 models. If both in 'pink health', the differences are pretty minimal. To these ears the 25 boasts a little more snap and

24-hour session, the 15 really sang.

Niggles? Mechanical noise from the mains transformer and choke through the chassis means there is constant background noise from the actual amplifier,



ABOVE: Costing £32 10s, the matching Radford SC 22 preamp was flexible and sophisticated for a unit designed in the early 1960s

is capable of a bit more aggression while the 15 sounds slightly smoother, more laidback, and a tad more liquid in the midrange. In some quarters the solid-state silicon bridge rectifier used in the 25 – as opposed to the 15's tube GZ34 rectifier – is blamed for spoiling the midband. I feel the differences are more down to the fixed bias operation. Both change the sound subtly.

TIPS 'N' TWEAKS

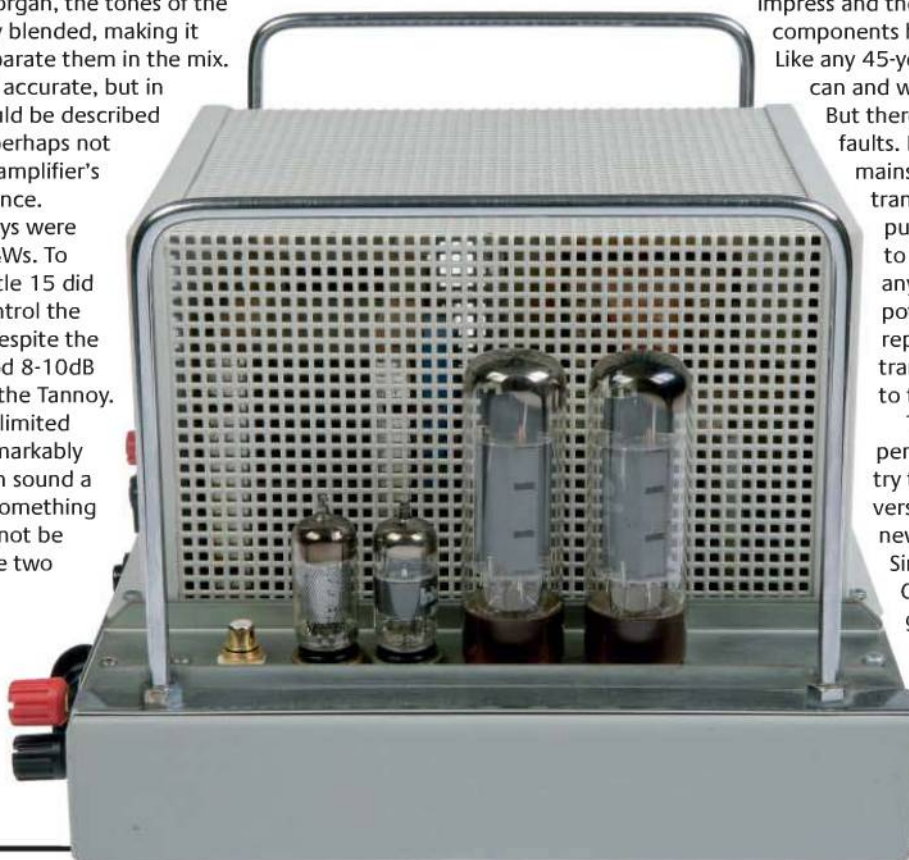
When it comes to reliability the Radfords impress and the use of military-specified components has certainly paid dividends. Like any 45-year-old amplifier, anything can and will go wrong in time.

But there appear to be no stock faults. I have seen both faulty mains transformers and output transformers, so potential purchasers would be advised to check under the hood for any internal components that potentially might need to be replaced (the original output transformers being paramount to the sound quality).

The quality of the EF86 pentode is quite pivotal; do try to avoid the poor Chinese versions of this tube and find a new old-stock European item. Similarly, the 6U8/ECF82.

Output valve life is pretty good; even in fixed-bias mode the 25 models do not drive the EL34s hard.

It is worth checking the bias voltage on the 25 at least every six months, but it is surprising how little it varies. ☺





Save £s throughout August in the Sevenoaks Sale. There are huge savings on a wide range of TVs, home cinema, hi-fi and more! Supply is limited on some products so don't miss the chance to pick-up a bargain!

SALE

DENON

AVR-1910

AWARD-WINNING A/V RECEIVER



£329
SAVE £120

LAST FEW!

ALSO AVR-1911 - VISIT SSAV.COM

LAST FEW!

MORE DENON SALE OFFERS

- AVR2310 A/V RECEIVER **£549** SAVE £250
- AVR3310 A/V RECEIVER **£799** SAVE £420
- DBP1610 BLU-RAY DISC PLAYER **£269** SAVE £130
- DBP2010 BLU-RAY DISC PLAYER **£399** SAVE £200

ONKYO
TX-SR608 A/V RECEIVER
£449

CLAIM HDMI CABLE WORTH £50

MORE OFFERS AT SSAV.COM

SAVE **£356**

ARCAM
FMJ AVR500 A/V RECEIVER
£2199

TRADE-IN OFFER

PRICE WITHOUT TRADE-IN £2555
PRICE SHOWN AFTER TRADE-IN DISCOUNT

ALSO FMJ AVR600 - VISIT SSAV.COM

SAVE **£550**

PIONEER
SC-LX82 A/V RECEIVER
£1349

LAST FEW!

ALSO SC-LX72 **£999**

DENON
DBP-1611UD BLU-RAY DISC PLAYER
£ S S A V . C O M

OFFER

ALSO DBP-2011UD - VISIT SSAV.COM

SAVE **£40**

PANASONIC
DMP-BD65 BLU-RAY DISC PLAYER
£139

ALSO 3D READY DMP-BDT300 - VISIT SSAV.COM

SAVE **£120**

PIONEER
BDP-320 BLU-RAY DISC PLAYER
£179

LAST FEW!

ALSO BDP-LX52 **£299**

KEF
KHT2005.3 5.1 SPEAKER PACKAGE
£ S S A V . C O M

OFFER

ALSO B&W & MONITOR AUDIO - VISIT SSAV.COM

SAVE **£70**

Q ACOUSTICS
CINEMA 2000 5.1 SPEAKER PACKAGE
£479

GRAPHITE ONLY

ALSO B&W & MONITOR AUDIO - VISIT SSAV.COM

SAVE **£150**

YAMAHA
YSP4100 SOUNDBAR
£1099

ALSO B&W & MONITOR AUDIO - VISIT SSAV.COM

PLEASE NOTE: SOME BRANDS/PRODUCTS ARE NOT AVAILABLE AT ALL STORES. SALE OFFERS ARE NOT IN CONJUNCTION WITH ANY OTHER OFFER (NICWA00). ADVERT VALID UNTIL 31/08/2010. E&O

more **OFFERS** at www.ssav.com

SEVENoaks
SOUND & VISION

VINTAGE HI-FI



ABOVE: All controls and settings offer easy access, including the loudspeaker impedance selector, mains switch and voltage taps. The phono input sockets are located close to the input valves in a bid to minimise noise and interference

Recommended tweaks include replacing the input and output sockets and, if you are settled on your choice of loudspeakers, wire out and by-pass the speaker impedance selector switch as this component has a negative effect on the sound. The rest of the circuit is fine and the quality of the passive components is good; changing them will of course change the sound, but is it better or simply different? I would leave the amplifier in as original state as possible.

The STA 25 made a 'renaissance' comeback in the late '80s, with the Series Four variant. This employed the classic Radford transformers, but with an 'improved' drive circuit. And there has been talk in recent

times of a Series Five STA 25 being launched by Radford.

BEST BUYS

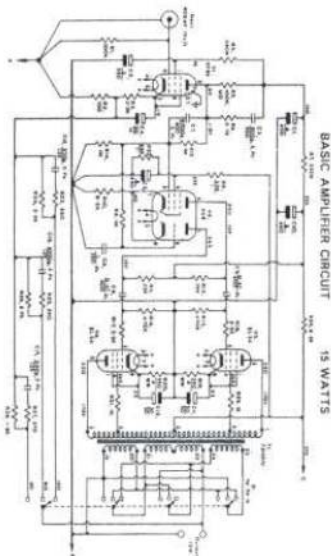
On the secondhand market, Radford amps have always commanded a premium over most other vintage designs. A good, clean STA model can be expected to fetch between £1000 and £1500. I have seen the odd one sell for more, and modified versions sell for less. The monoblocks are pretty rare and command even higher prices. But do remember that there are no real sonic advantages to be had with these units and it is rarity that is pushing up the price.

Is a 45-year-old amp worth this kind of money? If you value the midrange, vocals and absolute presence over accuracy in the bass, then yes. There are few finer amps – new or old – and I for one can live with the slightly compromised bass, given the magnificence elsewhere. Ⓜ

HI-FI NEWS VERDICT

Already well established as a true classic, the STA 15 III really does successfully bridge and blur the vintage/modern line. Given that this is a 45-year-old amplifier, it sounds remarkably fresh, modern and sophisticated and clearly lives up to the hype of being one of the best of the British vintage brigade. With its liquid midband, reliability and sturdy build – even by 2010 standards – it's hard not to be impressed.

Sound Quality: 88%



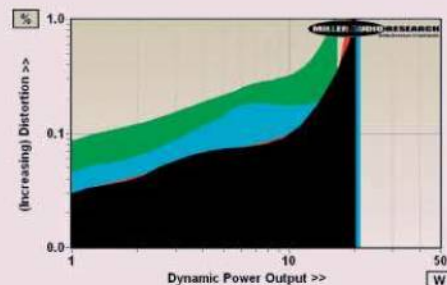
ABOVE: The main amplifier schematic; all variants use the same basic circuit

RADFORD STA 15 SERIES 3 (Vintage)

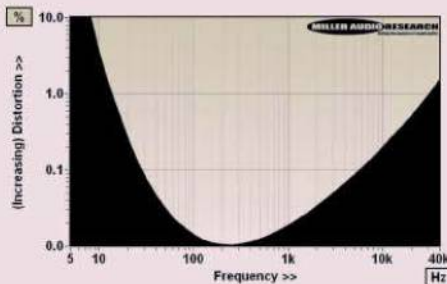
Top of the hi-fi tree in its day, the Radford STA 15 Series 3 benefited from its tube rectifier and bomb-proof EL34 pentodes, operated in push-pull mode well inside their capability. So, while the the 21W power output (into 8/4ohm via 8/4ohm taps) is very much on a par with the Armstrong, Pye and Scott amplifiers tested in *HFN* this year, the Radford STA 15 Series 3 does offer very much lower levels of low bass/midrange and low treble distortion. Lower still, I might add than the Leak Stereo 20 [*HFN*, Mar '10] which made specific claims in this regard during its heyday.

Specifically, the Radford comfortably exceeds its rated 15W specification with a clear ceiling of 20-21W into 8ohm down to 2ohm loads at 1% distortion [see Graph 1, below]. Distortion increases rapidly above this output, reaching 4% at a little over 22W/8ohm but is capable of staying below 0.1% right up to 10W/8ohm from 60Hz up to 2kHz and 0.2% from 30Hz through to 6kHz. In its day these were impressive figures, and more than an embarrassment to some modern, low output valve amps [see Graph 2, below].

Similarly, the Radford benefits from a lower-than-average output impedance of ~0.2ohm from 100Hz-10kHz, rising slightly at lower and higher frequencies. Without the effect of a speaker's varying load, the amp's native response shows a slight bass loss (-0.4dB/20Hz to -1.2dB/5Hz) allied to a 'sweetened' treble (-0.8dB/20kHz to -10.6dB/100kHz). Readers are invited to view a comprehensive QC Suite test report for this lightly-refurbished Radford STA 15 Series 3 by navigating to www.hifinews.co.uk and clicking on the red 'download' button. PM



ABOVE: Dynamic power output versus distortion into 8ohm (black trace), 4ohm (red), 2ohm (blue) and 1ohm (green) speaker loads



ABOVE: Distortion vs. extended frequency from 5Hz to 40kHz (3W/8ohm). Transformer core saturation causes distortion to rise steeply below 30Hz

HI-FI NEWS SPECIFICATIONS

Power output (<1% THD, 8/4ohm)	21W 21W
Dynamic power (<2% THD, 8/4/2/1ohm)	20W 19W 20W 17W
Output impedance (20Hz-20kHz)	0.195-0.65ohm
Frequency response (20Hz-100kHz)	-0.3dB to -10.6dB
Input sensitivity (for 0dBW/15W)	108mV 430mV
A-wtd S/N ratio (re. 0dBW/15W)	85.3dB 97.1dB
Distortion (20Hz-20kHz, 5W)	0.014-0.45%
Power consumption (Idle/Rated o/p)	180W/185W
Dimensions (WHD)	368x216x273mm

Somehow Coventry didn't seem such a bad place after all



 **Pro-ject**
AUDIO SYSTEMS
Worth the odd sacrifice.

Distributed in the UK by: Henley Designs Ltd, 01235 511166
www.henleydesigns.co.uk, e-mail - info@henleydesigns.co.uk

BC1 • LOUDSPEAKER • SPENDOR • UK

Spendor BC1



While firmly an historical product when compared with contemporary speakers like the LS3/5A, the BC1 would serve as a blueprint for those designing conventional box type speakers for some 25 years after it appeared. **Ken Kessler** traces its birth...

An obsession with digital radio, too many 'reality' TV programmes, having to respond regularly to accusations of biased political reporting – it's easy to forget that the BBC once hosted a division which ranked with private companies for technical innovation. As much as the likes of Bell Labs, Decca, EMI, RCA, Western Electric and other commercial concerns created or contributed to the myriad music storage formats enjoyed for over a century, the government-funded BBC, too, played a major role. It virtually invented public radio. But so clear-headed and competent was its (now-disbanded) technical department that it even inspired a mantra, a touchstone of which British audiophiles could be proud: 'the BBC sound'.

It even crossed national boundaries, from circa-1975,

RIGHT: Spendor's BC1 on trolley stand (left) in the company of the rest of the Spendor range

BELOW: 'Anxious to know what noises they were actually broadcasting, the BBC had need for a loudspeaker that really told the truth...' So begins Ralph West's 1973 review of the BC1 in Hi-Fi News



finding adherents in the USA, Italy and Germany in particular. The BBC motivated a sub-set of audio designers around the world who found much to admire in the subtle, low-key, yet commandingly competent and coherent performance on which the broadcaster insisted. Unlike Japanese obsessions with low distortion and screeching treble, Germany's fixation on horns and high-tech for the sake of it, or America's mania for imaging and excessive bass, the BBC worshipped at the altar of something far broader in scope: neutrality.

It didn't matter which two- or three-way box you listened to from the mid-1950s onward. If it was UK-made, it was probably designed with an ear toward the BBC's superb

live classical broadcasts. If the manufacturer was commercially savvy, he would want to sell speakers to the BBC, usually by the thousands. Should said speaker builder become a licensee, he could enjoy not one but a pair of revenue streams: professional sales to the BBC for monitors with consistent uniformity, and sales of less-industrial-looking versions to private consumers.

MIGHTY MIDBAND

So what did these affordable, domestically-tolerable examples of BBC standards provide in practice? While audiophiles might aspire to, but do not require the qualities that make broadcasting corporations demand loudspeakers that are consistent within a dB or so over a few thousand pairs, home

SPENDOR BC1

MANUFACTURER'S SPECIFICATION: Dimensions: 160 x 110 x 110 mm. Power handling capacity: 100 W. Frequency range: 20 Hz to 20 kHz. Impedance: 8 ohms. Construction: 100% metal. Finish: Black. Weight: 1.5 kg. Price: £115.00. The name is the trademark of Spendor Audio Systems, 20 Broomfield Road, London, SE16 5LH.

NOTE: Some years ago we wanted to know what reason they were actually broadcasting, the BBC had need for a loudspeaker that really told the truth. Even string to wire standards, they have some recently found it necessary to develop a form of their own monitor speaker, and one of the most difficult parts was the case of the main mid-band driving unit. With much patient research, a satisfactory design was evolved after suitable material, size and construction had been found.

But the monitor was constructed for a while in the use of the same principle could be applied to a smaller monitor design. This was found to be possible, but was not finished then as there was no need for a smaller monitor at that time. Indeed in the design, however, it did not stop here and the Spendor range was given a boost to suit the design information and make a complete loudspeaker. Later, the BBC did further work on it and finished a similar design (this being limited for production by various manufacturers, Rogers Electronics). The Spendor monitor has an excellent pedigree, as BBC research is well known for its painstaking investigations and meticulous attention to detail.

Spendor makes two main versions, one with a built-in 25 W amplifier and one without. The rate admitted for review were without these amplifiers and had standard 8 ohm speaker terminals.

Basically there is nothing unusual in the design. It uses three drive units on a single baffle, with a 25 W amplifier and one without. The main driver is a 25 W speaker, a Celestion 1300 driver and an LF driver, a G.D. speaker.

The active volume is approximately 2.5 litres, and the front panel also carries a small port which is more or less a reflex design. The ports are of 1 and 1/2 in. dia, each heavily flanged with 1/4 in. layer of heavy fibreglass felt and 1/2 in. of plastic foam. The crossover still runs well from 10 components and with the above units and cabinet design claims a response within 2.5 dB between 60 Hz and 14 kHz – which was indeed verified by measurement.

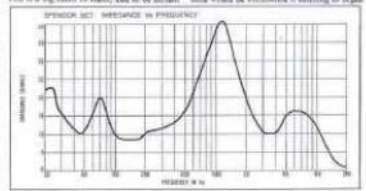
The unusual part of the design is mainly the driver case – nothing very unusual to look at, but the choice of material, shape, thickness, surface treatment, and material, represent a lot of patient research. We cannot have a fair idea just what they did right over the whole frequency range. All cases had and suitable grille cloth (one of the BBC's 1/2 in. dia, but if we can avoid major break-up modes and have the right amount of cone that go on vibrating after the signal has stopped, we will have a very nice set. All this has been known for many years, and numerous people have had success ways of doing it. Changing was obviously needed, and it was difficult to do in practice. Every design detail – the surround, the cone material itself, applied driver panel cut, damping mat, mesh on the CD driver, mesh on the mesh, and the B&W speaker mesh, surrounds and, especially, construction, and official shape – all help and probably do very well at some frequencies, but only at some frequencies, and all have been used. This is why the Spendor BC1 has stood out in an exceptional way, probably for over 15 years. It simply does not have this problem, or at least it is an order of magnitude or more beyond.

The BC1 has stood out in its own way, and it is an exceptional loudspeaker, probably the best the reviewer has had in his long career. This is a big claim to make, and to be certain.

of this it has also been found to be a wide variety of surroundings, and even included several other pairs of speakers. If a loudspeaker has slight modifications, they may not be as one might expect, but enough to create certain 'situations', here, include the physical surroundings and the music, the played through it. In a different room, the loudspeaker may be appreciated by different even more so, or a sound that sounds it more clearly. One would not expect it and we assume it is appropriate. This is not to always advise people to try and become professional loudspeakers so they can live like this in their own rooms before anything. It is a sort of threshold that we will stand on much and so on.

The Spendor must be used raised at least eight inches above the floor. On a low wall it is to be used above 'head' level, and when placed on the floor, many agree require a slight distance and main speech becomes better. Raising it up a few, they are 10 in. high, and it is better, but replace that with a more moderate height or a more and noticeable things had more fall. This phenomenon is known and understood, but has not been likely publicly so far, probably because for some months were testing our loudspeakers. Once improved standards have been reached, this factor becomes worth mentioning.

If the speaker is one or two feet above the floor the response in the low hundreds is not only improved it is less smooth, as explained recently in Wireless World by H. D. Harwood of the BBC's Research Department. By the time the speaker is raised, suitable measurements should be available, including a very useful one on bass, and the effect of the speaker on the room as well as on the room. This would be worthwhile if hearing to the



The remarkable performance of the Spendor presented the reviewer to big net for... and probably a useful arrangement... and probably a useful arrangement... and probably a useful arrangement...



Spondor BC1 loudspeaker

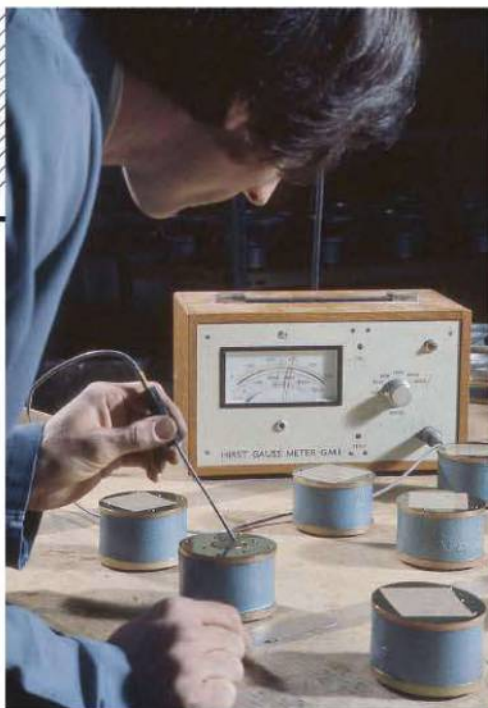
Size	225 x 300 x 300mm
Weight	14 kils
Wt Load	Cone 4001 G / Cone 4001 H / 3000
LF Unit	Speaker 250Watt / 250Watt
Horizontal impedance	8 ohms
Frequency Range	20Hz to 15kHz
Power Rating	25 watts
Dimensions	12x16 ft 11 in, 10 in
Case material	Black Tannin
Case Finish	Black, White

users' systems *could* benefit from authentic yet not-excessive bass, low coloration and – above all – a midband that favoured the voice.

The reasoning for the latter emphasis was simple: a goodly portion of BBC broadcasting was and remains clearly-enunciated, spoken word programming in the forms of news, plays, interviews, chat shows, verbal comedy and other material that occurs fundamentally in the midband.

Without suggesting for a moment that the BBC, or the loudspeakers they approved, ignored the frequency extremes, such monitors were not known for floorshaking bass nor glass-shattering treble. Additionally, BBC engineers did not seem to suffer an obsession with ear-bleeding playback levels, as would infect the entire recording industry from the mid-1960s onward. So while the term 'monitors' might suggest common ground between, say, engineers working at an on-location BBC remote site with some headbanger recording the latest heavy metal band, one was best advised to look elsewhere for 115dB SPLs.

While many of you know my own fixation for the LS3/5A, I have never claimed that it is a panacea for all of one's audio ailments. Everything I said above about frequency extremes and maximum SPLs applies to it in spades. It is to full-blown wall-of-sound audio what a go-cart is to an F1 racing car: a scaled-down facsimile. But there was one speaker in the BBC canon that serves to this day as the quintessential exemplar of all that was right about BBC designs. The Spondor BC1 is so vividly illustrative of the good that once came out of Auntie Beeb that it makes you long for times past

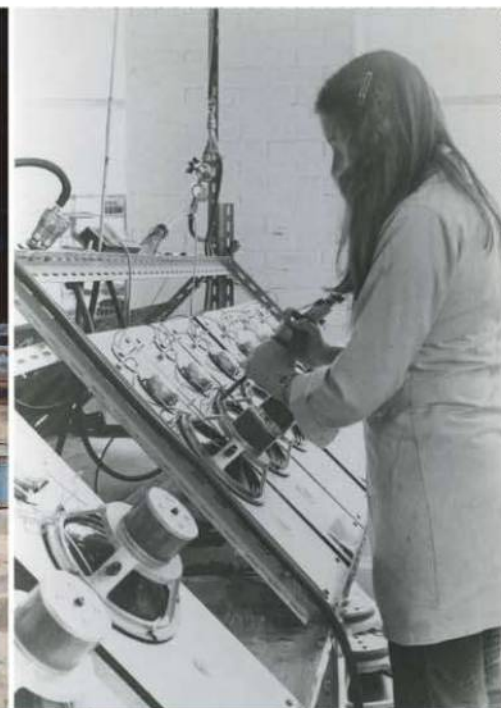


ABOVE LEFT: Original spec sheet for BC1

ABOVE: The first BC1s came with blue-coloured magnets; here they are tested in the Spondor factory in 1976

ABOVE RIGHT: Mounting the baffle assemblies

BELOW: Bass can be improved by swapping the trolley stands for those with spikes



when your license fee was, some might say, worth paying.

If the LS3/5A is almost an acquired taste, one that requires the listener to sacrifice any hunger for palpable bass or rock-friendly playback levels, the closer-to-full-range BC1 eliminates them entirely. Indeed, one would be hard-pressed to find room for complaint about its performance if you apply the more generous constraints of the next level up: the BC1 will fill a larger room, greater than the 12x16ft that seems to be the LS3/5A's true limits, and entertain

at higher volumes, while adding an instantly discernible extension to the low-end. But as the LS3/5A's big sister, it certainly possesses its smaller sibling's charms.

B FOR BEXTRENE

BBC speaker nomenclature, adhered to with reasonable consistency, was a code that told the engineers whether or not the speaker was designed for indoor or outdoor use, which iteration it was from the original, and similar information for accurate identification. The BC1, however, represented a departure in that it featured a new cone material, so rather than an 'LS' prefix, it is known by initials standing for either Bextrene Cone or Bextrene Chassis. Prior to the arrival of the BC1, the traditional method for BBC speaker development was

well established. The BBC created its own monitors because it was felt that off-the-shelf, commercial systems were not sufficiently accurate for broadcast applications. As the BBC was not about to go into manufacturing, it developed its speakers using readily-available drive units, which it matched to tougher standards than would be viable in commercial designs. The

drivers were then adapted to BBC needs through complex crossovers, the drivers-plus-network housed in BBC-designed cabinets.

'It was thought that the pulp paper cone had reached its limits'

By the mid-to-late '60s, it was thought that the pulp paper cone had reached its limits. As R&D was the primary *raison d'être* of the BBC's engineering division, researching the latest plastics was an inevitable step. Spencer Hughes (1924-1983), co-founder of Spondor with his wife Dorothy (the company name, of course, being 'Spen'+ 'Dor'), was part of the team that created the BC1, which also included Del Shorter and Dudley Harwood from the BBC Research Department. (Harwood would later set up Harbeth Acoustics.)

After the team spent two years devising 12in cones, Hughes identified the first successful unit as one made of Bextrene and used it in the development of the BBC studio monitor type LS5/5. Hughes, acting as a laboratory technician, also felt that he could devise prototypes at home. He employed 'an electric fire, a compressor working in reverse and an iron bedstead to create the



AUDIO MILESTONES

first vacuum former.' Eventually, he managed to create what is believed to be the first commercial 8in Bextrene cone woofer.

It was paired with Celestion HF1300 tweeters, starting with a small enclosure that increased in size to the final dimensions of 635x300x300mm (hwd) for the *ur* BC1. Hughes took a second pair to a retailer, who ordered another pair, in effect launching Spendor and the BC1. Meanwhile, Hughes was experiencing issues with the BBC because the terms of his contract stipulated that the design had to be offered to the corporation. As Hughes wrote in a letter in 1980, 'Fortunately the "Pop" era had just started and the main request was for more power,

so the BC1 was turned down. Around about this time there was a special requirement within the BBC for one pair of

speakers about the size of the BC1s. Being a kind soul, I suggested that my design could be used, so I was given the task of producing an official version of the BC1, later designated the LS3/6.'

THE LS3/6

For this speaker, Hughes used the same 8in Bextrene woofer and Celestion tweeter, but with a redesigned crossover. The latter was altered by the fitting of a multi-tap autotransformer to allow adjustment of levels between the two units, which was normal BBC practice at

that time. Active versions were also produced, with amplifiers mounted in the back panel; the 4001G 'super tweeter' was also added.

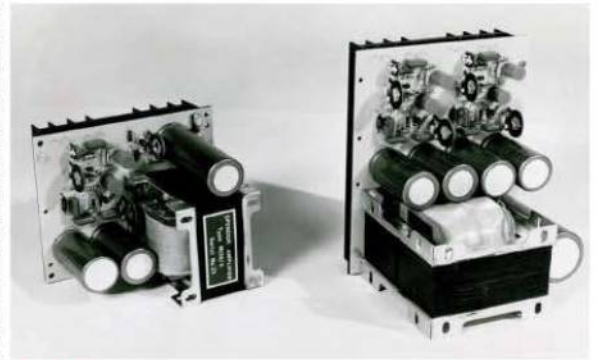
Although nominally a three-way speaker, it was a case of a mid-woofer and two tweeters as the high crossover points of 3kHz and 13kHz indicate, rather than the more conventional woofer/mid/tweeter array. The second tweeter was said to improve dispersion, while benefiting the BBC for broadcasting as it made 625-line breakthrough more readily detectable. Dubbed the LS3/6, it was put out to tender to commercial manufacturers, eventually going to Rogers.

Because Hughes had made the move to full-scale manufacturing through the founding of Spendor, the company had to pay a royalty to the BBC for every BC1 it produced. As of 1980, Hughes

wrote, 'To perhaps prove the order of development of the two systems, it is of note that out of over two thousand BC1s supplied to the professional market, there are over six hundred in operation with the BBC and as far as I know very few, if any, LS3/6 speakers.'

From such origins came a speaker whose influence far exceeded anything that the BBC, or the development team members, could have imagined. It was, for the next size up, as significant as the more controversial LS3/5A, which was also more commercially successful thanks

'It popularised the idea of a British-made box on a dedicated stand'



ABOVE: Amp modules from the active version of the BC1, the BC1A. The module on the left – model number M208 – was for a very early BC1A, and provided 20W of power. The larger unit to the right is unlabelled but is model number M508, which shipped with the 50W variant of the BC1A

to its diminutive size. After all, it is the LS3/5A that stayed in production despite those that attempted to kill it, while the BC1 is firmly an 'historical' product.

Which is not to say that the performance, nor its influence, is tied to the past. While cone materials have evolved into myriad choices which Hughes could hardly have imagined, Bextrene has fallen out of favour for aluminium, carbon fibre, other plastics and even a revival of paper cones – the very material the BBC thought of as passé. But for close to a quarter-century, the BC1 approach would serve as a template for conventional box-type speakers.

Its two tweeters and a woofer weren't quite so copied as the recipe in total: cabinets made with heavily-damped 'thin wall' plywood panels, with front baffle and back panel fixed by screws, providing further 'lossy' mechanical coupling. The BC1 followed the practice of an enclosure made of 3/8in birch ply sides, battened at the joints, with 3/8in bitumen-impregnated felt bonded to the inside of the panels to provide damping. The rear panel and undamped front panel were made of 1/2in thick ply. We could be describing dozens of British speakers from the 1970s and 1980s.

STAND AND DELIVER

While not the first speaker of its size – AR's and JBL's 'mid-size' boxes had been around for a solid decade when the BC1 made its first showing, as well as assorted Celestions, KEFs, *et al* – it is forever fixed in many minds as the one which popularised the idea of a British-made box on a dedicated stand. Ralph West reviewed the speaker in these pages in 1973 and commented that it needed free air around and below it. He confirmed



LEFT: In June 1977 the power handling of the BC1 was updated to 55W and the colour of the magnet used changed from blue to red to signify this

SEVENoaks
SOUND & VISION

Save £s throughout August in the Sevenoaks Sale. There are huge savings on a wide range of TVs, home cinema, hi-fi and more! Supply is limited on some products so don't miss the chance to pick-up a bargain!

SALE

Panasonic

50" PLASMA TV

MODEL: TX-P50S10

MORE PANASONIC TV SALE OFFERS



TX-P42G20 **£899** SAVE £150

TX-L37D25 **£899** SAVE £200

PRICES SHOWN INCLUDE TRADE-IN DISCOUNT



£699
SRP £1199

LAST FEW!



SAVE
£400

PHILIPS
40PFL9704H LED TV
£1399

MORE PHILIPS TV SALE OFFERS

42PFL9664H **£1199** SAVE £300

47PFL9664H **£1399** SAVE £400

FREE 5 YEAR WARRANTY ON SELECTED TVS

VISIT SSAV.COM FOR DETAILS

CLAIM FREE 3D READY BLU-RAY DISC PLAYER WORTH £339

WITH SELECTED SAMSUNG 3D TVS

SAMSUNG PACKAGES 3DTV CLAIM FREE 3D READY BLU-RAY DISC PLAYER WORTH £339

UE40C7000
40" **£1799**

UE46C7000
46" **£1999**

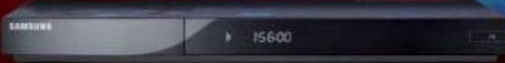
UE40C8000
40" **£1999**



Prices exclude 3D glasses

WITH THESE SAMSUNG 3D LED TVS

MODEL: SAMSUNG BD-C6900



BLU-RAY PLAYER SALE OFFERS



PANASONIC DMP-BD65 **£139**

PIONEER BDP-320 **£179**

PIONEER BDP-LX52 **£299**

SONY BDP-S370 **£99**

SAVE
£s

MORE OFFERS AT SSAV.COM

HUMAX
HD-FOX T2 FREEVIEW HD
£179



CLAIM FREE 1.0 MTR QED PERFORMANCE HDMI CABLE WORTH £35



SAVE
£100

OPTOMA
HD20 DLP PROJECTOR
£799

PLEASE NOTE: SOME BRANDS/PRODUCTS ARE NOT AVAILABLE AT ALL STORES. SALE OFFERS ARE NOT IN CONJUNCTION WITH ANY OTHER OFFER (NICWA00). ADVERT VALID UNTIL 31/08/2010. E&OE

more **OFFERS** at www.ssav.com

SEVENoaks
SOUND & VISION

AUDIO MILESTONES

that its dedicated trolleys were ideal for raising it off the floor. (Most studios would have monitors of this size wall-mounted.)

In the intervening years, however, the audio community has determined that the presence of wheels between floor and stand interrupts the craving for speakers mechanically connected to the floor, to disperse resonance. Instead, we expect spikes. After I had my circa-1976 pair restored at Spendor, I used them on both trolleys and 12in stands. Yes, they look more 'correct' on the trolleys, but they exacerbate one of the speaker's primary weaknesses for modern listeners: sloppy lower octaves.

PERFECT ALTERNATIVE

For those wedded to LS3/5As, but who need on occasion more level or bass, the BC1 is a perfect alternative. Like the smaller BBC monitor, it excels in the midband. Without question, it delivers greater playback levels, and the bass is discernibly deeper, if not as tight. But modern ears must approach the BC1 with generosity and flexibility, as they do the LS3/5A. As Hughes noted, the BBC rejected the design of the BC1 'on first approach because the main request was for more power.'

If you find a decent pair, you can easily use them in a modern milieu. You will be pleasantly surprised for a non-sonic reason, too: bizarrely, the anachrophile market has not allowed prices of BC1s to reach anything like that which they deserve. To put them



into context, and to show how inflation has ignored them, BC1s cost just under £75 in 1973 – the same as the Quad ESL '57. In 2010, for as little as £400-£500 for a near-mint pair, you will acquire a sophisticated, subtle sound, with bass that can be tweaked to current standards through cable selection, rock-solid pedestals and an amplifier with superb lower registers. Most good solid-state amps can control the BC1's lower flab, but try not to compromise the sweet treble: I love the sound of BC1s when used with true Class A amplification.

On the valve side, robust amps fitted with KT88s or 6550s are preferred. If you want to stay in totally authentic, 'vintage' mode, you *must* hear BC1s with Radford's STA-25 – the very combination I purchased from a musician who used the STA-25/BC1 pairing for years. US fans of the BC1 admire

SPENDOR BC1 TIMELINE

- 1969 Spendor founded, after a small run of BC1s produced in previous years
- Mid-'75 A change from white PVC to black surround (from S/N 7396)
- June '77 BC1 updated to 55W power handling (from S/N 13,000); colour of magnet changed from blue to red to signify this
- 1994 Final BC1s produced, ending with serial number 27,024

Variants included:

- BC1A built-in 20W, 25W or 50W amplifier
- BC1/3 a later, revised version using a 38mm HF/mid driver and a 19mm SHF driver
- BC1/69 a limited edition, luxury, upgraded anniversary model based on original spec

SPENDOR BC1 ORIGINAL SPECIFICATION

Impedance:	8ohms nominal
HF Drive Unit:	Coles 4001G, Celestion HF1300
LF Drive Unit:	Spendor 200mm, 26mm voice coil
Sensitivity:	84dB/1W/1m (74dB/1V/1m)
Power handling:	55W
Frequency response:	50Hz to 15kHz
Crossover points:	3kHz and 13kHz
Pair matching:	within 1dB
Dimensions:	635x300x300mm (HWD)
Weight:	14kg

Factory finishes included teak, walnut, rosewood and black oak

ABOVE: Derek Hughes, son of Spendor founder Spencer, who now owns and runs the company

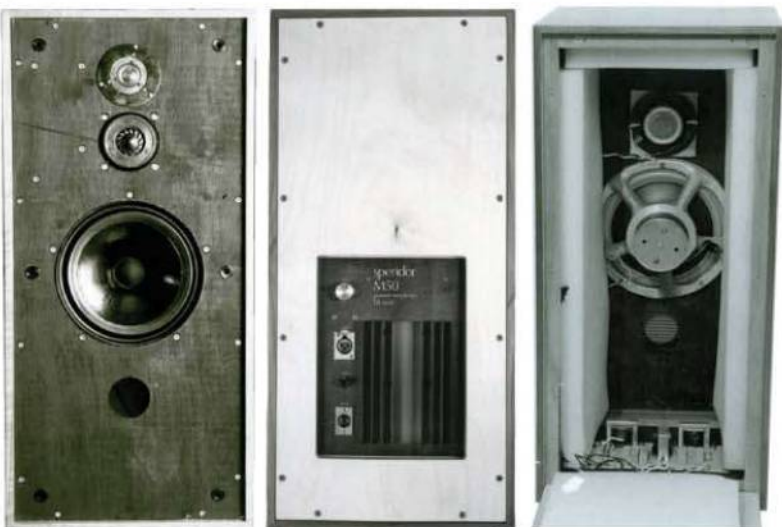
the three-dimensionality, while the treble is reasonably well-extended and surprisingly fast, with precise transient control. But it is the midband that seduces the lover of neutrality and accuracy. Simply put, vocals through the BC1 are as 'real' as when heard via an LS3/5A, or even a Quad '57 come to that.

NEW VERSIONS, TOO...

Of course, one who craves the BC1 sound could take the more sensible route and buy a pair of the current Spendor SP1/2Rs, said to be 'Directly descended from the critically acclaimed Spendor BC1.' Its dimensions are similar, its sound is recognisably 'BBC', but its real-world behaviour includes bass extension and maximum playback levels that address current expectations.

Should the idea of 'the BBC sound' appeal to you, whichever way you turn – BC1 or SP1/2R – you'll never again need to think in terms of 'coloration' or 'listener fatigue'. Can you name a more appropriate way to celebrate the departure from the BBC of Jonathan Ross? ☺

LEFT: Screws secure the front baffle of the BC1 to the cabinet in a bid to provide 'lossy' mechanical coupling; rear of a Spendor BC1A active monitor with M50 amplifier; inside a very early BC1 – this example is the original two-way design, probably one of the first 50 models made



"Hipness is not a state of mind, its a fact of life"
Cannonball Adderley



Fidelity

with SOUL

Chord Indigo Plus Digital

Whilst most hi-fi and home cinema enthusiasts are happy to accept the influence that interconnects and speaker cable can have on the performance of a system, many people struggle to accept that a digital cable can be equally influential.

The common reaction is that since the cable is only carrying a digital signal, the design and quality of materials used in the cable will have far less influence. Listening tests however, show this is not necessarily the case. Repeated listening tests using high quality digital to analogue converters and home cinema receivers have shown that digital cables can and do have an effect on the sound quality of the system in which they are used. Digital cables are capable of affecting levels of detail, dynamics, sound staging and the rhythmic and tonal characteristics of a system.

The improvements that the Indigo Plus Digital can bring to a system should not be dismissed lightly.



THE
CHORD[™]
COMPANY

www.chord.co.uk

Get advice on all aspects of hi-fi and home cinema from the Cable Doctor and sign-up for our newsletter, keeping you in touch with the latest product development news, exclusive competitions and technical tips

‘For those who still believe in progress’

Once in a while, perhaps just once in a lifetime, something comes along to break the rules and shatter our conception of what is possible.



Leaders in the worlds finest high-fidelity

26 New Cavendish Street | London W1G 8TY T: 020 7486 8262/3 | E: info@kjwestone.com

DEVIALET D-PREMIER

Once in a while, perhaps just once in a lifetime, something comes along to break the rules and shatter our conception of what is possible. Enter the Devialet D-Premier from Paris. This chic design, standing less than two inches high and weighing in at under 7kg, is a veritable powerhouse of purity, delicacy and dynamics that can drive virtually any loudspeaker to its maximum performance. With a combination of Class A output and huge current delivery from eight current dumping amplifiers, the revolutionary D-Premier integrates pre-and power amplification plus a world-class DAC and phono stage in a single unit that boasts the finest set of measurements ever achieved. Prepare to be shocked from the outset.



METRONOME TECHNOLOGIE T3A-SIGNATURE

With performance and elegance in mind, this slim French beauty is an ideal CD drive unit to compliment the Devialet's superb onboard DAC. Metronome Technologie are famous for their Kalista range of CD turntables, whose extravagant engineering beauty is matched only by their extraordinary performance. This most affordable Metronome T3A-Signature is a superb top-loading transport which will take your CD collection to a new and unforgettable level of musical interpretation when partnered with the Devialet. Together they represent a unique combination of sheer brilliance and minimalism. This surely is excellence for the 21st Century...



SONUS FABER GUARNERI MEMENTO

It is amusing that Italians can be so animated when they talk to each other, yet their second language, that of style, is often conveyed with deceptive understatement. However when Italians design style into what tradition determines to be a box, Sonus Faber produce *mobiletto acoustica*.

The Guarneri Momento Homage is fine furniture and a statement of acoustic art that compliments the outstanding demands of the French T3A and D-Premier. All three performing together they are beautiful objects of aesthetic and aural desire..Progress indeed.

The Path to musical excellence

Somerset | T: 01460 54322 | M: 07860 351113 | E: brianriv@mac.com

THE
PINWOOD
MUSIC
COMPANY
SOMERSET

FROZEN BANANA

WWW.FROZEN-BANANA.CO.UK

Yarland FV34 BIII SA EURO

ClarityCap SA capacitors, three line inputs, better quality RCA inputs, and 230v transformers specially wound for the EU market

Now even better, the yarland FV34 BIII SA Euro has tubes that have been cooled to -300°C known as deep cryogenic treatment. We believe the use of SA coupling caps, and deep cryo treated valves hugley improves this amp by giving better bass extension and nicer mids.



Push Pull EL34 integrated amplifier
Power: 40 Watt per channel
Power tubes: 4 x Shuguang EL34 B
Pre tubes: 2 x Beijing nr.1 Tube Factory 6N3 (5670)
Rectifier tube: 1 x Full music 12AX7
Bandwidth: 10 Hz -37 kHz - 1.0 dBwhether

NorthStar USB dac32 The quality of technology

USB dac32 is North Star Design's response to those who want music reproduction without compromise.

NorthStar USB dac32 combines streaming audio up to 192kHz and 32bit via USB high-speed signals and up samples to 192kHz-32bit before the digital-to-analog conversion.

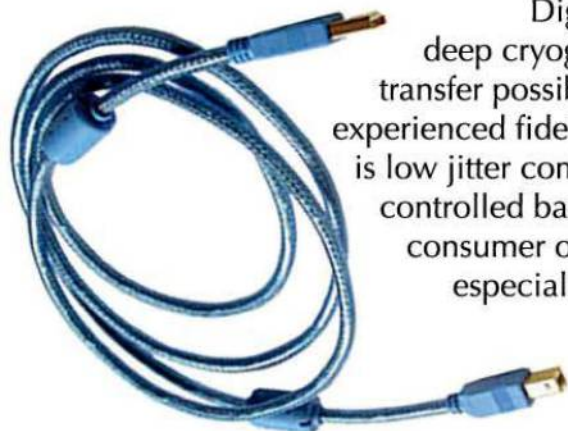
This makes it an ideal playback unit for high resolution files from your computer and a perfect companion for traditional sources. And it is very easy to use. Its use with conventional sources delivers maximum flexibility in interfacing, with four digital inputs: coaxial, optical, balanced and I2S. But what makes this converter so special, and like no other, is the ability to reproduce audio files with frequencies up to 192kHz and resolution up to 32 bits.

It is equipped with a USB2.0 high-speed port (i.e. capable of transferring data at 480Mbit/sec) designed to overcome the limit of 96/24 common to other converters. The superiority of the DAC is confirmed by two separate power supplies: one dedicated to the digital section, and one dedicated to the analog section. Designed and manufactured in Italy.



LAT International High end USB 2 Cable for Maximum Fidelity Digital Signal

Digital transfer is further enhanced by cooling to -300°C , this is known as deep cryogenic treatment USB 2 Signature will give you the best streaming audio transfer possible. Customers selected to test pre-production prototypes reported they experienced fidelity which far exceeded other USB cables sampled. What you will hear is low jitter combined with improved smoothness, detail, clarity, focus and powerfully controlled bass. This is a must where high resolution data is involved, dBwhether for consumer or professional use. This cable is capable of superb sound reproduction, especially with high resolution recordings; and as with any system component, you need a well engineered and well built USB cable to achieve it.



WELCOME TO THE NORTH EAST

ANATEK RESEARCH
 APOLLO
 ATACAMA
 AV INTERNATIONAL
 CHORD COMPANY
 CHORD ELECTRONICS
 CLEARAUDIO
 DYNAVECTOR
 EAR YOSHINO
 GOLDRING
 GRAHAM ENGINEERING
 GRAHAM SLEE
 G F HADCOCK
 ISOTEK
 KOETSU
 KUDOS AUDIO
 MARTIN LOGAN
 LYRA
 MAGNEPLANAR
 MELODY
 MICHELL ENGINEERING
 MONITOR AUDIO



NAD
 NAIM AUDIO
 NORDOST
 NOTTINGHAM ANALOGUE
 OPERA
 ORTOFON
 PATHOS ACOUSTICS
 PROJECT
 PS AUDIO
 PURESOUND
 REGA
 REVOLVER
 ROKSAN
 SME
 STAX
 SUGDEN AUDIO
 TEAC ESOTERIC
 TRANSFIGURATION
 TRICHORD RESEARCH
 UNISON RESEARCH
 USHER AUDIO
 VAN DEN HUL

HIFISOUND, Castlegate mill, Quayside, Stockton on Tees. 01642 267012

TURNTABLEWORLD

THE UK'S PREMIER VINYL RELATED RESOURCE WILL BE AVAILABLE SOON ONLINE!

If you need us sooner, please call 0845 6019390 or email news@turntableworld.co.uk

www.2ndhandhifi.co.uk ...what are you up for?



SUMMER SALE NOW ON - AT LEAST 10% OFF ALL MARKED PRICES IN RED

tel: 0845 6019390

Analogue

Acos Lustre, excellent Japanese tonearm.....149
 Ariston RD90 Superior, Mission 774, vgc.....279
 Basis 2200 Signature, Vector 4, Clamp c £28k new...4999
 Benz Micro Gilder, excellent low hours.....399
 Cordias Neutral Reference Tonearm Cable, weeks old...299
 Clearaudio Unify tonearm, brand new.....999
 Decent Audio Welshell, used.....149
 Garrard 301, good cosmetics, full working order.....799
 Linn LP12, Baski LVX, boxed.....499
 Linn LP12, Ekos in black ash.....1299
 Linn LP12 Rosewood, Cirkus, Lingo, Ittok, boxed....1499
 Mana Acoustics Welshell, used.....249
 Michell Hydraulic Reference, SME 3009, new lid.....749
 Michell Electronic Reference (no arm, SME out).....899
 Monitor Audio MA500 Direct Drive, excellent!.....249
 NAD 533 Turntable (Planar 2, RB250, Goldring Elektra, 149
 Project RPM10, speedbox, nr mint boxed.....999
 Project X Pack, very low hours nr mint boxed.....499
 Rega P3, in green.....279
 Rega P1, ex demo.....149
 Rega Planar 2 c/w RB250 and Super Bias, excellent...149
 Rega RB250 with stubmod.....119
 Roksan Reference PSU in black, ex demo.....Call
 Roksan TMS1 & DSU superb boxed, recent TM service...1749
 Roksan Radius 5, Nima arm, acrylic finish ex demo.....799
 SME 3009/2, excellent.....179
 Systemdek IIX, Rega RB250 vgc.....179
 Systemdek IIX, c/w Systemdek arm, vgc.....149
 Thorens TD160 Super/ SME 3009/Dynavektor.....299
 Tom Evans The Groove, excellent.....1099
 Well Tempered Amadeus GTA, ex demo.....2125
 Wilson Benesh Act 1 Tonearm, nr mint superb.....799

Radios/Recorders

Arcam DT81, excellent boxed.....199
 Arcam FMJ26DAB.....Due in
 Denon TU260L mk2, excellent boxed.....49
 Nakamichi ZX1000L, just serviced, vgc.....299
 Pioneer FB3T dual in.....299
 Quad FM3, vgc.....99
 Quad FM4, vgc.....179
 Revox B77 1/2 track, pro NAB, Cover, remote etc.....Call
 Yamaha KX580 nr mint.....49

Amplifiers

Air Tight ATM-1s, excellent boxed.....2999
 Arcam A28, nr mint boxed in black.....499
 Arcam Alpha 9C/P Pre/Power, excellent boxed.....499
 Audio Innovations S500.....499
 Audiolab 8000C&P grey versions excellent boxed.....349
 Audiolab 8000Q, excellent in black.....299
 Audion Silver Night 300b SE integrated, boxed.....749
 Audio Research SP11mk2, 2009 AS service.....2499
 Audio Research LS15, excellent boxed.....1299
 Audio Zone Amp 2 Monoblocks.....799
 Bel Canto Pre 3/S300 Power, excellent boxed.....1499
 Blyston BP25 two box preamp, mint.....1999
 Blyston BP20 pre & 3ES5T poweramp, excellent boxed...1999
 Bryston B60R integrated, nr mint boxed.....999
 Conrad Johnson FV15L preamp boxed.....1999
 Consonance Cyber 10 Signature, excellent boxed.....699
 CR Developments Calypso, excellent boxed.....699
 Krell KAV300, vgc classic integrated c/w remote.....999
 Krell Evolution 600 Monoblocks.....17499
 Levinson No27 Power amp, vgc.....1499
 Lyngdorf TDAI2200 with Roomperfect and DAC.....2999
 Marantz PM17K1 integrated excellent boxed.....299
 Marantz SM17 Power, excellent boxed.....299
 Melody 101 pre and Matching Monos, ex demo.....Call
 Melody 2A3 integrated, ex demo.....Call
 Meridian 501 with MSR and phono boards.....299
 Moon F7W/6 Pre/Power combo, excellent boxed.....6499
 Musical Fidelity F15, excellent boxed.....749
 NAIM NAIT XS, excellent boxed.....849
 NAIM 250, boxed, recased to olive & serviced in 2000...799
 NAIM NAPV145, excellent.....999
 NAIM NAP250.2, excellent boxed.....1749
 NAIM NAC82, naps, excellent boxed.....899
 NAIM NAC52, excellent boxed.....1999
 Quad 34, excellent boxed.....299
 Quad 99 Stereo power amp, excellent.....199
 Quad 909, as new boxed in black.....699
 Rega Qarsa 2000 pre, excellent.....249
 Roksan Caspian M Series Integrated ex demo.....799
 Roksan Kandy K2 integrated ex demo.....599
 Rotel RC06 & RB06 Pre/power mint boxed.....399
 Rotel RA1412, excellent 70s monster integrated.....499
 Sugden A21SE, as new boxed.....1299
 Tag McLaren 60irv, nr mint boxed.....399

Digital

Arcam CD17, nr mint boxed.....499
 Arcam Alpha 9, excellent, remote, DCS ringdac lovely!!!...299
 Audio Aero Capitele Mk2, excellent.....Due in
 Audiolab 8000CD original version black.....299
 AVI Lab Series CD player, as new boxed.....799
 Consonance CD2.2 24bit, excellent boxed.....599
 Copland CD822, excellent boxed.....649
 Creek Classic CD, black.....499
 Cyrus CD6SE, excellent silver boxed.....499
 Cyrus DAD3Q24, excellent boxed.....349
 Esoteric DV60, mint boxed, SAVE £2000!.....2499
 Linn Numerik, vgc.....299
 Marantz 8003, excellent boxed, Due in.....Call
 Marantz SA15, excellent boxed.....499
 Marantz CD17K1, excellent boxed.....399
 Marantz CD12/DA12 Due in.....Call
 Meridian G98, excellent boxed.....999
 Musical Fidelity Tubalig Rare as.....199
 Naim CD5, excellent boxed.....499
 NAIM CD3, excellent.....349
 NAIM CDS2/CDPS, nr mint boxed.....1749
 Pathos Digit, superb boxed.....1649
 PS Audio Digilink DAC, as new ex demo.....Call
 Rega Apollo, ex demo.....Call
 Rotel RCD02, excellent with remote.....199
 Shaning CD1100, excellent late model.....549
 Shering Omega Drive, vgc flight cased, serviced.....1749
 Sugden CD21SE, as new one owner boxed.....799
 Sugden CDMaster Bjvo CD player, as new boxed.....599
 Tag McLaren CD20R, excellent boxed.....349
 TEAC PD600, mint boxed due in.....Call
 TEAC P700/D700 excellent boxed 1/2 size pair.....749
 Unison Research Unico CDR, excellent boxed.....599
 Vincent CD-S6, excellent boxed, due in.....Call

AV/Accessories/Cables

Chord Epic Speaker cables, factory terminated pair.....Call
 Isotek and LAT extension blocks.....Call
 Linn Classik Movie, excellent.....899
 Meridian G68 Pre/Processor, excellent boxed with MSR...1999
 NAIM XPS2, nr mint boxed later version.....1749
 NAIM Suparcap in Olive, new Bundry.....1749
 Onkyo 507, 607 & 807, as new ex demo boxed.....Call

Loudspeakers

AVI Neutrium IV excellent ex demo units boxed.....349
 B&W 805S in Rosenut boxed vgc.....1249
 B&W DM70 excellent for year, full working order.....999
 Definitive Technology Mythos 2, pair, bargain!.....399
 Dynaudio Contour 1.3mk2 excellent boxed.....749
 Focal JMLab 1007Be, nr mint boxed.....1249
 Focal Sibs Cinema pack XXL fronts, XL centre and rears...749
 Kef Reference 103.3, with Kube.....Call
 Kef TDM34DS, excellent in black.....299
 Kudos C10, early bi-wire pair in Rosenut.....Call
 Magneplanar MMG as new boxed.....599
 Magneplanar MG1.6, ex review.....1499
 Martin Logan Purify, ex demo, for details.....1999
 Martin Logan Odyssey, excellent boxed.....2999
 Monitor Audio GSW12 Gold series Subwoofer, excellent...899
 Monitor Audio MA1800 Gold, large floorstander, bargain...349
 Monitor Audio BR5 in Walnut, excellent boxed.....349
 Monitor Audio Platinum 300, excellent crated.....3499
 PMC FB1+ in Walnut, boxed.....1499
 Proac Studio 140 in Ebony, excellent boxed.....999
 PSB Alpha B1 Stereoophile Product of the year BARGAIN!!!...99
 Quad 21L in Birds eye Maple finish, nr mint.....349
 Rega RS1, nr mint boxed.....279
 Rega RS3, ex display in Gloss Black nr mint.....Call
 Revel Performa F32, excellent boxed, serious value!!!...1399
 Spondor S3/599, excellent boxed.....Call
 Tinney Mercury, excellent boxed due in.....79
 Totem Arro with 'beaks'.....599
 Theil CST.2, large floorstander £13k new...BARGAIN! 2999
 Usher Mini Dancer 2, ex demo, nr mint.....Call
 Usher B5718 Standmount, excellent boxed.....999
 Wharfedale Diamond Home cinema pack, ex demo.....Call
 Wharfedale Active Diamond 7.1s - rare boxed.....119

Special System Deals

Arcam Solo, nr mint boxed.....699
 Esoteric A10 Amp & SA10 SACD Player, save approx 50%...Call
 Monitor Audio Radius HD AV Speaker System.....Call
 NAIM Uniti, as new boxed.....1599
 Onkyo A733/C733 Amp and CD ex display.....599
 Rotel RCD02, RC06, RB06 CD/Pre/Power - Subpar.....499
 Sugden A21SE & CD21SE, both as new boxed.....2199

Tuesday to Saturday 10 til 5, tel 01642 267012 or email news@2ndhandhifi.co.uk

DEFINITIVE AUDIO

Sale of part exchanged and ex-dem items

ITEM DESCRIPTION	SALE	NEW
TW 'Raven One' turntable with Kondo wired SME 312S tonearm and TW bronze armboard. 2 yrs old, but barely used - maybe 10 hours.	£2750	£4450
Octave Audio 'Grand Renaissance.' Publicity/display pair - unused and kept in storage for 12 years. Premium Pippy Oak veneers. This precision-engineered, craftsman built replica of the famous Tannoy Autograph is fitted with 15" Tannoy Monitor Gold drivers. Produced for the Japanese market this model currently retails unloaded for £29,000. For sale at £21,000. One pair only.	£21000	£29000
Octave Audio 'Renaissance.' Publicity/display pair. Unused and kept in storage for 12 years. Premium Pippy Oak veneers. This precision-engineered replica of the famous Tannoy Corner-GRF is fitted with 15" Tannoy Monitor Gold drivers. Produced for the Japanese market, these retail unloaded for 21,500. For sale at £16,000. One pair only.	£16000	£21500
Mundorf capacitors. Mundorf Supreme Silver/Oil. Unused. NB. All prices per pair.		
0.15 uF 800v x 4	£20	--
0.33 uF 800v x 4	£21	--
1.5 uF 800v x 4	£30	--
2.2 uF 800v x 4	£40	--
3.3 uF 800v x 4	£48	--
4.7 uF 800 v x 4	£58	--
5.6 uF 800v x 6	£64	--
10 uF 800v x 8	£96	--
Mundorf Supreme Silver / Gold. Unused. NB. All prices per pair.		
0.15 uF 800v x 4	£30	--
0.33 uF 800v x 4	£36	--
1.5 uF 800v x 2	£54	--
2.2 uF 800v x 4	£62	--
3.3 uF 800v x 2	£78	--
4.7 uF 800v x 2	£98	--
5.6 uF 800v x 4	£108	--
10.0 uF 800v x 8	£166	--
AmpOhm Capacitors. Unused. NB. All prices per pair.		
5.0 uF 630v Paper in Oil / Tin Foil x 2	£60	--
5.0 uF 630v Paper in Oil / Aluminium Foil x 2	£60	--
5.0 uF 630v Paper in Wax / Aluminium Foil x 2	£60	--
5.0 uF 630v Polyester in Oil / Aluminium Foil x 2	£60	--
1.5 uF 630v Polyester in Oil / Aluminium Foil x 2	£60	--
1.5 uF 630v Paper in Oil / Tin Foil x 2	£60	--
1.5 uF 630v Paper in Wax / Aluminium Foil x 2	£60	--
1.5 uF 630v Paper in Oil / Aluminium Foil x 2	£60	--
Jensen Paper in Oil caps - unused. NB. All prices per pair.		
5 uF 200v x 2	£60	--
20 uF 100v x 2	£120	--
Jensen Copper Air-Core Foil / Paper Inductors. Unused. NB. All prices per pair.		
.3 mH x 4	£200	--
0.9 mH x 2	£100	--
1.0 mH x 2	£100	--
1.8 mH x 2	£120	--
2.5 mH x 2	£140	--
Art Audio Diavolo Monoblocs	£3750	--
Linn Sondek. 20 years old. Excellent condition. Plays very smoothly.	£375	--
Cardas Golden Cross interconnect. 1.5m.	£400	--
Cardas Golden Cross interconnect. 1m (2 pcs)	£300 each	--
Cardas Golden Reference interconnect 1.5m	£550	--
Cardas Golden Cross a/c. 1.5m (2 pcs)	£175 each	--
Supra Lo-Rad 2.5 a/c with Furutech plugs. 3.5m (2 pcs)	£125 each	--
Transparent Reference digital interconnect 1m.	£450	£1000
Linn Linto phono stage inc' Linn silver interconnect. 5yrs old. Boxed & immaculate.	£600	--
Horning Zeus floorstanders. Cherry. Nice condition. Original packaging.	£900	£2000
Esoteric X-05 CD player. Black. 18 months old. Boxed. Immaculate.	£3000	--
VPI SSM turntable (3 yrs) inc: JMW9 tone arm, SDS electronic PSU, HRX pneumatic feet, Extra couinter weight, High grade record clamp & LFD silver ref arm lead. Very tidy package, all boxed.	£2900	£5910
Brinkman Integrated amplifier. Vollverstarker. Box. Remote control. Very tidy.	£2800	--
47 Labs Flatfish MK II CD player with Dumpty power supply. Tidy.	£2400	--
47 Labs Progression DAC with Dumpty power supply. Tidy.	£2300	--
Wilson Benesch Circle with .5 Carbon fibre unipivot arm.. Boxed.	£1125	£1845
Origin Live Sovereign MKIII. 2 YR old. SPOTLESS.	£2500	£4500
Origin Live Conqueror MKIII. Current spec'. Kondo silver internal wire. Ultraline external arm wire. Shiny & spotless. Howard Hughes clean.	£1650	£3250
Rega RB300 with Kondo silver internal wire.	£450	--
Revolver Turntable. c.1985 c/w OEM tonearm minus counterweight.	£150	--
Living Voice MC 20/80 ohm step up transformer in smart wooden plinth. Excellent.	£400	£800
EAR 859 power amplifier (from kit). Functional looking single-ended power amplifier. No box.	£750	--

T. +44 (0) 115 973 3222 E. shout@definitiveaudio.co.uk
www.definitiveaudio.co.uk

Hearing is believing
Mayflower Sounds

Wadia almarro Yamamoto TRIANGLE emille Tannoy Silver Arrow Moscode

a selection of some of our products.
For more....
Telephone 01302 711528 (mobile 07931524266)
or Email: info@mayflowersounds.co.uk
www.mayflowersounds.co.uk

audioplan

"Vorsprung durch audioplan technik"

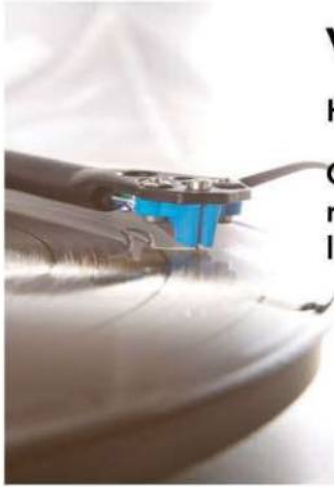
"Audio progress through Audioplan technology advances"

"They totally won me over..." Chris Thomas HiFi+
"Audioplan's have few musical peers..." Roy Gregory HiFi+
"Amazing... 95% sonic rating" Stereo Magazine

Uncommonly refined

Exclusive distribution
ikon audio consultants .com info@ikonaudioconsultants.com
Tel: +44 7956 476299

ikon



Vinyl LP reissues and new releases

High-grade pressings for audiophiles and collectors

Classic rock • 1960s/70s • folk • blues • jazz • soul
reggae • punk • indie • dance • breaks & beats • films
limited editions • box sets • rarities & bargains!

Classic LPs

E-mail or call us for a free catalogue:
info@classiclps.co.uk 01684 899 457

www.classiclps.co.uk

Radlett Audio

sensible hi-fi since 1973

- ATC
- Chord Cable
- Croft Acoustics
- Dynavector
- EAR/Yoshino
- Harbeth
- Helius
- Kudos
- LFD
- London Decca
- Lyra
- Manley Labs
- Michell Eng.
- Naim Audio
- Neat
- Nottingham Analogue
- Ortofon
- Pure Sound
- Rega Research
- SME
- Sumiko
- Something Solid
- Tannoy Prestige
- Tron
- TW Acustics
- ZYX



Near Saffron Walden, Essex. Please contact before visiting
Tel: 01799 599080 Email: radlettaudio@hotmail.co.uk www.radlettaudio.co.uk

House of Linn • Quadraspire • Focal Grande Utopia EM • Keith Monks



www.brianandtrevors.com
info@brianandtrevors.com





BUY & SELL EXCHANGE

- GREAT VALUE
NEW & PRE-OWNED
HIGH END HI-FI**
- Huge range of high end brands
 - Expert system matching advice
 - Used high end hi-fi bought and sold
 - Part exchange welcome
 - All items checked and guaranteed
 - Major credit cards accepted

HI-FI EXCHANGE

LATEST GUARANTEED HIGH QUALITY PRE-OWNED HI-FI:

CD Players and DACs A and R Cambridge Katana SE £3000 Acoustic Arts DAC 1 mk4 £3800 Acoustic Arts Player 1 mk3 £175 Arcam Dvix CD72 £250 Arcam alpha 9 £200 Arcam CD 721 £1750 Audiolab CDD Two mkl £2995 Audio Flight CD transport /v1.0 DDE £895 Audio Research CD1 £2750 Audiomatica / Pierre Lurie Mephisto II X & Enkianthos II X £550 Audiomeca / Pierre Lurie Mephisto transport £995 AVI 2000MC £245 AVI 2000MD £450 Ayre Acoustic c5x-e £3300 Beli Canto USB Link 24/96 £399 Bluenote Stibbert Tube £1850 Bluenote stibbert valve cd player £2000 Boulder 2020 DAC £795 Bryston BDA-1 £1195 Cambridge Audio DACMAGIC 2 £195 Cayin SCD-50T £1000 Chord Electronics QBD 76 £2450 Chord Electronics QBD 76 DAC £2195 Citronic cd 4 £1195 Consonance Droplet CDP 5.0 £895 Copland CDA822 £895 Cyrus Cyrus CD 65 £750 Cyrus CD79/psx £895 Cyrus CDX-T Transport £325 dCS Elgar Plus/Purcell/Verdi £7495 dCS Puccini + U-Clock £10500 dCS Purcell Upsampler £900 dCS Verdi Encore/Elgar Plus/Purcell £8900 Electrocompaniet PC1 £3995 Esoteric P03 & D03 £3700 Esoteric X-03SE £2995 Forsell AIR Reference CD Transport £1650 Goldmund Meta Laser II £7500 Inca Design's Katana SE £3000 Krell Evolution 505 cd/sacd £995 Krell KPS 25 SC 24/96 £4995 Krell KPS 28c CAST II £700 Lyngdorf Audio CD 1 £1295 Marantz cd 63 mk2 ki signature £75 Marantz CD-62SE £195 Marantz CD17-K1 £150 Marantz CD-9002 £239 Marantz cd7300 £700 Marantz Marantz SA8003 CD £199 McIntosh MCD 201 £2450 McIntosh MCD 201b £395 Meridian Audio 200/203 Tran/dac £350 Meridian Audio 500 18bit CD Player £495 MI2S CDB88 £395 MICROMEGA Duo CD 3.1 £295 Mitsubishi DAC 3.1 £450 MSB Link DAC 3 24/96 £1395 Musical Fidelity Nu Vista 3D CR CD £160 Musical Fidelity V-DAC £100 NAD C521 £140 NAD C521 BEE £1395 Naim Audio CDX2 £500 Onkyo MSB-1HDD+CD MSB-1 HDD recorder £495 Pioner pd-d9 £200 Pioner PD-5703 £70 Rega Planet £299 Reimyo CDP777 £4250 Roksan Kandy K2 CDP £249 Rotal RCD 02 £2495 Shanling CDT 300 3D-Sonics £495 Shanling CD S200 £80 Sonic Frontiers Transport 3 £2899 Sony CDP-XE270 £900 Spogden CD 21 sonic 765 2 £950 T+A Pulsar CD1240R £695 Tag McLaren CDT20R-T2L £7750 Tesc P70 D70 £7750 Theta Data Basic II + DAC DS Pro Prime II £750 Theta Jade CD Transport £650 TriChord Genesis £150 Wadia 861 £895 Wadia WT 3200 £2000 Wadia 17 AtoD £995 Wadia 861D £995 Wadia X6.4 Digimaster £1295 Yamaha CDX 1100 £250	Realistic optimus 17 £90 Reynaud Offrande £1750 Richard Allan Dimension Five 3 £300 Rogers Ls3/5a £500 Rogers Ls3/5a £995 Ruarik Templar 2 £225 Ruarik Sabre £200 SD (Steen Dossing) SD 4 £200 Sonus Faber Cremenza Ellipsa £8750 Sonus Faber STRADIVARI GRAPHITE £20000 Sony APMD2 ES £20 Sony System Audio SA2K £950 Talon Firebird Diamond £1750 Tannoy Churchill £6995 Tannoy DC3000 £3999 Tannoy Sensys 2 £275 TDL Studio 1.0m £300 Thiel CS1.4 £500 Titan £995 Melodyne FSR 10 £1750 Verity Audio Parsifal Ovation £9500 Wilson Audio MAXX 1 £13995 Wilson Audio System 8 £13995 Wilson Audio System 8 £13500 Wilson Audio Watt PUPPY 8 £16900 Wilson Audio Watt/PUPPY 5.1E £4750 Wilson Audio 5.1 £5750 Wilson Audio 5.1 Watt Puppies £5000 Wilson Audio Gram SLXMM series 5 £8950 Wilson Audio System 6 £7500 Wilson Audio Watt PUPPY 5.1 £5495 Yamaha NS-99AV £80	LSA 'Standard' £1395 Marantz 1050 £80 Marantz PM-66SE Signiture £100 Marantz PM7/mkII ki Sig LE £95 Mohnton MA6600 £1500 Moon i5 £1450 Moon i5 £2550 NAD 3020B £600 Naim Audio Nait 3 £500 ONIX QA-21 with phono stage £700 Pathos Loudspeakers £1750 Pioneer A a J 6 £200 Pioneer AA-A9-J £250 Roksan rocksan kandy ka1 £450 Rotel RA 05 £125 Sugden A21al £900 Acoustic Energy Aelite 3 £295 Apogee Duetta signature active dax crossover £3995 Apogee Duetta signature active dax crossover £1750 Arcam One £300 ATC SCM 100A SL £4250 ATC SCM 50A £200 ATC SCM-10 2A £1800 Audio Acoustics FUNDAMENTAL K2 £7000 Audio Acoustics Sapphire Ti-C £895 Audio Acoustics Sapphire Ti-C Mocha £895 Audio Physic Spak £95 Audio Physic Virgo 3 £1750 Autonouvo M3-signature active £1000 Aurosal A1 MKIII £645 B&W 802 £120 B&W DM620 £120 B&W 802D £2750 B&W CDM 9NT £825 bang and olufsen Lab 3 £1495 Beaùhorn B2. 2 Revelation £1800 Castle Invention 15 £250 Consensus Audio Magma £13500 Dalí Suite 2.8 £399 Definitive Technology BP8000 £2500 Dynaudio Consequence mkIII £1500 Eclipse 508TD & Silver STS £525 Eloc Jet CL310 Jet £550 Eloax Symphony 3.2 £75 Esoteric ES1.1 £145 Focal IJM Lab Alto Utopia Be £550 Focal IJM Lab Scala Utopia Be £13000 Focal IJM Lab Scala Utopia 3 £895 Focal IJM Lab Utopia Be L&R + Stands £4295 Focal IJM Lab Diatonic Utopia £7000 Focal IJM Lab Diva Utopia £9395 Focal IJM Lab Grande Utopia III EM £10000 Focal IJM Lab Nova Utopia Be +stands £2250 Focal IJM Lab Scala Utopia £1995 Focal IJM Lab Scala Utopia £17000 JAS Orsa £995 Calle Centre 2 £35 Gale Model 5 £2750 Dali Galileo 10 £95 GerShman Avant Garde RX-20 £150 Goldmund ERLOGUE 1+ 2 £350 Hales concept 5 £2200 IMX MKIII Ref Pro Monitor £295 Infinity Kappa 9 £1995 Jamo surround 300 £90 JAS Orsa £995 JB L TLX123,121,111 £180 KEF Q35.2 £200 KEF Q35.4 £175 KEF Q50/ref 90;30B;70S £600 KEF Q95C £75 KEF Special Reference Series £600 King's Audio Queens £895 King's Audio Queens £820 Klipsch Inc Palladium £10000 Leema CD 1 £400 Leema Acoustics SPLX12 sub-woofer £550 Linn Keillidh Cherry £300 Linn Keillidh Cherry £325 lower drive units 2 x pmc2 with phase plugs £350 Luminor Loudspeakers reference signature £1300 Magneplanar 3.6R £1990 Martin Logan Prodigy £4850 Martin Logan Ascend £1895 Martin Logan Summit £4995 Meridian Audio dsp 33 centre £600 Mirage FRX 9 £150 Mirage DM21 3 center channel £295 Mirage 290is ref monitors & stds £295 Mission M31 £235 Mission 733 £225 Mission 75c CENTRE CHANNEL SPKR £99 Monitor Audio PL100 £1795 Monitor Audio radius £1800 Monitor Audio Radius 250 £250 Monitor Audio Bronze BR1 £70 Monitor Audio PL100 £1850 MORDAUNT SHORT MS Avant 904i £150 MORDAUNT SHORT MS-50 Floor Standers in Black Ash £150 Paradigm CC1.50 £6500 Piega P4 £45 Piega P4XL Mk 2 £850 Piega SR3 satellite £300 PMC Loudspeakers BB5 £1295 PMC Loudspeakers EB1 £4895 Proac D15 £995 Proac Super Towers £995 Proac Tablets Signatures Ref 8 £600 Quad E1.5 £995 Quad ESL 63 £495 Quad ESL 988 £2295 Radford 180 monitors £200	Ruby Chameleon £295 Sumo Polaris 111 £0 Tag A2175 £595 Tag Avantgarde 1004x £1295 Tom Evans Linear A £3850 Tube Technology Genesis Monoblocks £1499 Tube Technology Genesis Monoblock £2500 VAC 30/70 Monoblocks £6995 Xindak PA1 Monoblocks £2200 Yamaha AX-92 £1300 Yamaha AX-92 £100 YBA Passion 1000 Monoblocks £13995 YBA Passion 1000 stereo £1495 YBA Passion 600 Monoblocks £7750 Pre-amplifiers Accuphase DC 38 + XLR I/O £4500 Acoustic Arts Pre 1 £1499 Arcam FMJ C30 £660 Arcam FMJ C31 £599 Arcam Dasha 110 Pre £150 ART VPI £425 Audiolab Flight Flight 1 Pre £2995 Audible Illusions Modulus 3A £2250 Audio Note M-ZERO remote preamp £395 Audio Research LS2 mkII £1295 Audio Research Reference 2 mkII £3850 AVI 2000MP £495 AVI 2000MP £400 B. A. T. VK-51se £3495 Bell Ga Mito Pre 3 £995 Bonnet Timpano £2200 Boulder 1012 £6495 C. A. T. SL1 Ultimate £4895 Chord Electronics cpa2200 £3000 Chord Electronics Prima pre-amp £1120 Crimson Electronics 710 £2750 Crimson Electronics 710 Pre Amp £3995 Densen B200 £700 DNM series 2/3 £325 Electrocompaniet EC 4.5 £495 EMM Labs Switchman 3 £4595 Gamut D3i £695 Goldmund Mimesis 2 Pre £1695 Gryphon Prelude £5695 Harman Reference Gryphon Pre amplifier XT £7000 Krell KCT CAST 2 £2600 Linn Akurate & Dynamic £500 Lumley pre/phonos 0001 Reference £1000 Marantz Marantz MM8003 £1650 Mark Levinson 38s £1650 Mark Levinson 30 £7995 Mark Levinson ML No. 326s £7995 Mark Levinson MLGA £1750 McComrak RL1 £1150 Melody Pure black 101 £2299 Meridian Audio 501 £1500 Michell argo £200 Michell Argo HR + Hera £600 Michell Argo HR/Hera £550 Michell ISO HR/Hera £295 Minim Ca Mk 78 £380 NAD 902 £160 Naim Audio 102 £195 Naim Audio NAC 62 £600 Naim Audio NAC 62 £220 NVA F50 £2000 Passalabs aleph p pre £1999 Prometheus Audio Reference C-core TVC £600 rose RV23s £400 sonneteer £100 TAC Roks £995 Tag McLaren pa10 £295 Tom Evans Arge HR £595 Tom Evans The Vibe £2495 YBA Renaissance Signature MKII Pre £6995 YBA Passion Pre £3495 Turntables / Arms / Cartridges & Phono Stages Audio Note ANS G II £4000 Boulder MS11 + MS01 Phono stage £1295 Cello Cartridge £2800 Clear Audio Titanium MC cartridge £3500 Demon DL103 GL £500 Dynavector DV507 mkII £199 Dynavector 10X4 £150 Garrard TPA 10 Pick Up Arm £200 Garrard 401 £425 Goldmund Mimesis 2 phono stage £500 Henley Design HMC100 PHONOSTAGE £895 Graham silec Era Gold V £395 HENLEY DESIGN HMC100 PHONOSTAGE £200 Kiseki Purpleheart Sapphire £0 Kiseki Argate Ruby £0 Koetsu Black 78 £750 LFD Scorpion reference-Tone arm cable £1500 Linn Akiva £1250 Linn Arkiv £500 Linn Ekos £995 Linn LP12 Lingo, Ekos, Cirkus, Arkiva £3450 Linn LP12/A/Armedgeddon £248 Michell Gyro SE £850 Michell Gyro SE / RB300 £1095 Michell Gyrodac / RB300 £1295 Michell Gyrodac QC £1000 Michell Gyro £795 Micro Seiki DOX-500 £475 Mission 77A Wand £100 Musical Fidelity V-LPS £90 Naim Audio Phono boards £45 Oracle MKIII £95 Origin Live Encounter £825 Origin Live Stylus Force Gauge £75 Ortofon S10 MM £35 Ortofon MC15 Super £65 Ortofon MC300 £75
--	---	---	--

100s more bargains online now list your items FREE at www.choice-hifi.com today!*

www.choicehifi.com
 Email: info@choice-hifi.com Telephone: 020 8392 1959 07768 720456

STOCKISTS OF: ACCUSTIC ARTS / AIR TANGENT / AUDIO NOTE / AUDIO PHYSIC / AUDIA / AUROSAL / BEL CANTO / BURMESTER / CAT / CLEAR AUDIO / DENON / GAMUT / GRAHAM SLEE / GRAHAM TONEARMS / HALCRO / JM LAB / LAMM / LEXICON / LINN / METRONOME / MONITOR AUDIO / NAD / NUFORCE / ORIGIN LIVE / ORTOFON / PANASONIC / PARASOUND / PIONEER / PLINIUS / PRIMARE / PROJECT / QED / REVEL / ROKSAN / SME / TIVOLI / TOM EVANS / TOWNSEND / USHER / VELODYNE / YBA AND MANY OTHERS

*10% commission on final sale value
 Scan & PDF: woridmags & avaxhome

Silence Reigns

Enter the Sasha

In 1984 the legend was born. Dave Wilson, through his mastering of recording, knew he needed a portable and supremely accurate line monitor speaker. Enter the WATT, which became an immediate hit with audiophiles the world over and was soon joined by a dedicated woofer, the Puppy. Over 25 years we witnessed no less than seven generations of technological advances resulting in more than 15,000 sales!

In 2009 we herald the ascension, the proud Sasha. Returning to his first love, recording, David found inspiration after a visit to Vienna Concert Halls. He was immediately drawn to the rich alacrity of the orchestra, which was directly related to the reflection given by the concert halls' ambient signatures.

Capturing the earliest reflections had to be the key. Wilson Audio's task was set. Development of a new generation driver, capable of the speed and detail first dreamed of in Vienna, became a reality. The advances with the new drivers, quite rightly utilized in the Alexandria 2, passed in turn through to the Maxx 3 and now the Sasha. In addition, the Sasha benefits from increased volume in both the upper and lower modules with new cabinet and baffle materials. And the crossover is now housed separately in the lower module.

Although this new speaker retains a clear genealogy with its predecessors, in truth its ascension confirms its place beside the majestic Maxx 3 and Alexandria 2.

Let's enjoy the silence

Enter the Sasha - Visit KJ West One



Leaders in the worlds finest high-fidelity



www.kjwestone.com

26 New Cavendish Street London W1G 8TY T: 020 7486 8262/3 F: 020 7487 3452



DINO Mk2 PHONO Amplifier



Made in the UK

BEST BUY

HI-FI CHOICE
magazine



- * MM/MC Phono Amplifier
- * Gain and Cartridge Loading - adjustable
- * Comprehensive Power Supply options including the new high performance 'Never Connected - Gen 2'

Upgrade your existing Mk1 Dino and enjoy the sonic improvements of the Mk2. Just send us your original unit and we will fit entirely new electronics.

TRICHORD RESEARCH

Tel: +44 (0)1684 311600
sales@trichordresearch.com www.trichordresearch.com

IMPACTAUDIO

WWW.IMPACTAUDIO.CO.UK

VISATON



Visaton offer probably the widest range of professionally designed loudspeaker kits in the world. Full details of designs online or send for free catalogue.

AUDIO COMPONENTS FOR THE ENTHUSIAST

HICON HI-FI & HOME

HICON precision made audio cables are new from Germany, with two ranges to match mid and high end systems. Buy online or send for free connection guide.

sales@impactaudio.co.uk

TELEPHONE

01270 883243

AMBIENCE SERIES

ERGONOMIC SERIES

MusicMatters



We offer custom installation of complete systems integrating hi-fi, home cinema, multi-room and lighting. Home trials are available for many products

Our extensive range of products includes

- Arcam • Apollo • Anthony Gallo • Atacama
- Atlas • Base • Bowers & Wilkins
- Nautilus Diamond available at Edgbaston, Solihull and Stratford
- Chord Company • Chord Electronics
- Cyrus • Denon • Dynaudio • Dynavector
- Epos • Grado • Infocus • KEF
- LAMM • Marantz • Meridian • Michell
- Mission • MJ Acoustics • Monitor Audio
- Musical Fidelity • NAD • Naim • Nordost
- Ortofon • Panasonic • Pioneer • PMC
- Project • Pure • QED • Quad • Rega • REL
- Rotel • Sennheiser • Sim2 • SME
- Sonus Faber • Tascam • Spendor • Teac
- Wharfedale • Wilson Benesch • Yamaha

OPEN TUES - SAT 10.00 - 5.30
LATE NIGHT AT BIRMINGHAM AND
SOLIHULL WEDNESDAY UNTIL 6.30PM

Interest free credit on selected items • 0% APR
Written details on request • Licensed credit broker



www.musicmatters.co.uk

EDGBASTON
363 Hagley Road,
Birmingham B17 8DL
0121 429 2811

SOLIHULL
93-95 Hobs Moat Road
West Midlands B92 8JL
0121 742 0254

STOURBRIDGE
9 Market Street
West Midlands DY8 1AB
01384 444184

SUTTON COLDFIELD
10 Boldmere Road
West Midlands B73 5TD
0121 354 2311

HATCH END
344 Uxbridge Road
Pinner, Middlesex HA5 4HR
020 8420 1925

DARLINGTON
17 Coniscliffe Road
County Durham DL3 7EE
01325 481418



New Stores Now Open

10A Chapel Street
Stratford-Upon-Avon
Warwickshire CV37 6EP
01789 414 533

23A Regent Street
Leamington Spa
Warwickshire CV32 5EJ
01926 888 644

114 Wolverhampton
Road, Stafford,
ST17 4BN
01785 258216



High End Cable when only the best will do.

www.highendcable.co.uk

For best prices talk to Dave Jackson on 01775 761880

Cables

Acoustic ART
Acoustic Systems
Analysis Plus
Argento Audio
Artisan Silver Cables
Audience
Chord Company
Ecosse
Furutech
Nordost Corporation
MIT Industries
Quantum QRT
Revelation Audio Labs
StereoLab
Synergistic Research
Townshend Audio
van den Hul
Vovox
Wyrewizard

Power Conditioning

Audience adeptResponse
Isotek
Kemp Elektronik
Quantum QRT
QBase

CableSpike
Cable Tower
Telos

Enhancement CDs

Room Treatment
Acoustic Art
Room Tuning Resonators

Hi-Fi

Ayra Speakers
Bel Canto
STAX headphones
Townshend Audio

XLR cables
Sub woofer cables
Chord ipod cables
iPod cables
DIN cables
Mains & Power cables
Jumpers
Firewire

Cables for dCS systems
Chord cables for Naim

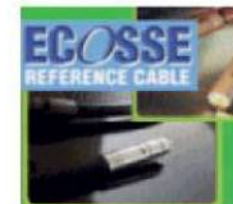
HDMI
Digital cables
Optical cables
S video
Component cables



FURUTECH

FURUTECH

FURUTECH



When only the best will do

Great trade in deal on offer if you wish to upgrade to the Ayra range.

The superb range of Ayra Speakers now on demonstration in Spalding.

Designed from the bottom up, all drivers and ribbon tweeters are built in house. Ayra use ceramics drivers, superb crossovers, unique magnet technology and Nordost Valhalla internal wiring. Offering frequency extension to 50khz these speakers are among the best in the World.



C3.0



C2.0

C1.0 and stand



Product of the year 2008

Please visit the High End Cable website for call for more information.

C1.0 was Hi-fi plus Product of the year 2008

We offer fabulous trade in deals, up to 40% when we take in your old speakers in part exchange. So your old speakers could be worth more than you think.

Call Dave today on 01775 761880.

THE PLACE TO BUY & SELL AUDIO EQUIPMENT & ACCESSORIES NOW FREE

1. ACCESSORIES

DENON AHJ 7000 headphones, as new £450, Sennheiser HD 600 headphones, ex condition £120 Tel: 07941 419196 [JK]

2. AMPS

EASTERN Electric M520 valve amplifier with remote and original packing, well reviewed amp with four inputs and tape loop, superb valve sound, can demonstrate £650 Tel: 01392 420316 [HJ]

TUBE Technology Unisis valve amplifier, still in all its visual glory, integrated but needs main board replaced, offers Tel: Roberts 01923 822581/email: clifflove.roberts@btinternet.com (NW London) (Northwood) [HJ]

NAIM 42 preamp & 110 power amp updated to 140 recently by Naim £400 Tel: 01179 502100 (Bristol) [HJ]

PA AUDIO power plant premier, award winning AC mains generator, converts poor incoming AC to pure 230v AC, upgraded model, remote, boxed as new, long warranty, cost £2000 new, ask £1100 no offers Tel: 07859 388167 [HJ]

VIVA 300p Class A tube amplifier in immaculate condition, 25w per channel, six line inputs, bright red aluminium chassis, contact details 01422 376234 or email: peter.ski@talktalk.net [JK]

QUAD 306 amp, 34 preamp and FM4 tuner, excellent condition, in original Quad boxes with manuals and cables, £350, delivery or collection TBA Tel: 07801 043231 email: alan@deadparrot.myzen.co.uk [JK]

QUAD 405-2 amplifier, excellent condition £70, Quad 34 preamp, excellent condition £70 Tel: 079141 19196 (Jim) [JK]

AUDIOLAB 8000P power amplifier, excellent condition, unmarked, £250 Tel: 01689 608925 (Orpington, Kent) [JK]

EXCEPTIONAL MBL 6010D reference preamplifier + XLR opt + MC opt, probably the best preamp

in the world, bought new a few months ago, like new, silver, a marvel, list price £19,000, asking £9500 email: voix_de_fugue@yahoo.fr [JK]

TACT/LYNGDORF SDA 2175 power amp, 200 WPC, excellent condition (£1300) £575 Tel: 07776 143890 [JK]

MCCORMACK DNA-225 power amp, mint condition, boxed, £900ono Tel. 07728 557772 (Midlands) [JK]

NAD C350 amplifier and NAD C542 CD player, mint condition in original boxes with manuals etc. £350 for both. Email: biometrics@1to1.org / or Tel 0208 738 8086 daytime (West Herts) [JK]

SANSUI amp, AU-X510 £85 Tel: 020 8950 0658/email: michael.stewart5@ntlworld.com (South Herts) [JK]

KARAN acoustics KAS 180 power amplifier, purchased, purchased new May 2008, as new condition, one of the best solid state amplifiers in the world, £2800, demonstration available, Tel: 01929 421377/email: ali.goldsmith@btinternet.com (Dorset) [JK]

TUBE Technology Unisis Signature valve power amplifier, 30 watts per channel, superb sound, excellent condition, with manual £900, Tube Technology MAC valve phono amplifier for MM and MC cartridges, wonderful sound, excellent condition, with manual £650 Tel: 07767 712116 or e-mail mike1304@hotmail.co.uk [JK]

3. CABLES

IXOS interconnects scart-to-scart 0.75 metres, digital coaxial 1.0 metres WBJ RCA plugs both 5 Star awards, mint condition £25 each ono Tel: 01772 745553 [HJ]

CHORD Cobra 2 Interconnects, One metre pair, tested but not used, £33 inc UK post Tel: 01305 766427 (PM eves) (Weymouth) [GH]

KIMBER Select 1030 1m RCA interconnect, deep cryo-treated black pearl silver conductors plus flight case, list price £1844, accept £500 ono Tel: 01294 829323 after 5pm [X]

TRANSPARENT Audio MusicWave Plus speaker cables (8ft set, spade & plug terminals) boxed Transparent MusicLink interconnect cables, SME 4 tonearm cable (internal & external) VDH 501 interconnects, all new/mint condition Tel: Stuart 07870 912 963 email: stuardarshan67@googlemail.com [JK]

NORDOST Heimdall 2m biwire speaker cables, boxed, excellent £650 (£1136) Tel: Pete on 0775 7174120 [JK]

KIMBER Kable, Select, Russ Andrews, K.S. 1011 1m interconnect, WBT - 0110cu termination £475 ovno retails at £765, sounds beautiful Tel: 01656 653976 [JK]

JPS SC-2 interconnect 1m length, 1 pair with fully balanced XLR terminations £325 including UK postage Tel: Tony Richards 01273 845029/email: jennifer.richards@tesco.co.uk [JK]

4. CD/DVD PLAYERS

CD Cyrus CDXT transport player, silver, boxed as new, can demo £350 ono Tel: 07766 415325 [JK]

COPLAND CDA822 CD player with remote control, vgc. Very analogue sound, low digital noise, XLR and RCA outputs, rarely available, a classy machine £800 or near offer Tel: 020 8443 3950 [JK]

SONY SCD-XA9000ES cosmetically perfect, original packaging and manual but extremely temperamental, repair needed, too good to dump, originally £2000 yours for £100 Tel: Val on 01908 661094 [JK]

RESOLUTION Audio Opus 21 with legendary GNSC Reference Level Mods, awesome two-box CD/DAC/preamp in black, perfect condition, £1900 Tel: 07930 401351/ email: catswinger@gmail.com [JK]

MERIDIAN 500 transport and 566 DAC 24-bit, mint, boxed, instructions £500 ono Tel: Mike 01246 209578 (day) 07780 888686 [JK]

ARCAM Alpha 8 CD player + R/C £55 Tel: 020 8950 0658 / email: michael.stewart5@ntlworld.com (South Herts) [JK]

MERIDIAN 602/606 Transport/DAC (black), mint, as new, little used, stored in original boxes last 12 years £375 Tel: 01962 711800 (eve/weekend) 01252 620644 (day) (Hampshire) [JK]

7. SPEAKERS

BOLZANO Villettri BV 3003 Piazzetta floorstanding equipolar speakers and BV Subwoofer, excellent condition, audiophile 360 soundstage, robust flight cases included, worth \$10,000, selling for £2000 Tel:07724 746984 email: oliver.duprez@hotmail.co.uk (Watford, Herts) [HJ]

KUDOS C20 premium oak veneer £250, 30mm granite plinths £140 eight months old mint boxed latest fronts cost £3500, sell £2550 have moved to smaller house and require smaller speakers, the C20s are excellent, can demonstrate Tel: 01913 869471 (Durham) [HJ]

EPOS ES14 black speakers plus stands £300 Tel: 01179 502100 (Bristol) [HJ]

WILMSLOW Audio hand-built large floor standing classique loudspeakers, 910mm tall x 260mm wide x 300mm deep, too large after all my efforts for my room, as new £600, buyer will have to collect, 40kgs in weight Tel: Vic on 01372 456196 anytime [X]

TANNOY 15in Monitor Gold loudspeakers, LSU-HF-15-8m rare opportunity, four pairs available, units 'mint' to slightly marked, all in Shabby 'Lancaster' cabinets, inviting offers, one pair, or lot, Tel: 01253 875194 (Blackpool, Lancs) [JK]

AUROUSAL A1 Mk II speakers in cherry finish, mint condition, full packaging and instructions, can arrange delivery if necessary £300 (were £645) email: ianringstead@talktalk.net Tel: 07894 708422 or 01246 432398 [JK]

REHDEKO RK115A, excellent condition, the fastest and most 'real' sounding speakers on the planet, no 'timesmear' very rare opportunity, pictures and demo available £1500 email: randbbloke@hotmail.com [JK]

MONITOR Audio RSW 12 subwoofer, as new, boxed, black ash (£750) £350 Tel: 07776 143890 (Southampton) [JK]

MARTIN Logan SL3 electrostatics, very good condition, £900ono Tel. 07728 557772 (Midlands) [JK]

To help ensure accuracy, your classified advertisements must be submitted by email, fax or post.

Please email your entries to: carole_molloy@ipcmedia.com. Call our reader ad dept on 020 8726 8321. Fax: 020 8726 8399.

LIVING Voice OBX-RS Santos rosewood finish, new in Feb 06, boxed £2600 (£5200) Tel: Pete on 0775 7174120 [JK]

LINN Espek loudspeakers, boxed & near mint condition, maple finish, £850 ono (originally £2500) Aktiv cards also available Tel: 07813 960156 / e-mail: ob.mm@virgin.net

LINN Keildh loudspeakers, boxed, mint, rosenut finish £350 ono, Ku-Stone stands also available Tel: 07813 960156 / e-mail: ob.mm@virgin.net [JB]

AVI ADM9 loudspeakers (active, with built in power amps), boxed, as new, in gloss white finish £595 ono. Tel: 07813 960156 / e-mail: ob.mm@virgin.net [JB]

KUDOS Cardea C2, cherry, run in, cost £1950 accept £1500 ono, moving to small pad Tel: 01555 860466 [JK]

PROAC Studio 125 speakers £375 Tel: 020 8950 0658 / email: michael.stewart5@ntlworld.com (South Herts) [JK]

KEF iQ30, brand new, dark apple finish, unwanted prize, tried out once to ensure ok, absolutely mint condition with all packaging and manuals £200 email: stephen.murphy@hiscox.com [JK]

8. TUNERS

QUAD FM4, ex condition £120 ono Tel: 079414 19196 (Jim) [JK]

9. TURNTABLES

PRO-JECT RPM 9X turntable carbon tonearm clear acrylic

chassis complete with speedbox SE Electronic speed control, brass record clamp, spare belt, excellent condition 3650 Tel: 01423 509943 email: atter9@nildram.co.uk [HJ]

SME Series V tonearm, excellent condition, with box and manual £1150 Tel: 07767 712116 or e-mail mike1304@hotmail.co.uk [JK]

GOODSELL/GARRARD

63SP commercial type mono record player unit, inbuilt Goodsell mono hi-fi amplifier and ELAC speaker, two ACOS mono cartridges and accessories, excellent condition, plus 170, 78rpm and a few early mono vinyl records, most sleeved and mint with record cases, all very rare £150, collect only Tel: 01492 878107 [JK]

THORENS TD 124 Mk 1 with 12in SME armboard in plinth, includes rare non-magnetic sub platter Inca CB 788, good condition including bearing, missing brake lever does not affect sound £525 ono Tel: Val on 01908 661094 [JK]

SME IV tonearm, 2 months old, boxed tools, mint £1050 Tel: Mike 01246 209578 (day) 07780 888686 [JK]

TECHNICS SSL1210 upgraded, mains lead, Moth-type RB301, incognito full wiring loom, Michell counter weight and stub, V.T.A. adjuster £300 ono Tel: 07811 521814 [JK]

SME 30/2A turntable, latest power supply with new gold plated VDH wired SME V arm with acrylic cover, arm is as new April

2010, all items boxed with original packaging £8995 Tel: 07746 839039 [JK]

11. COMPLETE SYSTEMS

PRO-JECT record deck + Pro-Ject phono amp/ Music Fidelity XA-1 preamp/Arcam Alpha 9 CD player/Arcam P60 power amp/Rogers Studio 5 speakers, includes all power cords (Russ Andrews) and cables/speak stands and equipment stand, value £3700, sell £1800 ono, must be heard, contact Steven on 00353 876376623 [X]

ARCAM player CD17, Tuner T32, Amp A18, rejected within one week so as new, £450 each or £1300 for all three, add postage Tel: 01305 766427(pm eves) (Weymouth) [GH]

B&W 805 Nautilus speakers, cherry, £500, Arcam Alpha 5 Plus CD player £75, Arcam Alpha 6 amp £50, all pristine and loved Tel: Steve on 01305 266702 [JK]

ROTEL RA-06/RCD-06CD/Epos M5 speakers £600 (£1200), all boxed, as new, Tel: Lee 01384 412234, email for pics, lee2009@hotmail.co.uk (West Midlands) [JK]

NAD 315 Bee amplifier and 515 CD player, Q acoustics 1020 speakers, all boxed, as new, hardly used, A1 condition, star system £250 ono Tel: 01255 553774 (Essex) [JK]

12. MISCELLANEOUS

REVOX B77 stereo open-reel tape recorder, in mint condition and has just been fully serviced,

detailed photos available or can demonstrate £495 ovo Tel: 07813 960156/e-mail: ob.mm@virgin.net [CH]

FIFTY new/sealed vinyl LPs of various genres at 50% of new cost, 25 s/h albums available cheaply, will separate, no timewasters please, Tel: Roy for list on 01453 519700 [JK]

REVOX F36 open-reel tape recorder with 25, 21 and 17.5cm reels, speeds 3¾ and 7½ ips separate record and replay heads, buyer collects from Southampton, offers over £50 Tel: 023 80511869 [HJ]

AKAI 4000DB reel-to-reel tape deck, newer model with Dolby, originally bought new in 1977 and used a very few times then boxed away in 1978 for 28 years! 1970s time warp in virtually new condition both cosmetically and mechanically, supplied with Akai original accessories & instructions £150 shipping extra, Tel (01492) 878107 [JK]

APPROX 100 magazines, mainly *Hi-Fi World* £50 Tel: 01772 632082 [JK]

BEAM Echo speakers good pair, Beam Echo preamp, Vortexion stereo recorder, lots of other vintage stuff, please call 01732 850574 for details (Kent) [JK]

WANTED

SUGDEN A21 amp, working or not Tel: 01772 632082 [JK]



hi-finews Placing an advertisement in the CLASSIFIEDS section...

Fill in your advertisement copy here...

Please write the product category number that best suits your equipment in the first square. The product categories are: 1 - Accessories; 2 - Amps; 3 - Cables; 4 - CD/DVD players; 5 - DACS; 6 - Software (CDs, records etc.); 7 - Speakers; 8 - Tuners; 9 - Turntables; 11 - Complete Systems; 12 - Miscellaneous We will insert the telephone number you want to appear in your advertisement(s) as many times as is needed. You only need to fill it in once and it only counts as one word - even if you run multiple adverts.

Tel (to appear in advert):

Hi-Fi News magazine, published by IPC Media, will collect personal information to process your entry. Would you like to receive e-mails from Hi-Fi News and IPC containing news, special offers, and product service information and take part in our magazine research via e-mail? If yes, please tick here . Hi-Fi News magazine and IPC would like to contact you by post or telephone to promote and ask your opinion on our magazines and services. Tick here if you prefer not to hear from us . IPC may occasionally pass your details to carefully selected organisations so they can contact you by telephone or post with regards to promoting and researching their products and services. Tick here if you prefer not to be contacted .

To help ensure accuracy, your classified advertisements must be submitted by email, fax or post. Please email your entries to: carole_molloy@ipcmedia.com. Call our reader ad dept on 020 8726 8321. Fax: 020 8726 8399.

For sale or wanted?

Please tick this box if you want your advert to go into the WANTED category

Name:

Address:

Postcode:

Daytime tel (so we can contact you)

E-mail address

Date of sending


The **NEW** interactive online magazine

Your **FREE** interactive magazine!

BETTER DIGITAL

Photography

SPRING 2010



Easy steps to...

Perfect Portraits

Setting Up Your Camera

Shutter Speeds

Gear Reviews •
Tips & Tricks •
Videos •


WORTH £2300!

WIN!

Canon 550D

PLUS! 24-105mm f4L Lens

CLICK TO OPEN



Download issue 2 **FREE** at...
www.betterdigitalphotography.com

YOUR POCKET-SIZED GUIDE TO MODEL VALUES

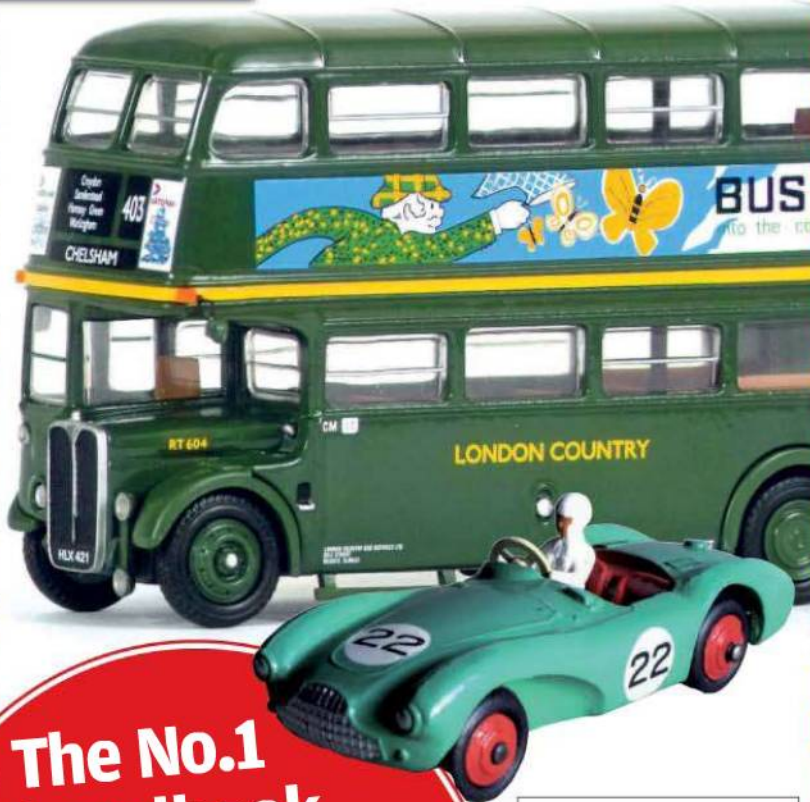
ORDER YOUR 2010 COPY NOW!

OVER 20,000 MODELS LISTED INSIDE

THE MUST-HAVE GUIDE FOR ALL DIE-CAST COLLECTORS

MODEL PRICE GUIDE

2010 EDITION • £8.99



- ABC/Britbus/CMNL
- Budgie Toys
- Corgi Classics
- Corgi Toys
- Days Gone
- Dinky Toys
- French Dinky Toys
- Exclusive First Editions
- Matchbox 1-75
- Matchbox King Size
- Matchbox Major
- Matchbox Dinky Collection
- Models of Yesteryear
- Matchbox Collectibles
- Morestone Miniatures
- Oxford Diecast **NEW**
- Sun Star Buses **NEW**
- Trackside
- Tri-ang Spot-on
- Vanguards
- www.modelcollector.com

The No.1 handbook for British die-cast values

VALUE PACKED!
» EASY TO USE
» FULLY REVISED AND UPDATED
» COMPILED BY INDUSTRY EXPERTS

On sale now at WH Smith and all good newsagents or order via our hotline on 01562 69296 or website: www.aarons-books.co.uk
Black Books, PO Box 3875, Kidderminster DY10 2WL
PRICE: £8.99 – POSTAGE AND PACKING IS FREE!



CHOKING
THE SOPRANO WITH YOUR CABLES?

Careless cable choices can strangle your excellent system. The Cable Company database, based on feedback from thousands of US home cable trials, can tell you what cables will work best in your system.

- **FREE SHIPPING** on purchases over \$100.
- 60 brands, 238 cable products.
- **FREE** of all US taxes.

COMPONENTS ACCESSORIES TUBES

Call, write, fax or email for details and free consultation (215) 862-4870 • fax (215) 862-4871

Visit our website at: <http://www.fatwyre.com>
email: fatwyre@fatwyre.com

THE CABLE COMPANY
125 Union Square, New Hope PA 18938 USA
ALL MAJOR CREDIT CARDS

DRIVERS:

- ATC
- AUDAX
- ETON
- FOSTEX
- LPG ➤ MAX FIDELITY
- MOREL ➤ PEERLESS
- SCAN-SPEAK ➤ SEAS
- SILVER FLUTE
- VIFA ➤ VISATON
- VOLT

SOLENS CAPACITORS AND INDUCTORS - USED BY THE MOST DISCRIMINATING LOUDSPEAKER MANUFACTURERS.

HARDWARE

HOW TO BOOKS

Contact us for the free Solen CDROM Catalog.

FREE!

SOLENS
4470 Avenue Thibault
St-Hubert, QC, J3Y 7T9 Canada
Tel: 450.656.2759
Fax: 450.443.4949
Email: solen@solen.ca
Web: www.solen.ca

Heatherdale audio limited

Worthing, West Sussex BN14 7SU
Quality pre-owned equipment available
Main Dealer for: Tannoy Prestige, Thiel, Esoteric, Audio Note, Ayre, Mark Levinson, Revel and much more.

Distributor for Wavac Audio Lab products
Part exchange welcome. Demonstrations in a dedicated listening room by appointment.

SPEAKERS

- B&W AS2 active sub woofer. Mint/boxed..... £195
- B&W M-1 speakers, black. Mint/boxed..... £195
- B&W M-1 speakers, silver. Mint/boxed £195
- Ruark Crusader Mk 3 speakers, as new FULL WARRANTY..... £2055
- Thiel .5 (point five) speakers, boxed..... £595
- Aurum Cantus Leisure 5 speakers, Boxed/mint.... £395

PRE-AMPS

- Proceed PAV Pre Amp..... £295
- Wavac PR-Z1 2 box pre amp as new (£15k) offered for..£9995
- Ayre KX-R pre amp..... £7950
- Audio Note M1 RIAA phono stage, MINT..... £795
- Audio Note M1-Line pre amp..... £350
- Audio Note M ONE-R remote controlled pre amp... £495
- Audio Note M Zero-R remote controlled pre amp... £395
- Audio Note M Zero pre amp..... £295

AMPLIFIERS

- Wavac MD-805 monoblocks 55wpc, SET's AS NEW (UK retail £16500) only £7995
- NAT Se-1 mono blocks (211 valves class A) cost new £7000 only..... £3495
- Estoteric A1-10 intergrated amp Brand new, normally £2750 Offered for..... £1395
- Emille K1-40 integrated amp..... £2995
- Audio Note P Zero monoblocks..... £495
- Ayre MX-R monoblocks..... £7950
- Ayre P-5X phono stage..... £1195

CD PLAYERS & TRANSPORTS

- TRI CD player (new) "Made in Japan" £1895
- CEC TL-1N CD transport, as new £4995
- Raysonic CD228 two chassis CD player, balanced, NEW, (£3700) only..... £2775
- CEC DA-1N, AS NEW, cost new £4,200. Offered for only..... £2,500
- Mark Levinson ML 31.5 Reference CD transport (original NOT upgraded ML-31)..... £4495
- Esoteric P-03 CD transport with D-03 DAC MINT. £13,750
- Audio Note 2.1X CD player £595.
- Audio Note CD-2 CD player £295.

MISCELLANEOUS

- Winds O1 stylist gauge.....New £495
- Madrigal balanced 2mtr. pair new CZ GEL interconnect, (£695) only..... £295
- MIT Shotgun S2 15' speaker cable..... £995
- MIT Shogun S2 balanced interconnects 1 metre pair £440
- Ayre Signature 1.5 metre power cord..... £440

Selection of equipment stands and speaker stands. Please phone.

TURNABLES, CARTRIDGES & TONEARMS

- Kuzma Airline tone-arm, AS NEW, (£7200) offered for only..... £4995
- Blue Pearl turntable with Graham Phantom arm ... £9995

Selection of brand new discounted cartridges

All major credit cards accepted.

Telephone: 01903 261213
Mobile: 07860 660001
Web Site: www.hifi-stereo.com
Email: heatherdale@hifi-stereo.com

Q: Where can I discover the finest Audio products for the home?

A: At Audio Destination!

Where Music Matters



Brand images shown:
1. Totem • 2. Lyngdorf • 3. Clearaudio

Run by husband and wife team: Mike & Caroline Rogers - Audio Destination is not your typical Hi-Fi Specialist.

Audio Destination brings together a range of only the finest audio products and places them in comfortable and relaxed surroundings, where you can take your time to audition and find the right product or systems to suit your exact requirements.

- Open Tuesday - Saturday (9am - 5pm)
- Two demonstration suites
- Large selection of famous brands
- Home demonstration
- Long-term customer support & care
- Easy Parking
- Free advice & consultation
- Out of office appointments
- Home installation

We look forward to seeing you

Stockists of:
Analysis Plus • Audio Analogue • Audioquest • Ayre • Bel Canto
Black Ravioli • Clearaudio • Electrocompaniet • Focal JM Lab
Grand Prix Audio • Heed Isotek • Leema Acoustics • Lyngdorf
Moon • Plinius • Primare • Project • Tellurium Q
TEAC Esoteric • Totem Acoustics and many more...

Audio Destination
WHERE MUSIC MATTERS

Call +44 (0)1884 243 584 • www.audiodeestination.co.uk
Audio Destination, Suite 7a Market Walk, Tiverton, Devon, EX16 6BL
Open Tue - Sat: 9am - 5pm • e-mail: info@audiodeestination.co.uk

MADISOUND PROVIDES SPEAKER BUILDERS WITH THE HIGHEST QUALITY PARTS AND ADVICE.

LA PASSION DU HAUT-PARLEUR

AUDAX **seas**

GOERIZ **Solen Inductors**
Solen Fast Caps

Skaaning Loudspeakers **FOSTEX**

DEFLEX ACOUSTIC PANELS **morel**

AURA **Peerless**

vifa **Peerless**

NORDOST **LPG**

keiga **ETON**

scan-speak

MADISOUND SPEAKER COMPONENTS, INC.
8808 UNIVERSITY GREEN
P.O. BOX 44283
MADISON, WI 53744-4283 U.S.A.
TEL: 608-831-3433 FAX: 608-831-3771
e-mail: info@madisound.com
Web Page: <http://www.madisound.com>

Analogue Seduction

where music is our passion



Analogue Seduction are dedicated towards two channel Hi-Fi, specialising in vinyl replay. As well as our on-line shop we have dedicated demonstration retail facilities based in Peterborough, Cambridgeshire and we can offer our customers home demonstrations.

We stock the finest in amplification, analogue, digital replay and speakers. We also specialise in a cable termination and cable burn in service.

Please visit our website www.analogueseduction.net to browse or purchase products that are not easily available elsewhere.

New vinyl records now stocked

Tel: +44 (0)1733 344768

IAN HARRISON HIFI

HIFI AT DISCOUNT PRICES. FREE NATIONWIDE DELIVERY

SALE - TEL: 01283 702875

SPECIALIST SUPPLIER OF TURNTABLES, TONEARMS, CARTRIDGES AND PHONO STAGES

INCLUDING: MICHELL, CLEARAUDIO, THORENS, SME, REGA, MOTH, HADCOCK, WHEAT AUDIO, GRAHAM SLEE, LEHMANN AUDIO, PRO-JEKT, TRICHORD, HENDON, GOLDRING, GRADO, ORTFON, DENON, KOETSU, SUMIKO, CARTRIDGE MAN, ZYX, TRANSGURATION, BENZ MICRO, AUDIO TECHNICA, TOM EVANS, REGA, ICON AUDIO, LONDON (DECCA)

PLEASE PHONE TO CONFIRM PRICE & AVAILABILITY PRIOR TO ORDERING. ALL GOODS ARE BRAND NEW & BOXED WITH FULL UK 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.

ESTABLISHED 1986.

MAIL ORDER ONLY FROM IAN HARRISON, 7 MILL HILL, REPTON, DERBY, DEAS GQ TEL: 01283 702875 9am-9pm INCLUDING SUNDAYS.

£650 CLEARAUDIO SYMPHONY
£1100 CLEARAUDIO CONCERTO
£290 DENON DL304
£90A EAR-YOSHINO
£1500 ORTFON CADENZA BLUE
£1000 GRADO PS1000
£1128 AUDIO TECHNICA AT440MLA
£380 AUDIO TECHNICA AT09CMLIII
£260 AUDIO TECHNICA AT17
£169 AUDIO TECHNICA AT17MKIII
£325 AUDIO TECHNICA AT110MLX
£90A MICHELL ENGINEERING
£90A MICHELL SPEAKERS
£90A WHIST PS30RDI
£90A ORTFON CADENZA BLUE

“this accessory is heartily recommended” Gramophone

“this accessory is heartily recommended” Gramophone

Is this your problem? Here's your answer

too loud way too loud
too loud way too loud

It's a common problem. The usable range of the volume control is all down at the bottom end and fine control at low listening levels is either difficult or impossible. The noise floor may be audible, too. There is a simple and effective solution - the **Rothwell In-Line Attenuators**. They can be used with pre/power or integrated amps to cure the problem of excess gain and bring sonic benefits with even the most expensive equipment.

£39/pair - post free
01204 366133

www.rothwellaudioproducts.co.uk

HEATHCOTE AUDIO

TEL: 07860 511111

WEBSITE: www.heathcoteaudio.co.uk

MAJORITY OF EQUIPMENT STOCKED IS ONE OWNER/BOXED VINYL WE STILL VERY URGENTLY! REQUIRE EQUIPMENT PHONE GEORGE

- | | |
|---|---|
| KRELL KAV 300R RARE TUNER AMP.....MINT/BOXED.....£1395 | REGA PLAYER 3IARM & CART.....MINT/BOXED.....£275 |
| MAGNUM DYNALAB MD-208 TUNER AMP.....EXCLT/BOXED.....£1595 | MICHELLE TECHNOWEIGHT.....BOXED.....£49 |
| MCCORMACK DINA125-AMT SILVER PRE SPECIAL ORDER.....MINT/BOXED.....£1250 | MUSICAL FIDELITY XLPs.....EXCLT.....£175 |
| 2 VOLUME POTS 2 BALANCED OUTS (GLOTSW).....EXCLT.....£2450 | SME 201A SME V ANALOGUE MENTRIEMENT TECHNOLOGY.....EXCLT.....£4750 |
| LYNX STRATOS PRE AMP & 2 MONOBLOCKS.....MINT/BOXED.....£995 | MKI AIR BEARING TONE ARMS/SUMIKO BPS.....GC/BOXED.....£2750 |
| ALCHEMIST APD-15 INTEGRATED.....EXCLT.....£599 | AUDIO NEMESIS PHONO STAGE.....GC/BOXED.....£975 |
| MUSIC FIRST SILVER PRE AMP (E3K7).....EXCLT.....£2050 | MCCORMACK MKI PHONO DRIVE (MMMC E0007).....EX DEM.....£349 |
| PARSONS CHZ PRE/REZ POWER AMP & CDX983.....EXCLT.....£895 | PROJECT PHONO BOX.....EXCLT.....£49 |
| ARCAM SOLID STATE STEREO POWER AMP.....EXCLT/BOXED.....£1849 | ANTIQUE SOUNDLABS MKI PHONO 2 BOX.....VGC.....£39 |
| NAKAMICHI AMPLIFIER 2 REM. INTEGRATED.....EXCLT.....£249 | LINN LP127 ARD ONE OWNER.....VGC.....£295 |
| JEFF ROWLAND MODELS MONOBLOCKS.....VGC.....£795 | SUMIKO BLUE POINT SPECIAL EVO 3 LOW HOURS.....DUE IN.....TBA |
| DENON AVC A11 SR AV AMP (CHAMPAYNE GOLD)EXCLT/BOXED.....£895 | MJINTOSH MCD-201 6 MONTHS USE.....DUE IN.....£1895 |
| ULTRA RARE NAKAMICHI 820 POWER AMP.....EXCLT.....£575 | KRELL KAV 250 CD PLAYER.....MINT/BOXED.....£995 |
| DK DESIGN VS 1 SIGNATURE MKII INTEGRATED DEMIBOXED.....£2450 | PERP TECH P1A 249R DSP UPSAMPLING ENGINEBRAND NEW.....£795 |
| PASS LABS ALEPH P PRE AMP.....EXCLT.....£1150 | MODRIGT SIG 2 MODULAR PSU.....BRAND NEW.....£599 |
| MARANTZ MA-700 MONOBLOCKS.....NOS.....£495 | PIONEER CL-D925 LASER DISC.....MINT/BOXED.....£249 |
| H-CAT 12-B PRE WITH WTC CONTROL (E2800).....DEM.....£1750 | DELOR 800000 IMPEDANTZ SAVER (SUPERB £1300)BRAND NEW.....£185 |
| ROTEL RB-8783X STEREO MONO AMP.....EXCLT.....£1750 | NAIM CD5X CD PLAYER.....MINT/BOXED.....£895 |
| ADVANTAGE 200 INTEGRATED AMP.....EXCLT/BOXED.....£795 | AUDIO ALCHEMY DOE V3 & PSU 3 (LAST ONE £500)NEW OLD STOCK.....£425 |
| ROKSAN S-1 PRE AMP NO PSU.....EXCLT.....£295 | MERIDIAN 200 TRANSPORT.....MINT/BOXED.....£399 |
| BOLZANO VILLETTRI BV 3003 AND BV SUB.....FABULOUS!.....DUE IN.....£1995 | CHORD 1500E DAC/DIGITAL PRE AMP (E6800).....MINT/BOXED.....£750 |
| AURUM CANTUS LEISURE 3SE (RARE MAPLE).....NEW/BOXED.....£495 | ACCU-PHASE DR-500 TRANSPORT (E60007).....MINT/BOXED.....£2750 |
| AURUM CANTUS VALLA (RETAIL E2500).....EX DEM.....£1495 | TRICHORD DIGITAL TURNTABLE.....EXCLT.....£795 |
| THEIL CS 1.5.....MINT BOXED.....£1250 | MICROMEGA CLASSIC SOLO XLRRCA (NEW MECH).....SALE!.....£695 |
| TANNOY BERKEYS.....VGC.....£1195 | MICRO CARMEN CD/DVD TRANSPORT.....MINT/BOXED.....£1250 |
| AUDIO NOTE ANE-D SILVER BINDING POSTS.....GC.....£895 | THE TA DATA II TRANSPORT (SILVER) AES/ICA ETC/MINT/BOXED.....£1750 |
| HYPERION S100V GORGES BIRDS EYE MAPLE/MINT/BOXED £2895 | PAIRWORTH 200M SPECIAL ORDER KT-90 MONOS WITH VCL CONTAS.....NEW/BOXED.....£795 |
| PODIUM ONE (HUGE PANELS E60007).....EX DEM.....£2895 | AKO RESEARCH CLASSIC 60 INTEGRATED VALVEEXCLT/BOXED.....£1295 |
| EGLSTON/WORKS ROSA.....EXCLT.....£2750 | DK DESIGN VS1 SIGNATURE MKII INTEGRATED (HYBRID)DEMIBOXED £2450 |
| MARTIN LOGAN CLARITY.....EXCLT.....£1695 | VTL ULTRA LINEAR 7575 STEREO POWER AMP (KT90).....VGC.....£875 |
| MARTEN MILES 11-C HERRY (8+ NEW).....EXCLT.....£3750 | BALANCED AUDIO TECH. BAT VK-40.....EXCLT/BOXED.....RING |
| MIRAGE M18 BIPOLAR STANTS (E5500).....EX DEM.....£1495 | ROGUE AUDIO 88 POWER AMP.....EXCLT.....£795 |
| CURA-CA-30 FLOORSTANDERS (MAPLE).....MINT.....£995 | ROGUE AUDIO 88 REMOTE PREAMP.....MINT/BOXED.....£795 |
| AURUM CANTUS VAM GLOSS BLACK (E1700).....EX DIS.....£1350 | ROGUE AUDIO 88 MAGNUM REMOTE PREAMP.....MINT/BOXED.....£795 |
| AURUM CANTUS MUSIC GODDESS £2500.....NEW.....£1795 | DELOR 800000 IMPEDANTZ SAVER (SUPERB £1300)BRAND NEW.....£185 |
| CELESTION A-3 (VERY SOUGHT AFTER).....EXCLT/BOXED.....£1150 | ANTIQUE SOUND LABS AQ10000D1 TWIN 845 MONOBLOCKS (E5000) 2 X EX DEM.....£2995 |
| CELESTION A-25 (EXTERNAL X-OVER).....BRAND NEW.....£995 | ANTIQUE SOUNDRESEARCH FEATHER PRE/REZ POWER EXCLT/BOXED.....£1395 |
| PROAC STUDIO 150.....TO CLEAR.....£849 | |
| LINN KANS AND DEDICATED STANDS.....TO CLEAR.....£299 | |

MOST MAJOR CREDIT/DEBIT CARDS ACCEPTED

DEALER DIRECTORY

High-end hi-fi retailers and other specialist services including components, kits and restoration available in your area

Berkshire

Audio Components
Specialists in loudspeaker components, design & restoration
Tel: 0118 989 0151
www.audio-components.co.uk

Garrard™
Loricraft Garrard Turntables, Record Cleaning Machines & Power Supplies.
www.garrard501.com
Contact: terry@garrard501.com
jane@garrard501.com
Telephone: 01488 72267

Benz Micro
Clearaudio
Dynavector
Focal
Focal Utopia
Linn
Linn LP12 Specialist
Lyra
Mark Levinson Reference
Naim
Revel
Totem
Transfiguration
Vienna Acoustics

studio AV
01753 631000
www.studioav.co.uk
sales@studioav.co.uk
44 High Street, Eton, Berkshire, SL4 6BL

Bristol

V' audio
Vinyl by SME, AVID, Origin Live, Graham Slee, Project etc.
Speakers/Amps by AVI, Electrocompaniet, Opera, Triangle etc.
Projectors by Sim2, JVC, Mitsubishi, Infocus etc.
Honest advice and home demonstrations a speciality
HIFI Consultants 36 Druid Hill, Stoke, Bishop, Bristol BS9 1EJ
Tel/Fax: 0117 968 6005
Email: icvhifi@yahoo.co.uk

Buckinghamshire

HAZLEMERE AUDIO
High Wycombe
Specialising in some of the world's finest products and celebrating our 21st anniversary.


By appointment only
01494 562610
info@hazlemereaudio.co.uk

AVID HIFI - GRAHAM SLEE - ORACLE - ORPHEUS
SPECTRAL - SME - STAX - USHER - NU FORCE
HADCOCK - ACOUSTIC SOLID - NAGRA - BELLES
PEAK CONSULT - TRILOGY - BRINKMAN
ART SPEAKERS AND MORE...

Cheshire

Doug Brady Hi-Fi
Open Mon/Sat 10.30 - 6.00
Sales & Servicing - including record decks & loudspeakers
dbrady8833@aol.com
01925 828009
s/h & ex. dem sales list on website
www.dougbradyhifi.com
Kingsway North, Warrington, WA1 3NU

DOOLEYS
AUDIO | VISUAL
106 MILL STREET
MACCLESFIELD
CHESHIRE
SK11 6NR
01625 264666
sales@dooleys-hifi.co.uk
www.dooleys-hifi.co.uk

Devon

tavistock audio
love your music
Wilson Benesch • Michell Engineering
Dynaudio • Grado • Naim • Usher
The Chord Company • NAD
Quadraspire • Leema Acoustics
18 Market Street • Tavistock • Devon PL19 0DE
info@tavistockaudio.co.uk 01822 618 940
www.tavistockaudio.co.uk

London

020 7226 5500
www.grahams.co.uk

GRAHAMS

"One of the five best hi-fi shops in the world"
ARENA Magazine

Grahams Hi-Fi
Canonbury Yard
190a New North Road
London N1 7BS

LOCKWOOD AUDIO
All TANNoy.
spares and repairs including obsolete models

28 RYEFIELD CRESCENT
NORTHWOOD, HA6 1LT, UK
Phone: +44(0)1923 829444 Fax: +44(0)1923 829448
www.lockwoodaudio.co.uk
email: roger@lockwoodaudio.co.uk

Oranges & Lemons
www.orangesandlemons.info
Audio-Visual
Multi-Room
Hi-Fi



020 7924 2040
61-63 Webbs Road London SW11

Front End Problems
then contact
"The Cartridge Man"
It doesn't have to cost an arm and a leg to get the best - HiFi News awards 2005. "BEST CARTRIDGE UNDER £1000! Agents for Croft, Moth, Hadcock, E.A.R. and others. 'CARTRIDGE MAN STYLUS GAUGES NOW AVAILABLE' Plus cartridge re-tipping service

Web Site: www.thecartridgeman.com
Email: thecartridgeman@btinternet.com
020 8688 6565

Midlands (W.)

The Midlands Premier Sound & Vision Academy

SOUND ACADEMY
Custom Install & Selected Audio



• Excellent product range • Demonstration rooms
• Friendly knowledgeable staff with over 25 years experience
Visit our NEW WEBSITE at
www.soundacademy.co.uk
for further information • sales@soundacademy.co.uk
152a High Street Bloxwich Walsall WS3 3JT West Midlands
01922 493499

www.soundcinergy.co.uk

sound cinergy
specialists in home entertainment

Exposure, Focal, Linn, Marantz, Michell, Monitor Audio, Okki Nokki, Onkyo, Orffon, Project, Rel, Roksan, Trichord

37 High Street, Aldridge 01922 457926

Monmouthshire

Hi-Fi, Home Cinema & Multi-room AV

Ceritech AUDIO
...where music stirs the soul
www.ceritech-audio.com
Tel: 0844 7365719
Email: info@ceritech.co.uk
Monmouthshire & Gloucestershire

Norfolk

BASICALLY SOUND AND VISION
Norfolk's Audio and Visual Systems Specialist
Call 01362 820800

Visit our showroom at:
Calveley Court, Southburgh Road,
Reymerston, Norfolk NR9 4QD
e: enquiries@basicallysound.co.uk
www.basicallysound.co.uk

Somerset

Alternative AUDIO

01984 624242
peter@alternativeaudio.co.uk
www.alternativeaudio.co.uk
Taunton, Somerset

Suffolk

atc
dynavector
epson
focal
hutter
isoblu
kudos
lyra
naim audio
neat acoustics
nottingham
pmc
rega
well tempered
more...

signals
hi-fi for grown-ups

Ipswich (01473) 655171
email: end@signals.uk.com
www.signals.uk.com

Hi-Fi Wanted

We source Hi-Fi from all over the UK and can arrange collection. Best cash prices paid

01986 895 929
or email
nick@emporiumhifi.demon.co.uk

DEALER DIRECTORY

High-end hi-fi retailers and other specialist services including components, kits and restoration available in your area

Surrey

Stockists of:

- Arcam • B&W • Focal
- Linn • Naim • PMC
- Rega • Rotel and MORE

Infidelity
NDECENTLY GOOD HI-FI

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

Tel: 020 8943 3530
Open: Tues - Sat 10am - 6pm
www.infidelity.co.uk




West Sussex

Do you want to own some of the world's finest audio equipment?



Stockists of:

- Audio Physic • Aura • Astin Trew
- Ayon • Belles • Cabasse • Coda
- Electrocompaniet • Hifi Racks
- Music Tools • Oracle • Stello
- Vivid Audio

We supply First Class Sound Systems
Rock Solid Sound Systems
The Old Barn, Billingshurst
West Sussex RH14 9DE
W: www.rocksolidsounds.co.uk
E: info@rocksolidsounds.co.uk
T: 01403 782221 M: 07950 274224

Wiltshire

Working Wireless
High Quality transformer rewinds for Hi-Fi and radio equipment.
Quad, Leak, Radford etc.
30 Yrs experience in repair and restoration of valve audio and radio equipment.
Specialist designs undertaken.
Phone Mike on 01380 860787 with your requirements

Wales

Acton Gate Audio
4 Ruabon Road, Wrexham, LL13 7PB
01978 364 500
www.acton-gate-audio.co.uk
Stockists of Arcam, Quad, Michell, Roksan, Onkyo, Denon, Yamaha and many more!

hi-finews
TO ADVERTISE HERE PLEASE CONTACT
ZOE WESTON
ON
020 8726 8324

DNM Stereo/Bi-Wire Solid Core Speaker Cable
The most accurate speaker cable you can buy. With defined resistance, low capacitance, balanced inductance and increased power rating, the design optimises the power amplifier's load. This stereo/bi-wire cable is designed to suit medium sensitivity speakers and longer cable runs, yet it still gives incredible resolution.

DNM Stereo Solid Core Interconnect Cable
The designed magnetic characteristics give absolute clarity and tonal accuracy, the cable parameters are precisely set to improve the sound quality of any amplifier connected to it. The semi-transparent ribbon contains four conductors, enabling connection of a stereo source using only one cable.

DNM High Frequency Termination Network
An important new DNM product, the high frequency termination network (HFTN) significantly improves the performance of all DNM cables. HFTNs remove radio frequency resonances that interact with the amplifier's feedback, damaging the sound quality. Really improves digital sources.

<http://www.dnm.co.uk/> phone DNM Design: +44 (0)1480 457989 email: sales@dnm.co.uk



HOW TO CONTACT US...

hi-finews

& Record Review



Editorial Team
Editor • Paul Miller
Production Editor • Patrick Fraser
Art Editor • Sheridan Dublin
Sub-Editor • Christopher Breunig
Editorial Assistant • Liz Spence
Consultant Tech Ed • Keith Howard

Photographic Team
Mike Prior, Anthony Butler,
Clare Collins, Andrew Sydenham

Management Team
Group Magazine Editor • Garry Coward-Williams
Publisher • Richard Marcroft
General Manager • Charlie Meredith
Managing Director • Paul Williams

Advertisement Team
Group Ad Manager
Susan Bann • 0208 726 8412
susan_bann@ipcmedia.com
Sales Executive
Daniel Birchmore • 0208 726 8317
daniel_birchmore@ipcmedia.com
Telephone Sales Executive
Zoë Weston • 0208 726 8324
zoe_weston@ipcmedia.com
The Market (Reader Ads)
Carole Molloy • 0208 726 8321
carole_molloy@ipcmedia.com
Group Production Manager
Vicky Geary • 0208 726 8339
vicky_geary@ipcmedia.com
Production Assistant
George Kesta • 020 8726 8213
george_kest@ipcmedia.com

Key Contributors
Classical • Christopher Breunig
Jazz • Steve Harris
Rock • Johnny Black & Ken Kessler
Hi-fi • Steve Harris, Ken Kessler, Christopher Breunig, Barry Fox, Keith Howard, John Bamford, Richard Stevenson, Barry Willis, Jim Lesurf

We Live At...
Our editorial, advertisement and publishing offices are at:

Hi-Fi News, IPC Inspire, Leon House,
233 High Street,
Croydon, Surrey,
CR9 1HZ, England.
Tel • 020 8726 8311
Fax • 020 8726 8397
e-mail • hi-finews@ipcmedia.com

Hi-Fi News magazine incorporates: Stereo, Tape & Tape Recorders, Audio News, Record News, Audio Record Review, The Gramophone Record, Vinyl CD7 and Music Business. Hi-Fi News is a member of the Audio Bureau of Circulations (ABC) and of EISA (www.eisa-awards.org)

Hi-Fi News is published on the first Friday of the month preceding the cover date by IPC Inspire, part of the IPC Media Group. It costs £4.00 per issue (£51.35 for 12 months) in the UK; £107.47 in Europe; \$144.63 in North America; £93.81 for the rest of the world. Rates are for annual delivery. See subscriptions order form on page 70 or call 0845 676 7778 for the latest special offers.

Copyright: IPC Media, 2010, all rights reserved. Reproduction in whole or in part is forbidden without permission in writing of the publishers. Distributed by Marketforce (UK) Ltd, The Blue Fin Building, 110 Southwark Street, London SE1 1SU. Tel: 020 7633 3333. Typeset by CTT, London E17. Printed in England by Southampton, Unit 17-19, Upon Ind. Estate, Prose, Bursell BA1 6SN. ISSN 1472-2569.

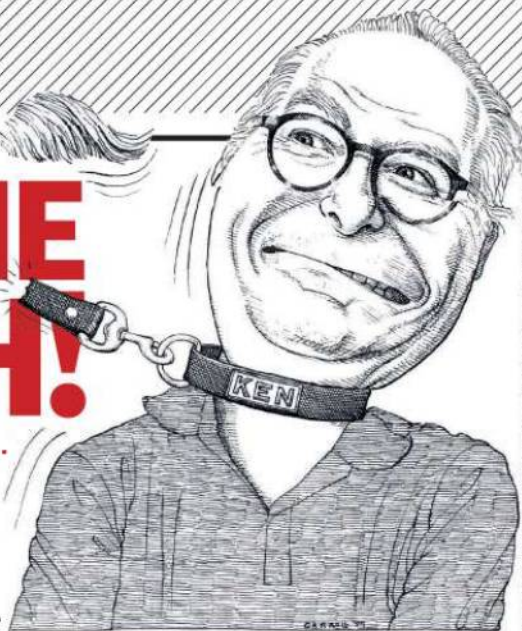
IPC | INSPIRE
FOCUS
A part of IPC Media, a Time Warner Company



OFF THE LEASH!

KEN KESSLER TELLS IT LIKE IT IS...

Free vinyl, anyone? A recent experience Stateside sends a chill down Ken Kessler's spine



In May, I enjoyed a much-needed vacation in the USA, to see family and friends. Despite returning with a few CDs and DVDs, they were not acquired as they would have been in the past. Alas, I must admit that my purchases were made online, primarily stuff that couldn't be sent to the UK for copyright reasons, or books that weighed too much to have them shipped directly to the UK one at a time.

What this has done is reduce the time I spend shopping when Stateside, which is a blessing, because most sales staff in multiples couldn't give a toss about anything, and know even less.

But, what is more relevant to the way the market for music and even electronics is changing, terminally, is that the reduction would have taken place organically. Why? Because specialist stores are closing with alarming rapidity.

GAMES WITHOUT FRONTIERS

All of you have noticed that a lot of major towns no longer have independent music shops, let alone hi-fi shops with 'audiophile' kit. What's worse is that the multiples which have replaced them are reducing the space they allot to either. Every time I go into our local HMV, it seems as if the floor space for CDs and DVDs has been reduced even further. What has encroached upon them

are games, gaming consoles, iPods, mobile phones, digital cameras, flat screen TVs and other modern electronica.

So, too, in the USA. I used to love visiting Best Buy, where I would find six or eight aisles some eight meters long, filled with nothing but CDs of every genre, with deep back catalogue selections. DVDs enjoyed almost the same amount of space. On my latest visit, computer games actually equalled the DVD display space, while CDs had been reduced by half. What remained was clearly Hot 100.

That visit alone was enough to send a chill down my spine. I had long ago gotten used to the idea of Canterbury no longer having

an independent record store, although Canterbury Hi-Fi Centre gamely soldiers on with Marantz, Rotel and other respectable kit not found in the electrical multiples. But I was not prepared for a couple of separate incidents in the USA that would show how truly diminished is the world of music on a physical format.

On Friday night, long after the stores were closed, a friend and I were sauntering down the main street of my home town, which was a buzz with student and artsy types enjoying its overabundance of cafes, clubs and bars. Upon reaching one of the city's better used vinyl shops, we noticed a box out front, with a sign saying 'Take what

you like. Take the box, too.' There must have been a dozen pristine, multi-LP classical box sets, and another 30 or so LPs from the '50s and '60s, popular vocalists of the time.

As pleased as I was to walk off with mint copies of *Marty Robbins' Greatest Hits*, a Vic Damone mono LP, a Steve and Eydie Gorme album and a Boston Pops extravaganza, my friend – a former record store owner – reminded me, 'Ken, that store could never shift those, even though they have bins for 50-cent and \$1 records. Literally, they have to give them away. And if someone with your weird tastes hadn't come along, they'd still be there in the morning.' In the shop window were the kinds of LPs that cause frenzies on eBay, so it was clearly a store that 'knew its stuff.'

NO CALL FOR IT

When we had lunch a couple of days later, with another friend who still works for a record shop, the situation was confirmed. After I related my story to him, he told me that the store he worked for had just dumped thousands – and he meant genuine truckloads – of LPs into landfill, because they were taking up too much room.

He explained, 'A lot of them were dumped, admittedly, because of condition. "VG-" is no longer good enough even for the cheapo bins. So if we had three copies of a Creedence Clearwater Revival LP, and two were VG-, we ditched them.'

But he also acknowledged dumping whole genres that, 'Nobody cares about any more. Big Band is dead, and Country & Western post-1965 unless it's someone like Willie Nelson. Broadway musicals and soundtracks. Male and female vocalists from the '50s and '60s. Nobody wants that stuff.'

That he'd named a few genres about which I'm passionate made me ache exactly as I did upon learning how many valves the M-O Valve Co tossed into landfill when the factory closed. But what he said is part of the human condition: the passage of time respects nothing. Who still reads Sax Rohmer or Booth Tarkington? Does anyone want DVD box sets of *Dixon Of Dock Green*? Vera Lynn's recent hit was a fluke, not a trend.

Hello, my name is Ken Kessler. I'm an anachronism. ☺

'The store dumped 1000s of LPs into landfill; they took up too much room'

Oct 20th AUG
issue on sale

ON TEST:

- Group Test: Affordable headphones
- Chapter Audio Sonnet-S CD player
- Leema Hydra II power amplifier
- Dynavector DV-507 tonearm
- SRM Athena SE turntable

PLUS:

- We reveal the EISA Awards 2010-2011
- Vintage Review: Leak Stereo 30 amplifier
- Vinyl Frontier: Latest LP releases
- Audio Milestones: SME 3009 tonearm
- Vinyl Icon: Pink Floyd's *Piper...*



reddot design award
winner 2006



soulution

nature of sound

Highend Audio Equipment
made in Switzerland

Distributed by
Select Audio
Tel 01900 813064
www.selectaudio.co.uk
www.soulution-audio.com



Sonus faber.

CREMONA SERIES. LOOK TO THE PAST TO HEAR THE FUTURE.

“FAST, TRANSPARENT, DYNAMIC, OPEN, CLEAR, VIVID.”

HI FI CLUBE / JOSÉ VICTOR HENRIQUES / CREMONA ELIPSA

Sonus Faber's introductions in the early "Noughties" of the floor-standing Cremona and the smaller Cremona Auditor were hailed as milestones in the Industry's long standing quest to achieve the highly-desired marriage of both aesthetics and sound quality. Such a marriage would please both ends of the consumer spectrum, the audiophile as well as the cineaste.

Indeed, it seemed incredible that the legendary, exquisite craftsmanship of the original Cremona and the Cremona Auditor could have been surpassed.

However, the recent launch of two new models with 'M' designations, along with a flagship speaker, the Cremona Elipsa, were inspired by that most astounding of transducers, the Stradivari. Thus, they are testaments to the fact that Sonus Faber's designers are in a constant process of perfecting the art of music reproduction, and of pushing the boundaries in the creation and engineering of awe-inspiring handcrafted works of art. These speakers are all the more precious because of their rarity, in a world characterised by so much automation and mechanisation.

The Auditor M, the smallest of the new Cremonas and the successor of the original Auditor, is a versatile two-way system ideally suited for smaller environments craving a large-scale musical picture. Its natural maple enclosure follows the Sonus Faber signature form of a lute in cross-section, while its components and final sound have been ear-tuned by the Sonus Faber team.

For larger rooms, the original floor-standing Cremona has evolved into the new superior Cremona M, which displays a more elegant, stylish finish and benefits from the introduction of new components.

Like their Homage siblings, both the Auditor M and Cremona M reflect the findings of Sonus Faber team's longstanding research, with attention paid to every detail, from small components, to wiring, to the drive units themselves. Equally, the aesthetics and external details have been refined to indicate a new stage in the speakers' evolution.

At the top of the new Cremona range lies the brand-new Cremona Elipsa, designed for the connoisseur with both the means and the environment to exploit a larger system. The Cremona Elipsa provides near-Stradivari performance in a more compact, economical package. Its sound is room-filling, open and natural, while its form is as beautiful as the speaker that inspired it. The Elipsa is, without question, another Sonus Faber masterpiece.



Sonus Faber CREMONA ELIPSA



Sonus Faber CREMONA M

For your nearest dealer contact:



absolute sounds ltd
58 Durham Road, London SW20 0TW
T: +44 (0)20 89 71 39 09 F: +44 (0)20 88 79 79 62
www.absolutesounds.com info@absolutesounds.com

Sonus faber.