

HI-FI WORLD

NOVEMBER 2009

UK £3.80

www.hi-fiworld.co.uk

FREE READER CLASSIFIED ADS IN THIS ISSUE!



EXCLUSIVE!

LEEMA TUCANA II & STELLO Ai500 amplifiers



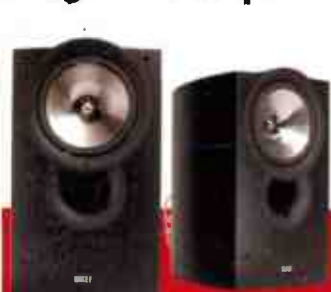
EXCLUSIVE!

CLEARAUDIO INNOVATION turntable



EXCLUSIVE!

SUGDEN MYSTRO integrated amplifier



SYSTEM SUPERTEST

Onkyo/Wharfedale, Rega/Naim/Guru and AuraNote/AudioSmile systems tested



EXCLUSIVE!

MERIDIAN SOOLOOS 2.0 & DSP5200

hard disk music system

- > CONSONANCE T988 UNIPIVOT TONEARM
- > ACOUSTIC ENERGY RADIANCE 3 LOUDSPEAKERS
- > PHILIPS FIRST GENERATION CD PLAYER FEATURING



COMPETITION WIN A ROTEL DCD-1520 CD PLAYER WORTH £695! (UK ONLY)

NOVEMBER 2009



58 Durham Road, London SW20

13 PAGES OF LETTERS - THE BEST KEF iQ30 LOUDSPEAKERS

"...a significant breakthrough in high performance audio."
The Absolute Sound, U.S.A.

"...performance that lifts them above the competition."
Hi-Fi News, U.K.

"...hits the sweet spot head on"
Stereophile, U.S.A.

"Black Velvet...a big 5 stars"
Sound & Vision, Greece

"...OUT-OF-THIS-WORLD GOOD."
Tone audio, U.S.A

"FIRST CLASS.."
Audio Review, Italy

"...from the first few notes, (you're) hooked.n"
Hi-Fi+, U.K.

"...what I heard blew me away."
The Audiophile Voice, U.S.A.

"A little champ of price/quality ratio: available at an affordable price, especially for atube amplifier of more-than-usual power.."
Audio Review, Italy

"PrimaLuna ProLogue One is now my'affiliate reference amplifier'. With apologies to various British and Italian geniuses, this amplifier has to my ears no equals at its retail price."
Hi-Fi News, U.K.

"A refreshing change from the transistor competition with a captivating presentation. Excellent finish and build quality makes for a package strong on value."
Hi-Fi World, U.K.



Prologue1 35 Watts Stereo Integrated Amplifier with EL34



Prologue2 40 Watts Stereo Integrated Amplifier with KT88



Prologue3 Dual Mono Valve Preamplifier



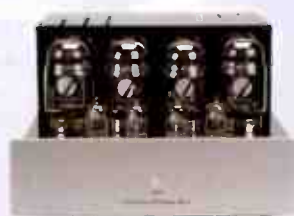
Prologue4 35 Watts Stereo Integrated Amplifier with EL34



Prologue5 35 Watts Stereo Amplifier with EL34



Prologue6 70 Watts Stereo Amplifier with EL34



Prologue7 70 Watts Stereo Amplifier with KT88



Prologue8 Valve CD Player



Dialogue1 36 Watts Stereo Integrated Amplifier with EL34



Dialogue2 36 Watts Stereo Integrated Amplifier with KT88

PrimaLuna

Music is a universal pleasure that should not be denied to anybody. So, too, the beauty of music reproduced by valves. To make available to a wider audience the seductive, silky sound of the vacuum tube, PrimaLuna has developed a range of all-valve amplifiers with the construction, power and sonic performance of high-end electronics, but with one unique, inimitable feature: prices that can only be described as 'entry level'!

Since the arrival last year of PrimaLuna's first model, the ProLogue One, the audio community has been unable to contain its joy nor reign in its praise, because PrimaLuna has revolutionized the whole concept of 'affordable audio.' Commencing with a pair of integrated amplifiers with prices more typical of mundane, solid-state products, PrimaLuna has shown other manufacturers that compromises in fit and finish, styling and facilities are unnecessary.

And PrimaLuna has shown the music lover that 'high end' performance and pride of ownership can be made available to aficionados on a budget. But don't take our word for it. Audition your preferred ProLogue or the newly-launched Dialogue models at the PISTOL Music dealer of your choice. And prepare your wallet for a pleasant surprise!

WE ARE THE UK'S FASTEST GROWING AUDIO TITLE!!!

welcome

EDITOR

David Price
tel/fax: +44 (0) 1275 371 386
e-mail: editorial@hi-fiworld.co.uk

DESIGN EDITOR

Faiza Chunara
tel: +44 (0) 20 7625 3129
e-mail: adproduction@hi-fiworld.co.uk

PRODUCTION EDITOR

David Noble
tel: +44 (0) 20 7625 3134
e-mail: classifieds@hi-fiworld.co.uk

ADVERTISING

tel: +44 (0) 20 7372 6018
Mob: +44 (0) 7917 047 546
email: advertising@hi-fiworld.co.uk

ADVERTISING DIRECTOR

Debi Silver
tel: +44 (0) 1723 500 435
mob: +44 (0) 7966 84 35 36
e-mail: debisilver@hi-fiworld.co.uk

ACCOUNTS

tel: +44 (0) 20 8841 8892
fax: +44 (0) 20 8841 9144
e-mail: accounts@hi-fiworld.co.uk

PUBLISHER

Noel Keywood
e-mail: publisher@hi-fiworld.co.uk

FREE READERS CLASSIFIEDS

tel: +44 (0) 20 7625 3134
e-mail: classifieds@hi-fiworld.co.uk

SUBSCRIPTIONS

tel: +44 (0) 1442 879097
fax: +44 (0) 1442 872279
e-mail: hifiworld@webscribe.co.uk

PHOTOGRAPHY

David Noble
tel: +44 (0) 20 7625 3134

WRITERS

Tony Bolton, Patrick Cleasby, Steven Green,
Tim Jarman, Paul Rigby, Adam Smith.

hi-fi world

SUITE G4, ARGO HOUSE
KILBURN PARK ROAD
LONDON NW6 5LF
www.hi-fiworld.co.uk

verdicts

- ● ● ● ● OUTSTANDING
- ● ● ● EXCELLENT
- ● ● GOOD
- ● ● ● ● MEDIOCRE
- ● POOR
- £ VALUE



If there's one thing I've learned in my fifteen years writing about hi-fi, it's that whilst products are always reviewed in isolation, they're never used in the same way. Brilliant as your new award winning CD player may be in theory, in practice (in your system) it could sound precisely the reverse...

That's why this month's issue looks at a number of well matched systems, from the £16.49 Tesco MC-907 [p25] to the £13,740 Meridian Sooloos 2.0/DSP5200 [p10]!

While the former is a bit of fun, the latter is an innovative hard disk based music centre with a superb full size graphical touchscreen interface, and surely the shape of things to come?

Along the way, we've come up with three different affordable systems [p15], including a brilliant new Onkyo line-up of separates, including one of the first iPod docks to give direct digital output. The Rega P3 turntable based system featured is a return to eighties minimalism, and sounds all the better for it. And my own choice uses the lovely AuraNote Premier music centre as its heart, which performs as well as it looks. Importantly, all three match their ancillaries brilliantly, giving a sonic performance that's more than the sum of the parts.

Elsewhere, we run through a range of great new products, including the super new Leema Tucana 2 high end integrated amplifier, which finds itself sharing a room with Stello's Ai500 [p26]. Moving down the price range a little, I couldn't help but be beguiled by Sugden's Mysterio [p66], which is a super new Class AB powerhouse.

Big speaker fans will love Acoustic Energy's chunky new Radiance 3 floorstanders [p32], but if that's not big enough then we remember the classic Klipschorn [p56]. Lovers of classic kit will also enjoy our brief sojourn back to the nineteen eighties, where we sample the very first ever Compact Disc player, the Philips CD100, and tells its interesting tale [p62]. Analogue addicts will enjoy their usual fix of hardware this month too, via Clearaudio's superb new high end Innovation turntable [p100] and Consonance's great value T988 unipivot tonearm [p104].

All in all, November's another bumper issue, packed with great kit, new and old. Perfect as those long dark nights draw in - enjoy!

David Price, editor



testing

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

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

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

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



ELECTRONIC MAGAZINE

Go to our website www.hi-fiworld.co.uk to buy an electronic version of this magazine, individual issues or a subscription. At present we do not offer back issues, but hope to soon.

Distributed by Seymour Distribution Ltd 86 Newman Street London, W1T 3EX Tel: +44 (0) 20 7396 8000 Printed by St.Ives, Plymouth Tel: +44 (0) 1752 345 411
Our Agents in Malaysia Millennium Hi-Fi & AV Simon Chang Showroom & office, 500-1-3 First Floor Wisma Indah (Shen Court), Jalan Tun Razak 50400 Kuala Lumpur, Malaysia
Tel: 603 9283 8171 Fax: 603 9281 3762 e-mail: info@millennium-audio.com

All unsolicited submissions and goods are at the owner's risk. We accept no responsibility for such submissions, nor do we undertake to return them.
No material may be reproduced from this magazine without the publisher's written permission. © Audio Publishing Ltd

15

AuraNote's Premier music system is David Price's choice for the system supertest...



66

Sugden's new Class AB amp is a jewel, thinks David Price.



10

Meridian's latest Sooloos 2.0 music server delights David Price!

26

Tony Bolton puts Leema's new Tucana 2 against rival Stello...



32

Acoustic Energy's new Radiance 3 floorstander impresses Noel Keywood.



100

Gorgeous new Clearaudio Innovation wins over Adam Smith!

SYSTEMS

MERIDIAN SOOLOOS 2.0/DSP5200 10

David Price tries out this superb new high end HDD based music server and digital loudspeaker combination.

SYSTEM SUPERTEST 15

This month, Patrick Cleasby, Adam Smith and David Price assemble three great affordable systems...

ONKYO NS-D1/C-S5VL/A-5VL/WH. 10.1 16

REGA P3-24/NAIM NAIT 51/GURU QM10 18

AURANOTE PREMIER/AUDIOSMILE KENSAI 20

TESCO MC-907 25

Adam Smith tries a complete mini system for the paltry sum of £20, or less!

AMPLIFICATION

LEEMA TUCANA 2 & STELLO AI500 26

Tony Bolton pits Wales against South Korea in this premium integrated amplifier face-off!

ROTEL RC1580/RB1582 58

Noel Keywood samples an affordable pre-power amplifier combination.

SUGDEN MYSTRO 66

David Price tries a super new Class AB integrated from Yorkshire.

DIGITAL

PHILIPS BDP3000 38

Noel Keywood reviews the latest budget Blu-ray wonder from Eindhoven.

14X4 PLAY 62

Tim Jarman remembers the early days of fourteen bit Compact Disc.

ROCKBOX 81

Patrick Cleasby tries this alternative FLAC-enabled iPod operating system.

LOUDSPEAKERS

ACOUSTIC ENERGY RADIANCE 3 32

These big floorstanding speakers get the nod from Noel Keywood.

FEATURES

OLDE WORLDE 56

Haden Boardman remembers the mighty Klipschorn loudspeaker.

WHITTLEBURY SHOW PREVIEW 72

Noel Keywood previews this forthcoming hi-fi show.

VINYL

VINYL NEWS 98

Paul Rigby with all the latest black plastic releases.

CLEARAUDIO INNOVATION 100

Adam Smith tries a super new high end turntable.

CONSONANCE T988 104

This affordable unipivot tonearm from China gets a review from Adam Smith.

SIMAUDIO MOON LP3 107

Paul Rigby auditions a fine new affordable phono stage.

MICHELL REFOCUSED 110

David Price walks you through the rebuild of this classic tonearm.



6 NEWS

Words from the front...

37, 71 SOUNDBITES

Tim Jarman samples the Tangent Uno FM radio, and Patrick Cleasby tries Yamaha's PDX-30 iPod dock and Sennheiser's HD218 headphones.

43 MAIL

A bumper thirteen pages of your views and queries this month!

73 COMPETITION

Your chance to win a superb Rotel RCD-1520 CD player worth £695!

75 WORLD CLASSICS

Our favourite classic bits of kit through the years...

82 SUBSCRIPTIONS

Ensure your copy every month and save money too!

84 AUDIOPHILE VINYL

Paul Rigby rounds up the latest audiophile releases.

89, 91, 93, 95, 97 OPINION

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

120 DIAL-A-DEALER

A comprehensive guide to UK hi-fi retailers.

123 FREE READERS CLASSIFIEDS

Three pages of second-hand bargains.

128 NEXT MONTH

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

129 ADVERTISERS' INDEX

130 CLASSIC CUTS

Paul Rigby remembers Linda Ronstadt's 'Heart Like a Wheel'.

news

ALL THIS TIME

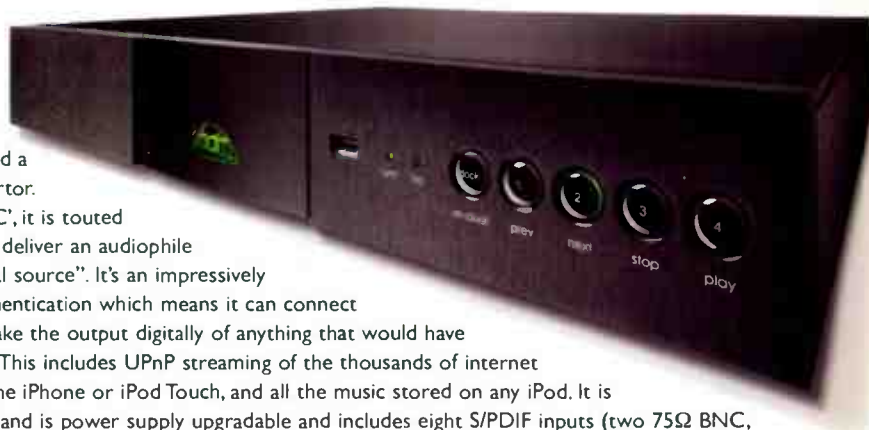
After a not inconsiderable period of years, Naim Audio has finally launched a standalone digital-to-analogue convertor. Somewhat self-effacingly named 'DAC', it is touted as "a true high-end product that can deliver an audiophile performance from virtually any digital source". It's an impressively flexible device, possessing Apple authentication which means it can connect digitally to any iPod or iPhone and take the output digitally of anything that would have been sent to the headphone output. This includes UPnP streaming of the thousands of internet radio stations available via apps on the iPhone or iPod Touch, and all the music stored on any iPod. It is claimed to have "zero S/PDIF jitter", and is power supply upgradable and includes eight S/PDIF inputs (two 75Ω BNC, two RCA and four TOSLINK (EIA) optical)). The Naim DAC also includes a USB (Type A socket) on the front and rear panels, giving USB memory stick playback and fully authenticated digital connection from an iPhone or iPod.

The DAC is designed in such a way that the master clock is not recovered from the S/PDIF signal as in most other DACs. Instead, the incoming audio data from S/PDIF is stored in solid-state memory and then clocked back out to the DAC chips using a fixed-frequency local master clock. This eliminates jitter caused by S/PDIF, Naim says. In essence the memory, master clock and DAC structure behaves in a similar manner to the CD, master clock and DAC structure of a CD player. The Naim DAC's high-speed DSP (digital signal processor) front-end is electrically isolated from its high-resolution DAC and analogue circuits. The two sections are also run from separate power supplies, reducing the effect of RF noise from the S/PDIF circuitry on the DAC stage.

Naim's buffer method of jitter removal relies on a simple concept: the audio data is clocked into the memory at the incoming inconsistently-timed rate, and is then clocked out of the memory and into the DAC chips using a precise clock. The rate at which the memory fills and empties is controlled by selecting the master clock that best matches the average incoming clock frequency. In this way, the data entering the DAC chips is completely isolated from the incoming jitter. This is handled by a powerful SHARC DSP chip running unique Naim authored code to create an ultra high precision 40bit floating point filter, which oversamples by 16 times on 44.1kHz data and provides stop-band attenuation of 156dB with virtually no pass band ripple, Naim says. Following the digital filter are the DAC's two mono Burr-Brown PCM 1704 digital to analogue converters, as used in the CD555 CD player. Finally, the Naim DAC features a high performance fully discrete analogue output stage.

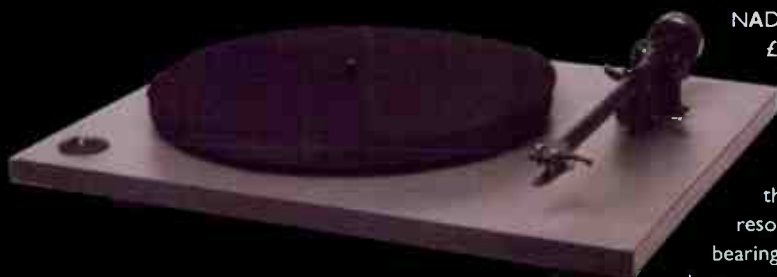
Hi-Fi World got a sneak peek of the Naim DAC in the company's Salisbury headquarters in mid August, and can report very positive findings. It's an extremely clean and detailed performer. Whilst not the most romantic sounding of devices, there's very little sign of its digital nature. Everything is tidy and smooth, yet explicitly detailed and musically engaging too. We were particularly impressed with what it can do to an iPod; we heard playout from an iPhone, running a direct digital connection via the universal dock connector, and the Naim DAC made a fine musical fist of things. The DAC even has fascia-mounted 'transport' controls for the iPod, to make navigation easier.

For more information, click on www.naim-audio.com.



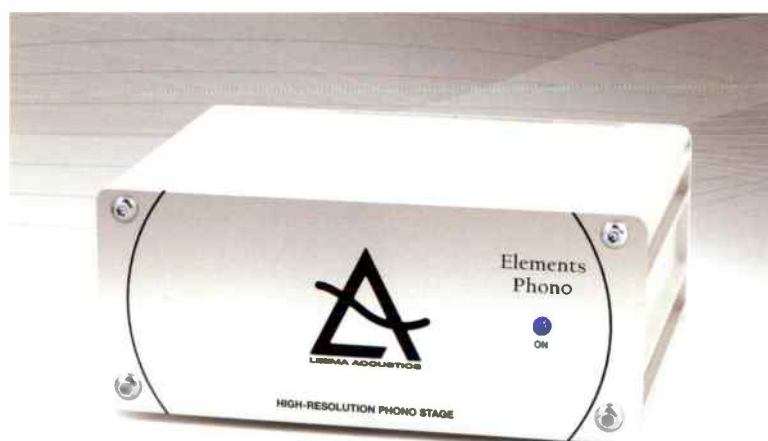
MORE FOR LESS

NAD's C552 turntable now comes with an Ortofon OM5E for just £275, representing an £85 saving over the previous price. It's a decently built little thing with a non-resonant polystyrene dust cover, rigid plinth and specially designed isolation feet to filter out unwanted vibrations. The precision AC synchronous motor drives the platter via a synthetic rubber belt to isolate the record surface. The platter itself is made of a special non resonant MDF material, and comes located on a precision machined bearing utilising a steel shaft that sits upon a hardened steel ball at the bottom of a brass sleeve. The tonearm offers fine geometry; the statically balanced design also incorporates a linear magnetic anti-skate compensator for ideal tracking characteristics across the entire playing surface of the record. For more information, see <http://nadelectronics.com>.



REVO-LUTIONARY

Revo's Ikon is described as "a multi-format digital radio that combines the benefits of a full colour 3.5" touchscreen, icon-driven user interface, multi-standard radio capabilities and iPod and iPhone docking". It's capable of receiving the full roster of digital radio standards including DAB, DAB+ and internet radio, as well as conventional FM radio with RDS. It will also wirelessly stream digital music files from any 'connected' PC or Apple Mac, displaying full colour album artwork and track information where available. Completing the hardware picture, Ikon is one of only a handful of digital radios that is Apple certified for use with iPod or iPhone, allowing IKON to double as a high quality iPod/iPhone sound system. In addition to its terrestrial and internet radio capabilities, it will also provide access to online music service Last.fm. It also sports NXT's patented 'Balanced Mode Radiator' (BMR) loudspeaker technology. BR drive units combine the performance attributes of an NXT flat panel speaker with the pistonic movement of a conventional loudspeaker, resulting in a high performance compact drive unit that can cover a wider range of frequencies while providing room-filling sound. This is allied to 30 Watts of Class D power. Price is £279.95, and it's on sale from October 2009; a pre-order service is available from www.revo.co.uk.



ELEMENTARY

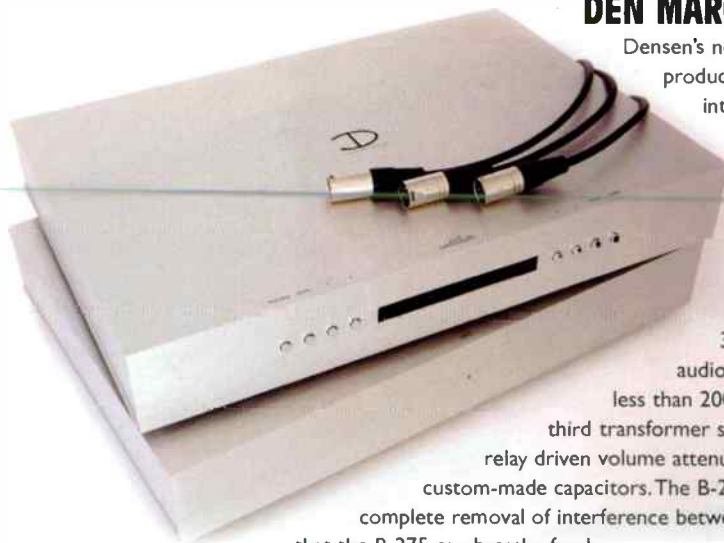
Leema Acoustics have launched a new baby phonostage based on their flagship reference Agena. The circuitry inside the Elements Phono is very closely based on that within the Agena, causing Leema to describe its performance as "simply astonishing at this price point". The Elements phono is switchable for use with both moving coil and moving magnet cartridges and includes a switchable low frequency filter. The low frequency filter only operates below 20 Hz to stop the by-product of warped records and turntable motor or bearing noise. The 110x48x100mm box costs £495. Watch out for a review of the flagship Agena in the next issue of *Hi-Fi World*. For more details, call +44 (0)1938 811900 or click on www.leema-acoustics.com.

DENON TWEAKS

Denon's new PMA-710AE integrated amplifier and DCD-710AE Compact Disc player have been designed for pure, high quality audio playback and amplification, the company says. Both models benefit from an extensive European sound tuning, and feature special technologies "for the maximum audio experience in their class and beyond". The PMA-710AE integrated stereo amplifier is equipped with an HC (High-Current) Single Push-Pull Circuit that delivers delicate musical details, which are backed up by plenty of power. Faithful reproduction of the original recording is also made possible by a circuit board layout that can handle greater power from the amplifier section and appropriately respond to the output level and unique character of the signal, it is claimed. In addition, the internal construction of the PMA-710AE has been designed to prevent unwanted vibration adversely affecting the audio signal. The DCD-710AE CD player sports a USB port for digital input from an iPod or USB memory stick, Denon's AL24 Processing analogue waveform recreation technology, plus "highly accurate D/A converters and DAC master clock design". The PMA-710AE and DCD-710AE are available now in premium silver and black colour at a suggested retail price of £349.99 each. For more information, call +44(0)2890 279830 or click on www.denon.co.uk.



DEN MARQUE



Densen's new flagship B-275 preamplifier is described as "the first Superleggera product from Densen". The 'super light weight' design divides the preamp into two sections, allowing the audio circuit to be totally separated from the power supplies mechanically, resulting in a dramatic removal of the power supply vibrations which will smear the signals of a normal amplifier, the company says. In the B-275 the huge power supply has its own cabinet, while the delicate audio circuit is in the Superleggera cabinet, where everything possible has been done to reduce weight and vibrations. The power supply of the B-275 is placed in a cabinet named 2NRG. The 2NRG contains no less than 3 custom-made transformers, each with 2 separate windings. Each audio channel of the B-275 Superleggera has its own transformer and no less than 200.000uF and rectifying by the use of ultrafast and precise diodes. The third transformer supplies the microprocessor, display, input selectors and the advance relay driven volume attenuator. All in all the 2NRG has no less than 510.000uF in the form of 51 custom-made capacitors. The B-275 Superleggera itself contains further voltage regulation, allowing a complete removal of interference between each part of the amplifier. The result of all this care, says Densen, is that the B-275 can breathe freely.

Densen's unique non-feedback single ended Class A topology is used, "for a transparent, dynamic, refined and musical sound". An advanced ultra precise attenuator is used, implemented with Vishay 0,1% laser trimmed metal film resistors, a microprocessor takes care of the display, remote, input selector and DenLink multi-room system, as well as calibrating the attenuator to the listening level desired by the listener. Interestingly, there's the option of an analogue surround board that expands the B-275 to a true 7.1 analogue preamp, "securing a precise and straight signal path for users who wants to upgrade the B-275 with a DVD or BluRay". Audiophiles wanting to use the B-275 with a turntable can convert one of the line inputs to either a MM or MC RIAA input by the purchase of a dedicated phono stage to insert in the B-275. The circuit is implemented using surface mount device technology, and the parts are the best possible, resistors being Vishay metal film, the transistors being ultrafast and precise types, while the capacitors are conventional leaded capacitors but are Densen custom-made film capacitors for the critical parts of the circuit. For more information, click on www.densen.dk.

OPEN UP

Sennheiser's HD238 Precision is described as "a hi-fi-oriented open back headphone design, that will extract the best from all sources, as long as it is used appropriately in a quiet environment. The new £70 Sennheisers are said to be "light and incredibly comfortable", thanks to new compact soft flat earpads. The stylish design with a sleek black metallic finish folds flat for easy portability, and sports exchangeable earpads for durability. A carrying pouch included for storage and protection, and there's a two year guarantee. Powerful neodymium magnets and patented Sennheiser Duofol low-resonance diaphragms give a claimed 16-23,000Hz, with a THD of 0.5% (1kHz/100dB), plus a sound pressure level of 114dB (1kHz/1Vrms). Impedance is 32 Ohms, total weight 286g and the cable length is 1.4m. For more details, call +44(0)1494 551 551 or click on www.sennheiser.co.uk

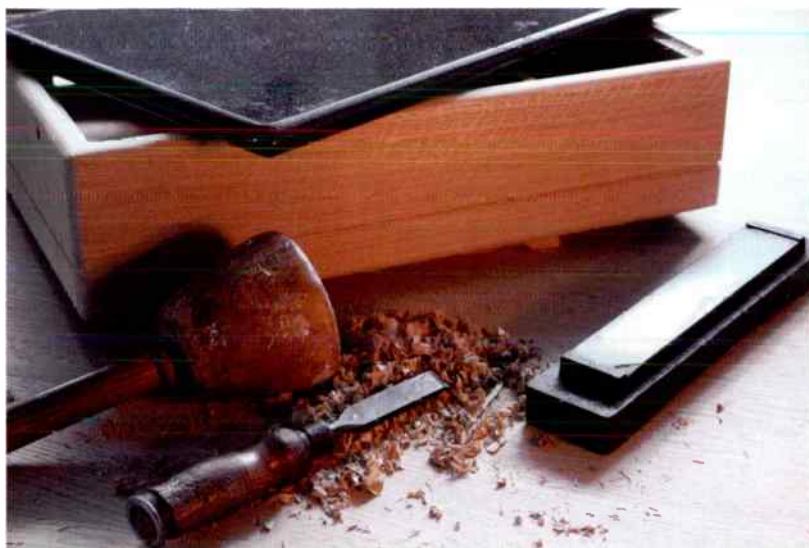


LEATHER FUN

Teac's SR-2DAB is described as "a good-looking table top high-fidelity radio offering iPod and iPhone dock replay and FM/DAB/RDS broadcast for around just £150". Housed in an acoustically sound wooden cabinet, with a black leatherette finish and a large striking blue LCD display with 3-step dimmer and light-off, the SR-2DAB boasts a number of facilities not normally found in products at this price. There's a preset station memory, wake to either iPod/iPhone or tuner, digital clock, calendar, dual-alarm, snooze, sleep timer and a preset equaliser for rock, pop, classical, jazz, bass or normal listening. Complete with headphone jack, independent speaker chambers with bass reflex-port, remote control and iPod Dock adapters, the SR-2DAB is said to "offer excellent value and outstanding performance in a smart table-top system". For details, contact Teac on 0845 130 2511, or click on www.teac.co.uk.

WHITEHALL SUPER POWER

Whitehall-based MyAudioDesign has "invented a second-to-none handcrafted English Oak granite box" called Balanced Power Isolation Platform, which serves two functions. First, it is said to clean-up your mains electricity supply, and secondly it isolates your power amplification equipment from vibration and acoustic feedback. This device is co-developed by the Whitehall based MAD and "a world leading power laboratory in Cambridge". Unlike inefficient Power Regeneration products, the BPIP runs at ninety-plus percent efficiency and only deals with whatever is necessary to correct the impurity of your mains. "The improvement is not obtained at the expense of dynamic transient attack; you should expect an almost palpable silence, a much quieter background", the company claims. This Whitehall super power retails at £895, and comes with a thirty day money-back guarantee. For more information, click on www.madengland.com or call +44(0)7782 137868.



ONE STOP STATION

The £1,295 Arcus Incatcare Music Station is the entry level product in a new-to-the-UK range from a German two channel specialist of thirty years standing. Sporting a built-in hard disk for music storage, Ethernet connectivity and many more features, it is described as being ideal for "the large group of consumers who do not wish to use their computer for hi-fi, who don't have home-based networking technology". It does not require network access and therefore makes it extremely simple to rip CDs to hard disk, the company claims. It sports an inbuilt stereo amplifier, so just add loudspeakers and go! For more information, click on www.arcus-highend.de.

SOFT MACHINES

Linn has launched new DS software claimed to "take digital streaming to the next level". It sports a brand new 'drag and drop' user interface, improved integration with iTunes music library, quick and easy access to new online listening sources, (e.g. BBC podcasts), and the new web-based configuration makes system set-up even simpler, says Linn. Linn Cara, a new family of software, "enriches the way Linn DS owners interact with their music collection, and lets them do more than ever before", the company claims. The new user interface is called KinskyDesktop, said to provide a Linn control solution that lets Linn DS owners browse their music by Album Cover Art, save playlists on their individual computers for later use and listen to new content including iTunes music files (AAC and ALAC) and radio podcasts. A new plugin feature provides an easy method of browsing and downloading new sources of content online as they become available, such as BBC radio podcasts and internet radio. KinskyDesktop also lets owners play their music for as long as they like in a random order using the 'shuffle' function. Users can also preset their favourite songs, artists, genres or radio stations by specific numbers. Downloading the new Cara software could not be easier; Linn DS owners should visit www.linn.co.uk/ds_software. To find out more about the full range of Linn products, click on www.linn.co.uk, or call 0500 888 909.



CLEAN EASY

Blue Horizon's Clean-IT is said to be an advanced contact-enhancing solution that cleans, conditions, lubricates and preserves audio connections to improve sonic performance. The electrical contact-enhancing fluid is specially formulated for use with audio and AV equipment. Clean-IT features a fast acting deoxidising solution that cleans, conditions, lubricates and preserves, improving the conductivity of all metal connectors and contacts. It is suitable for use on all metals that are used to make electrical connections, including gold, silver, rhodium, copper and nickel. Price is £17.95 per bottle. For details, click on www.bluehorizonideas.com.

SHOWTIME

Manchester is the place to be in October, thanks to the forthcoming Sound and Vision Show, held on Saturday 17th and Sunday 18th, at the Renaissance Hotel, Deansgate, Manchester.

Over fifty key brands are now booked (at the time of writing), and entrance fee is a mere £6. Said to be the biggest and best show held in the north of England, it is run by the newly expanded Audio-T group. For more information, click on www.manchestershow.co.uk.



Record Breaker

With its massive storage capacity, intelligent cataloging and powerful search facilities, there's not much that compares to Meridian's latest Soolos 2.0 music system, here reviewed with their DSP5200 loudspeakers. David Price adjudicates...

"Plus ça change, plus c'est la même chose", as our friends across the water so eloquently put it. As the way we play our music has evolved from records formed from beetle resin to vinyl, then to smaller aluminised polycarbonate discs, computer hard drives and now bytes flying down telephone lines, the sole guiding principle has been convenience. Every time a new format has been introduced, it has got easier to use. Not necessarily 'better', but unarguably more practical. Whereas eighty years ago, we'd be cranking a handle and changing a needle before every side of a gramophone record, it's now merely a case of shaking a mouse and clicking the button. Despite the rapid pace of techno-

logical change, there's always the expectation that things will get easier for us. Convenience is what human beings have always craved and always will, which is why I'm in no doubt that someday, (nearly) all hi-fi systems will be like this...

Right now, we're moving headlong into hard disk based music storage and computer-based playback, with a large number of systems now available. At its most simple, slotting your CDs into your computer and watching as iTunes or Windows Media Player does its job will let you turn your Mac or PC into a 'music jukebox'. For those wanting greater sophistication, you can stick with the same hardware and software, but play the signal out via your USB socket to a DAC like Cambridge Audio's DACMagic. This will certainly improve the sound, but you're still stuck with

wires. For this reason, the fashion is now to 'network' your music, using your computer as the 'hub' (to store the music) and syncing it via Wi-Fi to a network music player such as Squeezebox. This works well, gives good sound (especially if attached to a DAC), but still many are left wanting more.

There are plenty of choices for such folk; Linn do great-sounding DS systems to play out the music off your computer, and devices such as Illustrate's RipNAS are super one box CD ripping and storage devices. Together, they're a powerful pair, but hang on, where's the convenience aspect of this? Wasn't the great scheme of things supposed to hold that every advance in audio improves the user experience? If you've tried fiddling with Twonky software on a clunky old PC in an effort to get your

Linn DS system up and running, you may start to wonder if computer-based audio is a retrograde step. It's precisely here that Meridian's Sooloos steps in...

Unlike the Linn DS platform, Sooloos is emphatically *not* an enthusiast's product. Actually, I'll rephrase that; it's not a computer geek's product, nor a hi-fi nut's. But it most certainly is a music enthusiast's dream. It's a 'one stop solution' for storing masses of music in one place, and then providing hitherto undreamed of access to it. And by this I don't just mean big pictures of an album's cover art on your PC screen. Rather, Sooloos is designed to be easy to use for all human beings, and fiendishly clever too.

The thing is, practically every 'computer audio' device to date has suffered from the following problems. First, the user interface isn't terribly intuitive; it usually entails scrolling through long lists of text, often via a mouse or the cursor keys on a computer keyboard. If you can bypass the computer, then it generally involves having to hook the system up to your television, or buying an additional gadget such as a Nokia media tablet (which, of course, you've then got to set up). Second, those long lists of songs are nothing more than a long list of files. Not cutting edge stuff, is it?

Sooloos was developed to solve both these problems, which means a bespoke touchscreen linked to a graphical user interface. It also means that, should you so wish, you can search by far more than artist and song titles. 'The Sooloos difference', as they'd call it if it were a nineteen seventies washing powder, is that it goes off and does some detective work in the background, while it's ripping or playing your CDs, and comes up with a considerable amount of what geeks call 'metadata'. This is information about the disc, that contains vast amounts of extra stuff. Every time you rip a CD, Sooloos goes and asks no less than five different databases, "exactly what disc is this, and precisely who was involved in its creation?"

The result is that, instead of just telling me I've inserted a copy of Prefab Sprout's 'Steve McQueen' into its CD slot, giving me the song titles, the year (usually wrong) and the type of music (i.e. "alternative"), the Sooloos will tell me all this, plus that fact that the album is produced by Thomas Dolby, has Kevin Armstrong playing guitar and Matthew Seligman on bass. And sure enough these masters of their craft also appeared on Dolby's 'Flat Earth'

album he released a couple of years earlier, if it's also found on its hard drive. So you suddenly have a sort of electronic 'rock family tree' that looks for connections between songs in your music collection.

The Sooloos stores massive amounts of metadata on every CD you feed it, without you having to ask it, and sources it from a range of online resources. You can then search the Sooloos for connections between artists, session men, producers, years and so on, better than any other system of this type I've tried. For example, the Sooloos I was lent had a number of albums preinstalled (2,653 to be precise), and as soon as I loaded my 4hero 'Two Pages' CD, I found a couple of other CDs the two main 4hero protagonists had been involved with, that I'd never heard of before. Suddenly I was deeply immersed in these, listening to music I'd never known existed, but absolutely adored.

In a nutshell then, Meridian's Sooloos is a compact, single-package hard disk-based music system with unusually powerful search and playback facilities, yet it's designed to run seamlessly and with minimal effort on the part of the user. It's also designed to give excellent sound quality, and to interface with any DSP-series Meridian digital active loudspeaker system, and to be fully controllable via the Meridian system remote. It's not 'computer audio' as such, nor is it trying to be hi-fi; rather it's an ultra flexible music system that simply gets on with the job of playing music, and bringing you closer to it.

Now, knowing some of our readers, I can see how this might be a huge disappointment. Sorry if you're left in despair by not having to download any drivers, or nonplussed by not needing to reboot your network router or fiddle endlessly with a NAS drive! If piffing considerations of who recorded what classic album with whom and when don't quite hold the allure of fiddling with your interrupts and interrogating your IP address, then best turn the page now!

BACK TO BASICS

In its purest form, the package consists of control, storage and playback systems. Starting with the user interface, Meridian provides a very good quality high resolution 17" LCD touchscreen, encased in a beautiful bit of metalwork. It also sports a slot-loading CD drive, which is where you put your CDs. Known as 'Control 10', it costs £3,995. As well as offering the touchscreen, the system can also be accessed and/

or controlled from any computer, iPhone, or iPod Touch too, should you so wish.

Next is the storage module, called Twinstore. In standard form it costs £1,995 and comprises a swish aluminium box which contains two 1TB hard disk drives, which store approximately 2,400 CDs and automatically back them up invisibly to the user. Additional units can be connected for collections larger than this, or a simple Network Attached Storage (NAS) device can be attached for a couple of hundred pounds.

The Control 10/Twinstore is therefore a complete control, display, storage and play out system, just as a CD transport would be in the olden days. As it only outputs a digital signal, if you don't have a DAC you'll need a Source One analogue output stage (£2,795) for stereo (2.0) users or Source Five (5.1) multichannel output (£3,495). The other alternative is of course a pair of Meridian digital loudspeakers, such as the new DSP5200s I elected to use (£6,750).



For *Hi-Fi World's* purposes, aware that money's too tight to mention these days, even for your typical yacht-owning potential Sooloos purchaser, we opted for the Ensemble. This is a simple Store operation unit with 1TB of storage (priced £2,995 and £146.81 respectively), the idea being that you can buy another separate 1TB HDD drive, and run it as a NAS for backup. This has the Source Five board, so it



sports analogue outputs, so it's basically a 'plug and play' display, control and playback system for around £6,200. Now, considering a Naim HDX costs the wrong side of £4,000 and doesn't include a full sized display screen, the

Meridian Sooloos Ensemble begins to look rather better value.

This, the latest 2.0 incarnation of Sooloos, is the most powerful yet. The new Control 10 unit can be combined with a Twinstore alone to create a complete system, linked to Meridian DSP active loudspeakers. The system can now be controlled from any Windows, Macintosh, or Linux computer on the same network. At the same time, speakers connected to these computers can output music from Sooloos, acting as a local playback 'zone', so it's truly multi-room enabled. Very usefully, the system can now be accessed through any web browser (it can now be controlled from Firefox, Internet Explorer, and Safari on Macintosh,

latest firmware and transposing your existing digital music collection to the Sooloos. This even includes digitising your CD collection, so once bought, your dealer will do his best to get your silver Frisbees onto the hard drive. Obviously you can then add more as you go along; no need to go back to the shop as you just have to 'mail' your new CD through the slot in the Control 10, whereupon it rips it in the background.

The Sooloos 'records' everything in FLAC, which is chosen not just for its sound quality (and space efficiency) but for its powerful metadata system which is embedded with the file itself. But the system automatically provides you with an MP3 copy for good measure, to play on your digital portable (iPod included). The result is a seamless and simple transfer of music to iPods, iPhones and other portable music players with no special set-up required. Equally, all music file formats found on your existing music computer will be imported and identified, acquiring the metadata with its automated tools as per any other music file.

My Sooloos experience started with Meridian's Roland Morcom arriving with four boxes, two of which contained DSP5200 active

entering. The touchscreen system then gives you a list of the tracks, together with a convenient 'play all' option. It's all instantly controllable by light touches on the screen, easy as pie. There are additional search options of course, such as genres, credits, tags, moods, review. One touch of credits prints a complete list of who did what, so for Grace Jones's 'My Jamaican Guy', I see that Chris Blackwell is credited as producer (of course I knew that!). So 'touch' his name and the system asks me if I'd like to focus on Chris Blackwell? Yes, I reply, and suddenly it has shown me a long list of albums on the system that he's produced, from Bob Marley to Black Uhuru. All I do is touch the cover art corresponding to the CD(s) and it asks me if I'd like to play this next. Brilliant!

In traditional terms, Sooloos is like having the world's coolest big brother. He's the university student who's spent two years worth of grant (remember them?) on LPs in his local independent record shop, and has read every copy of NME and Rolling Stone since 1967. He knows all about Neil Young's 'Expecting to Fly', and what the connection is to Crosby, Stills, Nash's 'Country Girl'. He knows when and why Tom Tom Club's 'Genius of Love' was covered by David Byrne. He knows Trevor Horn was a session bass player for Tina Charles years before the Buggles, and what his connection is with variously, Pet Shop Boys, Dollar and Seal. Oh, and how about Stewart Copeland and Curved Air? Say no more! Like that mythical heroic older brother who fills you with music trivia from morning to night, letting you make connections you never knew existed, Sooloos not only entertains you but educates you too.

The system's not perfect of course; like any computer it's a case of 'garbage in, garbage out'. In the 'review' section, Grace Jones's superlative 'Island Life' compilation is rated as having one out of five stars with a perfunctory review of it describing as "typical of 1970s European Disco mush" by the hapless Andrew Hamilton (who he?). Obviously not all the metadata it scoops up from the internet is of the highest quality, then! Luckily, you can edit it; my copy of 'Island Life' rapidly acquired an extra four stars...

The system's flexibility is second to none; I've not come across any such hard disk music system that's anywhere near as powerful, or as engaging from a muso's point of view. It's so informative that I half expected it to start issuing voice commands at me from the speakers to go and

"the Sooloos crosses over from the niche market to the mainstream music lover who doesn't give a fig about FLAC and doesn't want to know about networking..."

Windows, and Linux platform), so you can listen to your music anywhere with a high-speed internet connection; your entire Meridian Sooloos music library is now available via the internet. The dedicated Control PC and Control Mac programmes offer the same control benefits as web browsers, with the addition of full CD importing, file importing, file exporting, and manual backup from any Macintosh or Windows computer on the network. The system now supports the import of FLAC, WAV, MP3, AAC, and Apple Lossless files, at any word length and sample rate up to 24bit, 96 kHz.

GETTING GOING

Given the not inconsiderable sum of money the system costs, it would of course be installed free of charge by your friendly Meridian dealer. The service includes delivery of the unit to your home, hooking it up to your home network, installing the

loudspeakers, while the other two held the Control 10 screen and Ensemble drive box. Having hooked it up to my Wi-Fi router, we were off. Roland asked me if I was doing anything fancy with my router, to which I replied, "errr, what do you mean? I use it to go on the interweb". The ignorant and vague nature of my reply reassured him, he told me. Apparently if you're a super tech geek who has his router configured in a weird and wonderful way then it can take a little longer to set up Sooloos, but if you're a duffer who paid someone from PC World to come and install it like me, then the chances are the Meridian will work 'out of the box'. And so it did...

It takes about a minute to switch on a proper, after which time you're presented with a screen with the artwork of any CDs already loaded. It's easy to use; you just 'push' the screen on the CD cover you want to play; no mouse scrolling or text

buy this or that CD from Fopp, next time I go into town! It's certainly the closest I've come to those old booze-fuelled late teenage sessions I used to have with my friends in my student digs, running from my record box to my LP12, hand cueing a new track on a different LP every five minutes, whilst authoritatively announcing to my captive audience, "and then Josef K recorded this, after hearing Edwyn Collins record this..."! It's a dreamboat for music completists, anoraks and aspiring trivia merchants - who I suspect comprise a sizeable majority of *Hi-Fi World* readers.

SOUND QUALITY

Unique as the Sooloos's music management system may be, ultimately it's a hard disk based music player, the like of which can be purchased far less expensively from other sources. With this in mind, it needs to be able to deliver serious hi-fi sound as well as doing all its other tricks.

The first issue with the system is the cooling fan noise from the Ensemble unit. It is quiet, but it is there all the same. Also, every now and then, the Sooloos is prone to make clicking noises which issue forth from the hard drive heads. Again it's not often but I would have expected a quieter hard drive to be fitted; maybe this isn't possible with drives of such large capacity at the moment, but here's hoping Meridian will work towards an even quieter product. If my MacBook Pro can barely ever make a squeak, the same should go for the Sooloos.

Fortunately when this new Meridian finally gets a push of the play button, as it were, things get dramatically better. I started by running the Sooloos out to the coaxial digital input of a Stello DA100 Signature plugged into my normal reference system, and got great results. 808 State's 'Plan 9', a somewhat dense slice of electronica that can easily sound muddled, came over with spry clarity and surprising stage depth. Bass was full and fruity, whilst sounding very supple and expressive too. The midband was clean and detailed without sounding sterile, and there was an awful lot of detail, while treble was nicely smooth and atmospheric. I then moved to my old stalwart test track, 4hero's 'Escape That', but using the search system, I quickly noticed and then pulled up another song on the system I hadn't known, Fragile State's 'Every Day a Story (4hero Electric Remix)'. With both tracks, the Sooloos served up a very svelte sound, showing tremendous depth

and subtlety with a real lack of digital 'mush'. The music flowed organically, beats shuffling along in a relaxed but infectious way. So I found the Sooloos, used as a transport, to be a very capable performer.

Moving to Meridian's DSP5200 active digital loudspeakers, and it was simply a matter of switching zones. Repeating the same Fragile State track, and I was pleasantly surprised by the DSP5200s. Where I'd respected the older, bigger DSP7000s more than I liked them, the newer, smaller speakers proved very amiable. They're far snappier than I remember the 7000s, bounding along with brio. Bass is impressively low for what are relatively compact floorstanders, there's oodles of detail across the midband with a wide soundstage. Treble is nicely carried too, if lacking the finesse and extension of my reference Yamahas. Most of all though, I just liked the Meridian speaker's naturally relaxed but engaging musicality; I have found some Meridian kit a little too 'cerebral' sounding for my tastes in the past, but am pleased to report the Sooloos 2.0/DSP5200 was an utterly pleasurable musical companion.

Big Country's 'Chance', a somewhat dour early eighties rock recording, was rendered beautifully by this system. Stuart Adamson's plaintive vocals were carried with delicacy, the Sooloos giving a good deal of insight into the timbre and grain of his voice. Those distinctive arpeggiated guitars didn't grate, sounding subtle but full bodied, while the steel stringed acoustic guitar overdubs came over with precision. The DSP5200s can deliver a very decent drum sound if they're called upon so to do; snares sound tight, well damped and well articulated - just like a good active system should. Moving to an altogether more uplifting piece of music, and Sade's 'Sweetest Taboo' showed the Sooloos/DSP5200 at its absolute best. It caught the interplay between the song's shuffling percussion, beautifully syncopated DX7 keyboard work and funky bassline with great skill. At the same time, it conveyed Ms Adu's distinctively creamy voice with uncanny tonal accuracy, along with imparting her every vocal inflection.

Stravinsky's 'Apollon Musagete' (Chamber Orchestra of Europe/Janiczek) showed the system's prowess with Classical music. The DSP5200s render strings beautifully; cellos had great body and a welcome richness of tone, while violins came over with just enough edge to satisfy but never grated. I also very much enjoyed the architectural precision

of the imaging; there was no lack of clarity about where the individual performers were sat, nor did it seem that the soundstage 'fell off a cliff' towards the back of the room. Instead, the recorded acoustic was conveyed in its entirety, just as it should be.

CONCLUSION

There are of course other hard disk based music playback systems on the market, and some of them, such as the Linn DS and Naim HDX, sound quite superb indeed. Whilst unable to do direct comparisons, I'd say that on sonic grounds the Meridian Sooloos 2.0 certainly isn't a poor relation to either. Where it really distinguishes itself however, is what's so tediously called the 'user interface'. In the way the Sooloos presents itself to the user, it is currently head and shoulders above its rivals, and the clever use of metadata and intelligent searching is something you fast find you can't live without. More than any other system of its type, the Meridian Sooloos crosses over from the niche hi-fi market to the mainstream music lover who doesn't give a fig about FLAC and doesn't want to know about networking.

The Sooloos is not perfect however. I still think it's a little too noisy (it should be silent), and the touchscreen, although streets ahead of anything its rivals provide, still feels a little slow and unresponsive for anyone who's ever used an Apple iPod Touch or iPhone. The ability to scroll, not by touching little arrows, but by dragging your fingers across the screen, Apple trackpad-style, is also something on Meridian's 'to do' list, I would suggest. Finally, I didn't like the way that the music library was no longer accessible whilst the Sooloos was importing CDs, even if you could still play music throughout.

A few minor gripes aside though, I must say I came to the Meridian Sooloos 2.0 a little sceptical, but ended up completely convinced by it. It offers excellent sound, a top-class user interface and wonderfully useful software searching that takes you closer to your music. The more CDs you feed it, seemingly the more effective it becomes. As such, I can see many people building this into their house's architecture as they would central heating or a mains supply. And just think of the space you'll save, not needing all those nasty CD jewel cases, enough for a walk-in wardrobe for your other half. Doh!



VERDICT ●●●●●

Great sounding high end hard disk music system that's exceptionally accessible and easy to use.

MERIDIAN SOOLOOS	
CONTROL 10	£3,995
MERIDIAN SOOLOOS	
ENSEMBLE	£2,995
1TB HDD	£146.81
MERIDIAN DSP5200	£6,750
Meridian	
☎ +44(0) 1480 445678	
www.meridian-audio.com	

FOR

- exceptional flexibility
- svelte, musical sound
- design, style, finish

AGAINST

- slight fan and HDD noise

IsoTek®

The power to deliver 'clean' power



Aquarius 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

www.isoteksystems.com



BE THE FIRST TO HEAR
IsoTek's new and exciting
Aquarius. Visit:

ROOM S25 & S26
for a full demonstration



SIRIUS



ACCESSORIES



ORION



VISION



SIGMAS



TITAN

Go Your Own Way

Ask three different people to assemble a system, and lo and behold, three different systems are what you get! Patrick Cleasby, Adam Smith and David Price each got the chance to match some choice componentry together, with varying results. David Price is your guide...



Variety, as they say, is the spice of life. Whilst many areas of modern living are getting ever more homogenised, uniform and more standard, it's good to know that there's still a lot of choice available to the hi-fi buyer. Happily, the hi-fi world still has a very varied micro-climate. There's a massive amount of kit out there, and much of it is rather good. People have different tastes, different needs and different approaches, and there are products around for every occasion.

To reflect this, I thought I'd challenge Patrick Cleasby ("Captain Digital" to his friends) and "Analogue Adam" Smith to come up with their own personal affordable dream systems, and for good measure I joined in the fun too. The three systems we came up with are certainly diverse, reflect our own innermost prejudices (or some of them, at least) and all to a greater or lesser extent, are very fine to listen to despite their modest prices. So, if you want the hi-fi system equivalent of a car you can't find when you leave it in a car park, look elsewhere; these systems are nothing if not distinctive!



PATRICK CLEASBY p16
Onkyo NS-D1 iPod dock
Onkyo C-5VL SACD player
Onkyo V-5VL integrated amplifier
Wharfedale Diamond 10.1 loudspeakers

ADAM SMITH p18
Rega P3-24/TT-PSU turntable
Audio Technica AT-OC9MLII cartridge
Naim Stageline/i-Supply phono stage
Naim Nait 5i integrated amplifier
Guru QM10 loudspeakers

DAVID PRICE p20
AuraNote Premier music centre
AudioSmile Kensai loudspeakers



Sources Direct

Patrick Cleasby assembles a superb entry level system from Onkyo and Wharfedale that plays SACD, CD and the direct digital output from Apple's iPod...



I've been pondering the concept of an audiophile iPod system for many years now. Apple's polycarbonate peril is a great portable device, so handy and wonderfully easy to integrate with a computer (which is where music is migrating to these days), so in theory such a system would be ideal. But until now I had yet to be fully convinced. No matter how clever the dock makers are at engineering the analogue circuits in their devices, they've always been impeded by the fact they were relying on the limits of the iPod's inbuilt DAC. Decent as it is, it's not really one of the aspects of iPod design likely to be augmented in these days of adding video cameras, et cetera. All of this costs, and a Christmas 2009 iPod Nano still has to fit to a certain pricepoint...

For many years, I've wanted to be able to bypass the iPod's inglorious DAC and weedy analogue output stage, but it wasn't until the introduction of Wadia's iTransport some eighteen months ago that this happened. It's a great product, but commensurately expensive, and so the news of the Onkyo NS-D1 costing just £150 made me sit up and listen. At last I could build a system

around my prized 'Pod, but what of the DAC and disc player (I still have a massive number of SACDs)?

Well, the new A5-VL (£350) is Onkyo's latest entry level stereo integrated amplifier, and guess what? It has a built in DAC, so it can marry up to the NS-D1 perfectly. Likewise, they've a new C-S5VL silver disc spinner which is a stereo-only SACD player, hooking up to the A5-VL directly by HDMI!

It's an impressive combination of electronics, so I needed a fittingly capable entry-level loudspeaker. The Wharfedale Diamond 10.1 (£200) was duly enlisted, as it's one we really rate and are keen to try in a variety of contexts. It has that characteristically upfront, musically gripping sound you'd associate with its illustrious forebears, plus a little added extra sophistication too. It proved a perfect partner for the excellent electronics, as you'll see...

GETTING GOING

It may be just that it was a previously reviewed sample, but the NS-D1 as I received didn't include a manual, so I had to intuit my way around how the little iPod plug cover worked. Once slid back it revealed the usual dock arrangement, ready to take the various Apple-supplied adapters. It is DC powered using a slide-in/

slide-out UK/European wall wart. The overall plinth is larger than the average dock, having the approximate dimensions of an Apple TV. But video hookups are much more limited; all the back of the NS-D1 allows is simple composite for rudimentary video iPod output. Who really cares about that?! Don't believe some of the pre-release puff about the NS-D1 still around on the internet, which claimed it didn't support the iPhone. It does, but for some reason only when it is set in flight mode!

The other more unique aspect of the NS-D1, apart from the expected optical S/PDIF digital output, is the B type USB socket. This is to hook up the dock to the computer (if you happen to have one near your hi-fi; the lead supplied is not long), theoretically allowing synching of your iPod using the 'Synch now' button on the front. Phono analogue audio outputs are also supplied if necessary.

As is the way with a lot of these machines the remote that comes with the NS-D1 is of the disconcertingly cheap looking, 'whip out the battery strip and you're away' type. But at least it does permit remote operation of the device. The brother/sister player/amp combo have slightly more posh looking remotes, but not by much. The SACD player comes with an RI cable as does the dock. For the A-5VL the presence of RI should mean that from the very first Onkyo RI iPod dock reviewed in these pages three years ago, you should be able to control it via the A-5VL's remote control even if you do not step up to the NS-D1. The amp's controller can also control the CD player, irrespective of whether it is RI connected. However the player's remote has more extensive and specific functions, particularly in the area of SACD usage.

Otherwise it is interconnects, IEC leads and manuals only in the box. In the hand, the finish on both SACD player and amplifier is flawless in that Japanese sort of way, and available in black as well as silver,

really showing up the admirable aluminium front panel in the latter. It has to be said that the plasticky gunmetal grey of the NS-D1 doesn't really tone well with the main components, but hey ho...

The C-S5DL disc spinner is surprisingly light, but the A-5VL amp is packed to the screw tops and quite a weighty piece of kit. It delivers 40W into eight ohms and is fundamentally a very traditional-looking amplifier, with A and B speaker outs, MM/MC phono stage, direct-defeatable tone controls, tape loop, record setting dial, with the simple addition of optical and coaxial S/PDIF inputs, capable of up to 24/96 resolution. There is also a useful digital lock light associated with the two digital input channels.

The C-S5DL has a 24/192 Wolfson WM8742 DAC for those connecting to analogue amplification. Again optical and coaxial digital are both present, and that's about it. Fairly standard MP3/WMA on a disc format support is provided, and there is the addition of a 'Digital' (circuitry off) switch on the front fascia, as well as the expected CD/SACD format selection for hybrid discs. On both machines all the buttons feel very positive, and the dials reassuringly solid and clunky. Both devices have full size headphone jacks, with volume control on the player. Both also make use of Onkyo's VLSC (Vector Linear Shaping Circuitry), designed to smooth out the analogue waveform produced by the D-to-A processing.

Interestingly, the disc player also has a small setup menu, basically on off toggles for a variety of choices of pre-DAC PCM and DSD filters, an invert phase option, and whether you actually want DSD to be the priority layer of an SACD. There is also a full system defaults reset ability. Finally, not having any bookshelves to hand, I set up the Diamond 10.1 speakers on our usual reference stands. Nice to see biwiring now a possibility on there, and they had a nicely solid feel for their very modest retail price.

SOUND QUALITY

Please forgive me my recent repeated reference to the HDCD-retaining capability of the RipNAS/dBpoweramp encoder, but it provides the perfect solution for testing this system, as far as I'm concerned. And the name of my top test disc is Bryan Ferry's 'Boys and Girls'. Armed with a 24bit HDCD rip on the iPod, an original HDCD remaster in CD form and the later SACD version, I was able to compare a number of different playback permutations

through the Onkyo system with this particular album. Similarly, and with equally imperfect methodology, I could compare the usual 24/48 Nine Inch Nails 'The Downward Spiral' DVD-A rip, to the CD and DSD layers on the SACD...

Duly set up, the system sounded great. A lossless 16/44.1 file of 'Little Sister' from Ry Cooder was more detailed from the NS-D1 dock than expected. All that intricate guitar interplay was there, sounding absolutely beautiful considering the modest price of the hardware being used. Similarly, analogue recorded material like Joan Armatrading's 'Show Some Emotion' was sprightly with a convincing way with a bassline.

But the Bryan Ferry test showed that the iPod digital transport route for 24/44.1 of 'Slave to Love' still had a fair way to go to beat the simple 16/44.1 digital data of the non-HDCD decoded disc, converted to analogue via Onkyo's proprietary VLSC circuitry in the player. The CD version was simply more enveloping and more present, with the iPod version seeming flat in comparison. The SACD version of the same was not hugely differentiated from the CD, only revealing itself in marginally more precise and detailed rendering of that intricate percussion.

The experience was enough to make me dig out more SACD material, and 'My Old Friend The Blues' from Steve Earle's 'Guitar Town' was a lifelike stunner, if slightly let down by a bright top end. I was still rooted to my chair until the end of the album though. Finally it was impossible to resist a quick rip through 'Bootylicious', less impressive, but still palpably an improvement over CD quality.

In order of preference then, I'd rate the SACD via the C-5VL HDMI out as the best source (obviously), but it wasn't quite as profoundly better than CD than expected. Perhaps this is because the Onkyo silver disc spinner does very well with ye olde CD. Last and not least was via the NS-D1 digitally, which was way better than your average iPod dock. But not as great as I'd hoped. This, I suspect,

tells us that the iPod itself isn't quite the match of a decent optical disc transport. Is that really such a surprise; should we expect it to be?

CONCLUSION

Although I'm not convinced Onkyo have quite got iPod sound up to ye olde Compact Disc quality via the digital link, I have to say it's an advance on your common or garden iPod dock, and there's loads of potential there. Surely, later generations of iPods with flash memory that's not so electrically noisy as the current HDD based Classic machines should give much better sound? Still, the Onkyo NS-D1 gives you a great start into the big wide world of audiophile digital, and the matching A-5VL amplifier seals the deal.

It's only a budget product of course, but my goodness it does a lot for the money. Onkyo's affordable amplifiers are very musical, decently powerful yet unexpectedly civilised, making many price rivals simply sound coarse. So it was that the A-5VL proved a fine companion for the new Wharfedale Diamond 10.1s. These speakers are so accessible, and so naturally musical, that they're always a pleasure to use. They do like good sources, it must be said, so lucky then that the C-S5VL was just such a thing. It comes as some surprise that at a budget price point, Onkyo see fit to support SACD (which, in the UK at least, is a dead format, sadly), but this machine makes disc spinning still feel like a worthwhile pursuit.

It's great to see the 'iPod as digital transport' idea finally come to fruition in the NS-D1. Love them or hate them, a lot of us use iPods, and while many have raised eyebrows at me uneconomically packing them with lossless files, whether ALAC or FLAC, finally we have justification for so doing. Now all I need is multi-terabyte iPod Touch!



ONKYO NS-D1	£150
ONKYO C-5VL	£350
ONKYO A-5VL	£350

Onkyo Ltd.
 ☎ +44 (0) 1494 681515
www.onkyo.co.uk

WHARFEDALE DIAMOND 10.1	£200
IAG Ltd.	
☎ +44(0)1480 447700	
www.wharfedale.co.uk	

Rhythm Divine



If Patrick Cleasby's system was a characteristically digital contrivance, then it's no surprise that Adam Smith's is vinyl based. Indeed, Hi-Fi World's resident analogue addict has put together a classic 'old school' Flat Earth system, comprising Rega, Naim and Guru components...

When editor DP contacted me with regard to this system test I was delighted; after all I seem to recall that the last time we had one of these sound-offs, I romped home victorious, and so clearly have a reputation to maintain! Even better, I was absolutely elated when informed what the opposition would be, as this helped me to fix the ethos of the system I would choose; this was going to be a pushover! You see, faced with opposition that appears to consist on the one hand of some weird boxes that apparently do something impressive with some strange computer files on a mobile phone thingy, and a shiny, blingy chrome lifestyle gadget that doesn't even have the decency to wear a 'Bang & Olufsen' badge on the other, I realised that it was up to me to do things properly.

As it happened, the commencement of proceedings coincided with a chat I had been having with fellow *Hi-Fi World* contributor Tim Jarman about eighties music and this clicked in my brain after I had finished chuckling over the competition, whereupon I realised that it was up to me to 'keep things real' and go back to basics; back to a time when the earth was flat, hi-fi came in proper black boxes, words like 'timbre' and 'soundstage' hadn't been invented. It was a time when the word 'digital' only applied to watches with 'Casio' writ small on their faces. Naturally vinyl would be the centrepiece and I wanted a system that funk'd. I wanted timing, I wanted rhythm, I wanted a pert and snappy musical companion and I wanted my feet tapping without any effort at all [you didn't want much, then - Ed.].

My starting point was easy, and

encompassed a name that has been around since those days of nineteen eighties 'flat earth' systems. Naim Audio have always been the kings of 'Pace, Rhythm, and Timing' and, although their amplifiers encompass so much more than that famous epithet these days, as far as I'm concerned they're still the number one choice when a stiff power supply punching out a fair few Watts is required. Consequently a Nait 5i went straight onto the shopping list, along with a matching Stageline phono stage and its i-Supply. The Stageline has sat quietly back in the wings for a couple of years now, but time has most certainly not diminished its abilities, nor custom withered its infinite variety [hang on, didn't someone else write that last bit? Ed.].

OUT OF THE BOX

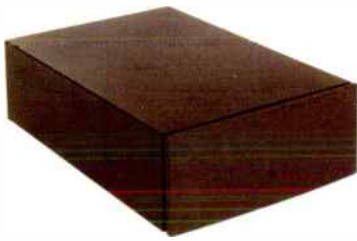
The vinyl front end required a little thinking out of the box, though. Naturally, a Technics SL-1210 was an obvious candidate but it seemed a little low budget in the context of this system and, despite its eminent and well documented upgradeability, I wanted something that would work off the (shop) shelf, rather than requiring a host of modifications. The fact that the latest version of the Rega P3 has finally wormed its way into my affections was not lost on me either and so this, I decided, was the way to go, along with its optional TT-PSU upgrade. Naturally one of my favourite cartridges happens to be something of a

rhythm king as well, and so bolted into the RB301 would be an Audio Technica AT-OC9MLII.

So, pretty easy so far, but then I came to loudspeakers and this required rather more thought. This is possibly the area in which choice is greatest. The possibilities of floorstanding versus standmount, plus the whole gamut of differing drive unit technologies makes the choice quite daunting. However, I had a good idea of what I wanted. Top priority was obviously going to be a loudspeaker that had punch, precision and the sort of timing that starts and stops on a sixpence. The problem is that, on occasion the search for transparency and the resolution of the very finest filigree details has on occasion pushed this to the side somewhat! Fortunately, my traipsing the corridors of many a hi-fi show has led to more than a few items that have imprinted themselves on my memory for one reason or another and one that kept leaping up in my head, gesticulating at me, turned out to be the very thing I was looking for.

The Guru QM10s are slightly unusual little items, bucking the current trend for narrow baffles and a slim, wife-friendly appearance for a shape that is definitely more squat than lofty. Still, they are nonetheless compact devices and sat happily atop my Atacama Nexus 6 stands, only appearing to be ever so slightly top heavy. Under the skin the Gurus have plenty of high-tech though, combining a 4in (102mm) plastic-covered paper





cone
bass
driver
to an
0.6in
(16mm)
tweeter that

Guru describe as a dome,

but actually has the appearance of a small cone. In fact I couldn't help thinking that the driver lineup actually looked very much like a Goodmans Maxim 2 tweeter and a Maxim 3 bass driver, but things are much more advanced than that under the QM10's skin! The Gurus have a single pair of connection terminals at the rear for 4mm plugs only, and are recommended for use close to, or within one to two metres of a wall.

SOUND QUALITY

So then, connect up, leave stewing for a few days, pop The League Unlimited Orchestra's 'Don't You Want Me?' on to the platter and evaluate. Result? Big grin and tapping feet; excellent, job done! I am delighted to report that this system does exactly what I aimed for, in that it takes rhythms, captures them and then issues them forth with an almost effortless sense of ease and a military sense of timing. The aforementioned League Unlimited Orchestra track is underpinned by a host of delicious eighties synthesisers and the Gurus pounded them out with a snap, punch and impact that utterly belied their compact dimensions. Each note started in an instant and stopped on the proverbial sixpence, but these ends encompassed a deliciously fruity and wholesome centre portion to really put you at the heart of the action.

Next up onto the turntable was a mint copy of the late Michael Jackson's classic album, 'Thriller', and the insistent bass line from 'Billie Jean' had those little bass drivers pumping their hearts out. The Gurus may be compact but I was very impressed at the way in which they are surprisingly happy to go loud without any sense of strain or compression. Push the volume too high and they do start to harden up a little, but this is at quite antisocial levels and I feel that their sound pressure levels will be plenty for most people. Back to Michael, and his vocals overlaid the superb instrumental backing expertly.

The system set up a nicely detailed soundstage and really let me know what was going on in the studio, I suspect largely due to the solidity of the latest offboard PSU-equipped Rega P3 combining with the fine stylus profile of the Audio Technica cartridge to really dig

every last morsel from the grooves. Even better, turning the pace down somewhat and skipping to 'Human Nature' revealed that the system was happy to pull back a little and flow gently with something more subtle, the Stageline and Nait 5i combo feeding the Gurus perfectly and telling them exactly what to play in a superbly controlled, yet insightful manner.

Of course, a system for the eighties generation would not be complete without some Jean Michel Jarre, and so 'Oxygene' was the next candidate for appraisal. Many audiophiles seem to be of the opinion that to check a sound out using something like 'Oxygene' is a complete waste of time and tells the listener nothing, yet I can assure you all that I have heard some systems bearing surprisingly large price tags make a complete mess of such material! Those analogue synthesisers should sound completely different to their modern digital counterparts, being more rounded in tonality, more expansive in timbral terms and offering a better sense of depth than the more flat-sounding modern devices, and the Rega/Naim/Guru setup did the trick perfectly. There was a warmth and sense of space to the performance and yet that impressive timing and poise remained firmly in place at all times making things a compelling listen. As so often happens with a good 'un, I had only intended to listen to the first track and was mildly surprised when I heard the telltale 'tick-tick' of stylus hitting runout groove!

So then, the perfect system for all occasions with nary a downside to be seen? Well, truthfully, not quite – a wander through some different genres showed that the Rega/Naim/Guru setup was certainly capable across the board, it seemed less comfortable in some areas. Hard rocking guitars held no fear, as did more recent new-fangled dance music, with the system's strengths of timing and integration making the most of the source material in this respect. Also, very gentle and soft classical came through very well, as the system as a whole has very impressive low level resolution abilities. As an example, the introduction to Ravel's 'Bolero' is incredibly quiet and can often be completely lost until it reaches a sensible level, but the Rega, Naim and Gurus were right in with the action from the beginning. Where things seemed less confident was when more insightful acoustic recordings, or more forthright classical material went under the

stylus.

In these situations, strings and horns lacked their customary feel and rasp; the system actually making them sound ever so slightly processed, and gently strummed acoustic guitars like those found backing the likes of Norah Jones or Katie Melua sounded a little plastic. A spot of substitution led me to point my finger at the loudspeakers here – I have found the Gurus to be a little lacking in tonal colour in the past and this setup did tend to reveal this. I have no doubt the issue could be eliminated by appropriate source and amplification matching (I suggest some valves might be a wise move) but, whilst an issue to note, I found it of little concern here, as the Gurus were chosen for a particular reason, and in this area, they absolutely shone.

CONCLUSION

I have to say that I am very happy with this system, as it set out to do exactly what I wanted it to; it punches, grips and simply entertains like few others I have experienced at the price. Yes, there is a slight trade-off in terms of ultimate timbre and insight into the likes of more detailed and atmospheric acoustic music but, even then, they are still far from being completely disastrous with material like this. Give them some rock, electronica or dance, though, and the whole system absolutely leaps into life to captivate and entertain like few others. Most importantly of all though, I'm willing to stake my Audio Technica Sound Burger on the fact that Captain Digital's collection of computery boxes and editor DP's shiny living room adornment can't even hold a candle to the Rega/Naim/Guru setup in terms of sheer fun, grin factor and musicality. Now, if you'll excuse me, I'm off to start writing my first-place prize acceptance speech...



REGA P3-24/TT-PSU	£580
Rega Research ☎ +44(0)1702 333071 www.rega.co.uk	
GURU QM10	£1,595
The Sound Practice ☎ +44(0)1727 893928 www.thesoundpractice.co.uk/Guru	
AUDIO TECHNICA AT-OC9MLII	£470
Audio Technica UK ☎ +44(0)113 277 1441 www.audio-technica.com	
NAIM STAGELINE	£260
NAIM I-SUPPLY S	£125
NAIM NAIT 5I	£765
Naim Audio ☎ +44(0)1722 426600 www.naim-audio.com	

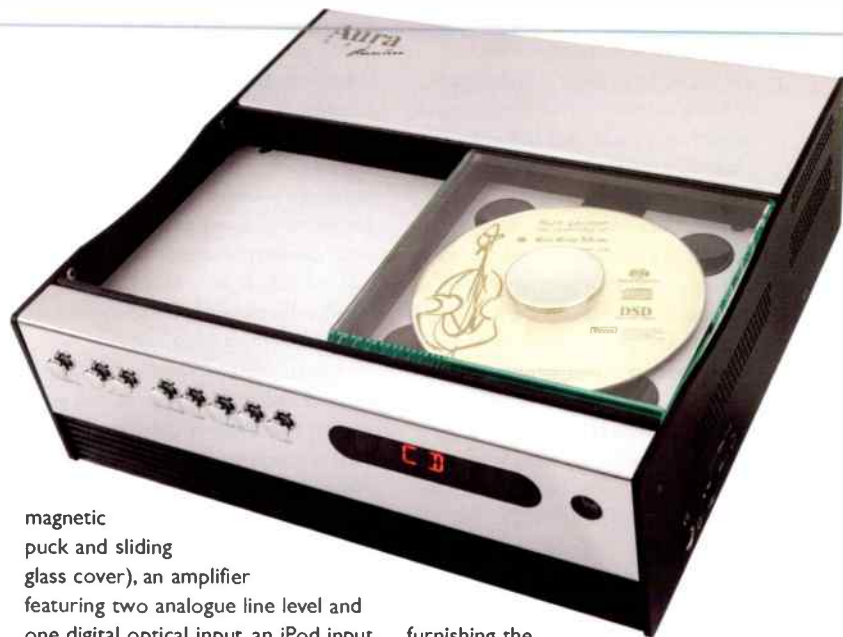
Note Perfect

David Price assembles an immaculately styled, super sounding style system based around Aura Note's striking Premier music centre and AudioSmile's excellent Kensai mini monitor loudspeakers...

Few hi-fi systems are designed from the ground up by a gifted industrial designer. That's why I was so interested to try the new Aura Note Premier, penned by the great Kenneth Grange. A founding partner in Pentagram, a famous design consultancy, his CV is impressive. Many of his designs are everyday household items, such as Kenwood food mixers, Wilkinson Sword razors, Kodak cameras and Anglepoise lamps. A couple of my favourites of his are the Parker 25 fountain pen and Ronson Quadrille cigarette lighter, both expressions of aesthetic modernism as pure as Concorde or the Lotus Esprit ever were for this seventies schoolboy! Grange's designs have won ten Design Council Awards, and he won the Gold Medal of the Chartered Society of Designers, and he's a member of the Royal Society of Arts' élite Faculty of 'Royal Designers for Industry'.

Whilst this is a most impressive career, the Aura Note Premier would never have been the basis of my system if it wasn't well engineered from a hi-fi point of view. Let's be honest here, both Patrick and Adam's systems are no sonic slouches. The good news is that the other parent responsible for this beautiful box is April Music, a company whose Stello range of separates has proved extremely capable. As such, the Aura Note comes with a sizeable custom made toroidal transformer, and selected components in the signal path, such as the Crystal Semiconductors CD3310 digital volume control IC and respected CS4398 24bit, 192kHz DAC. A 50W RMS per side MOSFET single-ended push-pull output stage with discrete amplification circuitry is used.

The unit itself consists of a top-loading CD player (complete with



magnetic puck and sliding glass cover), an amplifier featuring two analogue line level and one digital optical input, an iPod input (via a supplied cable attaching to the iPod's dock connector) and two USB inputs (the first for playing MP3 files from flash memory sticks, the second for attaching to PCs to play out music digitally) and plus a built-in (non RDS) FM/AM tuner. There's a preamp output for a subwoofer or external power amplifier, plus a 3.5mm mini-jack headphone output. The chrome finish of the casing is flawless, the chromed buttons feel great and the 'old school', seventies style red LED display is a joy.

Selecting partnering loudspeakers didn't require too much thought. Earlier testing had told me that it sports a very solid 50W per channel, which is just about enough for the excellent AudioSmile Kensai mini monitors. These £1,499 designs come in a tiny 150x250x200mm box, the hand-assembled cabinets made in the UK. The business end of the speaker is a small 12cm diameter surface treated magnesium cone bass/midrange unit, with solid copper phase plug, Faraday rings and a long throw (9mm) coil. Paired to this is another rare treat, an Isoplanar ribbon tweeter that boasts an effective area of two and a half times that of standard 25mm dome tweeters. This runs down to 2.2kHz, whereupon the mid/bass driver takes over; the crossover is hard-wired and uses poly film capacitors, low resistance inductors, and is covered with butyl rubber compound to reduce the effects of vibration.

The port is an aperiodically damped slot resonator, notable for

furnishing the Kensai with a bass that goes exceptionally low for the cabinet size.

SOUND QUALITY

It's a fine thing to have a superb sounding hi-fi, but the experience can be somewhat diluted when it takes over your living room and you have to step over yards of cabling and assorted power amplifiers and loudspeakers. Switch to a system like this, which does everything from a box little bigger than an old telephone answering machine, and you get a different kind of satisfaction, and that's before you even switch on! Maybe I am getting old, but there's something very agreeable about a small but beautiful looking hi-fi that doesn't just give you your room back but sounds far better than it's got a right to, too!

The usual lengthy running in process took place, and I also opted to use a Clearer Audio Copper Line Power Cable (£75 for 1m) for good measure, finding immediate benefits to the sound in terms of clarity and smoothness. The Aura Note also found itself sitting on a set of four Milty Foculpods (£19.95), which brought about a fuller bass and a more relaxed musical sound. Finally, Black Rhodium Tango loudspeaker cable (£15 per metre) did the honours feeding the AudioSmiles; I still think this cable is great value and cleaner and smoother than many I've heard at five times the price.

Firstly, a quick listen to the Aura Note Premier through my reference

Yamaha NS1000M loudspeakers; highly revealing and yet not famously kind to power amplifier output stages, they would immediately give me the measure of the Aura Note. Through a line input, it was obvious the amplifier section was of good quality. There's a decent amount of power, with a lively, tuneful bass, a wide and expansive midrange and a shiny, detailed treble. In a way, the sound reminded me of the Sugden Mystro [see p61] albeit on an obviously smaller scale. It was bouncy, musical and a lot of fun to listen to; dynamic contrasts were surprisingly vivid for such a modest machine, and the Aura Note just bounded along with the song like a puppy just set off the lead. Boz Scaggs' 'Lido Shuffle' from LP was rollickingly good fun.

More impressive still was the unit's own CD player, which worked with the amplifier section most synergistically. Fun Lovin Criminals' 'Up on the Hill' was a treat, the system coming over as a very confident and punchy performer. It was particularly solid rhythmically too, having a sense of metronomic precision that I remember from testing the Stello CD-T100 CD transport. The song's baseline was firm and confidently articulated, the rhythmic delivery of the lyrics clear as day and the song's busy but subtle mix carried with alacrity. There was a lot of detail coming through, but it wasn't shouted at the listener. Indeed that's how I'd characterise the Aura Note; it's a powerful yet discreet performer, one that never forces itself on you but still has a tiger in its tank, so to speak.

Tonally it's richest and warmest on its CD source; FM radio was good, but not outstanding considering what the format is capable of. Spoken voices on Radio 4 were clean and nuanced without a trace of nasal coloration, but I found its bass a little light on Glen Campbell's 'Witchita Lineman' on Radio 2. Still, the tuner did give a very quiet, noise-free account of itself even with the supplied 'wet-string' aerial where many 'real hi-fi' tuners I've tried in the same way couldn't. AM radio wasn't bad, but I've yet to be impressed with any modern tuner package on this waveband. I wholeheartedly approved of the Stello's DAC section; via optical in from an old Sony CDP-911E (£300 machine in 1993), it provided a useful boost for this venerable machine. There was better definition to the sound, with more warmth and a softer and more silky treble. By contrast the Sony's own DAC sounded colder and more steely,

as well as being far more musically constrained. Thumbs up then for the digital input; it's a great feature and adds real flexibility.

Together with the AudioSmiles, the Aura Note made great music. Despite the diminutive proportions of the speakers, and their less than generous sensitivity, the system filled my largish listening room with relative ease. Even the floor-rattling 'Ready for the Weekend' by Calvin Harris didn't phase it, the Kensais showing little signs of compression (or indeed distress of any kind) at high levels, while the Aura Note just romped along with the song's squelchy baseline and rousing classic House-style choruses.

Those superb Isoplanar ribbon tweeters provided a great sense of space to better recorded source material, such as 4hero's 'Look Inside', along with a wonderfully smooth yet tonally accurate rendition of the song's superb violin accompaniment. Compared to my Yamaha NS1000M tweeters, I found there was still a slight lack of detail, but they more than made up for this with a creamy smoothness which really suited the Aura Note's crisp high frequency sound. I also loved the rhythmic integrity of the Kensais; unburdened with large cabinets to keep a grip on, the speakers disappear immediately into the room, whereupon they issue music into the ether with a wonderfully natural sense of timing. You find yourself tuning in to a song's vocal phrasing, enjoying the tremendous immediacy the Kensais afford.

Tonally the Kensais are very neutral, and the Aura Note is just a touch on the warm side, so the result is very pleasing. There's never a moment's harshness, yet the sound balance isn't so smooth that it's soporific. The loudspeakers' magnesium cones have a flavour of their own, but it suits the Isoplanar ribbon tweeters brilliantly, and the result is a very delicate, detailed, fast and open sound. In fact, the integration between the two drive units is superb, making them very easy to listen to for long periods, and a synergistic pairing with the Aura Note makes life even sweeter. Obviously, you shouldn't expect massive, wall shaking bass from this system, but conversely it's not as lightweight as you might think; I

found this combo more than able to fill a largish (by UK standards at least) listening room with highish levels of sound. Going back to my NS1000Ms (which have a larger midrange dome than the Kensais' mid/bass unit), and another octave or two of bass arrived, but I still found the Kensais hardly any less enjoyable a listen, which is high praise indeed.

CONCLUSION

If I could only have one hi-fi system in the world, the Aura Note Premier might well be it. I adore its simplicity of design, its superb ergonomics, fuss-free operation and fine sound quality. Taken in isolation, it's not the world's best sounding bit of kit, but as a package it is brilliant at the price. Together with the equally diminutive and ultra-capable Audiosmiles, and it's, erm, little audio dynamite!

An odd couple, admittedly, but like all great partnerships the strengths of one complement, not expose, the weaknesses of the other. Actually, neither the Aura Note Premier or the AudioSmile Kensais have anything much to be embarrassed about, but still they seem to flatter the other. In absolute terms the AudioSmile speakers are the better sounding devices, but they're so evenhanded and devoid of distortion that they'll still sing with less able ancillaries.

The Aura Note has nothing to apologise for sonically; it's a serious



hi-fi product alright, but just in a lovely box. You'll get better sound

from separates of the same price but only just, and miss the Aura Note's sublime styling and lovely finish every second of the day. So here it is, a small system sporting fine sound with a massive measure of style.

AUDIOSMILE KENSAI £1,499
Audiosmile Ltd.
☎ +44(0)7952 478 193
www.audiosmile.co.uk

AURANOTE PREMIER £1,995
April Music Inc.
☎ +82 2 3446 5561
www.aprilmusic.com



Inspire Hi-Fi

eclipse



worth waiting for...



Review: September 2009

Superb build and finish allied to an effortlessly musical sound, makes the Inspire Eclipse a highly impressive debut.

"At all times, the Eclipse excelled at simply laying out the performance in a way that made me feel I was hearing the band exactly as they intended. All this comes about as a result of the Inspire's fine sense of uniformity and evenness across the midrange and treble. This flows together so well that overall effect is to imbue music with a lush expanse of detail and ebullient warmth, but with a delicious sprinkling of light top end and delicacy as a garnish. Acoustic instruments stand out as natural and full-bodied, whilst the Eclipse also captures the grittier style of electronic instruments and never leaves you in any doubt as to what is playing."

Taking sound to a whole new level.

www.inspirehifi.co.uk

Demonstration now available. Call us on 01246 568770.

Buying hi-fi is a highly personal thing, and this group test shows why. Give three different people the chance to put together a low-to-mid price system and you get three very different outcomes...

Naturally, no one here at *Hi-Fi World* raised an eyebrow when Patrick Cleasby came up with the Onkyo system, with the A-5VL amplifier at its heart. It's the latest in a long line of Class D integrations from the Japanese company, all of which sound rather better than you might expect. The A-5VL might be a cheap product, but is exceptionally well made at the price. The addition of a built-in DAC and HDMI connectivity in this latest model means that it will input Direct Stream Digital (DSD) directly in from the C-5SVD SACD player, which is a great facility to have if you're an SACD fan.

The star attraction of the system is surely the Onkyo NS-D1 though, which takes the direct digital datastream of the iPod straight out to the A-5VL amplifier, bypassing the iPod's own unlovely internal DAC and analogue output stage. As anyone who's tried to use an iPod for hi-fi duties knows all too well, this can only be a good thing. It's a welcome newcomer to the market, the main disappointment being that it's a little more plasticky than we'd hoped. Coupled to the special Rockbox software [see p81] which lets the iPod run FLAC files (Apple only permit Apple Lossless on the iPod), this new iPod dock gives you the ability to pipe FLAC files straight off your iPod. This will really chime with many computer audiophiles, for whom FLAC is their favourite format.

Even with stock 16/44.1 via the C-5SVD CD/SACD player, the Onkyo system is a very pleasant thing to listen to. It suits the lively, crisp nature of the Wharfedale Diamond 10.1 loudspeakers, giving a fast, punchy sound that's surprisingly large in scale. There's oodles of detail bursting out of the Wharfedales, although they can be a tad brightly lit so it's worth spending some time getting the matching interconnects and speaker cables right. Properly fettled, there's not much that can come close to this system at the price.

Just as PC was always going to end up immersed in hi res digital, iPods, HDMI cables and the like, so it was a foregone conclusion that Adam Smith was going to submit a vinyl-based system. Actually the Rega P3-24/AT-OC9, StageLine/Nait 5i and Guru QM10s are all products we've

reviewed before in this magazine, but never in this combination...

Here we have the *doyen* of the nineteen eighties British belt drive scene, the classic Rega Planar 3 (sorry, 'P3'). I'd venture that a good many readers of this magazine 'cut their hi-fi teeth' with this very turntable (myself included). The most recent incarnation, the P3-24, with offboard power supply, ramps the price up a bit but really pushes it forward. Most pleasing is the Rega's easy musicality; never one to smash you in the face, it has a lovely smooth warm tonality, but this is deceptive as it actually pulls out a huge amount of information from the groove. The arm is excellent, easily good enough to track the Audio Technica AT-OC9MLII moving coil cartridge, and the latter's spicy musical nature peps up the Rega, making for a synergistic combination.

Speaking of which, the Naim Nait 5i is a cracking partner to the Guru QM10s. The two get on famously, giving a wonderfully fast and vivid sound that's brimming with rhythm and bristling with detail. The Naim is an excellent integrated at the price; it covers its tracks brilliantly as you never get the feeling you're listening to a cost-cut budget amp. It has a lot of charm, and is beautifully built. You could certainly say the former about the Guru QM10 loudspeakers; they're characterful in the way the eighties-tastic Epos ES14s were, or the Monitor Audio R352s. They're unashamedly about making the music fun, focusing in on the emotion of a

All is not lost for yours truly however, because the little AuraNote Premier turned in a performance that belied my expectations. Don't judge a book by its cover, or the sound of this little unit by its gorgeous exterior. It's obviously a 'style system', but its beauty doesn't come at the expense of the quality of the electronics within. Rather like classic Bang and Olufsen's high end products of the nineteen sixties, seventies and eighties, it is designed to be effortless to use and yet there is real 'engineering depth' beneath the skin.

The AudioSmile Kensai loudspeakers continue to amaze me; speakers are a very personal thing but these completely float my boat. The brilliance of that isoplanar ribbon tweeter (and it's not just great because it's a ribbon, it is also a great ribbon as ribbon tweeters go), marries up beautifully to a very fast, grippy and yet smooth sounding mid/bass. For me personally, I'd rather have one of the best tweeters in the business in my speaker and forsake an octave (or two) of bass, than have a powerful bass response and a cloudy midband and treble.

Together, the AuraNote and AudioSmiles turn in a totally believable sound; music is fast, open and entertaining yet seriously subtle and sophisticated. I was not expecting the system to be as effortlessly loud as it turned out to be, as it was able to fill up even my very decent sized listening room with sweet, smooth, spacious sound. In fact, thanks to those superb ribbons, the sound was

"they're all so different, yet share a common bond of being well matched systems made of high quality separates. Each one is a winner..."

piece of music, but they don't pay too much attention to tonal or timbral accuracy. I've heard hundreds of speakers which are very neutral but dull as ditch water to listen to and to live with. The Gurus are a riot, kind of like a little sports car you just want to jump into and drive for the hell of it. On the end of Adam's system they're dynamite. I have to say, grudgingly, this was by far the most musical of the three systems here, so Mr Smith, take a bow!

almost ethereal.

Overall, each one of these systems has an awful lot going for it. The Onkyo is punchy and fun yet decently smooth, the Rega/Naim/Guru is riotously rousing in musical terms and the AuraNote/AudioSmile is sweet yet sophisticated. They're all so different, yet share a common bond of being well matched systems made of high quality separates. Different strokes for different folks, but each one of them a winner.

emillé

just for your musical bliss

AND THERE WAS CHA'AM



Distributed in the UK by Angelsound Audio
www.angelsoundaudio.co.uk
Tel: 01923 352479

- Dealers

Midlands
Mayflower Sounds
Tel: 07931 524266

Surrey/Hampshire
Blade Audio
Tel: 01302 711528

West Sussex
Heatherdale Audio
Tel: 01903 872288

Northern Ireland
Kronos Audio Visual
Tel: 02887 753606

www.emillelabs.com info@emillelabs.com

Syndicate Room 33



Simply The Best?



Adam Smith checks out "Britain's best hi-fi", Tesco's Value MC-907...

Well, I'm sure many of you thought you would never see it, but here it finally is! Yes, that's right, "Britain's best hi-fi" no less, as voted by owners and collated by Revo.com. Apparently its "old fashioned knobs, simple AM/FM radio and CD player won over thousands of consumers with its ease of use and big sound". Well, we at *Hi-Fi World* are always game for a laugh, so I was duly entrusted to the task of grabbing one of these bastions of the bargain basement for a listen...

The task wasn't as plain sailing as I had hoped, however. Not only was my local store sold out for two months but when I finally did grab my prize, the price had risen by a staggering seventeen percent, to a lofty £19.97, although it still appears to be £16.49 on the internet. Frankly however, it's difficult to get nasty about this when you unpack the MC-907, as it does indeed have an AM/FM radio with good old manual tuning and built in aerial, a simple CD player with basic programming facilities and two single drive unit loudspeakers. There are no flashy displays, no sonically ruinous equaliser settings; in fact there are no tone controls at all. Perhaps Tesco are closet 'flat earth' eighties hi-fi fans, running Naim Nait mark ones at home when they're not selling tomatoes?

Build quality is... well, 'lightweight' would be putting it kindly. The CD lid flexes alarmingly and the loudspeakers respond to the tap test with a gloriously resonant note.

However, I unpacked it, plugged it in and switched on and it leapt enthusiastically to life, albeit with a rather disturbing 'trouser-ripping' noise, pulling in radio stations with vigour and happily reading my more distressed CDs – a good start.

"I cannot talk about its bass impact, or its treble crispness, as it doesn't have any..."

SOUND QUALITY

An item like this requires something of a readjustment of values for a reviewer. For instance I cannot talk about its bass impact, or its treble crispness, as it has neither, and pondering on the intricacies of instrument and vocalist placement in the soundstage would also be futile as it doesn't really have one. Frankly, and I have to be honest here, it really isn't very nice. About the best thing I can say is that vocals come across quite well, undoubtedly due to the fact that the frequency range extremities are so rolled off, the midrange cannot help but stand out! However, drums sounded like cardboard boxes, cymbals like rusty dustbin lids and a brief blast of some hard rocking guitars revealed a noise that I last heard when I mangled a gearchange in my old Vauxhall Cavalier. On the plus side, the MC-907 did pull in radio stations well and, surprisingly, a good radio signal gave the sound a bit more body and form than the CD player.

I was even a little stumped when it came to offering some sort of comparison to a known standard.

The only thing I have similar is a Yamaha AST-C11 system from around ten years ago but not only did this cost me half as much as the MC-907 again when I bought it last year, but it originally retailed for over £900 when new, so not really a fair match. In the

end, I chose a family heirloom in the form of my late grandfather's Fidelity 'Rad 15' portable radio! Whilst the Fidelity couldn't quite match the MC-907 for stereo effect (well, it is mono after all) it certainly made things much more listenable, adding a sense of scale and warmth to announcers. Through the MC-907, Radio 2's Chris Evans seemed to be covering his mouth and speaking from the distant corner of a bathroom, whereas through the Fidelity he was definitely hiding under a blanket in the spare room. Mind you, the MC-907 did claw another point back later, as I was unable to work out where to load a CD into my grandfather's pride and joy...

CONCLUSION

If you want some seriously bargain sounds, the Tesco Value MC-907 is difficult to resist. It's neat, easy to use, costs less than I spend on a single vinyl LP, and is quite endearing in its own little way. "Britain's best hi-fi" does exactly what it says on the tin, apart from the "hi-fi" and "best" bits, obviously...

VERDICT ● £

Cheap, cute and loveable. Just don't switch it on!

TESCO VALUE MC-907 £19.97

Tesco Direct

+44(0)845 6004411

www.tesco.com

FOR

- it plays CDs
- it picks up radio stations
- it costs under £20
- it's rather sweet

AGAINST

- everything else.



Poles Apart

One comes from South Korea, the other from North Wales, so April Music's Stello Ai500 and Leema Acoustics Tucana II couldn't be culturally more dissimilar, but these two 'super integrations' prove to have fascinating parallels, Tony Bolton finds...

Ah, the 'super integrated' amplifier! It's a concept that's newer than some might think. In the old days, as recently as the nineteen seventies, if you were to drop the equivalent of £3,500 in today's money on an amplifier, the chances are it would come in two boxes (or more), rather than just in one. The integrated amplifier was always the poor relation of the pre-power, and never as sexy. But by the mid-eighties, companies such as Naim, Exposure and NVA were making premium priced one box designs, claimed to offer all the allure of your old twin boxer in half the space.

These days, the average chunk of change expended on an integrated amplifier is rarely more than £1,500

(if *Hi-Fi World's* letters pages are to be believed), but still manufacturers keep coming back with lavishly priced, expensively built one boxers. Just like household utility bills, no matter how much you ignore them, they just don't go away!

In the UK, Leema Acoustics has made a name for itself largely off the back of the Tucana, which was an excellent integrated that's neatly filled a niche in this country. A kind of hi-fi 'one stop shop', it had power, facilities and polish in equal measure, and now it's just been replaced by the new mark II version, more of which in a moment...

Some ten thousand miles or more away, a company called April Music has been making high quality, affordably priced audiophile gear for

over a decade now. We've dipped in and out of the April Music portfolio over the years, and never failed to be impressed. Designed and built in Seoul, South Korea, they're a tantalising taste of what we used to call 'Japanese high end', inasmuch as they share the same values. Build quality is superlative, and the sound isn't so dissimilar. You could even say the Stello brand is almost the Far Eastern equivalent of Leema...

As such, we thought we'd put the two tribes up against one another, and appropriately enough, bring in *Hi-Fi World's* stalwart reference, the Sugden IA4. Normally resident in DP's system, he grudgingly delivered it to my door for the purposes of putting these two new pretenders to its throne through their paces. It's



a striking sounding bit of kit, its full Class A circuitry doing things that rivals simply can't. To my ears it's not all good though, but for shining an unflattering light on price rivals it is surely superb.

Moving to the Britisher first, and the new Leema Acoustics Tucana II maintains the swish, stylised looks of the original, but adds a flourish on the front panel. Opinion's divided on the styling; DP wasn't so keen on it compared to the old model, but I like the new 'un. The volume control remains on the left surrounded by blue LEDs, but the source selection is now by button rather than knob, on the right hand side, and in the centre are a row of four more buttons for gain, balance, mute and the tape loop. Located on the far left are mini-jack sockets for MP3 input and headphones output.

At the back are the relevant sockets for balanced input (XLR) and rows of gold plated phono sockets for the six analogue line level inputs and the tape loop. Speaker binding posts are at each end of the back panel, and mains input is in the centre. The casework measures 440x110x320mm, weighs in at 18kg and is available in either black, or the silver finish on the review sample.

Mallory Nicholls, co-founder of Leema, informed me that in the preamp section the circuitry remained the same as that in the original Tucana but the software

functions had been taken from the Pyxis preamp, which forms part of Leema's Reference range (the Tucana coming from the middle ranking Constellation series).

The power amp section features new Thermal Tracking Output

"Both are fine sounding amplifiers that wouldn't disappoint users of premium pre-power amplifier combinations..."

Devices which feature five pins instead of the three normally found on transistors. These extra two pins feed a close coupled thermal tracking element which measures, and reacts to, the temperature of the device in real time. This enables the amp to be configured with a lower output impedance which improves bottom end control, Leema says. Power for all of this comes from three large toroidal transformers, one for each channel and one for the preamp.

Hailing from South Korea, April Music are now in their eleventh year. The Stello Ai500 is the company's new flagship product. The gentle curves of the sides of the amplifier disguise its substantial 460x86x400mm footprint. It is a very deep unit and with access for the cabling may be a tight fit on some

racks. It weighs 16kg. The fascia is populated by a red display, which shows the source selected and the current volume level (on a scale of 0 to 99), set by a Cirrus Logic CS3310 digital volume control, actioned by a large knob on the right hand side.

Running across the centre are push buttons for source selection for the four unbalanced and one balanced connection, as well as the four digital inputs to the DAC. These comprise S/PDIF, coaxial, USB and iPod USB.

All the appropriate sockets are on the back panel along with the mains input and speaker terminals. Internally, there are separate power supplies for the preamp and DAC circuits, while juice for the power amplifier comes from a 800VA toroidal transformer and a 90,000 microFarad capacitor bank. The output stage employs matched Hitachi MOSFET power transistors. The casework seems to act as a heatsink, becoming noticeably warm in use, but the manual advises that this is normal. The remote control is as weighty as it is comprehensive,



TRIANGLE

MANUFACTURE ELECTROACOUSTIQUE

Magellan

by TRIANGLE



CONCERTO SW2

A search of all-inclusive, unique perfection. Every minute detail has been meticulously thought out using the finest materials, selected with greatest care to blend beauty and technology. A fundamental and passionate process devised by a team of men and women who strive to achieve their sole ambition, that of providing the future owner of such rare equipment the enjoyment of a perfect instant, so fugitive yet so everlasting.



www.triangle-fr.com

AWARDS : DIAPASON D'OR HI-FI 2006 / EDITOR'S CHOICE HI-FI CHOICE MAGAZINE / BEST OF HI-FI VIDEO 2006

UK Distribution – UKD. 23, Richings Way, Iver, Bucks. SL0 9DA. Tel : 01753-652669. Web : www.ukd.co.uk

World Radio History

containing separate sections for CD player, iPod and amplifier control. It proved somewhat fussy about aim and sometimes took a couple of presses before the amp responded.

SOUND QUALITY

Regular readers will know that I use a Leema Tucana as one of my reference amplifiers, so you can imagine the zeal with which I unboxed the Tucana II. Anyone used to the original would instantly recognise the company sound. Fast and quite richly toned, my attention was immediately drawn to the bass where I found a whole new degree of speed and accuracy, as well as depth, compared to the oldie. I was impressed by the separation of detail and the speed at which sounds stopped and started. By comparison the bass from my early model Tucana sounded a bit soft and wallowy. Moving up the frequency scale and I found greater space around sounds and a more defined shape to them.

Digging into my jazz collection, I put on Chris Barber's *Bandbox Vol.3*. This 1960 Columbia recording was made as the British Trad Jazz movement was beginning to fade away. Barber was one of the driving forces of the music from its roots in late 1940s Soho, and this LP showcases re-recordings of some of his classic tracks with vocals provided, as ever, by Otilie Patterson. The Tucana II relayed the sound in a very engaging and energising manner, producing a sonic image that occupied about three quarters of the space between the speakers. Stage depth was aided by the feeling that the sound extended forwards as well as behind the speakers.

Rhythm driven music seemed to suit the Tucana II's somewhat vivacious nature. Moving to stereo with "Latin Jazz Dance Classics Vol. 2", and I found Cal Tjader's track 'Manuel Deeghit' slinking out of the speakers with all of the hip-swinging groove that you would expect from a master of South American sounds. It was elegant, poised and seductive.

Later in the evening I had slowed things down a little and was listening to Rubenstein playing Chopin Nocturnes. Here the Tucana II displayed a more considered and thoughtful side to things. The delicate touch of the fingers caressing the sounds from the piano was absorbing listening. The last LP I played on the Tucana II was 'The Orb Live '93', so it was the first on when the Stello Ai500 took over, and I was initially rather surprised at the closeness in sound between the two units. Both had a similar sense of pace, and a

similar tonality when presented with electronica, but began to define themselves when more conventional sounds took over...

The Stello Ai500 played the Chopin beautifully, possibly in a more thoughtful way than the Tucana II. I felt that I was focusing on different aspects of the performance, perhaps less on the tonal colours of the music and more on the shape of it. Moving back to the jazz and the difference in the presentation of the soundstage became apparent with the Chris Barber LP. The mono image was a little wider, nearly coming to the inner edges of the speakers, but stayed behind the line of the cabinets, extending to a moderate depth. Stereo had a similar presentation, this time extending sideways beyond the speakers further than the Tucana II managed, but lacking the latter's depth projection abilities.

Playing Cal Tjader confirmed a feeling that I had begun to have while listening to the Chris Barber tracks. I felt that the Stello was a little more straight laced when it came to the beat of music. The presentation seemed to lack a certain sinuous sensuality, seeming to lose a certain element of the passion that fuels good dance music, be it latin, trad, swing or whatever.

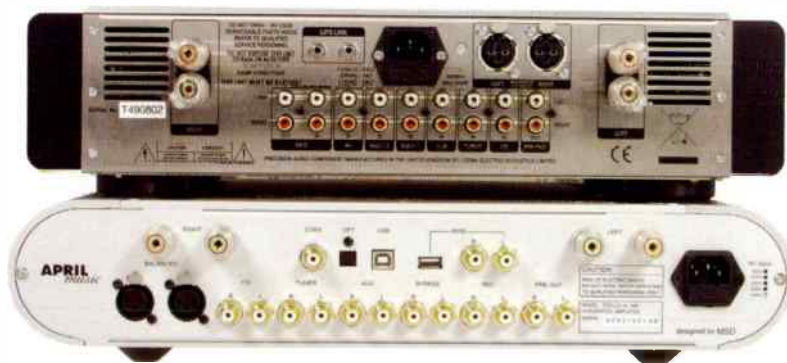
As computer-based music becomes more commonplace more amplifiers are being produced with onboard digital to analogue convertors. These allow a USB lead to link your computer's hard-drive into the amp's DAC, rather than using the often poor quality soundcard and headphone socket fitted to most computers. The Stello's DAC proved to be a very good performer when fed from my MacBook via the USB input. In certain aspects it seemed to have the edge over my Cambridge Audio DacMagic 3, despite the latter's upsampling capabilities. The sound was smooth, slightly rounded, nicely detailed and shown in a satisfying way.

An interesting pair of integrateds then, with subtle but nevertheless marked contrasts. How then do they stack up in the great scheme of things? Well, at this point the Sugden IA4 was duly heaved in. Actually, it stands as a testament to the quality of the Leema and Stello amplifiers, both running in Class AB, that they managed to stand their ground

against a pure Class A design. I'd concede that the Sugden had a slight advantage in the smoothness of the sound, being seemingly seamless from bottom to top, but it still showed a little forwardness in the upper midrange when provoked by female operatic voices and trumpets. If not shrill, it is certainly 'well lit'.

Both the Leema and the Stello exhibited better control in the bass arena when volume levels rose. The Sugden didn't have quite so finely tuned handling in this area. But where the reference Sugden won hands down was in the size, shape and openness of the soundstage. I can honestly say that it filled the room. The usual parameters by which I judge such things were completely recalibrated; moving back to the Class AB amps and the sound retreated to its conventional boundaries.

After readjusting my ears to the more restrained scale and presentation of the Ai500 and Tucana II (rather like swapping from a V8 engined car to a straight 6) I ransacked my record collection trying to pinpoint the subtle differences in the way these two amps made music. Apart from the more upright timing of the Stello, they both seemed pretty impervious to musical genre, but displayed the sound slightly differently. If you can imagine the subtle hue differences between the same picture taken with Agfa film



and with Kodak. The former gives a slightly cooler, bluer tint to things (the Stello), where as the Kodak version shows off the vividness of gold, reds and yellows (the Tucana II).

CONCLUSION

In a sense, I found this a difficult review to write, because both the Leema Tucana II and Stello Ai500 integrateds are very persuasive in their own respective ways. They present music very well, and in a lot of aspects such as power and grip, they are very well matched. Ultimately the choice comes down to nuances of presentation. In the same

B1



Beautifully
Designed
Sound.



The best loudspeaker is one that you can't hear. Sounds odd, doesn't it? But it should be all about the music; you don't want to have this disturbed by the distortions and reflections a traditional speaker enclosure presents.

The **B1** features our own patented drivers coupled to tapered tube absorbers. This technology eradicates the rear firing information from our drive units leaving just the pure sound that makes the speaker disappear.

Beauty isn't just about looks.

For more information:

t: 01903 530005 (Office)
01403 782221 (Studio)

e: uk@vididspeakers.com

w: www.vividaudio.com



VIVID audio

way that Beethoven's music is equally valid when conducted in a considered manner by Otto Klemperer, or in the more impassioned style of Toscanini, so both the Leema and Stello have equally valid viewpoints. I could live with either happily, although my personal preference would be the Tucana II. I usually reach for the Toscanini/ Beethoven set because I love the temperament and fire that he conjures up, and I find the Klemperer style a little too cerebral.

Both amplifiers are not the best at the price, but arguably the best all rounders around. The reference Sugden had an obviously superior sound in respect of the breadth of the recorded acoustic, and the clarity was superb. But it wasn't faultless in the bass, and certainly wasn't as forgiving as the Leema and Stello in their own different ways. You could say that the Leema offers things up in a lovely, exuberant way, whereas the Stello steps back slightly and gets a tad more accurate in so doing, whilst the Sugden lays things bare, and can be variously magnificent or stark and even hard.

There are of course other

considerations, such as the digital connectivity of the Stello which will appeal to some, but still the Tucana II has a greater number of analogue inputs which will be more convenient to others. The Leema remote is less comprehensive but very responsive, and I preferred the feel of the fascia mounted controls. In terms of finish, I think the Stello won the day convincingly, and that's really something because the Leema was already superbly well put together. The reference Sugden I am afraid to say wasn't quite a match for either in this respect.

So, as ever, the best advice is to listen for yourself, but be prepared for some serious headscratching with this pairing. Both are extremely fine sounding amplifiers that wouldn't disappoint even users of premium pre-power amplifier combinations. They're both well built and finished, sporting friendly user interfaces to make ownership a pleasure. Both come from companies with established pedigrees, and as I said before both have a very convincing way of playing the music. Which way is your way, I leave to you...

REFERENCE SYSTEM:

Clearaudio Master Solution/Satisfy/Ortofon Kp. a turntable
 Holfi Batt2riaa phono stage
 Whest PS30R phono stage
 Sugden IA4 integrated amplifier
 Charjo Ursa Major loudspeakers

VERDICT ●●●●●

Wonderfully sweet and natural sounding integrated with a musical heart. Fine styling and build complete a great package.

VERDICT ●●●●●

Highly focused and super-clean sounding integrated with detailed, expansive sound. Brilliant build and handy feature set, too.

LEEMA ACOUSTICS
TUCANA II £3,495
 Leema Electro Acoustics Ltd.
 ☎ +44(0)1938 811900
 www.leema-acoustics.com

APRIL MUSIC STELLO
Ai500 £3,000
 April Music Inc.
 ☎ +82 2 3446 5561
 www.aprilmusic.com

- FOR**
- power
 - natural timing
 - imaging precision
 - rugged build

- FOR**
- power
 - expansive soundstaging
 - fine onboard DAC
 - immaculate finish

- AGAINST**
- over rich tonality

- AGAINST**
- cool tonality

MEASURED PERFORMANCE

The Tucana II delivers 162 Watts into 8 Ohms, measurement shows, rising to 272 Watts into 4 Ohms, very high levels of power. Leema warn it has no output protection circuits so a short will cause damage. The advantage of this, they suggest, is that current limiting does not exist to degrade sound quality. With a high damping factor of 74 the Tucana II will exert strong electrical damping and help tighten up loudspeakers that are acoustically under-damped and waffly.

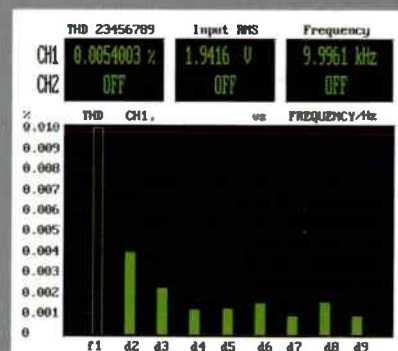
Bandwidth was wide, stretching from 3Hz to 102kHz, the upper limit matching that of 192kHz sample rate sources. Input sensitivity measured a normal 300mV through both the normal phono socket CD input (unbalanced) and the balanced XLR CD inputs. Measured performance through XLR was similar to that via the phono sockets.

Distortion levels were low right across the audio band, measuring just 0.001% at 1kHz and 0.005% at 10kHz, both at 1 Watt. Our analysis shows a progressively reducing harmonic structure with second harmonic dominant and this pattern was maintained as power increased, so the Tucana II has a dynamically stable transfer characteristic and should sound easy on the ear as a result.

The Tucana II is a high power amplifier that measures well all round. It should provide fine sound quality. NK

Power	162 Watts
CD/tuner/aux.	
Frequency response	3Hz-102kHz
Separation	82dB
Noise	-91dB
Distortion	0.005%
Sensitivity	300mV

DISTORTION - TUCANA II



The Stello Ai500 delivers 153 Watts into 8 Ohms under measurement, rising to 240 Watts into 4 Ohms, so there is no shortage of power. The Ai500 has an unusually high damping factor of 126 so it will exert very strong electrical damping and will sound 'tight' in its bass quality, especially with loudspeakers that are acoustically under-damped and boomy, where it will apply useful control.

Distortion levels were very low right across the audio band, measuring just 0.002% at 1kHz and 0.006% at 10kHz, both at 1 Watt. Our analysis shows second harmonic dominates and this was the case right across the audio band, at all power outputs. The Ai500 has certainly been carefully engineered to achieve this unusual property and it does make for an easy and natural sound.

Measuring 320mV in for full output, the balanced XLR socket CD inputs have half the input sensitivity of the normal phono sockets, but both figures are good. Measured performance was otherwise similar through both inputs.

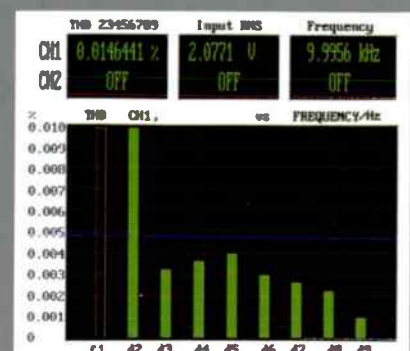
Bandwidth was wide but limited all the same, stretching from 10Hz to 68kHz

The S/PDIF digital inputs, optical and electrical, have a pronounced high frequency roll off, measuring -1dB at 17kHz with 44.1 and 48kHz sample rates. This will slightly smooth the sound from digital sources, it isn't enough to make them sound dull or warm however. Linearity was good, distortion at 0dB measuring 0.002%, and at -60dB a normal 0.22% with 16bit and 0.08% with 24bit digital code, both results being as good as it gets, so the Ai500 has linear D/A converters.

The Ai500 is a very carefully engineered amplifier that is likely to have very good sound quality. NK

Power	153 Watts
CD/tuner/aux.	
Frequency response	10Hz-68kHz
Separation	85dB
Noise	-90dB
Distortion	0.006%
Sensitivity	160mV

DISTORTION - STELLO Ai500



Sun Kings



Noel Keywood finds Acoustic Energy's brand new Radiance 3 floorstanding loudspeakers to be most musically illuminating...

Funny things, floorstanders. There are dizzying quantities of them on the market these days, and with computer design doing much of the donkey work in sorting out all the basics of operation, they all work quite well. And yet they also follow fashion and so although variety is wide, choice is narrow. Entering this market is Acoustic Energy's Radiance series and the range topping Radiance 3 floorstander reviewed here. Not overly expensive, but hardly cheap either at £1,500, the Radiance 3s are a compact floorstander that aim to give the fast AE sound from a loudspeaker big enough to reach low but not so big as to take over the lounge. I know Acoustic Energy engineer their loudspeakers well, so would the Radiance 3 be any type of mould breaker, I wondered?

Into a cabinet standing 920mm high Acoustic Energy place two bass units, each loaded with its own rear ported enclosure. The enclosures are identical our measurements showed and each drive unit has an aluminium cone and voice coil former. The idea behind the common twin driver arrangement is to retain good bass unit cone area together with a narrow cabinet baffle. Twin voice coils also share amplifier power, increasing power handling. There are other tricks twin bass chambers make possible, including stagger tuning, I am told by Acoustic Energy's first designer, Phil Jones, but it looks like the Radiance 3 doesn't utilise this technique because the ports behaved identically.

I was surprised to see a plug at the bottom of the cabinet giving access to a small sand chamber. The idea is to fill the chamber with dry builder's Silver Sand, to add weight, stability and damping to the cabinet. I have used it in the past with Mission loudspeakers and it is very effective, with surprising influence upon image steadiness and general solidity, upon bass quality and general tidying of presentation. Unfortunately, the downside is the loudspeaker can become immovably heavy and the sand is difficult to extract, so we do not sand fill for reviewing. It is worth doing, though.

Adding to stability with the Radiance 3s are outrigger feet that must be screwed on with an Allen key, not an especially easy or convenient process I thought. Worse, our loudspeakers were loosely packed, screws had escaped from open bags and two were missing so we had to use substitutes, but no big deal. Spikes protrude downward from the

outriggers and can be adjusted, as usual, to cope with uneven flooring.

Cabinet stability does improve midrange and treble, making the sound more concise, for want of a better description. So the aluminium coned midrange unit sitting above the bass units benefits from Acoustic Energy's efforts at providing a steady platform. An 130mm aluminium midrange cone must be good if the characteristic zing of aluminium is to be avoided, but you can expect good speech and vocal projection from such a unit and our measurements showed there's a small amount of midband emphasis to subtly enhance this effect. The midrange sits in its own chamber with a rear port.

Above the midrange is an interesting ring radiator tweeter,

used, my attention wasn't drawn to the tweeter's antics, simply because treble is so uncoloured and natural. I'm reminded of the only other tweeter type that is very 'quiet' in itself, an isodynamic unit such as that on Audiosmile's excellent Kensai loudspeaker (and on the Leak 3090s I once owned many moons ago!). This gets very big bonus marks from me when assessing sound quality because I find dome tweeters tiring in long term listening, as well as obviously and irritatingly unnatural, whilst an unobtrusive tweeter that is, by definition, doing its job well, makes for a loudspeaker that is easy to live with and enjoy; you can listen to the music instead of the tweeter.

The cabinet sides of this loudspeaker are curved to prevent

Radiance 3 comes over as running deep and sounding a little full, whilst still retaining a reasonably strong sense of pace. As I have already mentioned, upper treble from this loudspeaker is difficult to pinpoint in quality, but when 'Put Your Lights On' starts Carlos Santana's guitar strings resonate sweetly, their upper harmonics shimmering upward into a clear open space, it seems. The lack of sting or any brightness up top comes over as a sense of dark space, unoccupied by myriad minor resonances that together play their own background tune.

The midrange unit is specific in what it does though, and not perfectly free from a well lit nature that's projective of vocals and adds in swathes of upper midrange detail. The Radiance 3 gets away with this though, for in many loudspeakers a prominent upper midrange can add a sense of harshness, which is why so many manufacturers are happy to let a gap exist between mid and treble.

Whilst percussion was crisply rendered and clear, and the interjection from horns nicely forceful, my attention was directed to the amounts of recorded sibilance from the vocal harmonies. With 'Smooth' this again became obvious, where an abundance of 'ss' had the Radiance 3s hissing quite vigorously, the word 'shame' suffering in particular. At times a small amount of cuppiness behind vocals was evident.

There were times when the Radiance 3s displayed intense centre stage imaging and one of them was listening to Renee Fleming singing 'O mio babbino caro'. Her voice was intensely composed at centre stage, rock steady and clean of outline. I rather suspect that the sense of deep insight into her soaring voice and intensity of expression came from the Radiance 3's projective midrange and it was both obvious in nature and impressive. With a nice sense of stage depth and an absolute purity to treble it was a delight to hear and an example of how well the loudspeaker handled vocals generally.

Giving the Radiance 3s a workout playing Angelique Kidjo's 'Sound of the Drums' had the walking bass line convincingly weighty and full, notes moving up and down the bass scale with discernible resolution and little slur between them. Repeated cadenzas were nicely captured, and Kidjo's voice was well anchored centre stage. Cymbal crashes stang though and there was again a little emphasis that brought a slight hiss to leading edges. A sting to the sound of the Radiance 3 was often evident and signalled the presence of a metal

"a good all-rounder, a little different in its presentation but very enjoyable all the same..."

sitting behind a concave faceplate. Both ours were slightly off centre, which was a little disconcerting, but the tweeter looks like the new Scanspeak Discovery unit and says something about AE's intentions. An aluminium dome tweeter would have been a natural choice here but they justifiably have a reputation for sounding tizzy and bright. Whilst B&W stay with their rather peaky dome that demonstrates this problem, Monitor Audio have taken to using expensive ribbons whilst AE have chosen this interesting unit. The radiating element is a ring driven by a voice coil at its centre. Both the inside and outside edge of the ring are fixed by a surround that allows flexure. Drive applied by the voice coil is better distributed than in a conventional dome, so that ring better follows the music signal. In basic form one side would interfere with the other so a stationary phase plug must be placed in the centre, and this gives the tweeter its unusual and distinctive appearance.

Does it work? It certainly does under measurement, giving a much flatter and smoother response than an ordinary dome [see MEASURED PERFORMANCE] and, better, Acoustic Energy haven't tried to make it subjectively obvious, something I found very apparent - or should I say unapparent - when listening to the Radiance 3. In contrast to most rivals it seemingly doesn't have treble! Don't panic - it does, but much like the many electrostatic loudspeakers I have

discrete cabinet resonance modes between parallel side walls and Acoustic Energy add bi-wiring terminals to the rear. Whilst the overall standard of finish was good, it wasn't great by current standards, but with their grilles on, the Radiance 3s look smart enough.

Like many metal coned loudspeakers the Radiance 3s needed a lot of running in to soften out their sound and lose a rather hard, thin and tinselly quality to the midband. The trouble with this process when it is slow, likely because the alloy is work softened, is that you do not know when it has reached an end. So we ran the loudspeakers nightly for four nights, in effect giving them about fifty hours of hard continuous use, in addition to all the hours of review usage, during which time they changed from having quite a challenging midband to an almost warm presentation, a peculiar and marked change. I mention this because it isn't uncommon now with metal cone loudspeakers and needs to be kept in mind when listening to them. As the Radiance 3s ran in, their sound developed a sense of depth to it and the sound stage started to broaden.

SOUND QUALITY

The bass line in Santana's 'Love of My Life', from the 'Supernatural' CD, was full and firm with a small amount of warmth to it. Notes ran deep but I felt Acoustic Energy have managed a good balance between low and slow, and high and fast; the

...over **80 brands** ...with more being added every week!*

SOUND & VISION

THE MANCHESTER SHOW

Hi-Fi, Home Cinema, Flat Screens, Projectors - it's all at Manchester

Great Deals and special offers only available at the Show
WIN superb prizes in our Show Competition!

Latest News - Just some of the exciting new additions on Show at Manchester:

Alphason - launch a new range of furniture by Conran.

B&W - showing the EISA award winning CM9 speakers.

Chord Company - showing several new cables.

Denon - new hi-fi stereo separates, a new two-piece mini system as well as a full line up of AV models for 2009-10.

Electrocompaniet - planning to introduce new models!

Focal - updated Electra 8e range

JVC - showcasing the new LT-32WX50 LED slim monitor.

Marantz - unveil its 'Pearls', for their first UK showing!

Monitor Audio - first outing for the new SilverRX range.

NAD - see the new stereo amplifiers.

Onkyo - see the full line up of home cinema receivers.

Samsung - showing the next generation of LED TVs.

Sonos - see the new CR200 touch screen controller.

Wharfedale - see the new Diamond 10 Series.

The **What Hi-Fi? Sound and Vision Awards 2009** will be announced at the Show - prior to the Awards issue that comes out the following week.

So be the first to see their 2009 winners, most of which will be on demonstration at the Show!!!

WHAT HI-FI?
SOUND AND VISION
AWARDS 2009

Current brands on show include (updated every week): Alphason Designs, Anatek Acoustics, Anthem, Arcam, Audio Note, Audio Technica Headphones, BDI, Bowers & Wilkins Loudspeakers, Canton, Chord Company, Chumby, Conran, Curvi Hi-Fi, Cyrus, Dali, Denon, Diverse Vinyl, Dynaudio, Electrocompaniet, Epson, Fatman, Firestone, Focal, Goldring, Graaf, Grado, Hi End, Hi-Fi Plus, Hi-Fi World, iDapt, JVC, KEF Kicker, Kimber, Lehmann, Marantz, Meridian F80, mi Football, Monitor Audio, Myryad, NAD, Naim Audio, Off The Wall, Okki Nokki, Onkyo, Opera, Optimium, Ortofon, Outcast Junior, Panasonic, Paradigm, Pathos, Pioneer, Pro-Ject, ProAc, Pure Sound, Q Acoustics, QED, Quad, Roksan, Rotel, Russ Andrews Accessories, Samsung, Scandyna, Sooloos, Sonos, Sony, Soundstyle, Stuff Magazine, Sugden, Thorens, Triangle, UKD, Unison, uPlay, van den Hul, Vinyls Best, Vita Audio, Wharfedale, What Hi-Fi? Sound and Vision, Yamaha & many more...

Saturday 17th October 2009

Opening time: 9:30am - 5:30pm

Sunday 18th October 2009

Opening time: 10am - 5pm

Admission: Adults £6.00

Students/Senior Citizens (over 65) £3.00

Accompanied Children under 16 Free

Tickets are only available on the day.

PLEASE NOTE: there is no dedicated trade day. Trade and Press can pre-register by visiting the website.

Renaissance Hotel, Blackfriars Street, Manchester, M3 2EQ.

Getting to the show



By car: North, Take the M56 motorway to the City Centre
South, Take the M6 motorway north towards Manchester and exit onto the M56

By train: Manchester Victoria Station is only a 5 minute walk.
Piccadilly Station is only a 5 minute taxi ride or 10 minute walk.

Organised by the
Audio T Group

In association with

Previously known as

audio T
Sound & Vision Solutions

WHAT HI-FI?
SOUND AND VISION

HOME ENTERTAINMENT SHOW

Practical Hi-Fi



*Visit www.manchestershow.co.uk for all the latest information

coned midrange driver. Together with a small cuppiness somewhere in the midrange, the Radiance 3 has quite a distinctive presentation, but it is fast, detailed and specific in its delivery, always with well resolved dynamics.

With strings I often noticed the peculiar combination of some edginess from the midrange cone, accompanied by a dark, clear upper treble. So violins of the Emerson String Quartet fairly jumped from the Radiances and were deeply detailed, catching my attention and admiration. I felt I could hear every small movement of bow on string and the strings were described by a tonally broad and rich palette. Again there was at times a slight metallic edge that detracted a little, sometimes giving strings beneath harder downward bow movements a sound that wasn't convincing. This has to be balanced against an intense presentation though, vibrant with detail and communicative of the musician's input. The Radiance 3 is quite a lot different and more characterful than many of its rivals and a sudden and intense ending to one movement made me jump as violins leapt from both loudspeakers, again highlighting the speaker's midrange projection.

Spinning Duffy's not so well recorded 'Rockferry' surprised me a little. The Radiance 3s sounded full and warm in basic balance, but I appreciated the way they got Duffy's lovely voice onto centre stage largely free of the muddle around her from the otherwise messy musical arrangement. Her stronger vocal inflections were well captured, almost as if the loudspeakers had managed to creep up to the mixing desk and turn up output from the vocal mic! 'Warwick Avenue' glided by well, with some slight shininess in strings, but with Duffy sounding full of voice centre stage, every small nuance clearly conveyed.

Turning back the years to 1968 had the inevitable Hammond organ of the Full Tilt Boogie Band sounding fruity and the screams of Janis Joplin clear as if they were recorded yesterday, if with that small edge again present. The screamed start of 'Cry Baby', a trademark of what for me was one of the world's greatest female singers, sprang at me as had done the Emersons. The Radiance 3s didn't disappoint with Janis Joplin, throwing out her spoken lyrics with fitting intensity, and adding just a little edge to shouted "cry baby". Just a small amount of boxiness was evident as the band kicked in on the start of the following track though; this may be coming from the midrange chamber.

The sense of richness and slight warmth I heard at the start of 'Rockferry' was repeated with Jackie Leven's 'Boy Trapped in a Man'. Jackie sounded full in voice centre stage and was as clearly and firmly described as other vocalists. I sensed a small amount of boxiness and some softness, but otherwise a lovely ease of presentation that allowed me to focus on the lyrics.

As Jackie lowers his voice for the slowly sung

'Desolation Blues' the Radiance 3s sounded full bodied and rich. Spoken and gently sung word at centre



stage was intensely wrought and vibrant in nature. There were times that the sense of balance the Radiances enjoy, their dark clean treble and centre stage intensity would make other loudspeakers shudder for their very existence. 'Extremely Violent Man', a fittingly frightening track, had me locked in rapt attention because the Radiances gave Jackie Leven's voice a weight accompanied by a cutting edge to lyric that intensified the emotional content of the track. Again, although with small blemishes, the Radiances can be expressive and able to hold a listener's attention.

CONCLUSION

The Radiance 3s are an unusually characterful loudspeaker - and I don't mean that as deprecatory euphemism! A bit like loudspeakers of yore they have great strengths, moderated by a few small weaknesses.

For intense imaging, especially with centre stage vocals, good overall balance and superb treble they impressed me greatly. In most rooms I believe their bass will be in fine balance and it plays well. The small sting to strings and emphasis of sibilance gives the loudspeaker a bit of zest that may or may not be acceptable, according to taste. The Radiance 3 is a good all-rounder though, a little different in its presentation but very enjoyable all the same, and well worth hearing. It is an interesting step out of the mainstream.

VERDICT ●●●●●
A nicely balanced, fast yet intense delivery with beautifully smooth treble makes the Radiance 3 unusual and attractive.

ACOUSTIC ENERGY
RADIANCE 3 £1500
Acoustic Energy
☎ +44(0)1285 646580
www.acoustic-energy.co.uk

- FOR**
- intense vocal delivery
 - smooth, uncoloured treble
 - tonally balanced

- AGAINST**
- mediocre finish
 - emphasised sibilance
 - screw on feet

MEASURED PERFORMANCE

Our frequency response analysis shows the Radiance 3 has no major excursions away from flatness. In fact, the response trace stays closer to the 0dB datum than most and there will be less character added as a result. In particular lack of peaking means absence of local resonance and the time smear that inevitably occurs, so the basic prognosis is good. The tweeter in particular has an unusually even frequency response, suggesting it will lack most of the usual clatter from metal domes. However, a small lowering of output below 500Hz may give the Radiance 3 a dry balance and it should be used close to a rear wall. A small rise in output around 80Hz suggests it will have some added bass zest. The ports work over a very wide band and well damp the bass units resonance around 40Hz. So the Radiance 3 has well tailored acoustic damping and this is reflected in the impedance curve where the motional impedance element sitting above the DCR component (as it were) is quite small. So the Radiance 3 is well engineered at low frequencies and should have nicely damped bass, aided by good amplifier matching.

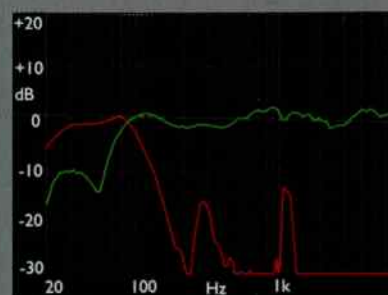
The impedance curve also lacks the usual rise in inductive reactance of the bass unit voice coils, remaining relatively flat and unreactive at higher frequencies. Measurement showed a DCR of 5 Ohms and an impedance, with pink noise, of 6.5 Ohms. Together with a healthy sensitivity of 89dB SPL at 1m the Radiance 3 is an amenable amplifier load that produces plenty of volume from little power, so low power amplifiers of 30W-40W should work well with them.

Spectral decay analysis shows little colouration, although the bass unit looks 'hot' around 80Hz where there's peaking and it overhangs too, but the lower midband is clean.

Distortion from the midrange unit hovers around 0.2% across most of the audio band, but it lifts a little to 0.5% above 3kHz. Below 100Hz distortion stays below 2% all the way down to 40Hz at 90dB SPL. The ports give a similar result down to 40Hz, exhibiting more distortion below this frequency (5% at 30Hz). This is a good result, showing the Radiance 3 is linear and does not suffer bass doubling at modest volume levels.

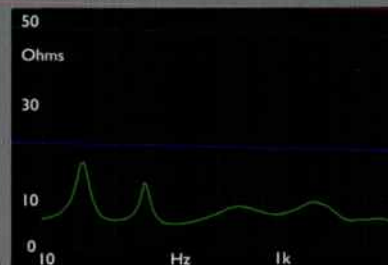
The Radiance 3 measures well in all areas. It will have an even balance, treble should be smooth and clean and bass very well controlled. Strong upper midrange output means detailing will be good and a small amount of midrange emphasis suggests well projected vocals. NK

FREQUENCY RESPONSE



Green - driver output
Red - port output

IMPEDANCE



YAMAHA



A century of making music
distilled into our ultimate Hi-Fi:
it could only be Yamaha



Yamaha began its quest for sound superiority over 100 years ago - rather earlier than most of our hi-fi competitors. Since 1887 we've turned our attentions to all manner of musical instruments and professional audio equipment, but never lost sight of our original driving force - the creation and delivery of beautiful, natural sound. You'll hear the difference when you choose Yamaha for your home. Discover more at hifi.yamaha-europe.com



av·hi-fi

Powered by music



TANGENT UNO £89.95

A simple looking AM/FM analogue table radio, although small the Tangent cannot really be called a portable as there is no handle, and it works from mains power only, something that allows greater freedom for the designer as they are then not obliged to consider battery economy as a constraint. The cabinet has a wooden shell with plastic panels covering the front and back. A 3" loudspeaker with foam roll edges is fitted into the top, leaving space on the front panel for an oversize tuning knob and what would have been known in the nineteen thirties as an 'aeroplane tuning dial'. The cabinet is ported at the rear to augment bass, but is otherwise well sealed, so some thought has clearly gone into this area of the design.

Although in its basic form the Uno is a mono set, it does include a stereo amplifier rated at 5 Watts per channel. An output at the rear is provided for a second passive loudspeaker, ideally of the same type and housed in the same manner at that in the radio itself, although whether Tangent is able to supply such a loudspeaker is not made clear in the instruction manual. Other connections include one for stereo headphones, a stereo recording output for a cassette or MD recorder, a mono output for an active subwoofer and the inevitable line input for a Walkman or MP3 player. A 3.5mm to 3.5mm stereo lead is provided for this so it can be used right away.

Inside the Uno, I found things unexpectedly complex, the circuit having amongst its elements no less than ten operational amplifier stages, many of which are coupled together

with signal-grade Mylar capacitors. This is the sort of thing that one would expect to see in a high grade DAC or phono stage, not a small table radio. The cabinet is braced inside too, another good sign. In fact the whole thing looks like the degree project of an ambitious electronics student rather than a commercial product - refreshing indeed! Also encouraging is that the supplied mains adaptor is a linear design with a proper mains transformer rather than the cheap switch-mode type that comes with some sets, which can cause enough interference to blot weak broadcasts out completely.

The sound of the Uno is characterised by an exaggerated bass lift and a sucked out midrange. This initially gives the impression of warmth but the one-note nature of the bass soon becomes frustrating. Such a tonal balance impresses the novice but is predictable for the more experienced listener; speaking personally a little less bass and a sweeter midrange would have pleased more. Without a separate tweeter, the treble performance is always going to be limited but what is there is clean enough. It's both soft and slightly edgy, a common trait in products of this type.

There is plenty of volume available and neither the amplifier nor the loudspeaker appears strained at higher levels, but despite the efforts to make the cabinet rigid the back is rather thin and one can hear (and feel) this singing along when the set is playing loudly. The main sound characteristics are clearly applied electronically in the power amplifier as both the headphone and the tape outputs are impressively clean and neutral sounding, even when receiving a stereo broadcast through the built-

in rod antenna.

The FM tuner clearly has AFC (automatic frequency control) that eliminates drift and eases the tuning of strong stations. The only trouble with this system is that when one tries to tune into a weak, distant station the set tries to pull onto adjacent, stronger ones and often succeeds. An extra 'FM-AFC' position on the wave change switch would be welcome.

The AM section works well too, although the strong noise between stations suggests that there is a little too much gain which the AGC (automatic gain control) then has to retard when a station is on tune. The AM receiver operated like a properly engineered circuit rather than the begrudgingly tacked-on afterthought that it is on so many sets. Tangent are to be congratulated for securing good performance from an often overlooked but still reliable and entertaining medium.

Using the Uno as an amplifier revealed a similar character to the one it has as an FM receiver. The character of the sound is well suited to covering up the shortcomings of MP3, and while it won't ever replace your main system it is certainly good enough for short term utility or background entertainment use.

The Tangent Uno is an honest and competent product with a fashionable look and sound, and is obviously well engineered. It enters a crowded marketplace however up against the likes of Tivoli and Roberts and I would advise a brief audition first so you can ensure that the somewhat coloured sound is to your taste. **TJ**

[Contact: www.tangent-audio.com, +45 9641 1500]

SOUNDBITES



Blu Sale

As competition in the Blu-ray market hots up, so the prices come down. Noel Keywood tries the brand new bargain-basement Philips BDP3000 for size...

Philips recent BDP3000 aims to mix it with Sharp and Samsung players in the budget Blu-ray player market. It starts out well: quoted as costing £169 by Philips you can find this player priced right down to £135 or so in the shops. What it offers at this price is remarkable in some ways, if flawed I found.

The BDP3000 is light at 2.5kgs and compact too, measuring 435mm wide, about the same width as the Marantz SR8002 receiver I used it with. However, at 227mm deep and 58mm high it's a cinch to put into place and connect up. Life is made easier here by the absence of multichannel analogue audio outputs to confuse things, but this does mean anyone wanting to use analogue audio for surround-sound will have to look elsewhere. The S/PDIF digital audio output is labelled

'coaxial', an unusual description, and there is an HDMI output socket of course, an RJ45 ethernet socket for internet connection and a USB socket. Although light, the BDP3000 is nicely made and finished, and a little less clanky in its casework than a Samsung.

Philips point out repeatedly that the USB socket is for memory only, to store BD Live download data. It isn't possible to replay music or video files from it. The internet connection also allows firmware upgrades. Or it does if you can get it. The BDP3000 would not connect to my Netgear router, used successfully by Samsung players and Onkyo receivers. It polled the network, was seen by the router as MTK8520 (?) and given an address, but dropped it. Assigning a static address and direct route did not help, so I was unable to access BD Live to download bonus material. This means nothing to me and does not

affect the player's basic functionality. However, it does frustrate software updates, and these are more valuable.

SOUND QUALITY

In addition to the main HDMI output that carries both digital video and sound, and the 'coaxial' digital audio (only) output, there are analogue stereo outputs, so the BDP3000 can be hooked up as a basic CD player. Tests showed [see MEASURED PERFORMANCE] these sockets deliver a decent result but of course you cannot expect real audiophile player sound quality. It makes much more sense to use a player like this as a CD transport, hooking up its S/PDIF 'coaxial' output either to a quality external DAC or to the digital input of a receiver. Why? Well, like the Samsung players this one has very low jitter and therefore high quality digital output our measurements showed. It isn't quite up to the



Samsung BD-P1600's extraordinary performance but it is comparable to most CD transports.

Most people will, however, just use an HDMI cable which carries both audio and video digitally. I spent a few bemused hours comparing CD digital via S/PDIF and HDMI and felt S/PDIF was just a little tidier and cleaner of the two. As there's no video signal when playing CD, there was no jitter from this source via HDMI and I had Pure Direct selected as always, because Ken Ishiwata and, therefore, Marantz insist video RF degrades audio. Differences really

"In some ways this is a breathtakingly good machine considering its price point..."

weren't great, but I felt S/PDIF was faster, sharper and sweeter than HDMI, when listening to CD.

But so much for CD. This is a Blu-ray player and good ones can guzzle formats, an Oppo BDP83 being able to play every silver Frisbee invented. The little BDP3000 is one quarter its price and a bit more limited. Staying with audio, the Philips

plays only the CD layer of an SACD, so plonk an SACD in and it will play, but you get stereo.

It will also play a DVD-Audio disc, but not the high resolution code, so when I popped in Toy Matinee I got DTS 5.1 surround-sound, but could not select the Meridian Lossless Packed 24/96 PCM track. I didn't burst into tears though: sound quality was very good and thoroughly enjoyable, if not as hard edged and visceral as the uncompressed track.

And now we come to Blu-ray video sound track, and disappointment. Amazingly, our

instruments.

The Chris Botti concert was similarly affected: 24/96 PCM 5.1 surround-sound was two channel, but the Dolby stereo and surround-sound versions played correctly, although I noticed that my receiver saw a Dolby encoded signal with either Bitstream and Auto set on the player, when it should have registered PCM from Auto mode. This suggests the player was not decoding TrueHD to PCM.

An Opus Arte Blu-ray sampler with every performance offered in 2ch PCM, 5.1 PCM, DTS-HD Master Audio and Dolby TrueHD played all versions properly except 5.1 PCM, which my SR8002 receiver registered consistently as 2 channel - how sad! But I must say the swans in 'Swan Lake' have never looked so good; this player gives a fabulous picture.

Philips claim to fit Dolby TrueHD decode, but not DTS-HD Master Audio decode. But whilst the player registered TrueHD and Master Audio on its display, my receiver showed it was doing the decoding, not the player, with Auto or Bitstream set.

When I popped in a 24/192kHz sample rate Audio Blu-ray from 2L of Norway the situation changed a little. The BDP3000 processed both 5.1 PCM and Dolby TrueHD to

BDP3000 would *not* play PCM (basic digital code) surround-sound. Listening to Andrea Bocelli's 'Live in Tuscany' which offers 24/48 code in stereo or 5.1 surround-sound format (no Dolby or DTS options) I got only stereo, with the player set to Auto or Bitstream output. The 5.1 track was missing channels, as switching to 2ch brought up level and the density of



Tucana II

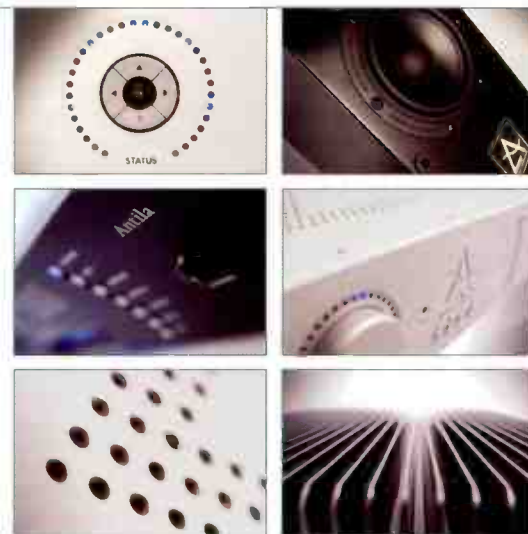
The Tucana was Leema Acoustics' first hi-fi electronics product. Within a short time it established itself as a true reference amplifier winning many prestigious awards. The new Tucana II extends both the performance and features, to set a new world-wide benchmark.

Tucana II

Borrowing heavily from developments pioneered in the staggering Leema Reference Series Altair IV amplifier, the Tucana II is an even more accomplished performer than its multi-award winning predecessor. Improved dynamic range, resolution of fine detail, and remarkable clarity help the Tucana II present music with life-like verve into even the most fussy of today's audiophile speakers. This highly refined amplifier can deliver over fifty amps to each channel with a vice-like grip and precise control of the loudspeakers.

New features on the Tucana II include an MP3 input, balanced input, headphone output, direct input selection, adjustable input gain, and a balance control.

The Tucana II helps even the most complex music make complete sense.



Please visit
www.leema-acoustics.com
 to find your nearest dealer

Leema Acoustics: Award winning hi-fi



stereo, in Auto and Bitstream modes. What an irony that it leaves DTS-HD Master Audio well alone, sends it out native and the receiver then turns it into glorious surround-sound! With this disc it did turn Dolby to PCM

dinary noise suppression, which is why it gives silky smooth colour, and it also has amazing detail resolution too. I saw just one problem...

With the Tiger Moth sitting stationary its rotating prop was a

Reviewing a Blu-ray player takes a lot of button pressing and operationally a few issues stood out. The onscreen menus were cleanly designed and clear, not the shaky text I've seen with some Chinese made receivers. The



when set to Auto, but again only two channels were output.

Inability to output 5.1 PCM digital audio isn't acceptable even in a budget player, so the BDP3000 is seriously flawed here (on 2 samples).

VIDEO

With normal Hollywood output on Blu-ray the BDP3000's picture looked very good immediately. All the usuals like 'Iron Man', 'Spider Man' and 'U-571' had silky smooth colour, meaning noise was low, and plenty of detail too. Pictures looked sumptuous and I was very impressed. How a cheapy player could look so good was a bit baffling, but there are some very clever bits beneath the skin, even if they are not related to audio!

Our HQV Blu-ray test disc showed clearly the Philips player handles 24p film superbly even in motion scans and suffers no jaggies on the edges of moving objects. It outclassed Samsung players here and was almost shockingly good. However, these discs have limitations. My own footage from a Canon HV-30, burnt to Blu-ray disc via the TMPG MPEG2 codec in BD-V format revealed what the Philips could and could not do. Watching a Tiger Moth biplane stationary at Duxford airdrome revealed astonishing detail in grass and trees; those old favourites of resolution! Whilst the Tiger Moth, people and lettering on construction equipment looked good on a Samsung BD-PI600, the Philips machine showed the Samsung was blurred with grass and trees. I thought this was a limitation of the HV-30, but it was not. The BDP3000 showed astonishing ability to suppress noise and reveal detail; I was more than impressed here. I was quite astonished that the blurring of distant grass on an airfield was not attributable to my consumer camcorder, but to the Blu-ray player. So the BDP3000 does have extraor-

blur with the Samsung BD-PI600, much as you'd expect. The Philips player couldn't handle this motion and produced a peculiar ghost image instead. Noise reduction algorithms are often compromised by movement and this was the case with Philips processing scheme. However, this was the only time it failed; as the aircraft moved off to taxi, moving verticals in the stringers were perfectly crisp and wing edges left no trail or blur. It was a lovely picture and I was quite taken aback at how much better the Philips looked than any other player I have reviewed to date. The depth of the scene was made more apparent, colour was rich (well okay, oversaturated by the HV-30 and the Philips added something here) but detail superb. It was a transfixing picture and nothing other than very impressive.

absence of a Draw Open button was disappointing and the important Top Menu is too small and part of a button group, when it should be large and close to Menu.

Load times were fast: 20 seconds to initialise at startup, 6 seconds to play a CD from Draw open, 12 seconds to play a Blu-ray movie and 30 seconds for a Java menu to load from Spiderman and John Meyer. Picture in picture worked fine.

CONCLUSION

If picture quality is all, then the Philips BDP3000 is a great player at the price, but its inability to play 5.1 PCM as surround-sound, only as stereo, is unacceptable. Sadly this rules it out for audiophiles, and many others too. What a shame, because in some other ways this is a breathtakingly good machine considering its modest price point.

MEASURED PERFORMANCE

The analogue audio outputs offer a good result for those that may want to use them. Frequency response has a small lift to 20kHz (+0.2dB) with CD and from DVD a 24/96 stereo track gives output extended up to 45kHz (-1dB).

A small amount of noise diminishes EIAJ Dynamic Range to 109dB from the 112dB from a quality CD player, but with 24bit code distortion at -60dB measured 0.07% - very low.

The BDP3000 does not decode DSD from SACD. Play an SACD disc and it reads the CD layer only, measurement showed.

Jitter on the coaxial digital output was a low 10pS or so right across the audio band above 100Hz, so BDP3000 works well as a transport, lacking the terrible jitter performance of so many cheap players, and comparing with the excellent performance of Samsung players.

The BDP3000 is well engineered under the skin. It gives good audio results from all outputs. Obviously, results from HDMI are determined by the receiver, not the player. NK

Frequency response (-1dB)	
CD	5Hz-21kHz
DVD 24/96	5Hz-45kHz
Distortion (%)	

0dB	0.003
-6dB	0.002
-60dB	0.28
-80dB	3
Separation (1kHz)	102dB
Noise (IEC A)	-115dB
Dynamic range	109dB
Output	2.1V

DISTORTION - 16bit

JITTER

VERDICT ●●●£
Pleasant to use, and with great picture quality, but the lack of PCM surround-sound rules it out audio-wise.

PHILIPS BDP3000 £169
Philips
+44(0)800 3316016
www.philips.co.uk

FOR

- great picture quality
- fast loading
- easy to use

AGAINST

- no PCM surround-sound
- erratic with 24/192
- no Draw Open button

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

▶ OUR CURRENT PRE-OWNED STOCK LIST:

AMPLIFICATION

Musical Fidelity A5 Integrated.

One owner from new, unmarked condition with original box/packing. (£1500) £795

Sugden Maestro Amplifier. 5 Months old and as new condition. One owner. This Class A/B amplifier with Class A Bias offers astonishing performance for this price point. 50w (8 ohms) and 76w (4 ohms). 3 Line Inputs, 1 Phono Input for MM Cartridge. Cost new £1300 our price £795

Eastern Electric M520 Integrated Amplifier.

Ex-demo unit in fantastic condition. This amplifier has been reviewed to very high acclaim, and has a quite exceptional presentation with the EL34 valve as its base and pure Class A output. It is complete with the aluminium full function remote control, packing and manual. We have been astonished at the sonic performance of this amplifier, humbling many a unit at far higher price points. (Cost new £1950) £POA with a 5-year warranty

Naim NAP 150 and NAC 112 pre/power combination. One owner, unmarked condition and a 5-year warranty for the new owner. Cost new as a pair in the region of £1600. so incredible value for money at only £795 for both units together.

Audio Analogue Maestro Settanta Integrated

Amplifier. Wonderful condition, with all original Boxes, Packing, Manuals and Brass Remote Control. As always, we have updated the Display to current specification. Incredible transparency and dynamics, make the Maestro a favourite with reviewers and buyers alike. (£2500 New) £995

Plinius P8 Power Amplifier. Boxed in excellent condition. One very minor mark to front plate. One owner from new, great reviews. (£3600) £1195

MBL 7008 Integrated Amplifier. One owner, boxed, manuals. As new condition. Brilliant reviews. (£6500) £4878

Van den Hull (VDH) Array A-1 Pre-amplifier. One owner from new and a very rare item indeed. Costing the best part of £3000 when new, this pre-amplifier will surprise many with its incredible performance. (£3000) £995

Quad 909 Power Amplifier. One owner from new, Four months old. Unmarked, boxed, manuals. (£999.95) £625

DIGITAL

Naim CD5i-2 CD player. This is the newest version (italic i) version. Only months old, absolutely mint condition. One sold on e-bay a couple of weeks ago for £700. our price including a 5-year warranty is £695

Wadia 301 CD player. One owner from new in silver, boxed, packing, excellent condition. Comes with the upgrade metal remote (these normally have a plastic one). Can be run directly into a power amplifier using the digital volume control (£4000) £1695

DCS Verona Master Clock. One very careful owner from new. Original box, packing and manual. The reviews and reputation speak for themselves. Price includes a 5-year warranty (£6000) £1995

Raysonic 228 two box cd player. Stunning red book cd replay. One owner, upgrade vintage Mullard NOS valves included (cost £300). Unmarked condition. (£3800 - £4100 inc valves) £2495

Acoustic Arts DAC1 mk4. Fully balanced or single ended operation, current model with latest spec. 66 bit, 1536khz upsampling. 4x digital Inputs. One owner from new, unmarked condition. Boxed, manual. 5-year warranty for the new owner. A bargain. (£3950) £1995

McIntosh MCD201 SACD player. One owner from new in outstanding condition with original box/packing. Great reviews. Built in pre-amp, so can be used directly into a power amplifier. (£3495) £1695

LOUDSPEAKERS

Audio Physic Virgo III. In almost as new condition having had one extremely careful owner from new. Original boxes and packing. Stunning in cherry. (£4500) £1895

Living Voice OBXR2 speakers. One owner with outboard crossovers. Unmarked condition finished in Maple. Latest specification and come complete with £1000 of bi-wire cable. Cost new over £5000 (including cables) a bargain at £2395

Jas Audio Orsa Loudspeakers. One Owner from new, Finished in Hi-Gloss Cherry. Ribbon tweeter and adjustable crossover - amazing value for money. Hi-Fi+ Product Of The Year Award. (£1795) £895

Martin Logan Aeon Electrostatic Loudspeakers. One owner from new. Quite exceptional condition. Finished in Light Oak and complete with immaculate original boxes, packing, accessories and paperwork. (£2995) £1495

ATC SCM19 in Cherry, one owner, as new. (£1524) £1095

ATC EL 150 SLP. A rare opportunity indeed. Only 30 pairs of these will ever be manufactured (these are no 11 of 30). Our ex-demonstration pair in unmarked condition, complete with the original wooden crates. These also come with a lifetime warranty for the first owner. (£26393) £POA

ATC SCM40 Loudspeakers. One owner from new, 18 months old, finished in cherry. Boxed, manuals and balance of 6-year warranty. Slight mark on bottom edge and rear edge (£2044) £1395

Klipsch P-39F Flagship Palladium Speakers.

These are simply breathtaking and have recently had a stunning review by Stereophile magazine. Ex-demo with a few minor marks. Finished in the Merlot veneer. (£14798) £POA

Audio Physic Scorpio boxed in Cherry, one owner from new, excellent condition. (£3800) £2495

Audio Physic Avanti V speakers. Finished in the Macassar Ebony (premium finish), ex-dem. Unmarked condition, sensational performance and reviews. Make no mistake, if these cost twice as much, they would still represent great value for money! (£9823) £POA

Audio Physic Scorpio II - Latest model, finished in cherry, ex-dem, unmarked condition. (£3773) £POA

ATC SCM 50 ASL active speakers in Yew, one owner, unmarked. Current spec (£8500) £5695

ANALOGUE

Acoustic Solid Solid Machine with Music Maker Conductor Parallel tracking air bearing tonearm. There have been some fantastic reviews on this combination. This is our ex-dem unit and it is in unmarked condition with light use. (£5100) £2995

Eastern Electric Minimax Phono Stage. This probably holds a record (no pun intended) for the most outstanding reviews of any product currently available. Boxed in unmarked condition. One owner from new, only months old. Simply sensational (£1495) £949

Whest PS20 complete with MSU20. One owner from new, stunning 2-box phono stage in black, original box and packing. Incredible reviews. (£1299) £595

MAINS CONDITIONING

QED Qonduit MDH6 mains block. 6-way mains filtration and protection hub. Unmarked condition, a bargain at this price. (£239) £119

Vertex AQ Taga - 6-way distribution mains filter. Great reviews. One owner from new, unmarked. (£868) £595

Vertex AQ Jaya, boxed with manual, some very slight marks, one owner. (£302) £225

Isotek Premium Mains Cable, boxed as new - 1.5m - Three Core Annealed Oxygen Free Copper for better signal transmission - (£75) £49

CABLES

Vertex AQ HiRez Solfonn XLR interconnect 1.5m. 8 months old. Original Technology demonstrator for the new HiRez range of cables. As new condition, stunning performance. (£2990) £POA

HMS Sestetto Mk2 XLR Digital Cable Wonderful digital aes/ebu cable with original box and packing. 1m Length, 110ohm - £95

▶ Please ask about our unbeatable part-exchange programme.

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

* terms & conditions apply

mail



LETTER OF THE MONTH PRIZE



KEF iQ30 LOUDSPEAKERS

Visit our website at www.hi-fiworld.co.uk or send your emails to letters@hi-fiworld.co.uk. Letter of the month wins a pair of KEF iQ30 loudspeakers and one years FREE subscription to Hi-Fi World.

A pair of KEF iQ30 loudspeakers is on their way to DAVE DICK, Letter of the Month winner in our OCTOBER 2009 issue.

Letter of the Month

ON THE ROOF

I thought I might tell you about my exploits with FM aerials. Having spent the last four weekends up at roof level mounting and remounting TV and FM aerials on larger and taller poles, and adding even DAB aerials (yes really!) I came across signal level problems on my Quad 66 FM tuner which hadn't been used on my main system for a while. This turned out to be due to corrosion in the aerial connecting boxes, and on good quality Antiference aerials up for fifteen or twenty years or more. Not being content with a replacement aerial I overhauled my six-element unit and my single dipole (but not my relatively new circular dipole), hacksawing off the rusted bolts, sanding off corrosion of each element and of course cleaning the connecting boxes. A couple of hours or so brought me a refurbished six-element, but remounting it up on the chimney was not so good, the wind speed having increased dramatically, and now dropped off the upper end of the Beaufort Scale!

On powering up the tuner, the signal level shot up near the top of the scale on the Quad, which never has been so high, but the real surprise was my Denon TU1800DAB, on another simple dipole, which has the most fantastic stereo separation on FM. So I had bought a DAB tuner for digital radio a year ago, hardly used it because it sounds 'DAB-ish' (you know what I mean), and through my Harbeth speakers too clinical, but on FM it sings! Okay, it's not as good as the Quad, that has more smoothness and resolution and other qualities, but it did cost a lot more. So checking the specs the Denon has a stereo separation at 43dB (wide) but sounds even better than that, and way better than DAB where the spec shows 87dB...



DAB in Harrow comes from Alexandra Palace transmitter, North London.

In conclusion, there must be millions of aerials on both TV and FM which have been up for some time and are losing signal strength to the tuner through deteriorating connections, poor cabling, mice, etc., yet we are prepared to spend a fortune on equipment which is state of the art (not DAB!), but not look at the whole chain from aerial, lead, etc. Okay, I could have bought replacement aerials, saved myself a load of time and less risk of sliding down the roof into the tomato plants, but I have recycled my aerials to make them almost as good as new. I reckon my six element has another twenty years life, even if FM has a quarter of that. I could always turn the rods into pickup arms, about 900mm long, with a Denon DL103 on the end, but what a unique record deck that would be.

Lastly, I think Steven Green and Noel Keywood should be made joint Prime Minister for their articles in your September magazine on the curse of DAB and the potential demise of FM. I wonder if Gordon wants his aerial refurbished?

Ron Koorm

Yes, it's a hard life sitting on top of a roof in the wind and rain, and I've had to hacksaw off a few rusty parts in my time after they were ravaged by the elements. Things deteriorate pretty quickly and an FM tuner needs quite a strong signal if it is to give its all sound quality wise. If you do manage 1mV or more from the aerial, then listening to live Radio 4 talk and such like is like sitting in the studio; it is both atmospheric and involving - and a lovely evening experience.

If you are a real aerial 'saddo' like me (!) you will enjoy a peep at this site, one of the 'webs wackiest <http://tx.mb21.co.uk/gallery>. Here you will see some glorious pictures of aerials - mostly of transmitters - with moons, sunsets and all manner of scenery behind. You can actually see what your local transmitter looks like (woo hoo hoo!), and see how they did it closer to Marconi's time. The wallpaper section shows far off hills in windy places and why you wouldn't want to be a

transmitting aerial. There are even stories of aerial collapses and what it's like to ascend in one of the tubular ones using a crude service lift. Did you know aerials have clouds inside them? Check out the Features section. Note that you must use the Finder drop-down to select from a station list to find your local site and with, say, North Hessary Tor, you will get a BBC coverage map to see whether you are in or out of its service area.

The Denon TU1800DAB was a great tuner and I saw them going for £250 or so not too long ago in a clearance from one shop in London's Tottenham Court Road. With rebuilt aerials you should get a great sound.

NK

Fair point, well made, Ron. The ravages of the UK weather are such that whilst the twig may stay okay over a long period, the connections most certainly won't. FM aerials make a big difference to tuner sound, so they shouldn't be overlooked. Just because it's still working, doesn't mean it's working perfectly. Still, you wouldn't catch me up a ladder on the roof if you paid me; I get acrophobic looking at a department store escalator! **DP**

TECHNICS TWEAKING

I was wondering if you had an article regarding the tweaking of a Technics deck. I have had my SL-1200 for two years now and have replaced the cartridge with a Goldring 1006 (couldn't afford the 1042, though it is on my list). I use a Sorbothane mat and have replaced the phono cable with a double



A Technics SL-1200 with SME V arm - is this the ultimate tweak?

shielded cable that I use throughout my system. I am trying to figure out where to go next as I still prefer the sound of my Rega Apollo CD player over the SL-1200 and would like them to be even at least!

The rest of my system? Well I

have an Analogue Audio Paganini and Donizetti amplifiers and am using the phono in the preamp., plus 9.05AWG cat 5 home made cables (huge improvement in sound) and Dali Ikon 1s on solid sand filled stands.

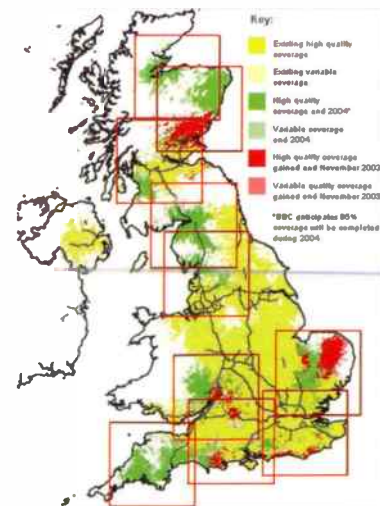
If there isn't such a thing as a tweaking article then a few pages of an issue could possibly be turned into an article on your favourite deck? A guide of tweaks for different price ranges would be as good, because most owners of an SL-1200 would struggle to buy a top SME arm.

just a thought
Andy Love

Hi Andy. If you have the standard arm then change it for a Jelco SA250ST (that's the straight one, not the swans neck) or a Rega RB301. The impecunious could fit a Rega RB250, second hand perhaps. Arm plates and bits are available from Sound Hi-Fi (see www.sl-1200-mk2.com). Obviously, the Goldring 1006 is a budget 'starter' model and with this in a Technics arm I think it is asking a bit much to compare it with a Rega Apollo; this really is comparing cheap chalk with expensive cheese. A decent moving coil cartridge with valve preamp will show clearly the deficiencies of CD, whilst a good, modern MM cartridge in a decent arm, should be more than entertaining. **NK**

Hi Andy, I've actually done two Technics SL1200 'tweak' articles so far, first in September 2007 when I fitted an Audio Origami RB250, Isonoe Isolation feet, SDS Isoplatmat. This little lot cost me about £1,000,

including the £150 SL1200 I got off eBay. My second feature in August 2009 involved me fitting an SME Series V tonearm and Koetsu Red K Signature moving coil cartridge, the aforementioned Isonoe feet and SDS Isoplatmat, plus a Timestep PSU. This



BBC coverage map.

cost upwards of £5,000.

To summarise, in my view, the biggest weakness of the SL1200 is the standard S-shaped arm which is too resonant to give a detailed, neutral sound. As I write, I've learnt that you can now get a Funk Firm mod which involves the fitting of a new (non-resonant carbon fibre) armtube, but at the time of my first feature this wasn't available. That's why I opted to rip the stock arm out and fit a Rega RB250 (expertly rebuilt and rewired by Audio Origami).

The new arm had a dramatic effect, but tells you that the platter is as resonant as a church bell, and the isolation is lacking. I solved the first problem with the SDS mat, which gives the platter a dull thunk instead of a 'ding' when you hit it. It also adds a bit (but not too much) mass, which seems to damp the 'edgy' quartz lock servo. Many recommend other mats (and I've tried most), but to me the SDS is the best for this particular application.

The deck has less than ideal isolation, although it's lots better than any price rival. Technics have had a go at damping it - there's a strong alloy top plate, resin damping and a rubberised plastic base, so it's better than a sheet of MDF or Perspex. But it's still a weak point. The Isonoe feet I fitted to my Project decks basically float the whole shebang on small rubber O-rings. It works well, but they're expensive. I added an Audiophile Base 01 isolation platform too; this really helped as a belt and braces measure.

Before the first stage of mods, I found the SL1200 to be a punchy, bally performer but crude across the midband and hard in the upper mid, and dynamically compressed with a veiled treble. After, it became a punchy, bally performer with a surprisingly open midband with great focus, and a wide, expansive sound, and lovely filigree detailing in the

treble. Surprisingly good dynamics, too.

The second, most recent article that you've obviously seen is me fitting a Timestep PSU, among other things. I found this aftermarket power supply takes away another layer of mush, exposing the fundamental platform as being incredibly detailed and open - it's there with an SME 10 or suchlike, no less! Also, it calms down the direct drive servo system a little, so it's a touch more fluid sounding, whilst retaining the sledge-hammer bass of the original. The result is a truly lovely thing to listen to. **DP**

IN THE BAY

In the last couple of years I have discovered eBay and been on a nostalgia trip. I have bought linear tracking turntables (including an amazing sounding Sony PSFL99), ancient audio magazines including *Hi-Fi World* with Mr. Noel Keywood looking much younger but already with signs being follicularly challenged (no offence meant as recently I am also being confronted with the same issue!).

I was getting intrigued by ancient CD players fetching unbelievable prices. In particular I saw a Rotel RA965BX going for more than I paid for my brand new Samsung Blu-ray player! In my younger days I wanted to buy this particular model but did not have enough money at the time and settled for some thing half the price and regretted that for years.

Instead I had bought a another Bitstream model (Marantz CD42) that was guaranteed to give me a headache within one hour of listening. Perhaps it was no better or worse than other budget CD players of that era but it did not deliver the revolution that was promised by all the hype that was advertised about the miracle of Bitstream DACs. In fact, it sounded a bit worse than the older multibit four times oversampling Sony I had previously.

That was almost twenty years ago, but I always wanted to know what I had missed. Then I was inspired by my recently purchase of 1991 October issue of *Hi-Fi World*. So I kept doing an occasional bid on Rotel 965BXs on eBay and managed to win one without a remote control (and a promise to mail it in the future; still not arrived) at a reasonable price.

When it finally arrived the box was damaged and my heart sank when I pressed the 'Open' Button: the tray was stuck! The unit had been shipped without the transit screws. Then I recalled reading somewhere turning the unit upside down can get a stuck tray going. That did the trick and I have had no trouble since!



Rotel RA965BX CD player

It was very interesting to compare my Pioneer D6 to the geriatric Rotel. With SACD it was simply no contest; the Pioneer was miles ahead. But I only own twelve SACDs and that is not for the lack of trying (I was so frustrated by the lack of SACDs I even purchased the 'Top Gun' soundtrack - a sign of a truly desperate man!).

On well recorded CDs (unfortunately very few of them around as I mainly listen to rock/pop oldies), the Pioneer came slightly ahead with better treble detail and better bass. But to my utter surprise on a majority of CDs I preferred the ancient Rotel. It seem to give a rose tinted view of the music that was just captivating - it was just more musical. My hat off to those Rotel engineers who got it just right so many years ago! However, the Rotel seems very sensitive to dirty/scratched CDs; it coughs and splutters over discs that the Pioneer has absolutely no problem with. Does this mean the Rotel is about to die?

It was truly unfortunate that SACD failed. Subjectively, CD player sound quality has not improved that much since the early nineties, though the measurements may have (from your own figures the Pioneer has about half the distortion at -60dB). This may have

format and sadly most consumers don't seem to give a damn either. Hence a CD player that gives a rose tinted view of the music maybe preferred to one that is just accurate.

best regards
K. Fonseca

If your old Rotel is stuttering then it may just need to have the laser lens cleaned. It may have spent years of its life sitting in a smoky lounge and have a grungy yellow coat of nicotine over the lens; who knows? While you are at it, try giving mechanical connectors a good clean with Kontak 60, or Gold 2000 perhaps (Canford Audio stock these, see www.canford.co.uk) or similar.

It is a pity about SACD. Of all the high resolution formats it is the one that sounds most natural, whilst at the same time making CD sound a little bland and mechanical by way of contrast. I marginally prefer the DSD track on 2L Blu-rays, where 24/192 PCM is also available (and both Dolby TrueHD and DTS-HD Master Audio). However, differences are not vast and PCM may come to approach what DSD can do, opening up the possibility of decent sounding Blu-ray discs. Unfortunately, the music business is in such disarray, with major studios like Air and Olympic closing down, that sound quality is absolutely not an issue, so I wonder if a high quality audio disc format like SACD will ever exist again.

It may be that others will follow 2L of Norway who aim to launch a prodigious range of Blu-ray music discs, mainly classical but also jazz, pop and folk they say, in future. You can see their 2010 disc release plan on the Home Page at www.2l.no. Their surround-sound discs have stereo versions I should add, so you can hear 24/192 digital via a high quality stereo system, but you do need both a Blu-ray player and a TV connected to it for menu navigation.

NK

Ah, the vexed issue of CD sound! I think it's hard to be definitive about it, as there have been so many different iterations, and even with the same chipset, differences can be



Icon Audio PS1.2 valve phono stage

something to do with the fact that you can only do so much with 16bit/44kHz data - i.e you cannot make a silk purse out of a sow's ear.

A majority of rock and pop recordings sound awful and do not even exploit the full capacity of the CD

disconcertingly great. For example, in this month's feature on classic fourteen bit, four times oversampling Philips machines, Tim Jarman and I did direct comparisons in my own reference system between the CD100, CD303 and CD104. One was the first ever CD player, the next a slightly higher end version of it, and the next was a slight development of the first. Still the differences were surprisingly present, as Tim outlines in his feature. CD players sound different for a number of reasons, and DACs/digital filters aren't the only ones. Things as basic as the PCB layout and noise suppression/vibration isolation can make the same circuit sound quite different.

If it is possible to generalise, then you can say that whilst CD has become technically better, thanks to the use of superior DACs and filtering, it hasn't necessarily become audibly more palatable. A typical modern CD spinner has a considerably clearer, cleaner sound with superior low level focus, compared to the likes of the original Philips CD100. And yet it doesn't necessarily sound any 'nicer' to listen to, and indeed the modern machine will make today's horrid peak-compressed 'in your face' pop discs sound even less tolerable.

Still, there are a number of machines around that are more euphonic than you'd expect. The AstinTrew AT3500 is the obvious one; this has become the default choice for those who'd, given the chance, rather not have to listen to CD. It injects a goodly dose of syrup into an otherwise slightly bitter pill. The now-discontinued Chord DAC64 DAC was another; it was unexpectedly full sounding with a lovely musical gait - its modern replacement, the QBD76, is altogether more forensic, detailed and revealing, if slightly less balmy to listen to. Finally, the dCS Paganini

is a fascinating DAC; using their superb Ring DAC circuitry, it gives an unusually fluid and musical sound. You couldn't quite call the tonality 'rose tinted', but it errs more on this side of things than almost any other high end CD spinner I've heard. **DP**

SOOLOOSING IT!

Question. The Meridian Sooloos music server sounds a wonderful bit of kit and a peek at what more is coming our way in the future from different companies to satisfy the market. I was wondering if I ripped my CDs and SACDs with the Meridian Sooloos music server whether the playback will be as good as playback through my CD player and/or SACD player? Do CDs and SACDs sound as good through this system. Is the quality still there and can you tell the difference? If it does sound as good then perfect, if not does anyone know how far away we are until it is please?

Rob McIntyre

As our review on p10 shows, the Sooloos rips CDs in very high quality. It's one of the best systems to do this, and of course has the added benefit of that superb, largely graphical, user interface. It won't, of course, rip SACDs in DSD, it will only rip the CD layers of these. The playback depends on which Sooloos package you buy; I used it mostly as (effectively) a digital transport; hooked up to a Stello DA100 Signature it made a very fine noise, as good as almost any sub-£1,500 CD player running as a transport. If you're not into multiroom and don't want to hook it up to Meridian's own DSP-series digital active speakers, then this is how I'd use it. **DP**

MAN OF HARLECH

I have had my current Meridian system (506 CD player, 501/555 pre/power amp, Castle Harlech speakers) for a number of years now and am thinking about a change. In particular, I have hundreds of old LPs that I would like to play again and have been considering purchasing the Rega P3-24 after reading your recent review of it. As the 501 has a built-in phono stage, I could live with this for a while, but should I think about a separate phono stage and if so, which one?

After this, I would love to change over to valves, so would the Harlechs be worth keeping and changing just the amps?

Mike Robinson

A Rega P3-24 is a great way to step back into vinyl playing, simply because it is a very strong package, helped by the superb RB301 arm of course. I'd suggest you use an Eastern Electric



Castle Harlech, "off the pace"
David says and worth upgrading.

Minimax or Icon Audio PS1.2 and then, ultimately, think of stepping up to a good moving coil (MC) cartridge if you find your old vinyl and perhaps any new purchase, is to your fancy. I'd urge you to buy at least a few modern 200gm discs pressed on Quiex SVP vinyl, for LPs really are of superb quality nowadays. **NK**

The Harlechs are nice old speakers, but (to use my well worn and much loathed phrase) well 'off the pace' by today's standards. Basically your loudspeaker choice depends on your amplifier choice, as it's the marriage of the two that will make or break your system's sound. Pro tem, I would suggest you keep your Meridian pre (with its built-in phono stage), and get a pair of Icon Audio MB845 monoblock valve power amps. Use your Castles until you can afford a modern replacement, such as Yamaha's Soavo 1.1 Piano, and then buy a decent valve phono stage such as the ones Noel suggests. Then it's finally time to get a new preamp; MF Audio's Passive would be my choice. **DP**

DAC ATTACK

My question is fairly simple and follows on from your interesting and very timely review of DACs. Current system is a Linn Genki that replaced a loved but very troublesome Micromega Stage 6, connected via Clearer Audio Copper Line cables to a wonderful Copland CTA 501 through Nordost cables to Castle Howard 2 loudspeakers. The Genki is now nine years old and you keep reviewing tempting £1,500 to £2,000 players but I keep coming back to rather liking what I've got. And then I hanker again! So could the V-DAC be the cunning alternative I wonder? And I hope you can help - is it going to be better than the Genki's internal DAC, or should I carry on before. Or, finally is a new CD player calling me?

Ben Richardson



Chord DAC64 - a great DAC now discontinued.

Hi Ben. Hmm...! Not quite sure why you think a £150 DAC is going to be better than that in your CD player costing over ten times the price, just a few years ago? It may be different, there may well be a fractionally warmer tonality, but it's not going to be like the difference between AM and FM radio. If you want an upgrade, rather than a 'sidegrade' (or even a 'downgrade'), you're going to have to get serious. Sell the Genki, buy a Cyrus CD Xt SE transport and hook it up to a Chord QBD76. The difference will be profound, striking even, with masses more information, grip and focus. If you can't afford the new Chord, look around for a used DAC64 for under £1,000. Either way, you'll not be wanting to upgrade your CD again, ever! **DP**

CON-FUSED

I thoroughly enjoyed reading Adam Smith's piece on electrical safety viz hi-fi equipment and DIY adjustments/repairs. I "shake hands with the National Grid" daily as I work on the 400kV system supplying London. I too have regularly grimaced at wires twisted together and have unwrapped several miles of poorly-applied insulation tape to find a multitude of sins. I wholeheartedly agree with Adam's advice about the dangers of removing fuses. We all want the best possible sound from our kit but we also want to live to listen another day. I would imagine that a 13 amp fuse is too big for all but the most power hungry amplifiers. Any good electrical shop will sell a BS 1362 cartridge fuse in ratings of 1, 3, 5, 7, 10 and 13 amp. Most of my appliances are protected by a 3 amp fuse. One should aim for the closest protection possible so that you grade with the rest of the system. The fusing factor on these cartridge fuses is normally at least 2:1 and so a 13 amp fuse will not even begin to operate until it passes 26 amps or more. In fact for a 13 amp fuse to blow in the relatively slow time of 1 second (our circuit breakers on the supergrid operate in 45ms), it requires no less than 60 amps to flow through it. I feel it is my duty as an engineer to point out one minor mistake in Adam's otherwise perfect article - 30 milliamps is actually 30 thousandths of 1 amp (from the Latin mille passum meaning one thousand paces and our derivation of the mile as a unit of distance) whereas 30 millionths of 1 amp would be 30 microamps. Adam is quite correct that 30mA is sufficient to knock the average human heart into fibrillation at 50Hz.

Having helped you with things that I know something about perhaps you could help me with things that you guys know a thing or two about? My present

system is a *Michell Orbe SE with SME V/M150 Litz wiring and Ortofon 2M Black*. This is connected via a custom-made Audio Origami/Van Damme tonearm cable to the (don't laugh) MM input of a *Rotel RA-03 Integrated Amp*. This drives a pair of *Kef iQ5s* via *QED Silver Anniversary cable*. I also have a *Yamaha CD/HDD recorder* and *Denon tuner* but I mainly listen to vinyl.

I would like to know what the big fuss is about phono stages? Can you outline the merits and added value of a preamp/power-amp combo and explain when one requires an additional phono stage over my present arrangement? I realise my amp is pretty low budget but I like the warm sound it gives and I have never found it noisy. I like a lot of music produced in the nineteen eighties and have many LPs from *The Human League, Depeche Mode, Duran Duran, Thompson Twins, Fine Young Cannibals, Erasure, Eurythmics, etc.*, (you get the idea) and the Rotel seems to deliver the synths very well indeed. In short I wonder if I am missing out on something? With such a fabulous front end, am I doing it justice with the rest of the set-up?

Stay safe,

James Watson
Protection Engineer
National Grid

Thanks for that James. It's always nice to hear from a power engineer, those that deal with megavolts instead of millivolts (well, OK, kilovolts then, but it doesn't sound as good). Poor Adam made a slip of the proverbial pen, which got many readers very excited, but I can assure everyone that he does know his 10exp-3 from his 10exp-6 and laboured explanations are unnecessary.

Your system, James, is a little amazing in its own way. A tricked up SMEV with Ortofon 2M Black MM cartridge is pretty unusual, but the fact that you are prepared to go so far to listen to the black stuff is always comforting. Funnily, the SMEV and 2M Black is very much an engineering solution: each

is as perfect as it currently gets in engineering terms, but that is not to say or even suggest they lack emotion, as did, say, the old Ortofon M25FL moving coil.

But it is slightly peculiar to be asked about the importance of a phono stage with this lot up front. Bit like buying a Ferrari and asking why it needs decent tyres. The 2M Black and SMEV are works of art sonically as well as technically (I love them both). To appreciate such items you really do need to resolve their ability to deliver extraordinary dynamics, micro-fine detail, a reasonably deep sound stage and a goodly sense of atmosphere in recordings that defies lesser equipment - especially if it specialises in twiddling with digits.

Putting the signal through a mediocre amplifier will reveal how good your front end is, but not how great it is. As always, I recommend you listen to a valve phono stage and an Icon Audio PS 1.5 or, better, PS3 will show why. Connect either to a line input of your amplifier. The improvement will lead you on to consider how much better it could all sound through a suitable amplifier and whether you should move up to moving coil cartridges at a later date perhaps. Then you'll enjoy 2x10exp-6 volts at home after facing 4x10exp5 volts at work! **NK**

James, you are indeed quite right and my profuse apologies for misleading everyone. I think I got a bit carried away in mid-rant and I did actually realise my mistake a week or so later but by then the magazine was heading to print and it was too late to make a change. I did run a quick bet with editor DP as to just how many readers would spot my faux pas, so we'll need to compare numbers and check who will be buying whom a beer at the Whittlebury Hall Hi-Fi Show! As you say - 30mA equals thirty thousandths of an amp and is still a figure that is very definitely best left well alone.

As to phono stages, it is a sadly common fact that the devices



Rotel RA-03 - very nice but not really suitable for an SMEV.

fitted within amplifiers are generally there for convenience and are 'good' at best, albeit with a few notable exceptions. Upgrading to an external stage will take your vinyl enjoyment to a new level and also allow for much more versatility



For real power consider using Electrocompaniet's Nemo amplifiers.

when considering a new cartridge. As Noel rightly says, the Icon is a brilliant piece of kit and would be an excellent place to start. **AS**

ONE MILLIONTH AND ONE ANSWER

Sorry to bother you, as I am sure you are busy and have answered this question a million times, so hopefully it won't take you long to answer.

With a budget of £1,000 I was wondering what amplifier you might recommend for Yamaha NS1000 speakers? I am prepared to buy new as well as 2nd hand, but auditioning is an issue for me as I live in deepest, darkest west of Ireland. I have heard Quad 606 (smooth sound but clips too easily when volume is a little high), Classe Dr10 (probably the best I have heard that I can afford), Electrocompaniet ECI-3 (again a nice smooth sound and fine for low level listening, but not that tight in the bass and not much of it). I've also tried the WAD KiT88 (not sure that the valves were any good in this, as it sounded very under powered), Pass Labs x.250 (marvellous, throughout a massive sound stage and loads of drive, but price is the issue here), Musical Fidelity A308cr (again loads of drive, bass and soundstage, but too bright).

I am not a rocker and don't need to drive to huge volumes. The 70W of the Electrocompaniet was more than adequate, and am wondering if a 30 Watt valve amp would be best. However, I am not too experienced with valves and don't want to miss out on quality bass (i.e. not loads necessarily, but well defined). I was wondering if something like the Puresound A30, PrimaLuna Prologue or other amps could be recommended?

Have also wondered about the NVA kit, perhaps you have tried this at

some point. Or perhaps you have heard something better, I know you rate the Sugden gear for example. Just to add, I don't mind looking at vintage kit such as Woodside or Radford!

Jonathan Bliss

Hmmm... You say you do not want power, but claim to have clipped a Quad 606 that delivers 140 Watts per channel! Methinks you do need power for occasional forays into high volume, and you do want a "tight" sound too, which may well be transistor type tightness. An unusual combination that I found worked well was a Naim NAP250 power amplifier with a valve preamp. This gives the open and organic sound valves have, plus a sense of stage depth, or you could go one better by using an Electrocompaniet Nemo amplifier. For an all-valve set-up the least you need is a Quad II-eighty or Icon Audio MB845. **NK**

Tricky, because you've not told me your front end, or your music tastes, both of which are immensely important when matching the NS1000Ms to anything successfully. Actually, given your budget, if you want to buy new then the Sugden Mystro reviewed in this issue would be a great start point; I love the full Class A Sugdens but they don't half sound brightly lit via Yams, especially with CD. The Mystro is a cracking amp; I adore it, for slightly different



Quad 606 power amplifier - 140 Watts run into overload.

reasons to the A21a et al.; it has a fuller, richer, ballsier sound and really drives the Yams well, yet doesn't sound hard, surprisingly. If you're looking for classic kit, the Quad 909 makes a good fist of it with NS1000Ms, for around £700 or less used. If cost is no object, it's got to be those Icon Audio MB845s, for my money. **DP**

ENJOY THE MUSIC

Music has always been an essential part of my upbringing - an interest that I am now passing on to my children. And with fondness of music comes fondness of audio equipment...

Over the years I have put together my present system consisting of a SlimDevices SqueezeBox v3, Harmony

Design DAC9, Linn Kolektor preamp, Exposure Super XVIII power amp and Celestion AVF302 speakers. Interconnects are Audio Synthesis SilverBlue SQ (terminated with WBT NextGen RCA), digital cable is the Audio Synthesis SilverBlue Triax and loudspeaker cables are BCD P.I.C.F.O. (terminated with Furutech FP-200B). I am quite happy with my system and the way it is capable of projecting the verve and presence of the music. I find the music enjoyable, engaging and foot-tapping. And so are my children - they enjoy the music immensely.

But I am in desperate need of some advice. Though the Celestions (I think these speakers have been underrated since their launch) have given me years of good service I feel now that it is time to let go and invest in a new pair of speakers. Is this observation agreeable or would you point your fingers at something else in my set-up that needs to be addressed?

Having had this hobby since the late eighties (paused a few years due to children) I have auditioned and owned a wide range of audio equipment in a wide range of price categories. But with a market now flooded with stand-mounted two-way designed loudspeakers (which I am looking for due to the size of my living-room) I am lost as where to begin my search. I was thinking of auditioning speakers from Spendor, ProAc, Dynaudio, Tannoy, Monitor Audio, Audiosmile etc. Do you have other suggestions of makers and models?

I like my music (electronic/ambient, jazz, classical) presented in an enjoyable and musical fashion with focus on a coherent soundstage. I have up to £1,500 to spend on speakers without stands (I still have my Atacama SE24 laying around), but would not mind spending less. I would be very grateful for any advice.

**Morten B
Norway**

Hi Morten - having heard most, I personally am a big fan of two particular designs at this price point. First, the Spendor SA1 (£1,295) is a very bubbly sounding standmounter, almost un-Spendor-like in its exuberant character. It romps along like a terrier taking after a blackbird, with all the enthusiasm thereof! It's also very couth, as you'd expect Spondors to be, with an open, expansive, detailed sound. They would fit well on your fine Atacama SE24 stands. The other obvious candidate is the AudioSmile Kensai; I am listening to them as I write this and can honestly state that this is what I'd have if I didn't have room for my big Yams. That tweeter is superb, and it integrates so well with the mid/bass

unit. They're - if anything - just a tad on the analytical side, which means you need a great source, and don't expect to get a lot of bass; it's low but not exactly overpowering. The Spendors are more robust in the bass, with a more bouncy sound, whereas the AudioSmiles have a more technically correct sound, with stunning, to-die-for, treble and tremendously atmospheric soundstaging. Both loudspeakers are superb; just choose the one that suits your taste. **DP**

SIGNATURE UPGRADE

I want to upgrade my CD player which just happens to be a Marantz CD63-K1 Signature. What would you say was a good upgrade from this? Am I better off getting new or upgrading the CD63 itself? My system comprises a NAD 3020 (hoping to upgrade to a MIF X-150), CD63 K1, Goldring G99 with RB300 arm sat in a 1" thick slate bed on 2" oak, mounted to a wall on oak Hangman brackets, Musical Fidelity XLPSV3, Leak stereofetic tuner and Jamo Classic 6 loudspeakers (hoping to upgrade to Monitor Audio RS8's).

Doug.

Hi Doug - the '63 K1 Sig is a lovely player in its way, but there's better to be had if you've got the cash. If I were you, I'd buy a Stello DA100 Signature DAC, using the Marantz as a transport until it dies, whereupon you should buy a Cyrus CD Xt SE transport. This done you'll have a very potent silver disc spinning tool with far more scale, clarity and detail than your current Marantz. **DP**

BOXING CLEVER?

Why are many loudspeakers so expensive? A few years ago I bought a pair of metal coned floorstanders from a major hi-fi chain. These were on offer at £1,300 - a saving of £900. They were the speakers used in a certain hi-fi comic's "reference system". You've probably guessed by now what they were. They were listed at £2,200 in the 1995 editions. Their smaller standmount brothers with identical drive units were listed at £900. A difference of £1,300 for an extra two feet of veneered MFDF. You could get four three-piece suites for that cost difference!

I have to admit that when I first got the speakers home, being me, I had to have a peak inside. I remember being quite disappointed at seeing how little I had in fact got for my money, and I felt a bit foolish for buying them. They did however sound good.

Fast forward to the present, and you can still pay £2,000 or so for a pair of twin drive unit floorstanders. For me this shows what an outrageous rip-off my

speakers were fifteen years ago.

However, what finally instigated this letter was a recent visit to Chappells and Selfridges in London, where for similar money (and considerably less) you can buy a conventional or electronic piano. The cabinetwork of these pianos is far, far more complex and extensive than a loudspeaker box, and in many



Spendor SA1 "is a very bubbly sounding standmounter," says David Price and worth considering.

cases far more expensively finished. And certainly in the case of the conventional piano, the internals are far more impressive than half a dozen crossover components. I know there are R&D costs in loudspeaker development, but this also applies to electronic pianos.

Go and look in a decent musical instrument shop and you will see exactly what I'm talking about. I believe that vast profits are still being made on loudspeakers. I would be interested in your opinion, and any speaker manufacturers - should they like to stick their head above the parapet!

Bill Parish

Peter Comeau says: 'Yes, I'll stick my head above the parapet on behalf of Wharfedale, Mission, QUAD and Castle! But I'm going to approach the subject from the other direction.

When I first started designing speakers in the nineteen eighties, one of my first, and possibly best known designs, the Heybrook HB1, sold for £120. Today, at Wharfedale, we are still designing speakers that sell for that same amount. Of course we can

only do this because a) IAG make everything in one factory and b) we manufacture, like a lot of other well known brands, in China where costs are low.

However, if I cost high quality speaker parts and cabinets in the UK then a similar mass-produced speaker to the HB1 would, today, sell for around £900.

But what happens when we start to use more advanced technology in both cabinet and drive units and crossover? The Mission Pilastro, which uses very sophisticated components and methods of manufacture and was made in the UK with European sourced parts, was launched seven years ago to sell for £20,000. I was asked, at the time, why it was that this speaker cost as much as a Mercedes A Class. I countered by pointing out that a Martin D-50 Acoustic guitar cost twice as much (\$50,000)!

In any manufacturing process you have to weigh up the cost of R&D, technology and materials and workmanship and offset that against the quantities sold. The pianos your reader saw are produced in millions per year, so the cost of manufacture is low. The same is true of, say, the Wharfedale Diamond 10.1 which is a far more sophisticated speaker than the Heybrook HB1 but sells for below £200. Compare that to the sales of a 'speaker of the class of Pilastro, around 80 per year, and the fact that it takes 15 days to make each speaker, and you'll get an idea of why the selling price is so high.

So there is no easy answer to the question of why any product is priced the way it is, whether you are looking



Heybrook HB1 would sell for £900 if produced today, says its designer, Peter Comeau.

at designer clothes, Swiss watches, electric pianos or washing machines, let alone hi-fi equipment. The only answer is that a product sells on its



Mission Pilastro was very expensive to build.

merits and, if its performance and build quality is such that it reaches a high level of desirability, then you can expect that it will cost a lot too.

**PETER COMEAU
DIRECTOR OF ACOUSTIC
DESIGN,
IAG GROUP LTD.'**

Bill, never buy an electrostatic loudspeaker. You can see right through them for heaven's sake! And they cost thousands of pounds. **NK**

AND DAT?

Having read your piece on the Sony NWZ-X1060, I am compelled to e-mail you my comments. I enjoyed this particular article whilst still reminiscing about a previous month's piece on the Sony Tape Walkmans. The predecessors are very good comparisons and I have listened to tape players and CD players from Sony. However, one format is missing and that is the DAT portables. All generations are great sounding, if not the best format. I have recorded from a decent LP source via Sony's SBM adaptor (ADC) into both D8 & M1 (@48kHz) with great results. I feel that DAT has been overlooked in your article and would like to hear your comments.

David Hung

Hi David - well, your comments are duly noted. Funnily enough, Tim Jarman (our Walkman expert and author of the NWX-X1060 is penning a piece about DAT at this very moment. Unlike DCC, and even MD, DAT really did have a profound effect on the market, although it was the 'pro' market more than the domestic one. For much of the nineties, the 16bit, 48kHz digital tape was the mastering standard for many smaller recording studios. It's capable

of very good sound; it's surprising how that extra 4kHz added to the sampling frequency improves the sound of digital PCM. **DP**

SAMPLE THEORY

Recently I took delivery of a new record deck, a Project Debut III, closely followed the same day by two new albums, 'Back to Black' by Amy Winehouse, and Rickie Lee Jones's eponymous LP from I think 1979.

In the September issue, Keith Gooden asks, how can a music loving teenager with shallow pockets even dream of a Rega deck at £500? Well, if someone wants something badly enough they'll usually find a way of paying for it. But I can recommend the Project, which is a more affordable £200 - though a phono stage needs to be added or present in the amp. The coloured bases were £35 more, and I wish I'd bought red now instead of the basic black. I know in hi-fi terms it's regarded as being entry level, but that's why it may appeal to Keith Gooden's music loving teenager.

As for the sound, wow! I like it a lot. It made me want to listen to several albums, having satisfied myself I'd set it up properly. Yes, once it's set up. The instructions leave a lot to be desired and the anti-skate instructions are contradictory too. I managed to complete the task by finding a helpful forum on the net, (it's obvious I'm not the only one who can't make head or tail of them), plus compare notes with the set up instructions from a previous deck. Even then I realised the importance of having the tonearm lever's vertical adjustment just right.

I think you have an archive article on the net about setting up turntables, but that's a general one. How about running an article on setting up the Project Debut III, with clear instructions and photographs? I think this would be helpful to beginners, and as a reference guide in the future. In fact, why not a series of articles for beginners covering several 'entry level' decks?

As for those new albums, I didn't get on with Amy at first. Then I had a second listen but this time I never read the words. Fared a bit better. At first I thought she was all mouth and bloomers, but now I see her as Alma Cogan with swear words.

The Rickie Lee Jones one I like. The LP cover shows her smoking a cigarette, yet her voice is far from Marianne Faithful. Lyrics are the length of Knopfler/Dylan's, blank verse mainly and need a bit of listening. It varies from being quite jazzy to end-of-the-evening cocktail bar feeling. I can picture the singer sat reflective at the piano. Quite enjoyable.

Early evening, as I sat reading the magazine, supping tea, and listening to

Classic FM (on FM!) I looked up to see five out of five lights up for the signal strength. A first! I usually manage three, or four maybe after a good warm up. Maybe the heavy rain cleared the air or something. Only annoying thing about the Classics at Six spot is the ubiquitous advert telling me my FM radio is out of date, and I should buy a DAB radio. I've signed up to Hi-Fi World's Switch Off DAB campaign, and I didn't need much persuading. The strange thing about the advert is it's trying to sell the concept. It's not as though it's a manufacturer telling me why their radio is better than somebody else's. No, it's just Buy DAB. It smacks of desperation.

I've been reading about DAB and internet streaming rates. If my school mathematics is right, as the sampling rate goes higher, the more the signal becomes closer to analogue. Area under a curve and all that. So Digital is turning into Analogue. Discuss.

It seems sampling rate is proportionally related to frequency range. Is that right? And if I get a stereo (2-channel) signal on DAB at 160kps does it have the same frequency response as a mono (1-channel) signal at 80kps? Please enlighten me.

Melvyn Dover.

It is DAB that is out of date. It is an old technology, a non-extensible system, rooted back in the early 1980s, believe it or not. It uses a military transmission technology resistant to jamming (Cold War and all that), with a simple music modulation system plonked on top to keep us punters happy. Adjacent transmitters do not interfere with each other (providing they are time delayed), so you don't have to retune when driving along a motorway, a small benefit. However, being non-extensible means it could not be updated. This is fine whilst you believe, as the gullible in the EBU did in the 1980s, that digital always was 'perfect' and would not therefore need improving, but the world has moved on since then whilst DAB has not, and cannot. It is locked into technological antiquity and the world is sailing blithely past as the EBU issues calls to "perform a comprehensive set of objective and subjective evaluations of the new DAB audio coding system AAC (see EBU Technical section, <http://tech.ebu.ch/groups/ddaba>). In other words, in 2008 they are trying to assess its sound quality!

With this laughable situation in the background they are still trying to tell us that DAB is somehow better and we should change over to it. Amazing chutzpah!

VHF/FM has a 'bit rate' equivalent

to 1Mbps, five times more than the 192kbps of BBC Radio 3 on DAB. So Radio 3 on VHF carries five times more musical information than Radio 3 on DAB, we can say. You are right to say that as sampling rate goes up the signal better approaches an approximation of the original analogue signal. And as sampling rate goes up so does bandwidth. But you have forgotten bit depth. The data rate of CD is simply calculated as - bit depth x sample rate x number of channels. For CD this is $16 \times 44100 \times 2 = 1.4\text{Mbps}$. My VHF figure was derived from $16 \times 32000 \times 2$ and some may argue that it does not have a 16 bit depth (96dB dynamic range) but a 14 bit depth at most (84dB dynamic range) but as VHF is far more linear than a 16bit digital system it has more usable dynamic range - and that is what matters (and why arguments about sound quality based on the sort of figures I am using are specious!).

Anyway, all this apart, internet radio looks to be the future as it already offers far greater variety than DAB and better quality too, so my practical suggestion is get an internet radio and avoid the poor audio quality and reception problems of DAB. **NK**

WIRELESS WORLD

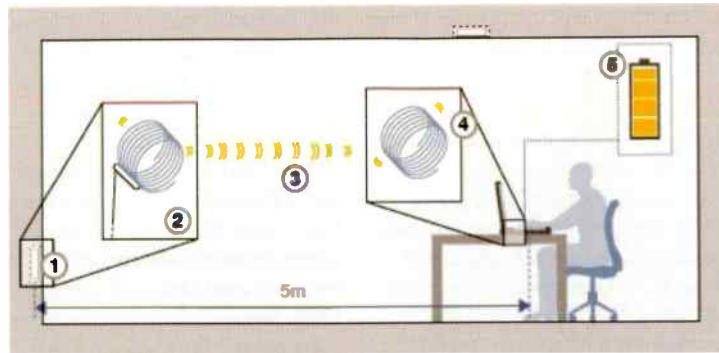
Found this on my late night trawl through the BBCi Website. It's a brilliant idea and will probably sell well but, given the problems I have experienced with my WAD 5881 amp and Quad 57s, from DECT telephones and wi-fi Routers, I am wondering what the probability is of this technology also interfering with peoples enjoyment of their expensive music systems.

I bought a Leak Troughline 2 (with ONA Stereo Decoder) from Classique Sounds last year and had to send it back, as the interference was horrendous. I have had to stop using wi-fi and DECT phones, because of the problems they were causing. I still suffer minor problems, when my neighbours turn their wi-fi on. Any thoughts on the subject?

Russ Betts

P.S. With regard to my prize of the iQ30 speakers, I am very impressed so far. I think the previously reported 'sharp' top end, may actually be a benefit to my ageing ears. I can hear John Williams' fingers working the fretboard; something I haven't heard for several years. Once they are fully run in and I have had a chance to listen to them attached to the WAD, I'll send you a full report.

There's a long and detailed look at this idea under the title Wireless



Witricity - is it a good idea? A lot of companies are working on it.

Energy Transfer at Wikipedia (go to http://en.wikipedia.org/wiki/Wireless_energy_transfer). There will be no energy transfer except to a co-tuned receiver, which I imagine represents a low impedance point in solid space around the transmitter coil, and electromagnetic energy transfer takes place as it does between primary and secondary of a transformer, but in a line between the two. Walking through this beam seems a little worrisome, but we are told electromagnetic waves at these power levels are harmless to biological matter. The transmitter coil must set up a field, but it will be unmodulated i.e. carry no signal. I can't help feeling however, that even if this is at a low frequency it will still have the potential to induce a signal into a coil of wire, perhaps a coiled up loudspeaker cable, whereupon your woofer might light up - then blow up! And what about the house wiring, where a loop may be accidentally tuned to the right frequency? Transmit and receive signalling before current flows would overcome this I imagine. I would still worry about a nearby Leak Troughline tuner though. It is a slightly worrying idea, isn't it?

NK

WOULD YOU ADAM AND EVE IT?

I have read Hi-Fi World since 1997 and now I would like some advice. I have a Goldring Lenco GL75 record deck (with cheap Audio Technica cartridge) and would like to tweak it and carry out some upgrades. I prefer the sound of the Goldring compared to my Pro-ject RPM4, it seems to have a more solid, deeper sound. I would like to know if it is possible to change the tonearm and if so what are the options, and what other upgrades could I try? I could sell the Pro-ject and have some money available to improve the Goldring. I know Adam could offer advice as he is a record deck expert.

David.

David, you've found yourself a good deck there, as a glance at the Lenco Heaven online forum will show you

- there are plenty of people out there modifying these decks and obtaining some pretty impressive results from them. Before you dig your screwdrivers out though, it's worth pointing out that the standard arm can actually be made to work quite well if you treat it to a new set of 'V-block' bearings and change the headshell for the lighter, drilled type from the GL78 deck. However, it is still a high mass design and so your range of optimally matched cartridges will tend to be limited.

Consequently, an arm upgrade is a fine idea but do beware that some drilling is highly likely to be involved as the standard L75 arm has a 227mm effective length, and a 210mm spindle to pivot mounting distance, which does not marry up with most of the obvious modern options like Regas (237mm/222mm) and Pro-jects (230mm/212mm). However, as luck would have it, the Jelco SA-250ST has an effective length of 228mm and a mounting distance of 210mm, so in theory it should drop right in. You will have to drill three holes for its mounting collar but as this is a 30mm diameter device going into the L75's 40mm holes, there is also some leeway here for alignment. The Jelco is around £350 so is not cheap but it would be my choice and the GL75 motor unit will certainly do it justice. However if this is a bit steep for you and you don't mind a bit of



Goldring GL75 - a golden oldie some people think, but the arm is not so golden perhaps.

metalwork, then I'd go for a Rega RB301 - it's worth the extra over the RB251 in my opinion. **AS**

DAB - THE COMEBACK

Thanks for printing my letters, and the resulting correspondence, regarding DAB radio and the proposed switch off of FM. Following my letter to the BBC Trust, published in last month's magazine, I wrote to the Government's Department of Culture, Media and Sport. Today I received the attached reply (below). Just what sort of people work for the government these days? Are they all sucker uppers, or what, or do they come from the planet Venus?

Cliff Millward

"Dear Mr Millwood [sic],
Thank you for your email of 12 August on Digital Radio. I have been asked to reply.

The final Digital Britain White Paper sets out the Government's vision for a radio industry in a digital world and the mechanisms needed to deliver it. It is because we recognise that radio is so enormously popular in the UK - more than 90% of the population consume in excess of 1 billion listening hours a week- that we believe radio must be able to effectively compete in a digital world.

Evidence suggests that the digitisation of radio has already begun. Around 20% of all radio listening is currently via a digital platform and this is expected to exceed 50% within the next five years. We believe the challenge for government and broadcasters is to ensure that any transition to digital is delivered in a coordinated way which best reflects the needs and expectations of listeners.

With this in mind the Digital Britain White Paper set out our intention to deliver a Digital Radio Upgrade programme by the end of 2015, when we would expect all services carried on the national and local DAB multiplexes to cease broadcasting on analogue. The Digital Radio Upgrade will be implemented on a single date, which will be announced at least two years in advance. At that time, ultra-local radio, consisting of small local commercial stations and community stations, will occupy the vacated FM spectrum.

The Digital Radio Upgrade programme will require new investment in building out and improving DAB coverage and reception. To this end we will be working with the BBC and commercial operators to ensure coverage of DAB is comparable to FM by the end of 2014. We have also

stated our intention to work with the car manufacturers, with the aim that vehicles sold with a radio are digitally enabled by 2013.

DAB receivers are already portable, easy to use and affordable with the cheapest sets available for about £25. The White Paper welcomes manufacturers' commitment for sub-£20 sets in the next two years and urges manufacturers to look closely at the market opportunities for a 'set-top box' solution for analogue radio which would allow existing analogue radios sets to receive DAB.

I recognise that there are a range of opinions about the quality of DAB. These often depend on any one given area. I am convinced that with the investment in building out and improving DAB coverage and reception, that the average consumer will benefit from the Digital radio upgrade programme.

The White Paper was clear in setting out the Government's intentions for a broadcast specific platform to allow the UK radio industry to compete against increasing numbers of internet radio stations. The report backed DAB because it is already establishing itself in the UK, and there is an urgent need to provide direction so that the sector can have the confidence to make the necessary decisions to make digital radio a success. I should add that, until now, the radio industry has backed DAB over other technologies.

We now have in the UK over 9 million DAB sets sold, and those listeners who have purchased a DAB receiver have the right to expect that their sets will continue to work in the future. The Government therefore believes that DAB is the most appropriate platform for delivering digital radio at this time. The benefits of adopting a newer variant are outweighed by the uncertainty any change would create in the already fragile radio market. It may be that DAB+, DRM, or DRM+ provide future options, or can complement DAB.

Yours Sincerely,

**JAMES VENUS
MEDIA DESK OFFICER
DEPARTMENT FOR
CULTURE, MEDIA AND
SPORT"**

Hi Cliff - firstly I'd like to thank you, on behalf of many readers I'm sure, for your diligent letter writing campaign. What a shame then that it results in replies like this. I think it speaks for itself, but suffice to say that there's very little of substance

in it apart from them spelling your name incorrectly! I do like the term "Digital Radio upgrade programme"; it's not surprising considering that (as I write this) Peter Mandelson has just said on the Radio 4 'Today' programme that Gordon Brown never pretended that the government wouldn't be cutting public expenditure after the next election, despite the Prime Minister's repeated insistence to the contrary at Prime Minister's Questions, earlier this year, plain as the nose on your face in Hansard! Oh well, I suppose Sir Humphrey would approve...

So what we have here is a government that says white is black, black is white, and Digital Radio is an "upgrade", despite the fact that it sounds worse than FM and you can't receive it in half the country, seemingly. They are completely in denial, or simply in blissful ignorance of the effect (and cost) of yet another one of their misconceived initiatives. Incidentally, my petition to 'Switch off DAB' was taken off the Number 10 website after one month, despite me requesting it to last six months. I suppose you've got to laugh or else you'll cry! **DP**

CABLE TALK

Because it is always fun to share one's experiences in hi-fi, especially with the experienced staff of Hi-Fi World and most of their readers, I cannot refrain from sending you another letter. I just acquired a new hi-fi set for my new, smallish (3.2 x 3.2 square metre), listening room. As my wife wanted to keep the existing hi-fi set in the living room I was allowed to buy a totally new set. Because she knows I take my hobbies seriously and also because she loves me, she did not impose any limits on what I was about to spend (no she is not for sale, guys!)...

So I went off with a budget of about 10,000 Euros without cables. Listening at three different hi-fi shops taught me that I was after a transparent, natural, detailed sound, with a wide soundstage. I started with Marantz Premium 11 products and Bowers & Wilkins 804 or 803 loudspeakers, but I finally fell in love (earwise, that is) with the natural sound of a Tim de Paravicini design which is the EAR Yoshino 8L6 integrated. I partnered this beauty with a set of high end modified Phonar Veritas P5 loudspeakers supplemented with a decent sub of the same brand. This sub is used only to fill up the very low frequencies in my small room and it does so properly.

My CD spinner is the U.S. Music Hall CD25.2 that feeds into a DAC of the same brand. This DAC features a tube output and a Burr Brown Ti

PCM1796 24bit, 192kHz converter. It sounds surprisingly analogue.

Next, I let the whole chain play in for about fifty hours before I started to upgrade the cable work. I commenced with the power supply by changing the standard wall plug by a Furutech Rhodium wall plug. Very fortunately my hi-fi chain is the only equipment on the power group it is using, apart from the alarm clocks in my bedroom.

I replaced the power cables by the renowned Isotek Sigma power filter with Isotek shielded power cables. I was amazed to experience that this move actually degraded the sound.

Experimenting showed me that I had to avoid absolutely all filtering activity (even passive) in my power supply. I obtained the best results with the silver plated Phonosophie, which took about an hour to 'burn in' and reveal the full beauty of the increased detail and soundstage.

Next, I replaced all fuses with Padis Furutech Rhodium which had a further clarifying effect on my sound. A note of caution here: always check the fuse value because the value mentioned on the

equipment is not always correct, as it was the case with my EAR amplifier that mentioned 1 Amp at 220V but in reality had a 5 Amp fuse!

Following this I replaced my old Eagle LS cables with biwired Inakustik 1302 and replaced all standard interlinks also with Inakustik. This improved the detail and sound staging audibly. From that Inakustik base, I started to vary the interlinks (Inakustik, Dolphin, Nordost) and the loudspeaker cable (Eagle, Inakustik, Nordost Blue Heaven, NO Heimdall & NO Frey) until I reached the optimal sound for my set. Unfortunately (for the money spent, that is) this improvement was audible for each step up the ladder and I finally ended up with a full set of Nordost cables. (Frey + Silver Shadow for digital and Blue Heaven for the sub).

Finally I modified the tube output of my Music Hall DAC by replacing the Electro Harmonix E88CC by a Siemens NOS E88CC tube, which turned out to be a very rewarding upgrade. If you guys ever test this DAC (£475) you should really also test it with this Siemens tube (£40). The end result sounds far better than the £1,000 that I spent on my source equipment. By this time my set sounded breathtakingly natural. Me, I am happy!

All this shows the enormous influence of choosing the right cables. Each step I took in the cable upgrade of my set was well audible and worth every dime (or eurocent) spent. I noticed that it matters terribly what cable you use, that it also matters greatly what digital interlink one uses (an often ridiculed argument). I also found out by accident how it is that some cables have a preferred direction when I connected my NO Frey interlinks the other way around. I have no explanation why this is so, but it simply is. I also obtained a pretty good idea about typical burn in times. Loudspeakers: 50hrs, tube amplifier and

Keep up the good work at Hi-Fi World. I will keep subscribing for my monthly dose of high end next year too. Somehow I feel that you guys will finally convince me to go fully analog and re-acquire a good old turntable. Any suggestions what I should dream of?

Rudy Deblieck
Opglabbeek (Belgium)

You put your finger on the nub of the problem when you say "the fact is that no measuring device actually measures what the ear-brain combination hears". William A Yost of the Parmlly Hearing Institute said



EAR Yoshino 8L6 - a tube amp with a lovely sound.

preamp tubes 50hrs, power cables 1hr, interlinks 1hr, loudspeaker cables 10 hrs.

So, I get a bit angry with all these technicians, who denominate themselves experts, who keep on telling us that the importance of cable quality is overrated, that burning in is nonsense and that it all comes down to 'psycho-acoustics'. They claim that 'one simply cannot measure these so called 'audible differences'. For crying out loud, I am a solid state physicist myself and as a scientist I know very well how to conduct an experiment, how to compare setups and finally, how to be careful about not drawing conclusions from what has not been measured in the test. The fact is that no measuring device actually measures what the ear-brain combination hears and we should be humble enough to admit that we are not able to do so properly. It is much like the measurement of temperature in a room; one may feel cold in a room heated to 30 C, where the walls are frozen solid. A technician unable to understand the importance of radiation equilibrium would state, "according to my thermometer, this room has a temperature of 30C, it is impossible for you to feel cold, it is all between your ears...". This technical conclusion seems sensible enough but it is dead wrong.

much the same and really wasn't very impressed with the typical electrical engineering measurements commonly used (including by us) to assess hi-fi products. The lack of understanding here is huge, but it isn't easy to address without much time and effort in the sort of psycho-acoustic experiments outlined in Fundamentals of Hearing, and even those would not be sufficient in themselves. Add in the influence of preconditioning (experience, or lack thereof) and you start to get into impenetrable difficulties. Cables are a sub-set of this general problem, seeming to have their own intrinsic sound, as well as an interaction with the products they connect. It all makes for a very interesting situation, one with so many variables that it is effectively an art, not a science.

You could dream of many turntables, an affliction Adam Smith suffers. The magnetically suspended Clearaudio Innovation we review this month is quite an amazing machine I thought, or you might want to pop into an SME stockist and run your fingers over a piece of engineered loveliness. I would suggest you fit it with one of Ortofon's better MC cartridges and run it into a valve



A World Design loudspeaker designed by Peter Comeau. DIY is a great way to get the sound you want.

phono stage like the Emille Labs KPE-2AS. Just ask a dealer to demo LP to you, using a good turntable, and bear in mind also that modern audiophile LPs on quality vinyl can sound significantly better than normal commercial releases from the past. **NK**

DOING IT YOURSELF

I have been an avid reader of your magazine for many years now and Hi-Fi World always did take some effort in highlighting DIY audio. Of course there are the World Audio Design kits and Peter Comeau has written many articles regarding building and designing loudspeakers lately. However, I still feel the DIY audio subject has never really entered the spotlight. Let's take for instance DIY loudspeakers as they are relatively easy to construct.

Commercial speaker designs have always been thoroughly reviewed in your magazine. Designs and makes have been compared to each other, but there have never been, as far as I know, reviews of DIY speakers or a comparison of a DIY speaker to a similarly priced commercial design. Loudspeaker DIY may be limited to the enthusiast who can handle a solder iron and has some woodworking skills, but there are many people out there enjoying this line of the hobby and it is therefore a very real part of the hi-fi world.

Many serious designs are readily available from driver manufacturers or speaker shops and many more serious enthusiast designs are available on the web. In Germany specific magazines exist on this subject. Many designs could be called proven or are innovative and

in my view deserve to be considered from independent reviewers such as yourselves.

The choice of drivers and construction principles seems much larger for a given price segment than is the case for commercial designs. If it is horns, transmission lines, open baffles or bass reflexes; domes, cones or ribbons; aluminium, titanium, Kevlar, (coated) paper or carbon fibre designs are available. Also the crossover filters show high quality items even for low cost designs.

I recently compared my 1400€ commercial Dynaudio I 22s to a 300€ DIY kit I've recently built (design from a German magazine) on my main system which is Linn Axis/Akito/Goldring 2500, Pure Sound P10, Arcam A90, Arcam CD192. I dare say the 300€ kit was playing in the same league as the Dynaudios. Imagine what would happen if one spent 1,400€ on a DIY kit! Not to mention the knowledge you gain and the fun of creating something.

Bart (Belgium)

Hi Bart - that's fair enough, but do remember this. We are a mainstream hi-fi magazine with fingers in many pies, so to speak. We try to devote a very decent amount of coverage to DIY, and many of the staff and contributors are enthusiastic DIYers, or at least inveterate fiddlers such as myself. However, a sizeable majority of our readers have neither the time or the inclination to build their own kit, they just want to buy something to get them closer to their beloved music. That's why we don't 'major' on DIY in the magazine, much as we love it!

When considering DIY loudspeakers versus commercial designs, you're not comparing like with like. I could (in my dreams at least), make a car able to deliver similar standing quarter mile times to a Ferrari Enzo at one twentieth of the price (Cobra chassis, supercharged Jag V12 engine), but it's not really a fair comparison, is it? DIY speakers, built well from top quality drivers, can be superb and far better than equivalently priced commercial designs, but it's certainly not fair to make direct comparisons which talk in terms of value for money, as you're not comparing eggs with eggs. Manufacturers wouldn't be keen to supply us with review samples if they thought their latest pride and joy was going to be compared to a hot rodged kitchen table special with drive units five times as expensive as their own. This in turn would mean that all our readers would be deprived of the chance to read about some really great commercial

designs...

So you do need a sense of balance; DIY is brilliant fun, and an immensely good thing for those wanting maximum sound per pound and able to build things properly. But it's not a universal panacea, and shouldn't be set up as a sort of rival to commercial designs. Each unto their own, say!! **DP**

DIY is the ultimate solution and as you may know we have been strong on it in the past. But as David says, it is a highly specific idiom that conflicts with much else. I don't mean just commercially, but physically a lot of woodworking and metalworking, as well as soldering, is necessary. Also, looking at many DIY designs I am not sure they are derived from any firm engineering appreciation; some are very left field (amateur!). All of Hi-Fi World's own designs have come from top designers like Andy Grove (valve amps) and Peter Comeau (loudspeakers). Some of the DIY kits we have seen have been "eccentric" to say the least and may be more entertaining to build and tweak than truly accomplished in what they achieve sonically. **NK**

PHASE FREE?

Absolute phase is an interesting concept. Many audiophiles will be familiar with aligning phase component by component against a common reference point, for example the main amplifier, due to the propensity for some components to invert phase at the outputs. Finally the amplifier and speaker interface may be similarly checked for absolute phase and, with everything properly aligned, an end to end phase coherent chain will result in the most solid and consistent imaging available from the system in question.

Those with sensitive ears will readily notice phase anomalies in reproduced sound and it is interesting to note how often this is the case, even in public demonstrations. We are not speaking here of the blatant out of phase effect which results when the polarity of a single speaker is reversed, but the more subtle effects of a lack of absolute phase coherence. I was reminded of this recently when experimenting with mains filters/conditioners and noticed that there was a readily discernible difference in phase and associated imaging when a particular combination was tried (irrespective of the effect upon the noise floor), the sound reducing in perceived depth while artificially enhancing width.

This was quite a curious observation, demonstrating how even the supply of mains power can affect the perceived sound stage and even the overall timbre of instruments within that sound stage. It seems to me that

we used to focus more upon phase coherence and associated distortions, both within individual components and within systems as a whole than we do today. Yet surely, if we are seeking the last nth degree of realistic sound reproduction, this is an important factor? Of course, once the sound has left the speaker cone, there are a plethora of boundary interactions and potential phase muddling, but that is another story...

Douglas Marc

LINN DEPENDENT'S SAY

I have read with interest your Linn article in the October HI-Fi World and, having heard the product at my dealer, confirm everything which you say, and confirm that it all applies to classical music, particular to older recordings. But, [1] You describe the turntables which you listened as fitted with Ekos tone arms. The Ekos SE sounds far better. [2] You fail to mention the Urika modification, which itself produces a notable improvement in sound quality (and costs £2,200). [3] You correctly state that the Radikal is produced in two versions, standard (wide) casing, at £2,500 and machined aluminium at £4,500, but fail to state which version you listened to.

Bearing in mind Linn's statements that there is absolutely no difference in sound quality between the two, you probably felt it unnecessary to specify. But I have, and can say that there is an obvious difference, perhaps more noticeable with classical music. The standard case version sounds marvellous, the solid case version notably better. Readers interested in achieving the absolute maximum improvement may rest assured that the solid case version is worthy of every penny of the difference in price: the solid casing is much more than just a pretty case!

Richard Smith

Hi Richard, actually the tonearms were Ekos SEs; apologies for the confusion. I deliberately "failed to mention" the Urika, as that's another kettle of fish; my intention was to hear the traditional AC Sondek against the DC motor version. I listened to the machined alloy version primarily; to my ears, I didn't think there was any significant difference between the two sonically, but I'm sure LP12 owning readers will take on board your comments with interest. **DP**

COTTONING ON

I have what I think is a top tip for the eternal problem of missing the opening bars of most vinyl albums when rushing back to your seat before the needle hits the groove! Get some of that stretchy,

sticky stuff, usually holding cover CDs on magazines and a suitable length of cotton. Wrap one end of the cotton around the arm lift and squidge some of the sticky stuff to seal it. Don't use glue for obvious reasons. Trail the rest to your arm seat, making sure you are sat more or less opposite your deck with no obstructions. Cue up the arm properly and go sit down. Gently tug the cotton until said arm falls into the lead groove and... bliss... no more missed opening bars! Sounds crazy, but it works and doesn't cost 'owt. Of course, don't leave the cotton trailing afterwards or disaster will surely happen!

Moving on, after reading about surround music for some time and Noel's various reviews of surround receivers for music, I think I have a truly budget path to the first steps of surround nirvana, if you have an HD TV and a PS3 lurking under it. Get a

your TV stand and take a break. Get your DVD-As and SACDs ready for the Pioneer and some Blu Ray concert discs for the PS3...

Turn everything on and play with the settings, then sit back and enjoy real surround music to see what all the fuss is about. I have, as you may have guessed, and am very happy about it all! And the best thing is that, if you don't like it, you can get about 90% of your money back on the second-hand market. If you get hooked, you will be eyeing up a third pair of speakers and that spare speaker wire for the 7.1 surround option in the Onkyo set-up screen. In short, £500 will get you well started and put your Michell Orbe fund back by only about two years!

On a final note, I was a little discouraged by Noel's rueful observation that 24/192 digital music was still not that good. However, I will never be able



Get a refurbished Onkyo TX-SR605 says Paul Clewlow

refurbished Onkyo TX-SR605 from eBay (£275 inc P&P; it comes with a year's warranty from the various sellers). Get a second-hand Pioneer DV-565A multi format player (well reviewed by yourselves at the time) for approximately £50. Get two pairs of those cheap Eltax or Acoustic Solutions floorstander speakers from wherever, at £25 per pair. Get 20 metres of speaker wire and three pairs of cheap phono leads approx £20. Go to www.thatcable.com and get three of their £5 HDMI leads. Then go to www.DTSEntertainment.com and order some cheap DVD-A and SACDs, approx £35 for 3 or 4 or use that copy of 'Dark Side Of The Moon' everyone owns with SACD on it. Find a couple of Blu Ray concert discs to your taste approx £20 each...

Next, after the initial despair of having to nail it all together, make a cuppa and a sarnie and get to work. In the Onkyo set-up, ghost the centre and subwoofer channels (thanks to Noel for his advice on this one), cable up the Pioneer analogue outputs, plug in the HDMI's for routing your PS3. Don't forget to output LPCM, not Bitstream from the PS3 though. Cut plenty, but not all, of speaker wire for the surrounds. Slip a disc, moving the Onkyo into

to afford kit that will tell me that, so my ignorance is truly bliss.

I hope this is useful advice to those who want to dip a toe into surround and haven't so far. Those who have will knock more holes in this set-up than Swiss cheese, but it is truly budget and a very effective start, I think. Also, it sounds contradictory to what I said in my previous letter re: CD and vinyl, but hi-res digital sounds way better than standard CD, to the point it is quite good and, more importantly, enjoyable, even on such cheap kit and I love putting on my records for their unique sound quality.

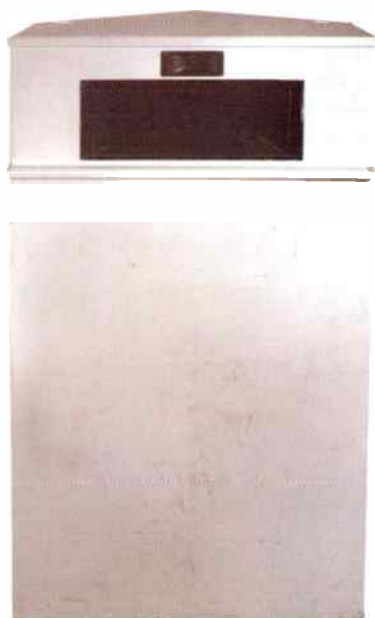
Paul Clewlow.

I think you take Heath Robinson too seriously Paul, but I am suitably amused. Live concerts on Blu-ray have their own attraction and surround-sound peps up most movies too. Your budget starter system is ingenious. As for 24/192, give it time. It is worth hearing all the same. **NK**

Thank you Paul. I do hope that you're happy and well, but I am a little worried that you're not continuing with 'the treatment'. Best of luck old boy! **DP**

Special K

Haden Boardman reflects upon sixty illustrious years of Klipsch audio history...



Aside from Beyer DT48 headphones and the Ortofon SPU cartridge, I can think of no other component that has enjoyed such a remarkable time in production as the Klipschorn. *Still* in production at the Klipsch factory in Hope, Arkansas, some sixty odd years after the original models rolled off the production line, it does in fact hold

the record for the longest continuous production run of any loudspeaker.

The famous designer who gave the speaker its name was of course one Paul Wilbur Klipsch. Born in Elkhart, Indiana on the 9th of March 1904, he was a prolific inventor and engineer with over twenty patents to his name. Paul lived until the age of 98, and was still very much active in loudspeaker design, even at this time.

Introduced after the end of World War II (Klipsch actually filed his patent on the 3rd of October 1942, a design for a "loudspeaker of small dimensions") the Klipschorn was the first truly serious folded horn loudspeaker. The overall dimensions are 130 centimetres tall, by 80cm wide by 76cm deep in the corner; small it is not!

A three way, all horn speaker design, the upper spectrum is handled by the K55 4" midrange and the K77 1" treble horns and are based around a highly efficient pressure (compression) unit design, current productions versions using a fibreglass based horn material and a 'phenolic' (plasticised) diaphragm material. These are crossed over at 450Hz and 4500Hz respectively. The speakers featured in the review are an early nineteen eighties set, and feature metal horns, but retain the phenolic diaphragms.

The clever bit from Paul Klipsch was the mathematics he put into the folded exponential bass horn. A

15" bass unit is located at the heart of the cabinet. This fires forward in to the horn throat, and through a series of very carefully worked out ducts, no less than six foot long. Sound disperses from the rear of the cabinet and into the corner of the listening room. It is, and remains the most efficient low frequency bass system ever made, at 105dB for one single Watt from a single bass unit. And that is a real rating, as one single Watt of power into these speakers is seriously loud! Under normal conditions, the system is capable of displacing more than 121dB from a good 50 Watt amplifier, which in anyone's British front room would take your head clean off!

One of the great difficulties with the K-horn is that it must go in a corner. Your room is part of the design, and part of the acoustics. The bass horn simply will not work away from this locale, and even making baffle boards to generate false corners, does not really work so well (you do lose the lower bass notes). Combine this with the midrange and treble horns, which while they do a good job at dispersing the sound, do sound best square-on firing directly at you, and you can see that unless your room lends itself to this design and pattern, sadly, it will not perform as well as it could.

I am somewhat blessed that other than one rather awkwardly positioned central heating radiator, the K-horns *just* fit either side of my bay window, and with the 45 degree angle, I can enjoy good sound with my sofa positioned only a foot or so more forward than the room aesthetics may have dictated! My only other minor gripe on positioning

is that by current standards I feel the mid and treble horn are positioned a bit too high; or perhaps it is just my sofa is a tad too low?

If anything, in my room the speakers could do with being a tad further apart; but clearly in late 1950s America the problem was the other way, with the corners too far apart for good stereo! Of course when Paul Klipsch designed the speaker, stereo simply was not about or in his mind. His 1958 solution was to introduce a centre channel concept to fill in the missing area, using the little Heresey speaker system.

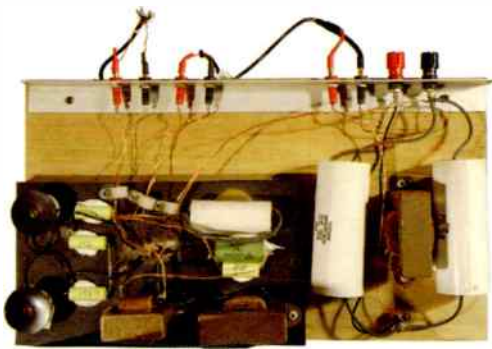
A little later than this, the stunning La Scala was introduced in 1963. You could call this speaker 'Klipschorn Lite' as it shares the same midrange and treble horn design, crossover and the same 15" woofer, but a compromised folded bass horn, albeit an incredibly simple, yet incredibly effective exponential system.

La Scala has the advantage of physically having a square footprint, and, on paper at least, not requiring a corner for proper operation, (although there can always be bass gains in locating any bass horn speaker in a corner). It has, in the main, been sold as a 'pro' speaker, and supplied unveneered.

SOUND QUALITY

Both these illustrious loudspeakers need a *big* room. Frankly, the bigger the better, by UK standards. Like any pressure unit based system, I feel a





chandelier shaking! With such clean dynamic range, you simply cannot help but crank it up. It just does not seem to be that loud!

However, these speakers do not take prisoners; feed them a rough recording and they

good space is needed between the speaker system and the listener, and with three separate horns firing at you, the sound does need to converge.

Klipschorns can be summed up very easily in one word: dynamic. Amplifier wise, with such massive sensitivity you really do have to be careful what you put these guys with. A lot of valve stuff can be far too noisy; and it's a crime to use transistors with them! One good thing is the speakers are an incredibly easy resistive load.

Although I have used these speakers on and off for about the past eight years (La Scala another eight years before that) this was the first time they had been seriously set up in the main front room with the attention and detail they deserve. Rest of the system was Audiocom clocked Marantz CD80 as a transport/DA12 DAC and Sowter based transformer pre amp. Normally a passive preamp would not have enough output to drive the Quad II monoblocks to sensible levels (Quad IIs need 2V, ideally 5V), but on this occasion...

Jacques Loussier's original 'Plays Bach' on Decca was absolutely splendid. Not what you may think of a dynamic recording, a late 1950s stereo, but talk about having a real world sound on this system! The simple bass-drums-piano interplay was incredible. Jumping forward to the nineteen sixties and Dinah Washington's, 'Mad About the Boy', and the way these horn speakers projected vocals was amazing. With the dynamics available from Ms Washington, the power of her voice, the way the air just moved was real motive force. My Jimmy Smith Hammond torture tracks again had vitality and energy; every last key pop, every last edge. What was so impressive is the way they handle any material; they are so clean from light classical, opera, rock, pop, jazz and anything with serious bass. Talk about a drum'n'bass fan's dream!

A few vinyl twelve inchers of some fairly left-of-centre dance stuff didn't half shake the chandelier. Trouble is, it was next door's

will not just sound rough, they will attempt to stuff it down your ears as punishment. A selection of fairly mediocre CDs was actually quite hard to listen to. These speakers demand the best in ancillaries and source material. Having also run La Scala, the differences between the two are more demonstrable than you may think. With the shorter, simpler bass horn, the La Scala can seem nimbler on its feet at times, almost sweeter in the upper bass. This seems to have a knock-on effect into the midrange, and combine this with the speaker being a little easier to position, it can possibly

give a better performance. It cannot hit the bass notes like the big K-horn can, however; the weight and authority generated by this speaker is awesome. But still it comes as no surprise to hear of people preferring the smaller speaker...

The only tiny thing that lets both speakers down for me is a very slight lack of emotional spark; that kind of low level intimate details that I get from the small full range Fostex and Diatone speakers. Nothing is missing in timbre, just almost a lack of subtlety. Pure vocal tracks like Rickie Lee Jones or ABBA do not quite communicate that last degree of oxygen; these speakers are more about fast dynamics! I am being a tad churlish here, but for me emotion in the music is very important.

Klipsch themselves have only tweaked the design very slightly throughout the years; it's virtually an unchanged design. Just proves how correct Paul Klipsch was in the first place... But one new variant was the Jubilee model introduced a decade ago. This claimed to be less corner sensitive, and an extra 1dB more sensitive, and was done as a limited

(\$15,000!) edition which is no longer listed. Biggest difference is the bass horn is a foot longer; there's a super luxury finish, and the use of Tractrix horn profiles, something of which I am very much a fan.

The other vintage models in the Klipsch Heritage line up are the little Heresey, so named as it was the first speaker not to use a folded bass horn, and the Cornwall. Both are conventional infinite baffle designed cabinets with horn tweeters and horn mid unit on the Cornwall. There was a Belle Klipsch, a kind of slightly smaller slightly squarer Klipschorn, but I have never seen or heard a set.

The set used for review are finished in a rather tasty white paint finish. Common to a lot of Klipsch speakers sold over in Europe, these speakers started life unveneered. Despite my best efforts, plans to get the poor things veneered have come to naught. But when looking second-hand for these things, do bear this in mind.

There are not many used Klipschorns knocking about. The

"Klipschorns can be summed up very easily in one word. Dynamic."

good news is they do not sell for much more than the La Scala; and they can sell pretty darn cheap (even sub £1,000). Currently there is no official UK distribution plan for the Heritage range, but they are available to special order, and a handful of specialist dealers do seem to have some of the Heritage range on demonstration.

CONCLUSION

If you have the corner space and the right room, very few speakers out there can match what the Klipschorns can do. If you don't have a corner, have a go with the La Scala. They both move air in such a clean, palatable way it is hard not to be impressed. Micro power amps are all that is needed, then the loudspeaker liberates the music, being one of the very few designs that can physically punch you in the chest. It has been a great experience using the big Klipschorns again. For the moment, they can stay in the corners!



CONTACT:
TNS Distribution
+44(0) 1344-382080
www.sales@tnsdistribution.com



Power Station

Rotel's new RC-1580/RB-1582 pre-power amplifier combination promises serious amounts of Watts allied to a wide range of facilities. Noel Keywood listens in...

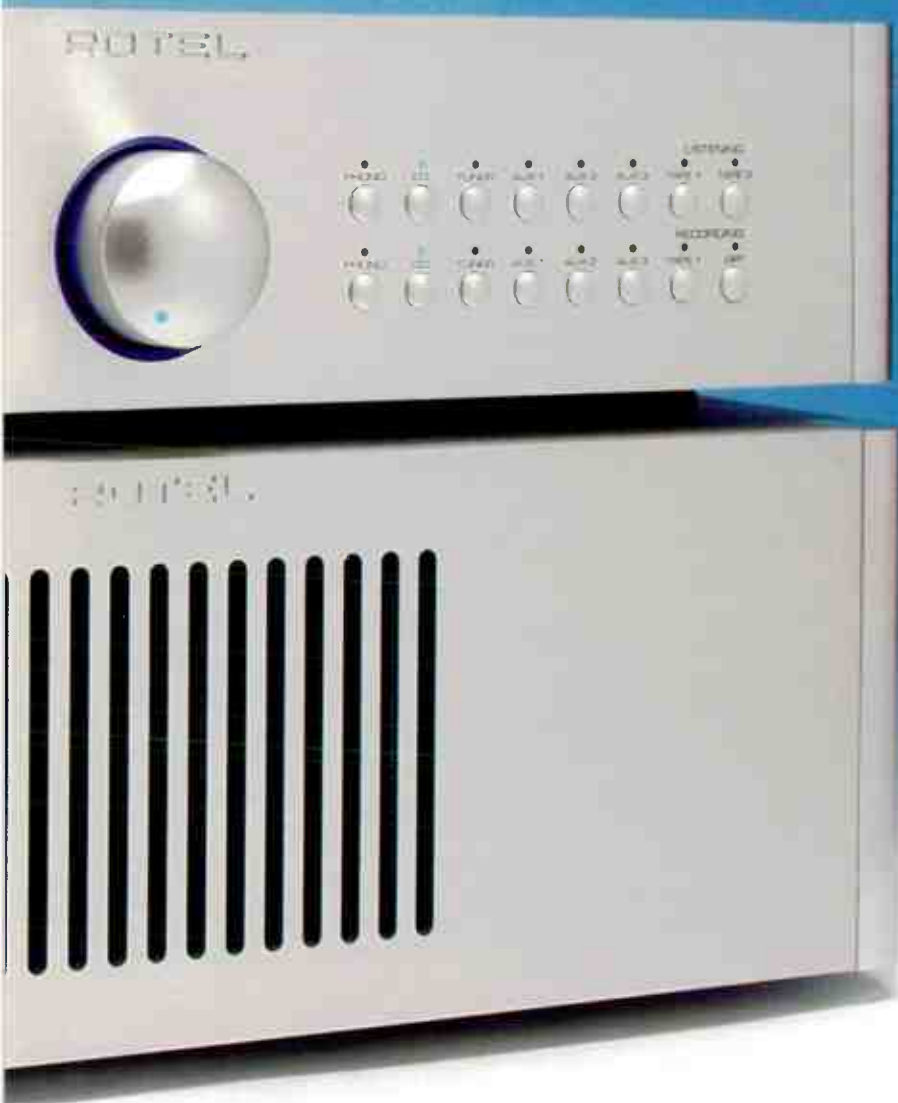
Amplifier sound quality is one of hi-fi's more contentious subjects, only beaten into second place by cable quality. And it raises its head here because as interesting and capable as the Rotel RC-1580 preamplifier and RB-1582 power amplifier were under measurement, I was less than impressed by sound quality. In fact, there seemed to be little connection between the two, a slightly distressing experience for me, one I encountered long ago with the world's first

'perfect' amplifier, the Hitachi HMA-7500. But more of this a little later; let me get the Rotels into context.

Together these units cost around £2,000 and for that you get a stereo power amplifier able to deliver a thumping 420 Watts into a 4 Ohm loudspeaker. So whether you feel you need the power or just want an amplifier with audible grunt to its sound, the RB-1582 looks a fair proposition. However, power comes cheap nowadays and even the £500 Onkyo TX-SR607 receiver I reviewed last month managed 180 Watts per

channel into 4 Ohms, meaning 1kW from seven channels! More directly comparable would be an NAD C275 power amplifier of course, at £900.

The RC-1580 preamplifier has both MM and MC phono preamps, tone controls and a front panel media player analogue input. However, at £995 it isn't cheap yet it lacks modern accoutrements such as a digital input or balanced inputs or outputs. In fact, lack of balanced connections make this combo look a bit old fashioned. The world is moving on...



Like all Rotel products these items are well made and nicely finished. The power amplifier comes on with a small clunk from its protection relays and an intense blue light circles the power switch, forming an escutcheon (to use an old steam radio term). The RC-1580 preamplifier has a similar illuminated power switch and a massive volume control in the centre of its front panel.

The RB-1582 power amplifier has twin paralleled output terminals that accept bare wires, American style spades or 4mm banana plugs. Twin terminals enable bi-wiring to be used, and because the preamp has paralleled outputs bi-amping is possible if you buy a second RB-1582. There is an RJ45 'ethernet' computer input, but only to accept custom control codes from a computer, not to connect to the internet to update software, firmware or what have you.

Both units can be remote switched using a 12V trigger signal and the preamplifier has both a

3.5mm headphone output and 3.5mm media player input. Plugging in headphones does not mute the preamp output so for late night listening the power amp must be switched off.

SOUND QUALITY

Transistor amps are funny things and a little difficult to review. Whilst they have a base sound that acts as a fundamental signature, they also react differently to loudspeaker loads, the most likely explanation being the way the feedback loops cope with loudspeaker back emfs from its motional impedance element and general energy transfer from reactance in the midband. This isn't specious theorising. I find a low feedback valve amps. like the powerful Icon Audio MB845s have a consistency with loudspeakers that transistor amps lack, one reason I use them for loudspeaker reviews.

After being tested and run in by being left on for many days the Rotel was initially used to run the Acoustic

Energy Radiance 3s I review in this issue, to see how those loudspeakers fared with solid-state. Bear in mind that although I feel valves are technically superior to transistors and you can hear this (there are plenty of dedicated audio valves; there are practically no dedicated audio transistors but, having said that we will be reviewing some next month)!

I actually use and work with transistor amplifiers as a reviewer so I know what to expect from them. Well, switching from the MB845s to the Rotel RB-1582 power amplifier (with Creek OBH-22 preamp and Stello CD-T100/DA100 CD player) was a marked contrast. Far from sounding open and powerful, the Rotels sounded dynamically quite flat, weak in bass output and lacking sparkle. I recalled Hitachi's much vaunted HMA-7500 MOSFET amplifier that I used at length some thirty years ago; even though this behemoth measured perfectly it wasn't endearing to listen to.



Synergistic Research

"Your cable for life"



ABC Audio

For details on the full-range of Synergistic Research Products please contact:
t. 020 8462 1379 | www.abc-audio.co.uk | www.synergisticresearch.com

" Technically unique and with exceptional sound, this takes the science of cables to a new level. "

Tesla Accelerator speaker cable review - Hi-Fi World, August 2009

Hi-Fi World
VERDICT ●●●●●

design: © audiodiagram 2009 ABC/HFW109

AWARD WINNING RINGMAT PRODUCTS

Ringmat is the world's leading supplier of products that are truly designed to improve sound and picture quality in hi-fi and home cinema systems.

All Ringmat products are of unique design and tackle distortion problems in a manner that is quite different from all other attempts. We do not just create products if satisfactory solutions are already available.



RINGMAT and RINGMAT SUPPORT SYSTEM

Use this modular system on every flat turntable platter



STATMAT CDi BLUE

Use a Statmat for playing all CDs and DVDs, other than with multi-disc players



Statmat CDi Blue
Ultimate Guide to Home Cinema 2004

VIVACITY AR ANTI-RESONANCE PLATFORMS

Use VIVACITY AR Platforms under all equipment to free the sound, and pictures, from resonance and vibration based distortion

RINGMAT FEET, DOMES AND SPIKE STOPPERS

Use these Ringmat products for the most effective means of isolating your hi-fi and home cinema equipment

RINGMAT MAINS LEADS, INTERCONNECT, TONEARM and SPEAKER CABLES

Use Ringmat cables for the cleanest transfer of signals, from power source to speakers

RINGMAT DEVELOPMENTS PO BOX 200 BRENTWOOD ESSEX CM15 9FB
++44(0) 1277 200 210 WWW.RINGMAT.COM

Swapping from the Rotel to Leema's fine little Pulse amplifier restored order for me, and I continued with the Radiance 3s...

My suspicion was that the Rotel, being a very high feedback design, would likely sound better with the under-damped Spendor S8e loudspeakers so this is how I started out reviewing them. Surprisingly, with or without the RC-1580 preamp in place, the RB-1582 power amplifier sounded little different via the Spondors; in fact it made them sound much the same as the Acoustic Energys, which is to say dynamically challenged and with constricted bass. With Duffy's 'Rockferry' the upper midband dominated and this emphasis resulted in the sound having little warmth or body. An apparent lack of upper treble detail removed any sparkle and the bass line sounded almost distant. So I changed back to the Leema Pulse and again the sound stage opened right up, in both width and depth; all was normal again. Whilst Rockferry isn't a great track sound quality wise it is possible to reproduce it well enough to be enjoyable but the Rotel smothered the sound with its own interpretation of music and it was coloured and unimpressive. I did also try Triangle Quartet loudspeakers but again there was no improvement.

Since our benchmark Spondors are a known quantity that have been driven by countless amplifiers under review, both solid-state and valve, and since the Leema Pulse worked fine with them, I am fairly sure that we are not looking at outside influences here.

Particularly worrying with the RB-1582 is an upper response limit that exceeds 200kHz, which means into the Long Wave radio band. Why? This only invites problems. Naim amplifiers roll off at 20kHz, most others around 50kHz and some at 100kHz. Never have I measured a hi-fi amplifier with full gain at 200kHz. Wide bandwidth is achieved by using fast transistors, high open loop gain and masses of feedback. This also results in a high damping factor and low distortion, but lots of active devices to achieve high open loop gain and the subsequent application of high feedback is detrimental to sound quality and exactly 'how not to do it' when it comes to designing an audio amplifier, rather than a radio transmitter.

With a track containing strong deep bass, Angélique Kidjo's 'The Sound of the Drums' I did get to hear how the RB-1582 handles bass power and although there was a sense of taut control and good



downward extension, the notes had a bland, inflated outline. The amplifier sounded overly dry and mechanical here, as if notes were being generated by a synthesiser. I dutifully worked through a variety of musical genres but can report only that the Rotel combo maintained its distinctive sound.

Changing from CD to LP, and an Ortofon Cadenza Bronze moving coil cartridge in an SME 2-10 arm on a Pioneer PLC-590 DD turntable, there was an expected improvement. Now, the natural depth and smoothness of the Cadenza helped inject life and a bit of stage depth into music from the Rotels, there was strong insight into Mark Knopfler's gravelly drawl as he sung 'The Fish and the Bird' from the 'Kill to get Crimson' LP on 180gm vinyl, bass was quite distinct if dry but the peculiarly papery quality remained. The MC stage was stunningly silent and, for better or for worse, a long line of LPs I played consistently sounded more like decent CDs!

CONCLUSION

I couldn't find great merit in this amplifier combination. It brings quite a stark, dry outline to music perhaps, but even here it was superficially impressive rather than natural. Dynamically constrained, with peculiarly over taut bass lacking insight, rhythmic fluidity and punch, it wasn't engaging. It has

some virtues, such as the rugged looking build, the fine range of facilities (including quiet phono inputs) and lots of power, but still it seemed to major on its muscle and good looks more than anything else.

VERDICT ●●●
Unremarkable sounding but well equipped and solidly built budget pre-power amplifier combination.

**ROTEL RC-1580/
RB-1582** £995/£1,095
Rotel
+44(0)1903 221 500
www.rotel.com.uk

- FOR**
- seriously powerful
 - MM and MC phono stage
 - ease of use
 - flexibility
- AGAINST**
- opaque sound
 - no balanced outputs

MEASURED PERFORMANCE

The RB-1582 power amplifier produces a massive 230 Watts into 8 Ohms and 420 Watts into 4 Ohms so this power amplifier is for those users who want to run really loud. However, it's quite obvious looking at the unusual distortion spectrum at low powers (around 1W) that Rotel have found out how to give a transistor power amplifier a reasonably stable transfer function, for second harmonic distortion dominates our analysis shows and this remains the case at all output powers and frequencies. Our analysis is made at 10kHz, 1W, where crossover distortion is usually evident, but with the RB-1582 it is not, so this power amplifier should sound easy on the ear, treble lacking any unpleasant edginess or colour. The only peculiarity is a bandwidth that extends well past 200kHz, not a brilliant idea in an audio amplifier, especially nowadays with so much RF about. An extremely high damping factor of 157 will ensure the amplifier damps wayward bass cones, at least when there is a low DCR inductor in between. Ultra wide bandwidth and high damping factor suggests wideband transistors (or FETs) and very high feedback.

The line inputs, including CD, have a gain of x6.3, or 16dB, and this is usefully high. However, although x3 is a target value for preamps, since the matching RA-1560 power amplifier has a low 2V input sensitivity overall gain is much the same as usual. Rotel have given the preamp a bandwidth of over 100kHz, so there is no attempt to bandwidth limit before the power amplifier and this may cause problems with RF breakthrough. The tone controls work well, operating only at extremes, the bass control working below 200Hz and treble control above 2kHz. However, the amount of boost was very high and control action coarse as a result; just the smallest movement was needed for the sort of subtle trimming usually required. There is a cancellation button to switch the

controls out. Both MM and MC phono preamps measured well, having low noise and adequate gain. Equalisation was very accurate, with absolutely no treble lift as usually occurs, so the RC-1580 preamp should sound quite smooth. The RC-1580 preamplifier and RA-1582 power amplifier both measure well in all areas and the power amplifier in particular seems to have an unusual circuit topology. NK

RB-1582	
Power	230W
Frequency response	8Hz-200kHz
Separation	99dB
Noise	-126dB
Distortion	0.004%
Sensitivity	2V
Damping factor	157
RC-1580	
Frequency response	2Hz-100kHz
Separation	102dB
Noise	-117dB
Distortion	0.0002%
Gain	x6.3 (16dB)
Overload	18V out
Disc (MM,MC)	
Frequency response	8Hz-100kHz
Separation	68dB
Noise	dB
Distortion	0.003%
Gain	x410, x4500
Input overload	178mV, 16mV

DISTORTION





Tim Jarman looks back to the early nineteen eighties, to bring you the story of the first Philips 14bit, 4 times oversampling Compact Disc players...

14x4 Play!

All formats have to start somewhere, and for the now ubiquitous CD that means the early nineteen eighties. The search for the successor to the LP had preoccupied the research departments of the world's larger electronics companies for the greater part of the nineteen seventies.

What seemed to be emerging as the favourite was a high density LP-like disc using much finer track and groove dimensions, alongside technologies such as FM modulation, linear tracking and capacitive pickups. A system like this, RCA's CED, did appear between 1982 and 1894 but it was for video rather than audio.

Meanwhile, Philips had its own video discs in the technically outstanding Laservision system. With 5MHz bandwidth, all analogue signal processing and no compression it was arguably the finest home video format there has ever been, but it still failed to establish itself; unrecordable video discs had very little market appeal in those days. It did prove

however that a laser beam could be used to read a silver disc that could be mass produced and therefore laid one of the foundation stones for CD...

The other key technology, the PCM digital audio system, had already been developed in Japan by Sony and was being used for professional applications in conjunction with modified industrial video recorders. As a result of bringing these two technologies together, Compact Disc finally appeared in Europe in 1982. One of the first players offered was the Philips CD100 which, despite its high price and the small selection of disc titles that were available in the early days, sold well.

HARDTALK

The CD100 was small, pretty and very easy to use. All one had to do was to drop the disc in the top and press play, and "perfect" digital sound would then flow out into your existing system; the new age had begun! Inside, the CD100 used Philips' own chipset to decode the

digital information. Up until quite near the launch of the format, Philips believed that CD data would be encoded as 14bit data, so they designed their Digital to Analogue Converters (DACs) to this standard. Sony however specified 16bits for their PCM system so Philips had a problem, how to get 16bit performance from a 14bit DAC. The answer was inspired, using four times oversampling (hence '14x4'), and clever noise shaping techniques in the digital filter a "digital feedback loop" was effectively constructed and the necessary resolution was restored. The chips that performed this function were classics in themselves, the digital filter being the SAA7030 and the DACs two TDA1540s. The TDA1540 later formed the basis for the famous TDA1541, itself the basis for just about every audiophile 16bit player that you can name. Also part of the CD100 formula was the CDM0 mechanism, complete with its single beam laser pickup and radial tracking arm powered by a linear motor.

Philips also paid very careful attention to the analogue stages that followed the DAC. The filters were carefully designed to give a smooth response with accurate phase linearity and it is this, along with the SAA7030 digital filter, which gives the distinctive "Philips sound". In contrast the Japanese characteristically went for filters with a very steep cut off, this gave a ruler-flat frequency response but at the cost of a harsh sound and muddled imaging. In 1983, The CD100 (and its boxy but technically similar stable mate, CD200) were lightly revised, renamed the CD101 and CD202 and joined by the CD303. Intended as a more upmarket version, the CD303 used the same basic components and assemblies but was more extravagantly constructed with better internal screening and larger circuit boards with wider component spacing. Most distinctively, the CD303 was a front loader but not in the modern sense, for instead of having a disc tray that opened the whole mechanism slid out under motor power! The previous Philips models had lacked the now familiar time readout but the CD303 had one although it was not perfect, it displayed a rolling display of random numbers when skipping through the tracks.

By this stage CD was catching on as a format but what was needed was a really popular player that fitted in easily with any system. This came in 1984 with the CD104, a true classic that was also a huge sales success, even Boots the chemist stocked them! The CD104 looks just as a CD player should, small and neat with a drawer to load the disc and finished in matt grey or black. The controls had been rationalised into a square pad (not too dissimilar to that of the B&O Beogram 4000 turntable launched ten years previously) and a few simple buttons. The machine could be placed in a stack of other components and was the correct size to match the 'midi' systems that were fashionable at the time. The whole thing reeked of quality in a way that only the highest of the high end does today; although the fascia was plastic, the chassis inside was a single diecasting, as was the new CDM1 mechanism, still with a single beam radial pickup but improved by the addition of a silent running brushless DC spindle motor. The CD104 was also offered with remote control as the CD304, which although physically larger is much the same inside. After the 14bit machines faded away, 1985 brought the CD150, the first of the new 16bit models that came

with the TDA1541 DAC, the CDM2 mechanism and a more lightweight, plasticky build.

SOUNDING OUT

Sony's first CD player, the 16x2 CDP-101, had aspects to its performance which were quite good, but the Philips 14x4s have a degree of overall competence which none of the first generation Japanese machines comes close to matching. In simple terms they sound like an old turntable with quite punchy bass and soft, fluffy treble. If you've not heard one before then it'll be a revelation: can CD

"they're lovely things to have, an interesting historical 'curio' and show that - in build quality terms at least - CD hasn't taken the skyward trajectory we all expected it to..."

really be this different? The gentle analogue filters with their soft roll off yield treble that is not as well focused as one is used to with a modern player, but the classic digital audio trap of making everything above 10kHz sound the same has been elegantly avoided. Imaging, the result of attention to detail as regards phase linearity, is surprisingly good. This has the effect of drawing you into the music and making you want to listen more; there are plenty of other CD players that do just the opposite!

The CD100 is raw; it is the genesis and every time you hear it, it reminds you of the first time you heard CD. It bounces along in a

lively way with a bit of a zing to the treble, but still surprisingly relaxed and oddly satisfying. The CD104 is very similar but more modern sounding. It's the most familiar of the three, like a modern player but with added 'essence of 14bit'. If the rest of your system has relaxed treble then this is an ideal mix. The CD303 on the other hand is quite different. At the cost of some extreme treble detail it is more silky and better timed. It doesn't put every note under the microscope like a good Japanese player does, but the way it strings them all together is strangely

enjoyable. It offers a unique take on how to get pleasure from a silver disc although it demands that the rest of the system is easy going to give its best. One for the connoisseur then.

TO THE END

The early days of CD were curious; the media was obsessed with numbers. The 16bit (alleged) resolution that the Japanese machines offered was seen as simply better than the measly 14bits the Philips machines could muster. But some, more discriminating hi-fi journalists in this country and abroad pointed out that, even though they shouldn't be, the Philips machines were far





SOUNDS SIMPLY SENSATIONAL

**This is the
best turntable
mat I've
yet heard.
At well under
£100, it's
a bargain.**

David Price,
HiFi World.

For superior sound quality, you should try the Isoplatmat. Made from SDS Aluminium, the Isoplatmat isolates your vinyl and needle from vibrations and feedback giving an exceptionally high quality audio. Just place the Isoplatmat on your turntable and to further enhance your music, you can also use Isofeet placed under the components, subwoofers and speakers. You will be amazed at the sonic improvement to your system.

Isoplatmat £87.50 + p&p
Isofeet x 4 £30.00 + p&p

order by phone on
0191 250 0900
order online
www.sounddeadsteel.com



Atacama

Multi-Media Furniture : Where beauty and balance converge



You've found it!

Looking for (probably!) the best addition to your Home Entertainment system that also offers real value for money?

Then the Atacama Equinox range of English handmade Hi-Fi & AV Equipment supports are for you!



Prices start
from as little
as £169.99!

For more information or to find your nearest retailer, please visit:
www.atacama-audio.co.uk or call 01455 283 251



Enjoy the Music.com

Enjoy the Music.com Readers Say
I really enjoy your website and find it very informative.
(and read it every day). — Richard Holbrook

I have never replied to online audio reviews but wanted
you to know that I have enjoyed several articles. — Craig Mattice

What a great review! — Paul Kittlinger



www.EnjoyTheMusic.com
Daily Industry News iPhone / Mobile Site
Over 1000 Reviews Online 120 Show Reports
Contests Free Stuff Audiophile Browser
RSS Feed Partners With The Finest Audio Mags

more enjoyable to listen to. It merely went to illustrate the importance of the filtering; despite a lower resolution DAC, the Philips filter was far superior to those used on the Japanese 16x2 platform, and you could hear it!

Sadly though, 'phase-linear filtering' proved a more difficult marketing concept to grapple with than 'more bits'. In the same way that a guitar amp that goes up to 11 is "one louder" (as any Spinal Tap fan knows), so the Philips machines were "two less" good than the Japanese rivals. Unsurprisingly then, Philips soon replied with sixteen bit, four times oversampling machines using the TDA1541 chipset, which has gone on to be a classic. But as ever, 'it ain't what you do, it's the way that you do it'; the difference between the 1984 14x4 CD104 and the 1986 16x4 CD160 that replaced it is obvious, but it's not all positive. That mellifluous musicality was lost to an altogether 'up and at 'em' sound, albeit technically superior...

Philips 14bit machines are now reaching the status of collectable classics; they're not very detailed or

focused by today's standards, but are listenable in a way that no modern CD spinner is (if there was ever a vinyl equivalent of the sound, it's surely an early Linn LP12 with Hadcock unipivot arm!). They were very well built, and are more repairable than you might think [see TECH TALK], so if one turns up, it's worth a punt. Don't pay silly money; car boot sales turn up CD100s for under £5,

whereas an excellent, mint, boxed version shouldn't be too far north of £100. They're lovely things to have, an interesting historical 'curio' and show that in build quality terms at least, Compact Disc hasn't taken the skyward trajectory we all expected it to. May that, ahem, "pure, perfect sound" of 14bit sing on forever!



TECH TALK

All the models mentioned are well built and solid, so it isn't difficult (or expensive) to track any of them down today. The laser diodes used have proved exceptionally durable; laser failures are still not common after all these years. If the disc spins wildly but no information is read then a defective laser could be the cause. The CD100 is well behaved but it does suffer from poor soldering, especially around the voltage regulators, which can also be faulty in themselves. Defective reed relays in the analogue stages causing the loss of one channel and the interlock switch for the lid falling apart, stopping the disc being played at all, are other common faults. The CD303 has similar habits but in addition the signal lead can fail where it exits the rear panel, giving intermittent sound. No need to go mad and replace it with overly thick 'audiophile' stuff, just shorten the original a little to remove the broken bit. The CD104 can (and does) suffer with most of these problems but by far its most common failing is that the printed circuit boards are double sided and the connections between the two sides frequently fail, causing random and baffling symptoms. With care and patience the solder can be sucked away, fine wire threaded through the holes and new soldered joints made on both sides. This isn't especially difficult but one occasionally sees butchered boards after ham-fisted repair attempts; a delicate iron and a steady hand are needed to do it properly. The spindle motor can also seize up but it all comes apart comparatively easily for careful relubrication. Finally the belt that drives the drawer can stretch and wear giving a lazy action; it isn't as hard to change as it looks if you take the whole drawer assembly off in one piece first. Faults do appear then, but they're (mostly) not terminal and can be rectified by any competent DIY'er.

MEASURED PERFORMANCE

Outstanding features of Philips' first player are a frequency response that, in effect shelves down treble to give a subtly warmer sound – just what CD needs – and poor linearity at low levels, resulting in excessive distortion – just what CD does not need! Otherwise, the CD100 differs little from modern machines, except there is no digital output and track indication is crude.

Our frequency response analysis clearly shows the classic in-band ripples produced by the early anti-aliasing filter and this serves to lower high frequency energy. The high frequency limit is a low 16.6kHz, against 21kHz for modern filters, but subjectively this isn't easily detectable.

Whilst at maximum signal level (0dB) 16bit gave an impressive 0.002% distortion – the figure Philips liked to quote, at -60dB this had risen to a massive 2%, something they did not quote! This contributes to the murkiness of early CD sound.

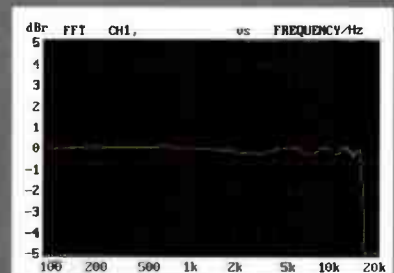
So the CD100 ably demonstrated CD's strengths, even though it was far from perfect. NK

Frequency response (-1dB)
2Hz - 16.6kHz

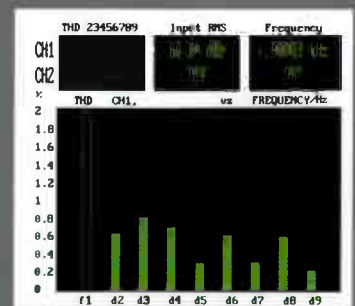
Distortion	(%)
0dB	0.002
-6dB	0.003
-60dB	2
-80dB	11

Separation (1kHz)	100dB
Noise (IEC A)	-107dB
Dynamic range (EIAJ)	95dB
Output	2V

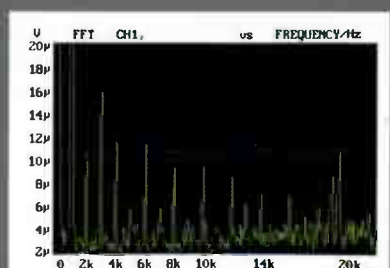
FREQUENCY RESPONSE

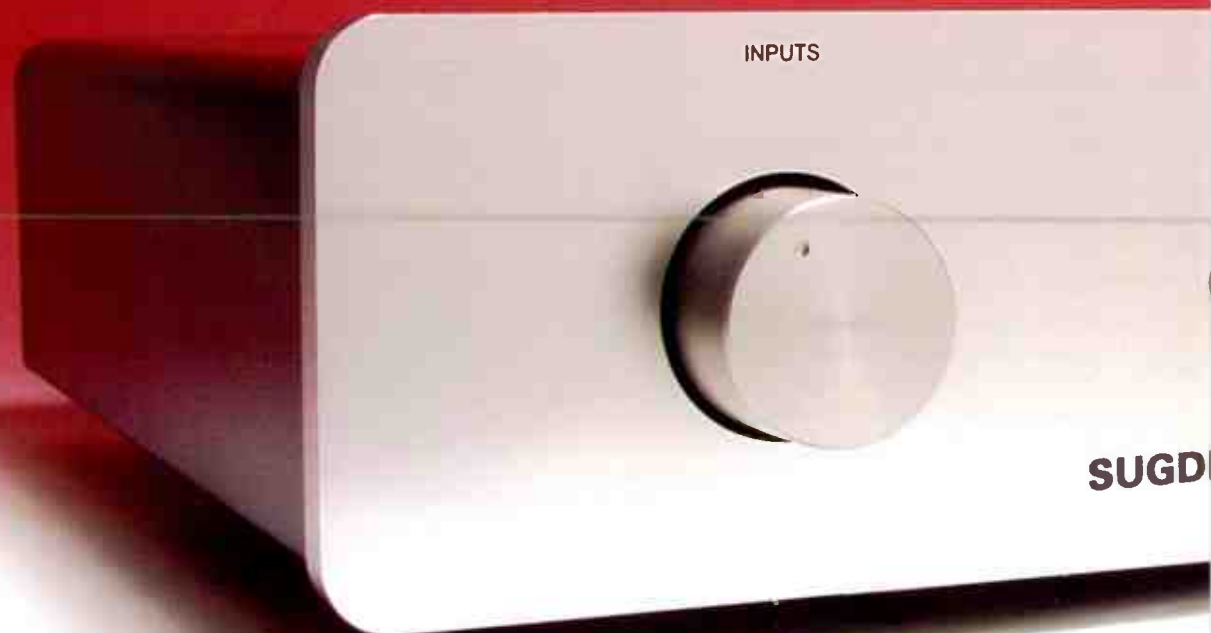


DISTORTION LEVEL, -60dB



DISTORTION SPECTRUM to 20k





AB Fab!

Hitherto famous for their super-clean sounding Class A amplification, J E Sugden have just introduced a brand new Class AB design, offering more output power along with lower electricity bills. David Price tries the mysterious Mystro integrated amplifier...

In hi-fi, as in the wider world outside, certain brands are synonymous for certain things. And this doesn't happen by accident; Sony didn't get to the top of the consumer electronics tree by making trowels. Hoover have never once made a television. Bang and Olufsen don't affix their moniker to cheap Chinese OEM mini systems the like of which you can buy at Tesco's...

It's always difficult then, when as a manufacturer that's become famous for certain products, or certain types of product, you start to branch out. For example, cast your mind back to the late eighties when Linn Products launched the Karik/Numerik CD player. Here we had a company whose Managing Director was one of the most erudite critics of the little silver Frisbee, and now suddenly they were making things to play it on! The list goes on and on. Musical Fidelity, a company who I still regard as an amplifier specialist, did a short-lived turntable a few years back. SME of course moved into turntables, and whilst the results are superb, they still don't quite have the almost supernatural, elevated status of their pickup arms.

Enter Sugden, West Yorkshire's foremost (are there any others?) purveyor of Class A amplification. Now the company have done quite a few things in their time (not least CD players and DACs), but you'd be a braver audiophile than me to argue that they're not most famous for their little boxes which get a lot hotter than they look, and sound better still. I can remember gazing at an advertisement for an A21a integrated amplifier as far back as 1978, wondering what delights were possible from the rather utilitarian looking box. I suspect the A21 line goes back further even than this, which explains why when you ask a British hi-fi nut to think of a Class A integrated, the word "Sugden" immediately issues forth from his mouth like your uncle naming the 1966 World Cup-winning England football team...

For this reason, I was intrigued to hear from Sugden's Tony Miller about a new integrated amplifier. With his characteristic unalloyed matter-of-factness (he's a Yorkshireman don't you know, and as Geoff Boycott shows us, they don't breed shrinking violets up there!), it just sort of slipped out in conversation. No "we

proudly present" or "we're delighted to be able to bring you"; it was more a case of "oh, and by the way we've done a little amp that we're quite happy with". To a hack who's constantly on the receiving end of ever more purple prose from a new generation of professional PR people, I was intrigued...

To be honest, I'm not still completely sure why Sugden have done the Mystro, but here it is anyway. It's almost as if its sole *raison d'être* is to take the company away from Class A, if only for completeness's sake. The likes of the A21a S2 and IA4 show that they're pretty much cracked that particular nut, so why not have a go at something a little different? So, this new amplifier runs in Class AB, and despite its 50W RMS (claimed) per channel power output, boasts substantially lower power consumption, as you'd expect. It has radically new underpinnings, including some circuitry designed for a high end range coming next year, to sit above Masterclass. It costs £1,225, which is about twenty percent less than their previous entry-level product (the £1,574 A21a). Soon, a matching CD player will be available £1,319. They both come in any finish

I mystro

VOLUME

POWER

INTEGRATED AMPLIFIER

you like as long as it's silver.

The Mystro is the first Sugden amplifier to include a 'Voltage Current Voltage (VCV) preamplifier stage, which includes a buffered input, voltage to current converter (Howland Current Pump) and current to voltage output stage. This produces a perfect current, says Sugden, independent of the volume control setting, in the HCP stage, resulting in "perfect structure and low signal to noise characteristics". This current drives the virtual earth output stage, combined with a Class AB power amp stage, configured as dual mono, which we found to be running very low negative feedback [see MEASURED PERFORMANCE] on its multi emitter, bi-polar output devices.

A large, clearly laid out printed circuit board houses selected discrete audio components, together with individually selected, low noise, low distortion, high slew rate op-amps. Most hardware components are mounted directly to the board and where they have hard wired interfaces these are all of special silver/gold construction. The Power Supply is a robust triple secondary wound toroidal transformer of 200VA. There are separate windings for each power output channel and a third winding for supplying the preamplifier stages. The latter supply is arranged with high impedance channel to channel and current shunt supplies to the active stages. The power output stages are smoothed by 6800uF capacitors, resulting in low impedance, fast response power availability to drive and control the connected speakers.

The amplifier has a liberal sprinkling of sensible facilities - there's a moving magnet phono stage,

"Sober in appearance and unsullied by superfluties, the Mystro is nevertheless a compelling little integrated amplifier that should fast acquire a cult following..."

three stereo line inputs, and that's your lot. A basic remote control is supplied. The slimline 430x340x90mm box is very good, showing few concessions to cost cutting compared to the A21 S2. The metal casing is decent, explaining some of that 9kg weight, and the front fascia is sumptuous and sleek looking. Finish is excellent considering the Mystro's modest position in life.

SOUND QUALITY

The prospect of listening to a non-Class A Sugden amplifier hadn't filled me with relish; like a V6 American muscle car or a four seater Ferrari, it sort of seemed to be missing the point. I'd expected the typical ultra-clean Sugden sound, except grittier, mushier and more diffuse - kind of like mineral water that had come from a London cold water tap. How wrong I was; I found the Mystro wasn't so much comprehensively worse than the A21a S2, but comprehensively *different*. Yes, I was right to surmise that there wasn't that crystalline clarity, the wonderful 'through the looking glass' midband that the A21a has at the very centre of its being. But what I didn't expect

was that the Mystro would have another, different, redeeming feature - a joyful rhythmic snap...

Kicking off with Sniff'n'the Tears' 'Driver's Seat', and I was more than a little impressed by the way the song powered along in such a bubbly way. It was almost as if the little integrated had been doing some sniffing of its own, ingesting an exotic nose powder that put a tiger in its tank and a spring in its step. Given that the A21a S2 is rhythmically no slouch at all, I was more than slightly surprised to find the Mystro an even more urgent, friskier sounding musical tool than its more expensive sibling. The song's basic guitar riff just seemed more spirited, the drums more impactful and the syncopation of the singer's voice more dramatic. Dynamic contrasts were no less vivid than the A21, with the kick drum and snares conveyed with gusto, while a surprisingly strong bass guitar sound underpinned the song in an unremittingly insistent way. Rhythmically and dynamically, the Mystro sounded like an A21 that had been slipped something by its best friend, and was now out to enjoy Saturday night in style. It wasn't as subtle or as





Jordan Acoustics

freephone:

0800 121 4771 / 4772

e-mail:

ask@jordanacoustics.co.uk

web:

www.jordanacoustics.co.uk

0%*

(STRICTLY LIMITED EDITION)

SA-KI CD/SACD Player: £2,500

10% Deposit: £250.00

Term: 12 months

Monthly Payment: £187.50

(STRICTLY LIMITED EDITION)

PM-KI Integrated Amp: £2,500

10% Deposit: £250.00

Term: 12 months

Monthly Payment: £187.50

*Subject to status conditions
written details on request.
Buy now pay later 0% finance
available on most products.



Limited Edition Pearl Components

When they are gone - they are gone forever...

When you first encounter the new KI Pearls, the first thing you notice are their unique 'Silk Pearl' finishing. The first of its kind in fact for Marantz. But it's the magic that Ken Ishiwata has created inside the box that really gets the pulse racing. He has built-in everything possible to ensure that the music is reproduced exactly as the original artist and recording engineer intended.

SA-KI: "Fed all manner of SACDs from Mobile Fidelity, Linn, Telarc and other admirable die-hards, the SA-KI showed itself to be a thoroughbred player reminiscent of the far costlier Esoteric devices, though the voicing differs. Marantz itself used the adjective 'silky' to describe the Pearls' black finish." Ken Kessler, Hi-Fi News Sept 09

PM-KI: "The phono stage was open, quiet and precise, especially the MM setting, and in every sense - from vinyl to CD to SACD - the bass was consistently quick. Decay or transient stops down below were as progressive or abrupt as required, nigh on perfect, while well-recorded bass drum kicks were reproduced with a vividly detailed sensation of pedal, hammer and skin in motion." Ken Kessler, Hi-Fi News Sept 09

marantz®



We are officially the UK's No. 1
Legendary and Premium
Specialist Dealer

hi-finews
EDITOR'S
CHOICE

Exclusively from Jordan Acoustics, the KI Pearls will be personally demonstrated by Ken Ishiwata at this year's **National Audio Show 09**.

September 26-27, **Wilton Music Hall, Liverpool, Room: Vale Suite**

For the true collector, Ken Ishiwata will be personally signing a limited number of 30th Anniversary Books & CD's. We look forward to seeing you there!





YAMAHA PDX-30 £110

This new iPod dock is available in four different colours; all black or white with variously pink, grey and blue cloth trimmings. The intention is that you can theme it with your interior decor, or more likely your current shade of iPod Nano. It's

decently well made; superb by the dire standards of many docks but still plasticky compared to premium products like Harman Kardon's Go and Play, and more so B&W's Zeppelin. It comes supplied with a dinky little flat remote, and a laptop-type power supply, and the DC in is the only connection other than the iPod connector dock on the whole thing. Thus you can't pipe in audio from elsewhere, and as no one really uses their iPod to feed video to a larger device, Yamaha make no provision for video outs. (Knowing Apple they'll only switch the pinouts in a short while anyway, annoying all the peripheral manufacturers).

So it really stands or falls on its audio performance, and as long as you're not trying to blast out at maximum volume the PDX-30's 15W RMS per channel can deliver a decently satisfying listen.

La Roux's brittle and compressed sounding 'In For The Kill' was tamed nicely, giving a tonally balanced and powerful performance up to about three quarters of the volume control, beyond which the bass became overpowered by the grating higher frequencies. The remote is usable, if a little counterintuitive in its attempts to emulate iPod control. The permitted iPods and importantly iPhones (nothing before 5G!) respond well to control, with only the first-generation iPod Touch (running v3.0) not seeming to know whether volume was intended to be going up or down. In these days of multiple elaborate alarm clock/teas-maid (or whatever) iPod docks, it is almost a relief to get a simple device that harks back to the original Bose Sounddock and the iPod Hi-Fi. Whether the buying public will agree remains to be seen, however. **PC**

[Contact: +44(0)1923 233166, www.yamaha-uk.com]

soundbites

SENNHEISER HD218 £40

We've all experienced the fellow traveller on the tube listening to something objectionable at ear-damaging volume, and annoying everybody else as the sound spills out. One of the sales angles of these new Sennheisers is that their closed construction reduces the anti-social effect generated by you, the portable listener. So I took a pair on the tube to try this principle out. Personally I still have a preference for in-ear 'phones, maybe because I feel conspicuous with 'phones as obtrusive as these in their sober, grey design. While they look deeply serious, they simply don't have the B-boy cool factor of a pair of oversized Sonys, but that's not my look either... Personal aesthetics aside, the listening experience was a joy; the phones are light and comfortable, so much so I nearly walked into work forgetting I had them on my head.

Between home and work I played some 24bit and standard FLAC on a 4g iPod Photo 60GB, running Rockbox. There was definitely still some sound leakage, prompting raised eyebrows from those nearby

when the 24/48 'The Downward Spiral' from Nine Inch Nails got going. But the impeccable production shone through for me (the listener) with great clarity, the HD218's upper range sounding pleasant and not at all grating. The closed design doesn't do a huge amount to exclude exterior tube noise, but this is not of great concern when the 'phones are able to deliver a coherent performance that stops you flicking through test material and gets you to settle down to a full album listen, getting truly lost in the music. For me this was the sumptuous symphonic prog of Toto's 'Hydra' in its original mastering, the lossless FLAC being given full reign by the appealing, dynamic sound of the HD218s. As ever 'White Sister' provided the highlight, with the late Jeff Porcaro's powerhouse drumming sounding truly impressive, Luke's amazing guitar solo was easy to pick out, those slabs of analogue synthesis being revealed in all their glory without sounding fake. If you're not a believer in ear canal, noise-cancelling type headphones these Sennheisers are



worth every bit of the £30 they can commonly be found for, as they're capable of an extremely musical performance with the right material. **PC**

[Contact: +44 (0)1494 551 551, www.sennheiser.co.uk]

Visit Hi-Fi World at the National Audio Show, on September 26th & 27th 2009

Held at Whittlebury Hall, near Silverstone, UK.

Come to our demonstrations and talks.

Hi-Fi World will have a stand at the Show but will also be holding demos and talks at the Interlagos Suite, 1st floor. Collect a ticket at the entrance or our stand.

- ▶ Hear publisher Noel Keywood of Hi-Fi World talk about and demonstrate LP versus CD.
- ▶ Martin Colloms, publisher of The Audio Critic, will be talking about important aspects of hi-fidelity.
- ▶ And finally, Peter Comeau, Senior Engineer of the International Audio Group, will fly in from China to demo Quad 2905 electrostatic loudspeakers and talk about them.
- ▶ As in the past we expect to have interesting products running and a full room of eager listeners. It will be simple and enjoyable so do join us. We'd love to see you.



A popular Hi-Fi World demonstration at Manchester with Tannoy Westminsters and B&W 801Ds.



WIN A **SUPERB ROTEL RCD-1520 CD PLAYER WORTH £695** IN THIS MONTH'S GREAT GIVEAWAY!

Here's your chance to win one of the best modern mid-price CD players, the Rotel RCD-1520, as tested in October's issue of *Hi-Fi World* magazine!

Here's what Paul Rigby said:

"The philosophy behind the construction of the Rotel RCD-1520 is intriguing. The company rejects the idea of employing surface mounting on its circuit boards because it prefers to have the freedom of swapping new and improved components in and out of its kit when the need arises. Measuring 431x99x320mm and weighing in at a relatively heavy 6.5kg, it features a large toroidal transformer to give the CD player the power to relax and perform without any constraints

as well as to minimise noise, plus Wolfson multibit DACs to maintain sound quality. The RCD-1520 provides the user with a slot loading disc facility, which is a far nicer thing than most use in practice, and the rear features just the essential outputs.

In use, the Rotel provided essential yet subtle details previously hidden, such as impressive piano transients and the bending of guitar chords, with tremendous midrange insight and clarity in this region. Synth lines were carried better still, and its rendition of the bass proved both powerful and subtle; the RCD-1520 offered both punch and weight. On Can's 'You Doo Right', the extra musical focus provided enough space to allow a lower register synth

line to appear, as if from nowhere. For the first time, I was aware that something seemingly as formless as feedback was, in fact, constructed of multiple parts.

The broadening of the instrument response also gave an extra dimension to the soundstage, adding depth and width. The Rotel is good enough to start mixing it with sub-£1,000 machines. It's a very open, detailed performer with a spry tonality and a nicely, naturally musical gait. It lilts along yet grips you too. The RCD-1520 showed a level of maturity that belied its price point. It's an excellent mid-price machine with a spry, crisp and detailed sound, allied to gripping rhythms and dynamics - plus a peach of a slot-loading CD drive."

For a chance to win this great silver disc spinner, just answer the following four easy questions. Send your entries on a postcard only by 30th October 2009 to:
November 2009 Competition, Hi-Fi World magazine, Unit G4, Argo House, The Park Business Centre, Kilburn Park Road, London NW6 5LF.

RULES AND CONDITIONS OF ENTRY

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

QUESTIONS

[1] Rotel rejects the idea of using what on its circuit boards?

- [a] surface mounting
- [b] components
- [c] cheese
- [d] feedback

[2] What type of DAC is used?

- [a] Wolfson
- [b] Crystal Semiconductor
- [c] Philips
- [d] Cirrus Logic

[3] What type of disc loading system is used?

- [a] slot
- [b] tray
- [c] drawer
- [d] top

[4] What did Paul Rigby describe as "gripping"?

- [a] its rhythms and dynamics
- [b] his mother
- [c] Big Daddy
- [d] Goodyear tyres

November Competition
Hi-Fi World Magazine
 Unit G4 Argo House
 The Park Business Centre
 Kilburn Park Rd.
 London NW6 5LF

entries will be accepted on a postcard only

**AUGUST 2009 KORA 3T LTD PHONO STAGE WINNER:
 Mr. James Mayhew of Ipswich**

its what you don't see **that creates the music**



Unison Research
Reference Pre

“ UKD Studio is a place where you can experience the ultimate in European listening pleasure, from our unique selection of hand crafted pieces of hifi architecture to our unparalleled service... ”

Dana Berkmen : UKD Studio

We cater for all tastes and pockets and deliver a product and sonic experience that's second to none.

Our facilities are there for your exclusive use to enjoy and select the best listening experience to suit your taste, budget and at your convenience.

We can supply and install complete systems with stands, cables and mains filtration, or alternatively help you upgrade and build your system piece by piece... and we carry the largest range of these brands in the country, so that you are able to experience and decide efficiently and in comfort.

Our ultimate goal is your complete satisfaction, through the best quality products, service and attention to detail.

ukd studio

Abbey Business Centre
18-24 Stoke Road, Slough
Berkshire, SL2 5AG, England
(Near to M25/M4/M40)

t: 01753 722 050
e-mail: studio@ukd.co.uk
web: www.ukd.co.uk

uk's largest demonstration range of:

graaf thorens
kemp triangle
opera unison research
pathos benz micro

WORLD CLASSICS

In this heavily revised section, you'll find the great and the good from audio's glorious past. Most are seminal designs which have earned their place in hi-fi history, but you'll also see some oddities which aren't classic as such, but are great used buys. The year of introduction is given, alongside the original UK launch price. Think we've overlooked something? Then write in and let us know!

DIGITAL

CAMBRIDGE AUDIO CD1 1986 £1500
Inspired Stan Curtis redesign of Philips CD104, complete with switchable digital filter. Lean but tight and musical performer.

CAMBRIDGE AUDIO CD4SE 1998 £200
A touch soft in the treble and tonally light, but outstanding in every other respect.

LINN KARIK III 1995 £1775
The final Karik was a gem. Superb transport gives a brilliantly tight, grippy dynamic sound, albeit tonally dry.

MARANTZ CD73 1983 £700
A riot of gold brushed aluminium and LEDs, this distinctive machine squeezed every last ounce from its 14x4 DAC -super musical



MARANTZ SA-1 2000 £5,000
The greatest argument for SACD. This sublime Ken Ishiwata design is utterly musically convincing with both CD and SACD, beating most audiophile CD spinners hands down.



MERIDIAN 207 1988 £995
Beautifully-built two-box with pre-amp stage. Very musical although not as refined as modern Bitstream gear. No digital output.

MUSICAL FIDELITY TRIVISTA 2002 £4000
When playing SACDs, the sweetest, most lucid and lyrical digital disc spinner we've heard. Old school stereo, pure DSD design. CD sound is up in the £1000 class, too! Future classic.

MERIDIAN MCD 1984 £600
The first British 'audiophile' machine was a sweeter, more detailed Philips CD100. 14x4 never sounded so good, until the MCD Pro arrived a year later.



NAIM CDS 1990 £ N/A
Classic Philips 16x4 chipset with serious attention to power supplies equals grin-inducing sonics.



SONY CDP-101 1982 £800
The first Japanese CD spinner was powerful and involving. Brilliant transport more than compensated for 16x2 DAC, and you even got remote control!

SONY CDP-R1/DAS-R1 1987 £3,000
Sony's first two boxer was right first time. Tonally lean, but probably the most detailed and architectural sounding machine of the eighties.



SONY CDP-701ES 1984 £890
Sony's first ever bespoke high end audiophile machine used a 16x2 DAC to provide a clinically incisive sound; supreme build quality allied to the pure unadulterated luxury of a paperback-sized remote control.

TECHNICS SL-PI 200 1987 £800
CD version of the Technics SL-1200 turntable. Massively built to withstand the rigours of 'pro' use and laden with facilities - a great eighties icon. Sonically, it's pure fun, with hefty bass that can still show weedy modern players a thing or two!

YAMAHA CD-X1 1983 £340
Nicely built 16x2 machine with a very sharp and detailed sound; sometimes too much so. Excellent ergonomics, unlike almost every other rival of the time.

COMPACT DISC TRANSPORTS

TEAC VRDS-T1 1994 £600
Warm and expansive sound made this a mid price hit. Welt built, with a slick mech.



ESOTERIC P0 1997 £8,000
The best CD drive bar none: TEAC's Tokyo boys pushed the boat out in style. Brilliantly incisive, ridiculously over engineered.

KENWOOD 9010 1986 £600
The first discrete Jap transport was beautifully done and responds well to re-clocking even today.

DACs

CAMBRIDGE AUDIO DACMAGIC 1995 £99
Good value upgrade for budget CD players with extensive facilities and detailed sonics.



DCS ELGAR 1997 £8500
Extremely open and natural performer, albeit extremely pricey - superb.



DPA LITTLE BIT 3 1996 £299
Rich, clean, rhythmic and punchy sound transforms budget CD players.



PINK TRIANGLE DACAPO 1993 £ N/A
Exquisite; the warmest and most lyrical 16bit digital audio we have ever heard. Clever plug-in digital filter modules really worked!



QED DIGIT 1991 £90
Budget bitstream performer with tweaks aplenty. Positron PSU upgrade makes it smooth, but now past it.

TURNABLES

ARISTON RD11S 1972 £94

Modern evolution of Thorens' original belt drive paradigm, Scotland's original super-deck was warm and musical, albeit soft. Still capable of fine results today.

ADC ACCUTRAC 4000 1976 £300

Bonkers 1970s direct drive that uses an infra red beam to allow track selection and programming. More of a visual and operational delight than a sonic stunner.

PIONEER PL112D 1973 £36

The beginning of the end for the British turntable industry. When vinyl was the leading source, this brought new standards of noise performance and stability to the class, plus a low friction S-shaped tonearm. Later PL112D was off the pace compared to rivals



PIONEER PLC-590 1976 £600

Sturdy and competent motor unit that performs well with a wide range of tonearms. Check very thoroughly before buying due to electronic complexity and use of some now-obsolete ICs.

DUAL CS505 1982 £75

Simple high quality engineering and a respectable low mass tonearm made for a brilliant budget buy. Polished, smooth and slightly bland sound.

GOLDRING LENCO GL75 1970 £15.65

Simple, well engineered motor unit with soft, sweet sound and reasonable tonearm. Good spares and servicing support even today from specialists. Eminently tweakable. Similar 88 and 99 motor units are budget 301/TD124 rivals.

LINN AXIS 1987 £253

Simplified cut-price version of the Sondek complete with LVX arm. Elegant and decently performing mid-price package. Later version with Akito tonearm better.

LINN SONDEK LP12 1973 £86

For many, the Brit superdeck; constant mods meant that early ones sound warmer and more lyrical than modern versions. Recent 'SE' mods have brought it into the 21st century, albeit at a price..



MARANTZ TT1000 1978 £ N/A

Beautiful seventies high end belt drive with sweet and clean sound. Rare in Europe, but big in Japan.



MICHELL GYRODEC 1981 £599

Thanks to its stunning visuals, this bold design wasn't accorded the respect it deserved until recently. Early examples sound cold and mechanical, but now right on the pace. Clean, solid and architectural sound.

TECHNICS SP10 1973 £400

Seminal Japanese engineering. Sonics depend on plinths, but a well mounted SP10/II will give any modern a hard time, especially in respect of bass power and midband accuracy.

REGA PLANAR 3 1978 £79

Brilliantly simple but clean and musical performer, complete with Acos-derived S-shaped tonearm. 1983 saw the arrival of the RB300, which added detail at the expense of warmth. Superb budget buy.

GARRARD 301/401 1953 £19

Heavy metal - tremendously strong and articulate with only a veiled treble to let it down. In many respects, better than the seventies 'superdecks' that succeeded it.



ROKSAN XERXES 1984 £550

Supposedly the first to 'better' the LP12. Super tight and clean sound, with excellent transients. Less musical than the Sondek, but more neutral. Sagging plinth top-plates make them a dubious used buy.

SONY PS-B80 1978 £800

First outing for Sony's impressive 'Biotracer' electronic tonearm. Built like a tank with a clean and tidy sound, albeit lacking involvement. Scarily complicated and with no spares support - buy with caution!

THORENS TD124 1959 £ N/A

The template for virtually every 1970s 'superdeck', this iconic design was the only real competition for Garrard's 301. It was sweeter and more lyrical, yet lighter and less impactful in the bass.



TOWNSHEND ROCK 1979 £ N/A

The product of academic research by the Cranfield Institute, this novel machine has an extremely clean and fluid sound. Substantially modified through the years, and capable of superb results even today.

TRIO LO-7D 1978 £600

The best 'all-in-one' turntable package ever made, Trio/Kenwood threw their 'engineering best practice' book at this one with startling results. Clean, powerful and three-dimensional sound, ultimately limited by the tonearm.

TONEARMS

ACOS LUSTRE GST-1 1975 £46

The archetypal S-shaped seventies arm; good, propulsive and involving sound in its day, but ragged and undynamic now.

AUDIO TECHNICA AT 1120 1978 £75

Fine finish can't compensate for this ultra low mass arm's limited sonics - a good starter arm if you've only got a few quid to spend.

ALPHASON HR100S 1981 £150

First class arm, practically up to present-day standards. Buy carefully, though, as there is no service available now. Totally under priced when new, exceptional.



SME 3009 1959 £18

Once state of the art, but long since bettered. Musical enough, but weak at frequency extremes and veiled in the midband. Legendary serviceability and stunning build has made it a cult, used prices unjustifiably high.

GRACE G707 1974 £58

This early Japanese example of the tonearm art has a smooth, lyrical sound. Imported by Linn, fitted to early LP12s. Sonically way off the pace now, though.

REGA RB300 1983 £88

Inspired budget esoterica. Detailed, tight, neutral sound but tonally grey sounding in absolute terms. Responds well to tweaking, and its cheaper RB250 brother better still.



SME SERIES III 1979 £113

Clever variable mass design complete with Titanium Nitride tube tried to be all things to all men, and failed. Charming nonetheless, with a warm and inoffensive sound.

HADCOCK GH228 1976 £46

Evergreen unipivot with lovely sweet, fluid sound. Excellent service backup.



LINN ITTOK LVII 1978 £253

Arguably the first 'superarm'; Japanese design to Linn specs made for a muscular, rhythmic sound with real dynamics. Now off the pace, but the final LVIII version worth seeking out.

NAIM ARO 1986 £875

Truly endearing and charismatic performer - wonderfully engaging mid-band makes up for softened frequency extremes.



TECHNICS EPA-501 1979 £ N/A

Popular partner for late seventies Technics motor units. Nice build and Titanium Nitride tube can't compensate for middling sound.

INTEGRATED AMPLIFIERS/COMBOS

DELTEC 1987 £1900

Fast, dry and with excellent transients, this first DPA integrated is the real deal for eighties obsessives. Ridiculously punchy 80W per channel from a tiny, half-size box. Radical, cool and more than a little strange.

ROGERS A75 1978 £220

The prototypical Audiolab 8000a – lots of sensible facilities, a goodly power output and nice sound in one box. The later A75II and A100 versions offered improved sonics and were seriously sweet and open to listen to.

EXPOSURE VII/VIII 1985 £625

Seminal mid-eighties Exposure pre-power, offering most of what rival Naim amps did with just that little bit extra smoothness and sweetness. Still, it's by no means 'sweet' by today's standards, being lean, punchy, musical. It's also possessed of that quintessentially eighties look – frumpy black steel boxes with rough silk screened logos!



SUGDEN CS1/P51 1976 £130

Soft sounding early Sugden combo with a plethora of facilities and filters, complete with seventies-tastic DIN socketry. A sweet and endearing performer as you'd expect, but lacking in power and poor load driving ability, so partner carefully.

VTL MINIMAL/50W MONOBLOCK 1985 £1,300

Vacuum Tube Logic was one of the Europe's biggest tube names in the eighties, and it shows. Rugged, professional build and finish allied to a lively and punchy sound (albeit with limited power) make them an excellent used buy.

A&R A60 1977 £115

Sweet and musical feature-packed integrated; the Audiolab 8000A used its blueprint to great effect.



CREEK CAS4040 1983 £150

More musical than any budget amp before it; CAS4140 loses tone controls, gains grip.

AUDIOLAB 8000A 1985 £495

Smooth integrated with clean MM/MC phono stage and huge feature count. Extremely reliable, too. Post '93 versions a top used buy.



MCINTOSH MA6800 1995 £3735

Effortlessly sweet, strong and powerful with seminal styling to match.

SUGDEN A21 1969 £ N/A

Class A transistor integrated with an eminently likeable smoothness and musicality. Limited inputs via DIN sockets.

MISSION CYRUS 2 1984 £299

Classic eighties minimalism combines arresting styling with clean, open, lively sound. Further upgradeable with PSX power supply.



MUSICAL FIDELITY A1 1985 £350

Beguiling Class A integrated with exquisite styling. Questionable reliability.



NAIM NAIT 1984 £350

Superb rhythms and dynamics make it truly musical, but tonally monochromatic. Fine phono stage, very low power.

NAD 3020 1979 £69

Brilliantly smooth, sweet and punchy at the price and even has a better phono stage than you'd expect. The archetypal budget super-amp.



MYST TMA3 1983 £300

Madcap eighties minimalism, but a strong and tight performer all the same.

ROGERS CADET III 1965 £34

Sweet sounding valve integrated, uses ECL86 output valves, even has a half useable phono stage, sweet, warm a good introduction to valves



ROTEL RA-820BX 1983 £139

Lively and clean budget integrated that arguably started the move to minimalism.

CHAPMAN 305 1960 £40

Smooth pre/power combo with a sweet and open sound. Not quite up to Leak/Quad standards but considerably cheaper second-hand.

PREAMPLIFIERS

AUDIOLAB 8000C 1991 £499

Tonally grey but fine phono input and great facilities make it an excellent general purpose tool.

AUDIO RESEARCH SP-8 1982 £1,400

Beautifully designed and built high end tube preamplifier with deliciously sweet and smooth sound. Not the last word in incision or grip, but that didn't matter to those who aspired to it.

CONRAD JOHNSON MOTIV MC-8 1986 £2,500

Minimalist FET-based preamplifier from the Yank valve specialists is brilliantly neutral and smooth with a spry, light balance in the mould of Sugden high end stuff. Something of a curio, but worthwhile nonetheless.

CROFT MICRO 1986 £150

Budget valve pre-amp with exceptionally transparent performance.

LEAK POINT ONE STEREO 1958 £ N/A

Good for their time, but way off the pace these days. Use of EF86 pentode valve for high gain rules out ultra performance. Not the highest-fi!

LINN LK-1 1986 £499

A brave attempt by the Glasgow boys to bring remote controlled user-friendliness to hair-shirt audiophile hi-fi. Didn't quite work, but not half bad for under £100.

NAIM NAC32.5 1978 £ N/A

The Salisbury company came of age with this, their classic high end pre. Brilliantly fast and incisive sound that's a joy with vinyl but a tad forward for digital.

LECSON AC-1 1973 £ N/A

Amazing styling courtesy of Allan Boothroyd can't disguise its rather cloudy sound, but a design classic nonetheless.



QUAD 22 1958 £25

The partner to the much vaunted Quad II monoblocks - cloudy and vague sound means it's for anacrophiles only.

QUAD 33 1968 £43

Better than the 22, but Quad's first tranny pre isn't outstanding. Responds well to tweaking/ rebuilding though...

POWER AMPLIFIERS

HH ELECTRONICS TPA-50D AMPLIFIERS 1973 £110

Simple design with easily available components, solid build quality and fine sound make for a surprisingly overlooked bargain. Not exactly stylish, however.

LEAK STEREO 60 1958 £N/A

Leak's biggest valve power amp offers 35 Watts per channel and more low end welly than the smaller Stereo 20. Despite concerns over reliability their rarity means high prices are the order of the day.

LEAK STEREO 20 1958 £31

Excellent workaday classic valve amplifier with decent power and drive. Surprisingly modern sounding if rebuilt sympathetically. Irrepressibly musical and fluid.



LECSON API 1973 £ N/A

Madcap cylindrical styling alluded to its 'tower of power' pretensions, but it wasn't. Poor build, but decently clean sounding when working.

MARANTZ MODEL 9 1997 £8000

Authentic reproduction monoblocks still more than cut the sonic mustard. Highly expensive and highly sought after.

MICHELL ALECTO 1997 £1989

Crisp, clean and beautifully controlled with gorgeous styling. Partnered with the £1650 Orca this sounds delicious!

LEAK POINT ONE, TL10, TL12.1 1949 £28

Early classics that are getting expensive. Overhauling is de rigueur before use, using original parts if possible. Surprisingly crisp and musical sound, that's far more modern than Quad IIs. Deeply impressive when in fine fettle.



MUSICAL FIDELITY XA200 1996 £1000PR

200W of sweet smooth transistor stomp in a grooved tube! Under-rated oddity.



QUAD II 1952 £22

The all-time classic valve amplifier, with a deliciously fluid and lyrical voice. In other respects though, it sounds hopelessly dated. Low power and hard to partner properly



QUAD 405 1978 £115

The first of the current dumpers is a capable design with smooth, effortless power and a decently musical sound. 606 and 707 continue the theme with greater detail and incision.

QUAD 303 1968 £55

Bullet proof build, but woolly sound. Off the pace, but endearing nonetheless. Some pipe smoking slipper wearers swear by them!

RADFORD STA25 RENAISSANCE 1986 £977

At the time, very possibly the least cool amplifier on the planet – and we're not talking heat dissipation here. This reworking of Radford's original late sixties design was possessed of a wonderfully rich, old school valve sound with enough power (25W) and lots of subtlety.



KRELL KMA100 II 1987 £5,750

Ludicrous monoblock version of the giant KSA-100 is one of the seminal eighties transistor power amplifiers. Massive wallop allied to a very clean and open Class A sound makes this one of the best amplifiers of its type, ever.

PIONEER M-73 1988 £1,200

Monster stomp from this seminal Japanese power amplifier, complete with switchable Class A and Class B operation. Clean, open and assured sounding, albeit a tad behind the pace on high speed dance music. Rosewood side cheeks and black brushed aluminium completes the eighties-tastic experience.



PHONO STAGES

CREEK OBH-8 SE 1996 £180

Punchy, rhythmic character with oodles of detail makes this a great budget audiophile classic. Partner with a Goldring G1042 for an unbeatable budget combination.



LINN LINNK 1984 £149

Naim-designed MC phono stage built to partner the original Naim NAIT - yes, really! Fine sound, although off the pace these days.

MICHELL ISO 1988 £ N/A

This Tom Evans-designed black box started the trend for high performance offboard phono stages. Charismatic, musical and punchy - if lacking in finesse.

TUNERS

BEO MASTER 5000 1967 £100

B&O's first serious FM stereo tuner was at least a decade ahead of the game. Its detailed, open sound and precision build mean it's still an aural and tactile pleasure today.

MARANTZ ST-8 1978 £353

Marantz's finest radio moment. Warm, organic sound plus an oscilloscope for checking the signal strength and multipath.



CREEK CAS3140 1985 £199

Excellent detail, separation and dynamics - brilliantly musical at the price. T40 continued the theme...

NAD 4040 1979 £79

Tremendously smooth and natural sound allied to low prices and good availability make this budget analogue esoterica. Needs a good antenna to work properly, however.

NAIM NAT03 1993 £595

The warm, atmospheric sound is further proof of Naim's proficiency with tuners.

PIONEER TX-9500 1976 £295

Another of the serious classic solid-staters. Boasts the usual high end Jap package of fine sound, brilliant sensitivity and superb build.

LEAK TROUGHLINE 1956 £25

Series I an interesting ornament but limited to 88-100MHz only. II and III are arguably the best-sounding tuners ever. Adaptation for stereo easy via phono multiplex socket. Fed by a modern outboard decoder they're deliciously lucid with true dimensionality.



YAMAHA CT7000 1977 £444

Reputedly the best of the classic Jap analogues, this combines sleek ergonomics, high sensitivity and an explicit, detailed sound.



QUAD FM4 1983 £240

Supreme ergonomics and styling allied to a pleasingly lyrical sound with plenty of sweetness and detail made this one of the best tuners around upon its launch.



NAD 4140 1995 £199

Brilliant affordable digital tuner has a smooth, detailed musical sound plus sensible real-world facilities.

ROGERS T75 1977 £125

Superb mid-price British audiophile design, complete with understated black fascia. Fine sound in the true Rogers mould - smooth and sweet with fine dimensionality.

REVOX B760 1975 £520

REVOX B760 1975 £520

More of a semi-pro machine than a domestic bit of kit, the Revox offers superlative measured performance although the sound isn't quite as staggering as the numbers. Fine nonetheless, and surely the most durable tuner here?



SANSUI TU-9900 1976 £300

A flagship Japanese tuner designed to steal sales from the likes of Accuphase and Revox, it boasts superlative RF performance and an extremely smooth and lucid sound, along with very fine build and finish.

SONY ST-5950 1977 £222

One of the first Dolby FM-equipped tuners, a format that came to nought. Still, it was Sony's most expensive tuner to date, and boasted a very good sound quality allied to brilliant ergonomics.

SEQUERRA MODEL 1 1973 £1300

Possibly the ultimate FM tuner. Massive in terms of technology, size and features dedicated to extracting every ounce of performance from radio, including impressive multi-purpose oscilloscope display.



TECHNICS ST-8080 1976 £180

National Panasonic's specialist hi-fi brand was a big hitter back then, and this is no exception. Superb FM stage makes for a very clean and smooth listen with lots of detail and depth.



ANALOGUE RECORDERS

YAMAHA TC-800GL 1977 £179

Early classic with ski-slope styling courtesy of Mario Bellini. Middling sonics by modern standards, but cool nonetheless!



AIWA XD-009 1989 £600

Aiwa's Nak beater didn't, but it wasn't half bad nonetheless. Massive spec even included a 16x4 DAC!

UHER REPORT 4000 SERIES 1961 £97

Uher's little Nagra beater was made for decades and sold over a million. Brilliantly packaged with bullet proof German engineering and a clean, transparent sound.



PIONEER CTF-950 1978 £400

Not up to modern standards sonically, but a great symbol of the cassette deck art nonetheless.



REVOX A77 1968 £145

The first domestic open reel that the pros used at home. Superbly made, but sonically off the pace these days. B77 better, but couldn't match the Japanese.



SONY TC-377 1972 £N/A

A competitor to the Akai 4000D open reel machine, the Sony offered better sound quality and is still no slouch by modern standards



NAKAMICHI CR-7E 1987 £800

The very best sounding Nakamichi ever - but lacks the visual drama of a Dragon.



SONY WM-D6C 1985 £290

Single capstan transport on a par with a Swiss watch, single rec/replay head better than most Naks. Result: sublime.

DIGITAL RECORDERS

SONY MDS-JE555ES 2000 £900

The best sounding MD deck ever, thanks to awesome build and heroic ATRAC-DSP Type R coding.



PIONEER PDR-555RW 1999 £480

For a moment, this was the CD recorder to have. Clean and detailed.

MARANTZ DR-17 1999 £1100

Probably the best sounding CD recorder made; built like a brick outhouse with a true audiophile sound and HDCD compatibility.



KENWOOD DM-9090 1997 £500

Serious and sophisticated sound thanks to well implemented ATRAC 4.5; surprisingly musical MD recorder.

SONY TCD-8 DATMAN 1996 £599

Super clean sound makes this an amazing portable, but fragile.

LOUDSPEAKERS

ACOUSTIC RESEARCH

ARI18S 1978 £125

Yank designed, British built loudspeaker became a budget staple for many rock fans, thanks to the great speed from the paper drivers, although finesse was most definitely not their forte...

BBC LS3/5A 1972 £88

Extremely low colouration design is amazing in some respects - articulation, stage depth, clarity - and useless in others (both frequency extremes). Came in wide variety of guises from various manufacturers building it under licence. Partner with Rogers ABI subwoofers for an extra two octaves of bass!



HH ELECTRONICS TPA-50D AMPLIFIERS 1973 £110

Simple design with easily available components, solid build quality and fine sound make for a surprisingly overlooked bargain. Not exactly stylish, however.

LOWTHER PM6A 1957 £18 EACH

This seminal full-range driver is still manufactured. High sensitivity, as fitted to many classic horn designs.

TANNOY WESTMINSTER 1985 £4500

Folded horn monsters which certainly sound good if you have the space. Not the last word in tautness but can drive large rooms and image like few others.



JR 149 1977 £120

Infamous cylindrical speaker that was ignored for decades but now back in fashion! Based on classic KEF T27 / B110 combo as seen in the BBC LS3/5a. Doesn't play loud, needs a powerful transistor amplifier, but rewards with fine clarity and imaging.



SPENDOR BC1 1976 £240

Celestion HF1300 tweeter meets bespoke Spendor Bextreme mid-bass unit – and the result is a beautifully warm yet well focussed sound. A little bass bloom necessitates careful low-stand mounting, but these prove that the seventies did have some fine designs after all!

QUAD ESL57 1956 £45 EACH

Wonderfully open and neutral sound puts box loudspeakers to shame. Properly serviced they give superb midband performance, although frequency extremes less impressive. Ideally, use in stacked pairs or with subwoofers and supertweeters.



KEF R105 1977 £785

Three way Bextreme-based floorstander (complete with castors!) gave a truly wide-band listen and massive (500W) power handling. A very neutral, spacious and polite sounding design, but rhythmically well off the pace. The quintessential nineteen seventies loudspeaker.

IMF TLS80 1976 £550

Warm and powerful nineteen seventies behemoth with transmission loading and a mixture of KEF and Celestion drive units. Impressively physical wideband sound but rhythms aren't its forte.

MAGNEPLANAR SMGA 198X £800

Technological loudspeaker with genuinely musical abilities; fast, smooth, open, dry.



MISSION 770 1980 £375

Back in its day, it was an innovative product and one of the first of the polypropylene designs. Warm, smooth, clean and powerful sound.



MISSION 752 1995 £495

Cracking Henry Azima-designed floorstanders combined HDA drive units and metal dome tweeters with surprisingly warm results. Benign load characteristics makes them great for valves.

HEYBROOK HBI 1982 £130

Peter Comeau-designed standmounters with an amazingly lyrical yet decently refined sound. Good enough to partner with very high end ancillaries, yet great with budget kit too. A classic.



CELESTION SL6 1984 £350

Smallest two way design complete with aluminium dome tweeter and plastic mid-bass unit set the blueprint for nineteen eighties loudspeakers. Very open and clean sounding, albeit course at high frequencies and limp in the bass. Speakers would never be the same again...



LEAK SANDWICH 1961 £39 EACH

Warm sounding infinite baffle that, with a reasonably powerful amplifier can sound quite satisfying.



QUAD ESL63 1980 £1200

An update of the ESL57, with stiffer cabinets. Until the 989, the best of the Quad electrostatics



YAMAHA NS1000 1977 £532

High tech Beryllium midband and tweeter domes and brutish 12" woofers in massive sealed mirror image cabinets equals stunning transients, speed and wallop allied to superb transparency and ultra low distortion. Partner carefully!



MISSION X-SPACE 1999 £499

The first mass production sub and sat system using NXT panels is a sure-fire future classic - not flawless, but a tantalisingly unboxy sound nevertheless!



Rock With You

Having fiddled with replacement iPod operating systems for at least five years, has Patrick Cleasby finally found in Rockbox a usable system that's fit for installation by mere mortals?

The iPod is surely this decade's greatest creation, but one thing it won't do, officially at least, is play FLAC (Free Lossless Audio Codec) files, which are the uncompressed format of choice for the new generation of computer audiophiles. There have been ways around this however, in the shape of alternative iPod operating systems, downloadable as freeware. And this is where Rockbox comes in, for it is precisely this, albeit arguably the ultimate expression of the breed.

Rockbox has now reached full packaged release level. As your average audiophile will have become ever more interested in FLAC over the last few years, having your primary format play on a mobile device without transcoding suddenly becomes an extremely appealing option.

I used to fiddle with Rockbox when installation was a very fraught, step-by-step, command line process, and I had some success with a monochrome 40GB 3G iPod, and then more recently finally managed to get the install on a 40GB iPod Photo working; FLAC playback on this machine has been flawless and very nearly entirely cache-lag free.

The Rockbox Utility makes installing on a PC a breeze. Linux and OSX installers are also available, but

I have never got the latter to install a pod correctly. But for once this is not a huge issue for me, as the simple fact is that for Rockbox to work on an iPod it needs to be PC (FAT32) formatted through iTunes on a PC before you start. I have also never tried to install Rockbox on any of the non-iPod devices it also supports; as most iRiver H340s have now expired I have yet to collect enough spares to reconstitute a Rockbox version of one. Old Archos, Cowon and a few more obscure devices are also in the frame for modification. The key thing is don't get excited if you have a Touch/Classic/Nano (1G aside) generation pod, as the last (and the biggest) iPod you can Rockbox is the 5.5G 80GB. Anyone who wants rid of one, let me know!

The Rockbox Utility-moderated install process has three main stages, and takes you through them all automatically using the main 'Complete Install' button on the first screen (once you have autodetected which model of iPod you have, or set its path and type manually). The first essential is to install the non-Apple bootloader, which is the program which lets the pod start up in the belief it is a Rockbox. Then there is the managed download of the appropriate Rockbox application for your particular pod. Finally you can select the colour theme of

your choice (more limited selection on monochrome pods!) For colour pods, I find the Amarok theme the most appealing from the list offered during installation.

For the purposes of this write up, I initialised a 2GB 1G Nano on a PC, and installed the current 3.3 version of Rockbox with the current Rockbox Utility (I checked it on a Mac

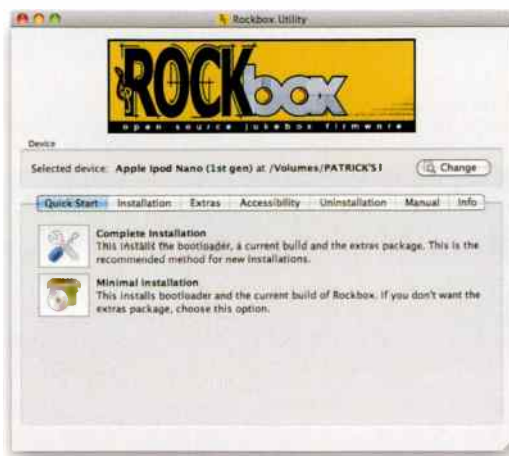


Look at all those antique devices it supports...

again; still doesn't work!). There were no issues at all. I then took it back to the Mac, to start loading it with FLAC and MP3 files I currently had to hand, a simple Finder or Windows Explorer drag/copy to the root of the iPod drive is all you need. The old Flash Rom in the Nano makes the loading seem time consuming, but the results make it worthwhile. Files right up to the bandwidth of my 24/96 'Gaucho' rip played with no problem, sounding great. But in a FLAC-centric world it is almost the convenience of using the same FLAC files everywhere, rather than their inherent quality that swings the argument for Rockbox.

Much like using Squeeze systems, you can navigate the FLAC library simply by folder/file structure, but to take advantage of well-tagged FLAC like you get out of RipNAS (or through assiduous Songbird or Mac Tag tagging), your final step is to run the 1st database update by going to the 'Database' menu and pressing 'Select' so all your metadata and art pays its way...

The only real concern over installing and using Rockbox, is that it will most likely make your use of anything more complex than a 3.5mm stereo jack for docking purposes awkward or impossible. But feel free to experiment; it is very simple to restore your iPod to pure Apple-ness in iTunes after all. And if you like Rockbox, make a PayPal donation to the project!



Mac Rockbox Utility.

VERDICT

The best way to get the most of the last days of your old iPods (and other devices). As FLAC becomes ever more prevalent in audiophile music file collections, it now makes even more sense to free your iPod from the Apple lock-in.

ROCKBOX £FREE
www.rockbox.org

FOR

- stable (at last!)
- multiple device support
- fun themes

AGAINST

- flaky Mac Installer
- old iPods only (pre 5.5G)

THE IDEAL ANTIDOTE

VISIT OUR WEBSITE: www.hi-fiworld.co.uk

UK SUBSCRIPTION SAVE UP TO

12.5%

SAVE UP TO 12.5% off the cover price when you subscribe to Hi-Fi World. That's an amazing £3.33 per issue, including postage.



FOR BACK ISSUES ENQUIRIES PLEASE CALL

01442 879097

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

+44 (0) 1442 879097

SO WHAT ARE YOU WAITING FOR? CALL NOW!!!

SUBSCRIPTION HOTLINE 01442 879097

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

FOR OUR
ON-LINE MAGAZINE
SEE P120

email:
hifiworld@webscribe.co.uk

Fax No:
01442 872279

TO WINTER BLUES!

WHY SUBSCRIBE TO HI-FI WORLD?

- 12 issues a year delivered straight to your door.
- Be first to grab a bargain in our "Free Reader Classified Ads" section.
- Run by dedicated hi-fi engineers and enthusiasts.
- Subscribers receive a minimum 10% Discount annually.
- Hi-Fi World has become famous for its informative reviews and radical kit designs.
- **PLUS!** Subscribe by Direct Debit and receive a 12.5% discount (UK only).

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



Please fill in this form and send to:

Hi-Fi World, Webscribe Ltd, PO Box 464, Berkhamsted, Herts, HP4 2UR

Originator's Identification Number

4	2	7	0	4	9
---	---	---	---	---	---

Name and full Postal Address of your Bank/Building Society

To: The Manager	Bank/Building Society
Address	
Postcode	

Name(s) of Account Holder(s)

--

Branch Sort Code

--	--	--	--	--	--

Bank/Building Society Account Number

--	--	--	--	--	--	--	--	--	--

Reference

HF

Instruction to your Bank or Building Society

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

Signature(s)
Date

Bank and Building Societies may not accept Direct Debits Instructions for some types of accounts

The guarantee should be detached and retained by the Payer

The Direct Debit Guarantee

- This Guarantee is offered by all Banks and Building Societies that take part in the Direct Debit scheme. The efficiency and security of the Scheme is monitored and protected by your own bank or Building Society
- If the amounts paid or the payments dates change Webscribe Ltd will notify you 10 working days in advance of your account being debited or as otherwise agreed
- If an error is made by Webscribe Ltd or your Bank or Building Society, you are guaranteed a full and immediately refund from your branch of the amount paid
- You can cancel a Direct Debit at any time by writing to your Bank or Building Society. Please send a copy of your letter to us.



TERMS & CONDITIONS: You will receive 12 issues per year.

Minimum subscription term is 12 months. Prices include P&P and are correct at the time of going to press. All prices are quoted in sterling. Offer available for UK subscribers, only. For enquiries relating to overseas pricing call + 44 (0) 1442 879 097.

I would like a years subscription to Hi-Fi World and receive a discount off the cover price (I have read and accept the terms and conditions).

I would like to pay for my 12 issues by:

6 monthly Direct Debit: Pay £19.95 every 6 months saving 12.5% off the yearly subscription rate of £45.60

Annual Direct Debit: Pay £39.90 every 12 months saving 12.5% off the yearly subscription rate of £45.60

Annual cheque/credit card: Pay £41.04 saving 10% off the yearly subscription rate of £45.60

Cheques made payable to Audio Publishing Ltd.

Your Details

Title _____ Forename _____

Surname _____

Address _____

Post Code _____

Daytime Tel: _____

Email: _____

Please debit my VISA MASTER MAESTRO AMEX (SWITCH)

Security No: (last three digits printed on the signature strip)

--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Valid from Date: ____/____/____ Expiry Date: ____/____/____

Switch card issue No:

Cardholder Signature: _____

Outside UK:-

EUROPE Airmail £50.00

OVERSEAS Airmail £70.00



Send this form to:

Hi-Fi World, Subscriptions Department PO Box 464, Berkhamsted, Hertfordshire, HP4 2UR.



Analog Extravaganza

Six stunning brands - One distributor



Xtension with ortofon arm
Pro-ject's new flagship combined with The
Ortofon tone arm
Poetry. pure poetry



Jukebox, new at £499
Pro-ject's first deck to include a built
in amplifier

ortofon

I am Vinyl

Cadenza Series
Now in stock and
Reviewed by Noel
keyword who
developed a bit of
a crush for our new
MC



2M
Taken the market by storm,
there is probably no better
MM cartridge. From budget
Red to high end Black, the
perfect upgrade for almost
any turntable.

Lehmannaudio



Roksan

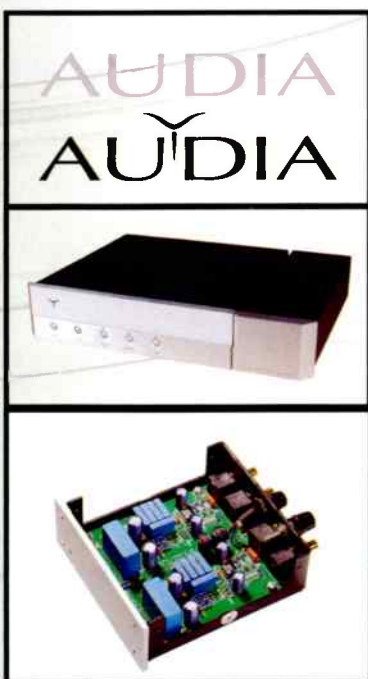


The all new Radius 5s
Launch October.....

van den Hul[®]

New dedicated turntable interconnect

After many years of requests, VDH have recently launched two new dedicated turntable interconnect cables. Named after UK waters and designed specifically for the UK market



Isis £90.00



Thames £125.00

www.henleydesigns.co.uk, sales@henleydesigns.co.uk, 01235 511166

SPECIAL INTRODUCTORY OFFER!!!!

HI-FI WORLD ELECTRONIC EDITION

VISIT OUR WEBSITE: www.hi-fiworld.co.uk

Queries to - esubs@hi-fiworld.co.uk

**Subscribe to our
eco-friendly e-edition of
Hi-Fi World and receive a
50% discount!!!**

- **Receive your issue a week before on-sale dates.**
- **Be the first to grab a bargain in our Free Reader Classified Ads.**
- **In-house lab. tests to AES and IEC standards**
- **Run by dedicated hi-fi engineers & enthusiasts.**
- **No missed issues, or postal delays.**
- **Access your issues from anywhere in the World.**
- **PC and Mac friendly.**
- **Eco-friendly.**

**Subscribe today and receive 12 issues for
£20 – that's an amazing £1.90 per issue!**

check out our free trial issue

**VISIT OUR WEBSITE:
www.hi-fiworld.co.uk and select
"ELECTRONIC EDITION"**

To purchase your e-edition click here

Pay in Sterling, US Dollars or Euros. Non-sterling prices vary according to exchange rate.
Cards accepted: Visa, Maestro (Switch), Mastercard, Solo and Delta.



"sadly there have only been a few hi-fi stylists of note I can name in my whole lifetime..."



David Price

Back in the nineteen sixties, separates weren't so much designed as bolted together. The styling came from whatever they had inside them, plus an obligatory steel 'biscuit tin' casing for good measure. Of course, there were beautiful exceptions to this rule (Quad gear springs to mind) but generally the look of a product wasn't important, as most of them ended up in large mahogany cabinets anyway!

The seventies was surely when 'hi-fi' took on its own unique identity. The silver brushed aluminium front panel, chunky spun aluminium knobs and aircraft-style switchgear became the design *lingua franca* of hi-fi, and something that's instantly recognisable even today. Ask a tech-obsessed sixteen year old boy to sketch 'a stereo' and something not too dissimilar to a 1979 Pioneer SA9800 amplifier is what will appear on paper. At this time, the Japanese obsession for meters and flashing lights kicked in; hi-fi had to be in some way 'kinetic'; it had to move, wink, sparkle. Suddenly a dour Quad 303 style box just wouldn't do...

The nineteen eighties ushered in the age of 'flat earth' minimalism, a new generation of British separates arriving with not very much to look at, at all. For me, the original Naim Nait was the supreme exponent of this look. Bleak, black, bedecked with one (power) LED and a 'free gift in a cornflake packet' plastic volume control knob, Naim's Julian Vereker probably designed it this way to save money, but for us starry eyed young audiophiles it was a powerful declaration of intent; in real hi-fi, less is more. The Nait, and others such as the Mission Cyrus and NVA AP30, weren't so much style statements as anti-cool incarnate.

It's quite hard to characterise the designs from the nineties. My memories of the early part of that

decade are boxy black Sonys, sort of late eighties 'tech look' separates but with more knobs on, but there were some attempts to make distinctive products of the day. Do you remember the Arcam Alpha Series? All swoopy plastic front panels, as curved as the profile of a Nissan Micra dashboard.

But surely the nineties was notable for its floorstanding loudspeaker craze. Whereas seventies speakers had been a random mish-mash of all shapes and sizes (everything from massive IMF TLS80 transmission lines that looked like the side of a house to the cylindrical JR149s) and the eighties had gone for smaller designs with fewer drive units (Epos's ES14 was typical of this, as was the Celestion SL600), by the nineties it was decidedly uncool to have a loudspeaker with a wide profile. The decade ushered in the narrow baffle speaker with multiple drive units, normally still running in a two (or two and a half way) configuration. Mission's 753 springs to mind here, for a moment the speaker than everyone was using around 1995.

How then do we define the noughties? Well, this is surely the decade of the eclectic. We saw the reappearance of the silver fascia panel, after two decades of black boxes. We saw a massive growth in the number of valve amplifiers, and the appearance of the skeletal turntable. Ermm, hang on, didn't that start in 1980 with the Michell GyroDec? Well, yes, but suddenly every new turntable that arrived after 2000 couldn't come in a wooden box (sorry, I mean "plinth") anymore. It had to be naked, plus a Perspex base.

It's been a strange decade for the silver disc, with a variety of different ways of playing it, from PlayStations to ultra high end battleship top loaders such as the Naim CD555. Indeed CD players have gone back to their roots in ergonomic terms.

Everything from Stello's CD-T100 to Oracle's CDI500 now comes with a top loading mechanism, just like the original Philips CD100 from 1982. For those not interested in manually placing a disc on a spindle, there's now a craze for the slot-loaders, like Cyrus's CD8 SE and Rotel's RCD-1520. After twenty years of tedium, with creaking, rattly drawers moving out to accept your disc, suddenly CD players have got interesting again, just as hardware sales fall of a cliff. Doh!

This month's group test (with me living with the new AuraNote Premier for several weeks) made me realise how little real rhyme or reason there's been to hi-fi design over the years. Amongst four decades of new products, it's remarkable how few have actually been ergonomically designed rather than simply just 'put together'. Possibly it's because those who make hi-fi are more often engineers than architects. Everything on the outside then follows from what's inside, in a logical way, but with little original thought?

Sadly there have only been a few 'hi-fi stylists' of note I can name in my whole lifetime. Jacob Jensen ran his own audio design studio in Copenhagen, Denmark, before joining a certain company named Bang and Olufsen in 1964, whereupon he radically redefined the look and feel of the marque's products.

Over the water in England, Allen Boothroyd designed the striking Lecson AC1/API pre-power amplifier of the early seventies, then went to work for Acorn Computers (to style the Acorn Atom and BBC Micro) and latterly of course Meridian. The packaging of those late-seventies 100 series is a testament to his genius. Along with Kenneth Grange who did the AuraNote Premier, he's one of our great industrial designers. We should treasure such people, holding them in as high regard as our great audio engineers. ●

National Audio
 Show 09 Sept 26/27
 Experience the stunning Marten
 Coltrane Soprano Speakers.
 Visit Room 55



Marten & Emillé specialists

AngelSound Audio
 01923 352 479

Mayflower Sounds
 01302 711528

Acoustic Arts
 01582 485316

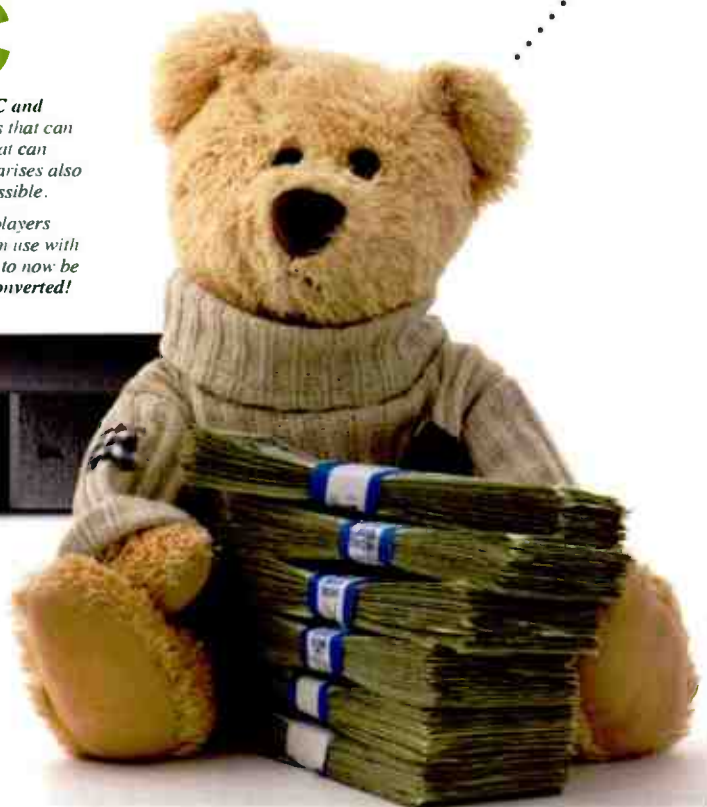


NaimDAC

Exceptional music making is the first hallmark of the Naim DAC and the second is versatility. Versatility comes thanks to S/PDIF inputs that can accommodate either optical or coaxial formats and USB inputs that can accommodate memory sticks and Apple iPod / iPhone models. It arises also from the numerous Naim system upgrades that the DAC makes possible.

*Simultaneously with its introduction, the CDX2 and CD5 XS CD players have gained S/PDIF outputs and can now benefit significantly from use with the Naim DAC. It also makes it possible for existing preamplifiers to now be incorporated into digital audio systems as well. **Get ready to be converted!***

...well yeah, this new DAC from Naim costs a few notes, but it arguably stitches up the competition good and proper on performance and flexibility so i'm happy with my purchase from Oxford Audio...



www.oxfordaudio.co.uk
 Tel: 01865 790 879

naim specialists

Image © audiography '09, HW1109.

"Denmark switching to DAB+ puts the writing on the wall for the BBC to take the plunge as well..."



steven green

Denmark is the latest country that has decided to switch from using DAB to the more modern DAB+ standard. Denmark is no ordinary country where DAB is concerned, though, as it is the one and only country that has the same level of DAB ownership as the UK, with around a third of all households owning a DAB radio. To put this into context, the country with the next highest household penetration is Norway with 15% of households owning DAB, then Switzerland with just 4%, then Germany with 2%. The UK and Denmark are therefore the flag bearers for the old DAB system, which makes Denmark's decision to ditch DAB all the more significant, and all the more embarrassing for the UK radio broadcasters.

Eric Henz Kjeldsen, the head of Distribution at DR, which is the Danish equivalent of BBC Radio, told the Politiken newspaper that DR's digital-only stations will switch from DAB to DAB+ in 2010, but that DR's biggest stations, excitingly-titled P1, P2 and P3, will continue being broadcast in the old DAB format for some time to come. This is so that owners of the 1.3 million DAB radios in Denmark would still be able to receive these stations.

Eric Henz Kjeldsen justified the decision by saying that the majority of DAB radios are relatively inexpensive to replace, and that most owners will have had a few years of use out of their DAB radios by the time all of the DAB services have been switched off. He also said that listeners would benefit from the switch, because "DAB+ is a much newer and better standard than DAB", and with DAB+ being far more

efficient than DAB it would allow for "more than twice as many digital channels as today, whilst the sound quality will also be improved".

Although I'm an advocate of switching from DAB to DAB+ as quickly as possible, I have to say that I'm quite surprised at how aggressive DR's switch over plan is, because it's the equivalent of the BBC switching 6 Music, 1Xtra, Radio 7, the Asian Network and Radio 5 Sports Extra from DAB to DAB+ next year, and I certainly wouldn't expect the BBC to do that!

Another reason why I'm so surprised at the way DR is going about this is that it isn't actually necessary to switch off the DAB stream for a stereo radio station in order to launch a DAB+ version of the station, and doing this wouldn't require any additional bandwidth so long as the DAB stream is reduced to mono. The advantages of launching DAB+ streams in this way is that owners of non-upgradeable DAB radios would still be able to listen to the station, so people would be far less likely to complain about the change, and owners of equipment that supports DAB+ would be able to receive the station at higher audio quality than beforehand. The older and newer format streams could then run side-by-side until the broadcaster decides to switch off the DAB version. For example, this could be once the vast majority of people owned DAB+-enabled equipment, which would then allow the bit rate level of the DAB+ stream to be increased to improve the audio quality further.

Irrespective of how Denmark switches its stations to DAB+, this is yet another huge blow for the old DAB system, whose turnaround in

fortune is now almost complete. Just five years ago, most people with an interest in digital radio would have staked their houses on DAB going on to become the European digital radio standard, yet now only the UK and Norway support it (Ireland also supports DAB, but only 20,000 radios have been sold, so I'd predict that they'll switch to supporting DAB+ in the next year or so).

The other main 'DAB country' switching to DAB+ can only be a good thing for those who would like to see the UK make the switch as well. If DR manages to switch its stations to DAB+ without receiving many complaints, that would greatly increase the chances of the BBC following-suit sooner rather than later. But even if things didn't go smoothly in Denmark, the mere fact that the UK is now one of just two countries still supporting the outdated DAB system (ignoring Ireland) puts pressure on the UK to switch due to the sheer embarrassment of being the joint most-backward digital radio country in the world.

The Digital Britain report should have laid out concrete plans for switching to DAB+ prior to digital radio switch over (if or when that actually happens), but as per usual for a Government/ Ofcom report, the issue was dodged in order to avoid affecting the sales of DAB-only receivers in the shops, and the report claimed that DAB would be okay for the foreseeable future. I don't buy that for a second though, because commercial radio will want to use DAB+ as soon as possible, and, in my opinion, Denmark now deciding to switch puts the writing on the wall for the BBC to take the plunge as well. ●



ALTO PRODUCTS

Candoli Isolation Platform

Installed in minutes - improvements for life
10 day money back guarantee if not satisfied

£179 including post and packaging
- Mainland U.K.

tel: 01704 233644

web: www.altoproducts.co.uk

email: enquires@altoproducts.co.uk

ASTIntrew®

▼ AT3500plus (£1,399) ▼ AT2000plus (£1,575)



- home demonstrations within M25 and Kent
- 30-day home trials
- visit us by arrangement

- Accuphase
- Amphion
- Astintrew
- Benchmark
- Futureglass
- HRS
- MIT
- Siltech
- more
see web site for full list of brands

soundlocation

01304-221011

allears@soundlocation.co.uk
www.soundlocation.co.uk

UK Dealers .RDT Specialists:

Analogue Seduction
t: 01733 344 768
CAMBRIDGE

The Audio Consultants
t: 01189 819 891
READING

Jordan Acoustics
t: 0800 121 4771
SCOTLAND

All enquiries

Whest Audio Ltd
t: 020 3176 0376
whestworld@fastmail.fm
LONDON

www.whestaudio.co.uk



*'this really is THE pinnacle in that sub-£5000 phonostage battle-
you really need to hear it to believe it !!'*

The all new PS.30RDT - £2799.00 incl VAT @ 15%

IT'S TAKEN THE WORLD BY STORM!

"Onkyo's easy way of combining old and new is fascinating, and a taste of things to come..."



noel keyword

I'm intrigued by Onkyo's product line up in Patrick Cleasby's system this month, because this venerable Japanese hi-fi company has cleverly combined the oldest of the old with the newest of the new in a system without batting an eyelid, and they've covered all ground in-between. So you can play LP, CD, SACD and an iPod, digitally connected no less! That spans the entire history of hi-fidelity, source wise, from the vinyl LP right through digital discs up to and including internet delivery. But that is the way the world is going, slowly discarding the view that if it is modern it is good, and all else is, as Karajan said, "gaslight".

Karajan said that of CD, and it's telling to look at the performance of the CDPI100 in this issue to see how deluded he was, a strong enough illustration if you want one that seeing a shiny new technology as offering salvation by the nature of its newness alone is naive and becoming outdated. Measuring the CDPI100 shows that it actually has about 50dB usable range, because any signal lower than -50dB down is hopelessly distorted. Since you cannot go close to 0dB in a digital system, in practice it had even less than this, around 45dB if musical peaks are to be free from serious clipping distortion. Amazing then that Mr Karajan, along with millions of others, simply believed what they were told, that digital was perfect. At launch it was worse than LP!

Philips and Sony got away with this deception quite nicely and, although I wrote critical articles for *Hi-Fi Review* pointing out that it was possible to measure 120% distortion from some CD players, not a lot of people heard, or believed. All the same, I'm happy CD succeeded. It has improved no end since launch in 1982 and it is an easy to use and

convenient medium.

Consumers have become a lot more savvy since 1982, by continual exposure to technology, by ever increasing amounts of information on consumer electronics and by forthright discussion on the internet where a small hardcore of experts, often in the forums, manage to get some well informed and cogent views across.

So whilst Philips and Sony got away with the launch of CD, the U.K. Government is having an altogether harder time trying to convince anyone DAB is useful to its citizens in any way, shape or form. Just look at the hopelessly forlorn meanderings about it from the Department of Culture, Media and Sport in our Letters pages, where the only justification provided for DAB is that it is digital! So I suppose that means "better", but no one is actually saying so. The reason is, surely, that DAB proponents realise this they can't get away with such simplicities any more, as well as the fact that it isn't true of course! The Government's statement carefully avoids entering this territory and we end up reading a 'justification' that is no such thing, which is disconcertingly vacuous I find.

Hi-Fi World has always mixed the old with the new, finding strengths and weaknesses in both. My dear old Leak Troughline is now virtually unusable in London, swamped by pirate radio Reggae and Soul stations, interference and much else, yet at heart it still has the best sound of any tuner I have ever used and if I lived in the village of Wrotham in Kent it would steam along merrily every day I'm sure. So technology can be appropriate to context and it's dangerous to dismiss something because it is old fashioned.

At the same time, it does not automatically follow either that being old fashioned is better! And here I

can't say I fully support the view that all old kit bought for a song from eBay is going to sound good. A lot of it isn't quite frankly, often because of atrocious 1970s component quality. So in other words it might have been good at heart, but you won't hear this unless you replace most of the resistors and capacitors. I have done this often and the change can be startling. Old is not necessarily gold to me, except in certain particular cases, so beware of what you buy.

What is intriguing me at present about today's acceptance of the old alongside the new are the reasons. Just look at an old Jaguar E-Type fully restored, preferably with those four lovely fish pipe exhausts of the V12, and top down, or even the immaculate TR4s at a Triumph owners meet at Duxford, and the attractions are very obvious. But I'm puzzled by the pathetic popping sounds of old scooters in my area (and by old I mean Vespas and Lambrettas that are at least thirty years old), usually in as new condition and piloted by twenty something year olds in Sixties-style pudding basin helmets. I suspect this is retro-chic because I can't see a lot to desire in these two wheeled relics other than the amiability of travelling at a speed where you cannot hurt yourself. But that has to be balanced against being unable to outrun the Council dustcart and ending up beneath it.

Taking to the implements of the past isn't exclusive to high fidelity, then. That's why Onkyo's easy way of combining old and new is fascinating and a taste of things to come I suspect. Their receivers have become best sellers in the UK where they exploit this thinking, leaving other manufacturers struggling to understand. The more I see the old and new being used on merit alone, not on the whimsy of fashion, the happier I am. ●

“ THE ULTIMATE REAL WORLD TONEARM ”

HI FI WORLD MAY 2009

“A new benchmark for musical communication” STEREO TIMES

“One of the truly special products I've reviewed in the past 18 years” STEREOPHILE

Winner of Stereo Times magazine Most wanted component of 2005 award

“The best tonearm I've heard” HI FI WORLD

“So far ahead of the pack looks about to lap them” STEREO TIMES



Multi-award winning ORIGIN LIVE TONEARMS make an enormous difference due to their leading performance. It surprises many delighted owners that changing to an Origin Live tonearm offers many times the improvements to that of a cartridge upgrade - Ratios of over 4:1 on performance to price are easily possible - and lasts a lot longer. Why not experience a new level of musical satisfaction by owning one of these arms? See Origin Live web site for full information and reviews. To eliminate any risk on your part, the arms are offered with a full money back guarantee should you not be anything other than delighted.

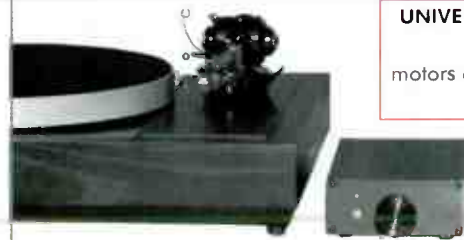
Tonearm Models

Enterprise
Conqueror
Illustrious
Encounter
Silver
OL1

2005 World Awards



Closest to the original sound



UNIVERSAL MOTOR UPGRADE

Upgrades & replaces motors & power supplies for ALL belt drive turntables

“The single most important upgrade you can ever make to any record deck concerns the motor

drive...nothing can prepare you for the shock of going DC. In a word, gobsmacking.” COMMON GROUND MAGAZINE

“It's value is nothing short of tremendous.” LISTENER MAGAZINE

“The LP12 remains a classic ...but ..upgrade kits by Origin Live can bring a vast improvement to it's performance” HI FI NEWS

UNIVERSAL TURNTABLE MOTOR KIT - No one would blame you for being sceptical of an easy to fit, inexpensive dc motor upgrade. Especially one that improves on the best of other power supplies costing over 4 times as much or your money back. It is simply impossible to imagine the level of improvement attained by eliminating the motor vibration that your stylus amplifies over 8,000 times! Our DC motor kit offers massive improvements to all versions of Linn Lingo / Valhalla, Rega, Systemdeck, Roksan, Rock etc. The kits consist of a drop in replacement high grade DC motor and off-board 2 speed control box. Why not order now? - see web site or phone.

Standard dc Motor Kit - £250
Advanced dc Motor Kit - £339
Ultra dc Motor Kit - £570
Upgrade Transformer - £195
Upgrade DC 200 motor - £129 with kit

ORIGIN LIVE

Tel/Fax: +44 02380 578877

E-mail: originlive@originlive.com

www.originlive.com

PARTS CONNEXION

The Authority on HI-FI DIY

DIY Parts & Components

pcX stocks the largest selection of DIY products for the discerning audio hobbyist, in all of North America!

Upgrade Mods & Repairs

pcX has developed a world wide reputation for high quality maintenance and high value upgrade modifications. In a tremendous array of products, gear, services, etc. we are the only audio "hot line" specialists in the world. High end audio components at low prices.

Accessories

PEARL Tube Capacitors, EAT Dual Damper, Duende Circula Fuse Rings, HiFi Tuning Slivers, Fuses, Furutech NanoLiquid, Walker Audio SST, Ultrapod Isolators, Cag De-Dust, Bybee Quantum Purifiers, etc.

New & NOS Tubes

pcX has the largest selection of New & NOS Tubes in the world. We are the only audio "hot line" specialists in the world. High end audio components at low prices.

Sales: www.partsconnexion.com Inquiries: info@partsconnexion.com
805-681-9602
5109 Harvester Rd, Unit B2, Burlington, Ontario, Canada L7L 5Y4

ISOKINETIK



ISOkinetik Audio Enhancement

Rega special. Take your Rega turntable to a higher level of perfection - transform your standard Rega to a deck which will compete with decks priced over £2,000

ISOsub. Rega sub platter upgrade. Precision machined 3 piece construction, aluminium hub, hardened ground steel axle, stainless steel spindle, 3 brass contacts provide further isolation. Added stability reduces wow and flutter.

ISOtone. Rega tonearm rewire kit. Must-have upgrade for Rega RB: 250, 300, 600, 900, 2501, 301 also Moth and Rega based derivative arms. Single length of silver plated high purity copper from clips to phonos. Kit complete with cartridge clips and silver solder - fitting service available.



Dealer and distributor enquiries welcome. For a full range of upgrades and accessories, interconnects or speaker cables please email info@isokinetik.co.uk or call 0208 241 8890 www.isokinetik.co.uk

"we hi-fi types have existed at a distance from the rest of the normal music lovers out there..."



adam smith

So, my regular trips to Tesco finally paid off. Despite months of looking at the 'Out of Stock' sign, as you will have seen, I finally managed to lay my hands on "Britain's best loved hi-fi", the Tesco Value MC-907. Of course it really wasn't very good, but in a way I felt that to be really critical and sniffy about it was to be missing the point of its existence. The sort of people who buy one of these are never going to spend upwards of £30 on a single album – certainly not on that old fashioned vinyl stuff ("records – can you still buy them?"). They are the kind of people who will never have arguments about whether cables make a difference, if vinyl sounds better than CD or whether a ported or sealed loudspeaker enclosure is the better way of doing things. To the sort of people who will buy the MC-907, DAB radio is a most likely a wonderful invention and top end hi-fi means Bang & Olufsen (not that it necessarily doesn't, of course!).

I realise that these statements may make me sound snobbish and snooty, but believe me that they are not meant to be disparaging as, after all, it has pretty much always been the case that we hi-fi types have existed at a distance from the rest of the normal music lovers out there. Think back for a moment, if you will, to the friends and family you have known over the years since you were young. Granted that, as a reader of this magazine you will be a hi-fi enthusiast and will very probably have relatives who were similarly afflicted, as I did, but I would wager that a moment spent recalling the audio replay equipment in the houses of friends and relations over the years will elicit more names like Alba, Goodmans, Fidelity and Amstrad than Leak, Quad, Nakamichi and SME.

I suppose this is true of many

walks of life however, as there are certainly more Toyotas than Ferraris in the driveways of my nearest and dearest, despite my passionate and reasoned arguments as to why a secondhand 412GT would make a better family runaround than a diesel Avensis...

In a way, I actually think that the sort of people I am talking about here are quite lucky, as it is the music that matters to them first and foremost and, to be honest, this is exactly the way it should be – something that one or two hi-fi enthusiasts have had a tendency to forget on their way to audio nirvana! When most people hear a track they like, they go onto iTunes, download it to their iPod or computer and simply get on with the business of listening to it and enjoying it. They have no need to concern themselves over bitrates and compression methods, and they certainly don't spend hours worrying whether that album they fancy is ever going to be released on vinyl and whether a kind distributor will bring it to the UK if so, or whether it's going to cost a fortune to acquire from some far-flung corner of the globe and possibly arrive in a few pieces. Or is that just me?

The fact is that, like the generations of portable radios, battery operated cassette players and Dansettes that went before, the Tesco MC-907 is an effective source of music for a good many people and is undoubtedly entertaining a good many of them right now as you read this. For this alone it seems a shame to really disparage it and, after my time with my example, I actually found myself growing quite fond of it. In its own little way it wormed its way into my heart and I'm sure I can find some shelf space in the guest bedroom or the shed for it – it's certainly the cheapest award winner

I've ever bought!

On a second topic, I cannot help but notice that the subject of Empire turntables keeps cropping up in our letter pages and it seems that the catalyst for this was the letter from Billy Gunn in our June 2009 issue, so thanks for that Billy! The marque's name appeared again last month after an informative communiqué from Simon Brown (I'd forgotten about the company's hexagonal loudspeakers) so it appears there is definitely a rich vein of interest in these products running through the readership, which I am hoping to mine successfully. Regular readers may recall that I signed off my reply to Mr. Gunn with the words, "I have been keeping my eye out for one for a number of years now, and rest assured that, if and when I do find one, I will be sharing the news with *Hi-Fi World* readers!"

Well, that time has come, as I am now the proud owner of a Troubadour 598 MkII and actually owe some big thankyou's to the fine gentlemen Andy and Phil at Phonography near Winchester for this. As it happened, my telephone rang the very day after that June issue hit the shelves and it was Andy himself, saying, "we've got one of those stuck out in the back room and have been wondering what to do with it!". Naturally, my car may have come very close to breaking the odd speed limit on the ten miles or so to from my house to Phonography's country premises, the beast was unearthed and a deal was struck. I'm afraid that it has been sat awaiting attention for a while, but am pleased to report that the sturdy old-timer is now in mid strip-and-clean and I am waiting impatiently for a new belt to arrive. However, I feel sure that an Olde Worlde will be coming this way regarding it in due course, so I shall say no more for now! ●

Innovation Situation

Adam Smith listens to the latest Innovation turntable from Teutonic vinyl-meisters Clearaudio...



Just as Italian products have traditionally been portrayed as 'full of character but flawed', so German designs were often regarded as 'staid and a little dull, albeit well engineered'. Nowadays though, Teutonic products are more universally admired, in the sense of forward looking, well designed and unerringly well built. It's not difficult to see why this is now the case, as some products coming out of Germany are built like few others. It's often said that, if you want to know what features the family car of a five years time will have, just look at the current Mercedes S-Class...

This holds for the hi-fi industry too. A wander around the hallowed halls of

the Munich High End Show reveals a whole host of companies churning out products that make some of their contemporaries from

other nations look both staid and ineffective. The leaders in the German turntable field are surely Clearaudio. With a product range that culminates in the Statement, which Clearaudio describe as "taking the best and making it better" and for which adjectives like 'mighty' seem too weak, this is surely 'Germanic' in the very best sense of the word.

A glance at Clearaudio's range shows that it's growing rapidly, and latest to arrive on the scene is the Innovation turntable, described by the company as "setting new standards in high end turntable manufacturing". Whilst a cursory glance may reveal nothing more than a funky looking belt drive design, things are rather less simple under the skin. Firstly, the deck features Clearaudio's patented floating magnetic bearing for virtually frictionless drive, and the three speed motor uses a new optical regulation circuit to control its speed, where an infrared sensor monitors a highly reflective calibrated scale on the underside of the platter and the control system keeps the speed under check through feedback from this. A quick glance over at the astonishingly impressive

measurements obtained by this [see MEASURED PERFORMANCE] show that this system works very well indeed.

Other than this, the chassis features a shape that has apparently been optimised for resonance control, and the platter is a two-part design, featuring a steel lower platter with the markings for the optical sensing system, and above this a Delrin second part that provides the contact with the record and the drive surface for the belt. Each speed is adjustable through trimpots in the chassis and the whole caboodle sits on three spiked feet, which are easily adjustable for levelling. Fit and finish are very good, although the lightweight 'wall wart' power supply struck a rather discordant note, particularly given the impressive mass of the rest of the 23kg beast!

Fitted to the review deck was Clearaudio's new tonearm, the Universal, which itself encompasses a number of noteworthy features. Obviously the high quality bearings are a given, and the arm tube is a carbon fibre type with differing diameters along its length to dissipate resonance. An optional VTA





"a superb way of playing vinyl that never draws attention to itself, a turntable that's seen but not heard..."

adjustment collar is available, which permits tonearm height adjustment during play and the headshell can be loosened and rotated for optimum cartridge azimuth adjustment. Once again, measurement shows that this works very well; the arm design is clearly beyond reproach. I was however rather disappointed by a couple of fit and finish issues. That VTA collar has no lock on it and allows the whole arm a couple of millimetres of lateral free play unless adjusted to its end stop. Also, the screw thread for the magnetic bias compensator made a squealing noise as it was adjusted. Small gripes maybe, but I personally feel they are valid, when similar and considerably cheaper products from the likes of SME, Jelco and Rega are beyond reproach in this respect. I also have to confess that, to my eyes, the Universal is challenging aesthetically. Still, I used to own a Ford Scorpio, so perhaps am not best qualified to pontificate on matters stylistic!

SOUND QUALITY

Clearaudio supplied the Innovation with their £3,600 DaVinci cartridge and this was how I commenced

listening. Initial impressions were very good indeed, with the whole combination turning in an effortlessly detailed and intimate performance. There seemed to be no particular area of the frequency range leaping out at me, as the Innovation took everything in its stride quite happily and offered a uniformly strong performance from top to toe.

Treble in particular was a pleasure, as the Innovation seems to have mastered the trick of being simultaneously insightful and blessed of fine clarity, whilst also imbuing the top end with a delightful softness and sense of flowing ease. Cymbals and hi-hats were never jarring or splashy, and yet they never floated off into the background to be glossed over, as is all too common with turntables that offer more of a sense of smoothness to proceedings. The Innovation and Universal strike a finely judged balance in this respect.

Where this paid off particularly handsomely was in terms of busier classical material, where the Innovation separated out the action with almost surgical precision. Filling the front of my listening area with scale and drive, the horns and brass



were easily distinguishable, both in form and location in the soundstage. The violins in the particular piece I was playing were expertly located to the left of the action and completely free of any nasty hints of screechiness. I did feel that some other decks I have auditioned at the price, such as the Thorens TD550, were better able to pull the action out into the room and consequently draw me as a listener better into the recording, but the Clearaudio still made a top job of throwing images well to the sides to offer a broad sense of perspective.

Changing the tempo a little to some classic rock in the form of Focus's 'Moving Waves', I noticed that the Innovation was really at home when asked to reveal



Heatherdale
audio limited



202 Findon Road, Worthing, WEST SUSSEX, BN14 0EJ
Tel. 01903-872288 or (after hours) 07860 660001 Fax. 01903-872234
e-mail: heatherdale@hifi-stereo.com //www.hifi-stereo.com

SPEAKERS

Tannoy Westminster Royal SE speakers, ex demo, mint, (£20,000) only	£12000.
Tannoy Definition DC8 speakers, piano black, mint/boxed	£1995
Tannoy ST-200 super tweeters ex demo	£595
Hales Trancendence 5 speakers	£2895
Dynaudio Audience 7 speakers with stands	£395
B&W M-1 speakers, black. Mint/boxed	£195
B&W M-1 speakers, silver. Mint/boxed	£195
B&W VM1 speakers with stands, black. Mint/boxed	£295
B&W AS2 active sub-woofer. Mint/boxed	£195

Dynavector D17 Karat MC cartridge, unused (£735)	£550
Dynavector 20X MC cartridge, unused (£449)	£350
Dynavector XX2 MC cartridge, unused (£999)	£750

AMPLIFIERS

Amaro A50125A int' amp, ex demo', (£3140)	£2250
Audiolab 8000M monoblocks with balanced 8000Q pre amp	£995
Wavac MD-805M monos (£16,500) as new	£7995
Amaro 318B (new)	£2250
TRI TRV-M300SE amplifier (new)	£4495
Meridian 551 integrated amp	£595
Roksan Caspian remote controlled int' amp	£495

Consonance Reference 2.2 CD player, black	£825.
CEC TLOX belt drive transport AS NEW only	£8995
CEC TL-1N transport with DA-1N DAC, AS NEW only	£8500
Panasonic DMREZ-25 DVD recorder HDMI-1080P	£99
Tr CD player New	£1895

TURNTABLES, CARTRIDGES & TONEARMS

Project Xperience turntable with Dynavector DVX10 mc cartridge	£425
SME V brand new/boxed (£2136)	£1495
Dynavector XX2 MC cartridge, unused	£750
Kuzma 4 point tone-arm, as new, (£4500)	£3495
Kuzma Ebony record clamp, as new (£165)	£125

PRE-AMPS:	
Mark Levinson ML-40 processor/pre amp cost new over £30,000 offer for	£9995
Proceed PAV pre-amp	£495

CD PLAYERS & TRANSPORTS

AUDIO RESEARCH CD7 with CD8 power supply upgrade, mint/boxed	£4750.
--	--------

MISCELLANEOUS

Transparent Ultra Music Wave 8' pair speaker cable (£2019) only	£895.
Nordost THOR 6 way distribution unit	£995
Selection OYAIDE plugs and power strips	POA
Sony AM/FM ST-SE370 Tuner	£75
Winds ALM-01 Stylus Gage (New)	£425
Sony ST-SE570 Tuner	£60
2 metre Madrigal CZ gel bal' interconnect, (£695)	£395
Nikon 17-55mm F2.8G IFED lens mint	£750

Main dealer for Esoteric

VISA - SWITCH - MASTER CARD - AMEX - DINERS CLUB WELCOME.
WE TAKE PART EXCHANGE ON NEW & USED STOCK and buy in for cash

ALL USED CARTRIDGES ARE CHECKED UNDER A MICROSCOPE BEFORE BEING OFFERED FOR SALE.

Sound Hi Fi

marantz
PREMIUM



Focal 705TE



Jelco SA-750D



Avid, SME & other turntables



because music matters

Avid, SME, Shelter cartridges, AT-OC9, Clearaudio, Jelco, Hadcock, SL-1200 mods
Denon cartridges, The Cartridge Man, Marantz, Focal, Whest Audio, A.N.T, Puresound, Transfiguration, 78rpm

All demonstrated in a relaxing setting with river views! Very high part exchanges & mail order.

Sound Hi Fi Dartmouth Devon 01803 833366 web www.SoundHiFi.com

www.2ndhandhifi.co.uk ...what are you up for?



Analogue	Amplifiers	Digital	Speakers
Acos Lustre, excellent Japanese tonearm	149	2999	199
ADC ALTI, excellent	149	Arcam A78 nr mint boxed due in	499
Ariston RB80, ex condition	59	Arcam Alpha 10 Integrated, excellent boxed	299
Aesthetix Rheo phono, the best we've ever heard	2399	Arcam Alpha 9 CD, excellent	299
Basis 2700 Signature, Vector 4, Clamp £8k new MINT	4999	Audiolab 8000CD new version, 6 months old black boxed	£299
Clearaudio Evolution with parallel tracking arm	999	Audio Research CD7, mint boxed in silver	4999
Clearaudio Master Solution c/w Unity tonearm	2999	Cairn Fog v2, in silver c/w upsampling board, BARGAIN!	599
Creek OBH15, excellent	119	Chord Charlotte Gem	CALL
Garrard 401 & SME 3009, excellent	799	Chord DAC64, excellent boxed to clear	749
Graham 2.2 Tonearm, nr mint boxed	1199	Creek Evo CD, excellent boxed, REDUCED	399
Graham Phantom, ex demo, excellent boxed	1749	Cyrus DACX, excellent	749
Koetsu Urushi, mint	CALL	DPA Little Bit DAC	199
Linn Ekos 2, excellent boxed	899	Esoteric UX1, nr mint boxed, absolutely stunning	4499
Linn Limos, excellent boxed	549	Krall KP5200, excellent recent lasermech, stunning	2999
Linn LP12, valhalla/nirvana	399	Marantz CD94/DAP4 Combo, excellent boxed	749
Linn LP12 early with Mission 774 tonearm	549	Marantz CD63KI Signature, excellent	199
Linn LP12, Rega Inconnito, Valhalla	599	Meridian 206, excellent with remote	249
Linn LP12, Itok 2, Asak, Herules, Valhalla	799	Musical Fidelity A3.2CD, excellent, remote, box	449
Michell Electronic Reference (no arm, SME cut)	699	Musical Fidelity Jubalog! Rore as...	CALL
Michell Gyro SE, excellent boxed no arm	699	NAIM CD3, excellent	399
NAIM StageLine, excellent	179	NAIM CD52/CDPS, new laser this year	1999
Origon Live fully modified RB250	249	NAIM CDX2, excellent boxed LATE MODEL	1749
Origon Live Resolution & Illustrious 2 arm c.£4k new	1399	Parbos Digi!, superb boxed	1649
Proton Kontropunkt 8, ex demo	499	Rega Apollo, ex demo mint	399
Project Genie Mk1, brand new sealed box	99	Shanling CD100, excellent boxed original UK model	CALL
Rega P3, in green	279	Shanling CD700, excellent boxed newer model	1199
Rega R8300 Upgraded wiring etc	199	Sugden CD21SE, nr mint boxed	1499
Roksan Xerxes & Tabriz Zi, serviced	499	Stello CD1200 Transport, superb boxed, remote	799
Roksan TMS1 & DSU superb boxed, recent TM service	1749	Stello DP200 DAC Preamp, superb build and value	999
Roksan Xerxes 20/XPS7 as new, used	1499	Tag McLaren CD20T and DAC20, excellent	699
SME 3009/2 as new boxed	249	Tag McLaren CD20R, excellent boxed	349
SME 3009/2 excellent	149	TEAC P20, excellent monster transport	1199
Systemdek 1 (Biscuit lin), c/w Linn LVX arm, vgc	299	TEAC P70B/D700 excellent boxed 1/2 size pair	CALL
Tom Evens Microgroove plus (upgraded ISD), as new	499	Technics 777, excellent remote	99
Wilson Benesch Act 1 Tonearm, nr mint superb	799	Theta DS Pro Gen 3	749
		UNISON RESEARCH UNICO, excellent boxed	599
Analog/Recorders		AV/Accessories/Cables	
Arcam D126, excellent boxed	299	Cyrus PSXR, vgc	229
Makamichi CD2 recent importer service	199	NAD755 and 7515 AV amp and DVD - BARGAIN	749
Quad FM3, excellent	99	NAIM HiCap, Dive, Boxed	599
Quad FM4, excellent boxed	199	PS Audio Quintessence ex demo	599
		SPECIAL SYSTEM DEALS	
		Arcam Solo Mini and Solo Music, boxed from	1499
		Marantz CD94, DAP4, PM94, ST34 all excellent	1199
		Dnkyo A733/£733 Amp and CD ex display	599
		Sonos BU150 ex demo	579

Tue to Sat 10 til 6, tel 01642 267012 or email world@2ndhandhifi.co.uk

instrument details. Pierre van der Linden's drumming was particularly noteworthy, as the deck captured the pace and rhythms that he hammered out very well indeed, and offered each drum strike real form and shape. This was a proper stick I was hearing hitting drum skin each time here, and not just a series of connected ambiguous thuds. The backing bass line was a little thicker than I would have liked and the whole performance seemed to be lacking in sheer low end impact. A change of cartridge to my reference Ortofon Kontrapunkt b helped here, reinstating the very bottom end and



area of strength is in revealing the character of both instruments and the human voice. Never did I feel an ambiguity in terms of who or what I was listening to, as the Innovation and Universal made each and every aspect of every recording abundantly clear, but without losing the overall focus of the performance as a whole. Overall, it is a lovely performer.

CONCLUSION

The Clearaudio Innovation turntable and universal arm combination is a magnificent record player, of that there is no doubt. The even-handedness with which it approaches any sort of music means that it always turns in a thoroughly competent and enjoyable performance, no matter how soft and mellow, or loud and thrashy you are asking it to play. My only real remark is that it lacks the 'wow factor' that some decks bearing this sort of price tag have. I never found it anything less

than superbly enjoyable, but equally you couldn't say it's one of the more 'showy' superdecks. Rather than grandstanding, it simply gets into the music in a subtle and delicate way.

This is precisely the point of the Innovation; it's a self-effacingly superb way of playing vinyl that never draws attention to itself, a turntable that should be - as the saying goes - seen but not heard. In the true spirit of German heavy engineering, it's a sophisticated, safe and solid choice that's bound to win many friends.



REFERENCE SYSTEM

Garrard 301/Alphason HR-100S/Ortofon Kp. b turntable
Anatek MC1 phono stage
Naim Supernait amplifier
Ferrograph S1 loudspeakers (modified)

improving the upper bass, but that faint sense of fullness was still present, particularly when moving to a favourite test track in the form of Tift Merrit's 'Still Pretending'. Here, the notes from the bass guitar were a tad more rounded than I am used to via my idler drive Garrard.

Still, the rest of the frequency range more than compensated, as the Innovation and Universal combo proved equal to the task of getting right to the heart of whatever I chose to slide under its stylus. Hard rock pounded forth with clarity and power, soft classical whispered out of my loudspeakers and the Clearaudio offered a pleasingly intimate rendition of Kari Bremnes' vocals from her 'Norwegian Mood' LP.

Once again, through my system I felt the deck was not quite filling in the centre of the soundstage as much as some, but there was no doubt that it captured her vocal inflections and the fine tonality of every backing instrument brilliantly. All in all, the Clearaudio's real

MEASURED PERFORMANCE

Our analysis of arm vibration using an accelerometer shows the assembly is fairly inert by current standards, all peaks being below 0.1g. The main arm tube bending mode lies at 500Hz and is very low in amplitude; this is as good as it gets and suggests the arm will have solid bass, stable stereo imaging and likely a wide sound stage at lower frequencies. The third order bending mode which also affects the headshell and cartridge is clearly at 1500Hz, is narrow and of low amplitude so will add no arm 'ting' type colouration. There is an unrelated small peak between them at 725Hz but it too is of low level and, being narrow, holds little energy. The usual forest of high frequency modes possibly related to the headshell exist above 4kHz but again they are of low level so treble should be clear.

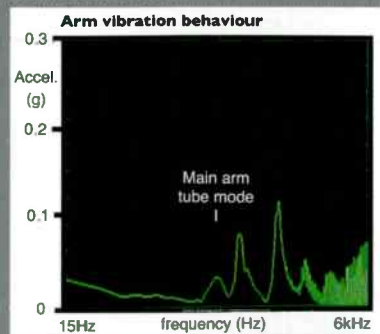
The Clearaudio arm measures very well by current standards, being up with the best, if not surpassing them.

The platter does seem to measurably benefit from magnetic suspension, since its unweighted IEC Linear Wow & Flutter figure was one of the lowest we have ever measured at 0.065% and it maintained this low value stably over a long period. As a direct result, the IEC Weighted value was also very low at 0.042% - quite

amazing figures that few turntables will easily rival. Absolute speed accuracy was good at -0.3% slow as delivered, an inconsequential error.

Measurement shows that Clearaudio's Innovation turntable and arm offers exceptional results and is a fine piece of engineering. NK

ARM VIBRATION



WOW & FLUTTER



VERDICT

High end heavyweight vinyl spinner with superlative levels of detail. Never flustered, it cuts to the musical choice in a characteristically Teutonic fuss-free way.

CLEARAUDIO INNOVATION £5,650
CLEARAUDIO UNIVERSAL £3,230
Audio Reference
☎ +44(0)1252 702705
www.audioreference.co.uk

FOR

- uniformity of performance
- vivid midrange detailing
- soft and enveloping treble
- superlative speed accuracy
- sheer stature!

AGAINST

- a few minor build issues

Eastern

Adam Smith tastes Consonance's new T988 tonearm...



adjustable effective length from 10.5in to 12in). I have sent much nagging in the direction of Consonance's UK distributor, Alium Audio, for a review sample of the ST500. However, it was not to be as I recently learnt that Consonance had pulled a curve-ball on me. Yes, that's right, they discontinued the entire range!

All is not lost however, as I sit here with Consonance's new tonearm quietly warming up beside me, and rather smart it is too. The newbie actually comes in two flavours; the T988 which is a nine inch unipivot design, and the T1288 which is the twelve inch variant. The designs are actually identical in other respects and spare arm wand/bearing assemblies can be purchased to simply lift on to and off the installed base. Each wand comes with leads terminated in a small multi-way plug that connects to a short lead with matching socket that is screwed to the armbase. The other end of this lead has a pair of phono sockets, so that the interconnect of your choice may be easily used to connect to your amplifier or phono stage.

The new arms have a interesting bearing structure, consisting of a 'well' with a central protrusion in the base around which sit six ball bearings, and the rounded 'point' on the underside of the arm fits into the centre of these, free to move on their upper surfaces. Maybe this doesn't make it a conventional unipivot in the strictest sense of the word but the arm feels more stable than some of the more 'point on a spike' types. Interestingly, this must be a very new development as the manual shows a thin point and makes no mention of the bearings!

The armtube itself is made of carbon fibre and a single weight allows for balancing in both the fore-aft and port-starboard planes. The headshell is little more than a basic

support platform, very much in the mould of the Simon Yorke S9 arm that still stands as the best unipivot we have yet measured at *Hi-Fi World*. Construction quality is excellent, although I was a little disappointed to find that the cueing lever seems to be more akin to the first ST100 arm that I met than the second, in that it dumps the stylus into the groove with a rather abrupt thud. Such things are rather a shock, especially when used to an Alphason cue lift so overdamped that there is time to brew a cuppa in between tapping the lever forward and diamond finally hitting vinyl!

SOUND QUALITY

It is often true that one affordable unipivot arm can often give similar results to another, and to really step forward in sonic terms, a greater outlay has to be made. Consequently I wondered if the ST988 would offer the usual blend of strengths and weaknesses that are most often part of the package with such designs. As the opening bars of Steely Dan's 'Do it Again' rang out through my loudspeakers, however, I realised that the ST988 seemed destined to impress. This particular track, taken from a double 'Best of Steely Dan' album is a rather laid-back recording that lacks top end sparkle and, unless a vinyl spinner can really cut through this to the material underneath, can often sound rather drab. With the Consonance in charge though, everything leapt out into the room and not the slightest bit of action was missed. Even more encouragingly, the bass line underpinning the track was impressively detailed and spry

The Opera Consonance Audio Company of Beijing is the oldest of China's respected audio manufacturers, having been founded in 1994 by Mr. Shi Hui Liu,

and I would say that they are definitely the kings of left-field. Whilst I have heard quite a few of their products and been impressed by them all, it is the sheer breadth and variety of their range that never fails to amaze me. If any readers can name a single current manufacturer where high end CD players rub shoulders with affordable turntables; where single ended valve amplifiers like the Cyber 10 sit alongside solid state 200W behemoths like the Forbidden City Calaf, and where horn loudspeakers find themselves stablemates to an iPod dock, then please let me know, because I can't think of any!

It is the record playing department with which we concern ourselves here though, as after testing a couple of Consonance's highly worthy LP spinners, I could not help but notice that the tonearm that was fitted to both, the ST100, was a rather special item. This formed the base of the ST range, below the ST300 (another nine inch, multi pivot design), the ST500 (a 10.5in unipivot) and the ST600 (another unipivot with

Promise

despite, again, not being the most vivid around in recording terms.

I was pleased to hear that the ST988 offered the traditional unipivot strengths of space and atmosphere around instruments and singers, as this is one aspect of such a design that I always find most enjoyable. With a good design of this type, performances stretch well into the distance and simultaneously project into the listening area, making a good recording a truly room-filling experience. Spinning such a recording, in the form of Eleanor McEvoy's 'Yola' had me thinking that perhaps I actually had a room full of musicians rather than a room half full of hi-fi! The lady's vocals were marvelously

Roksan Nima. The ST988 has an air of confidence about it at all times, and not once did I hear it give the sense that it was out of its depth, despite flinging a range of synthesiser bass lines, double basses and even some lithe fretless bass material at it. The ST988 took it all comfortably in its stride.

Part of this air of confidence surely has to be the fact that the ST988 seems completely uncritical of the material that is fed to it. Yes, this should naturally be true of any good hi-fi component but the fact is that a certain item's sonic signature may often suit one style of music over another. The ST988 seems to pull off the trick of coming complete with a whole range of musical 'hats', and it just put the appropriate one on according to what I was playing on it. Grand orchestral soliloquies made it seem to stand firm in order

highlight for me had to be the track 'An Cuibhle Mor/The Big Wheel'. Towards the end this has some radio commentaries played over the main vocals and really making the words contained in them distinguishable is usually the preserve of more expensive and exotic LP spinners. The ST988, however, gave me a big surprise by the way in which it pulled these items out of the background, yet never drowning out the main action; it layered everything perfectly.

CONCLUSION

On hearing that the old Consonance ST100 was to be discontinued I was rather disappointed, as I had even gone as far as to consider splashing the Smith credit card out on one. It was one of the few new arms that really impressed me at its price point and, as a result of this, I was quite prepared to give the newcomer a

"this new unipivot has an air of confidence about it at all times..."

intimate and forthright, the Consonance capturing each phrasing inflection as she uttered it and giving a vivid sense of being there. I also noted with delight that the drums that underpin the track 'Isn't it a Little Late?' were snappy, taut and full in their physical form. All too often even the best unipivots can be found a little wanting at the low end, but it appears that the T988 is not one of them.

With this in mind, I decided to see how far I could push things down at the bottom end. Maxi Priest's eponymous album went under the stylus next and the track 'Suzi - You Are' punched out of my loudspeakers in a forthright manner. In absolute terms the Consonance lacked the real punch, drive and virtually instantaneous start and stop of my reference Alphason HR-100S, but it really wasn't far off and I certainly never felt that it was struggling; something that can occasionally afflict another favourite unipivot of mine, the

to elicit a fine sense of purpose and control, whereas some more soft jazz flavours seemed to have the arm sliding back, kicking its shoes off and lighting up a cigar. At all times instrument definition was excellent, rhythms captured expertly and sound staging deep and well ordered, if ever so slightly diffuse at the very extremes of left and right.

A final fling in the form of Runrig's 'The Big Wheel' album was a delightful reintroduction to an LP that I have not played for far too long. Once again, the Consonance took a controlled yet fluid attitude

to the rhythms of the faster paced tracks, but the

tough time if it didn't come up to scratch. It turns out I need not have worried however, as the T988 builds on its predecessor's strengths and tops them off with a cheeky dollop of extras that, for me, make it a must-audition at the price. Heartily recommended!

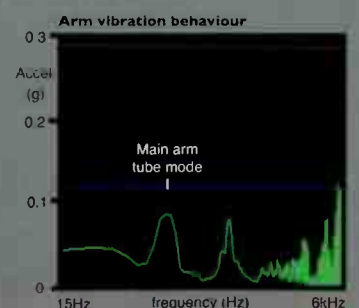
MEASURED PERFORMANCE

The slender arm tube of the T988 proved to be fairly inert, measurement with an accelerometer showed. There was some unusual low frequency energy below the main arm tube mode at 225Hz, suggesting the arm was slightly bending in sympathy with applied accelerations, up to 200Hz, but the accelerative level was very low, although as frequency lowers displacement and velocity get larger. The main arm tube mode is at a low frequency for such a light structure so compliance is higher than that of stiff metal tubes, but the low level of the peak shows that damping is good too; the tube does not 'ring' like a tuning fork as undamped metal tubes do. A small, narrow peak at 800Hz visible in our analysis will be of little consequence and above that the usual forest of small peaks that is common to most arms hardly exists, likely due to

lack of a headshell. Clamping direct to the arm tube might not look elegant but measurement consistently shows it is very effective.

The Consonance measures very well and will likely image sharply and sound clean across the midband and treble in particular. NK

ARM VIBRATION



VERDICT

Unipivot airiness combined with pleasing musical dexterity makes this an excellent affordable tonearm.

CONSONANCE ST988 £650

(9 or 12in arm wands £195)

+44(0)1273 325901

Altim Audio

FOR

- spatiality
- tonality
- bass weight
- build
- versatility

AGAINST

- poor cueing damping



HEATHCOTE AUDIO

TEL: 07860 511111 WEB SITE www.heathcoteaudio.co.uk

E-MAIL heathcoteaudio@aol.com

EQUIPMENT URGENTLY REQUIRED NOW!!! PHONE GEORGE

LOUDSPEAKERS

- HYMINGTON TIPS BOBBY GORGEONS DIRDS EYE MAFLE
AVANTEGARD DUD 2.0s (RARELY AVAILABLE)
PADIUM 1s EXCELLENT PANEL SPEAKERS (£6000? NEW)
MIRAGE BPS SUBWOOFERS 2 OFF DUE IN PLEASE RING FOR DETAILS
KESWICK AUDIO FIGARO MONITOR/ALTO SUB FLOORSTANDERS
RUIARK TALISMAN MKII OFFBOARD X-OVERS
EGGLESTONWORKS ROSA
MARTIN LOGAN CLARITY
REFERENCE 3A VEENA (SUPERB £3000)
REFERENCE 3A VEENA
MARTIN MILES II CHERRY (8k + NEW)
BKS 128 RIBBON HYBRID (STAR GRANITE £2800)
A.L.R. JORDAN NOTE 5 FLOORSTANDERS (£2500)
CURA CA-30 FLOORSTANDERS (MAPLE)
HARPER QUARTETO (£4000)
MIRAGE M1s1 BIPOLAR GIANTS (£6500)
AURUM CANTUS V3M GLOSS BLACK (£1700)
AURUM CANTUS M-103 FLOORSTANDERS (CHERRYWOOD £1300)
AURUM CANTUS VOLLA (RETAIL £2500)
AURUM CANTUS MUSIC GODDESS (£2500)
AURUM CANTUS 2SE MAPLE (£1995) LAST PAIR
AURUM CANTUS M-102 FLOORSTANDERS (2500?)
SNELL TYPE C MK IV AMERICAN OAK
LINN KANS AND DEDICATED STANDS
AUDIO NOTE ARE-3 SILVER BINDING POSTS
TEA TMR-100 TRANSMISSION LINE LOUDSPEAKERS
CELESTION A-2 SANTOS R/WOOD (£15/1600?)
PROAC STUDIO 150
CASTLE HOWARD S2 ROSEWOOD
B&W DM602 MKIII
MORDANT SHOT 914 FLOORSTANDERS
REGA XEL (ROSEWOOD £1250)
SONY CARBOON/SS 5050 LOUDSPEAKERS
ADVANCE ACOUSTIC UM-40 FEW MONTHS USE
TANN0Y REVOLUTION R-2 FLOORSTANDERS

SOLID STATE

- AYRE ACOUSTICS V5X PRE AMP ONE OWNER
AYRE ACOUSTICS V5X POWER AMP ONE OWNER
COLIN WOLFORD T0CA, SEGA20W X 2 CLASS A AMP (ULTRA RARE/GOOD)
L'AVARDIN IS REFERENCE EX DEM
MUSIC FIRST SILVER PRE SPECIAL ORDER TWIN VOL.POTS
3 RCA/2 BALANCED INS.1 RCA/ 2 BALANCED OUTS
DELETED DPA 50S 3 BOX PRE / PSU & PHONO STAGE & NOS.50S POWER AMP
ALL CABLES INC.5 METRE PAIR SLINK
NAKAMICHI SYSTEM ONE D9020/630 AND TIMER ALL RACKED
NAKAMICHI 620 WEDGE POWER AMP
REV0X H-5 INTEGRATED & REMOTE
CONRAD JOHNSON PF-1 PRE AMP+ PHONO STAGE
MAGNUM DYNALAB MD-208 TUNER AMP (E2K)
DK DESIGN VS.1 SIGNATURE MKIII INTEGRATED
PASS LABS ALEPH P PRE AMP
McCORMACK RLD-1 REMOTE PRE & DNA-125 POWER AMPS (4.5K)
CONRAD JOHNSON PFR REMOTE PRE (E3K?)
CONRAD JOHNSON MF 2500A POWER AMP
TECHNICS A-800 MKII INTEGRATED
MARANTZ MA-700 MONOBLOCKS
MUSIC FIRST SILVER PRE AMP (E3K?)
H-CAT 12-B PRE WITH WTC CONTROL (£2800)
H-CAT P-12A PRE AMP (£2500?)
ROTEL RB-870B STEREO MONO AMP
ADVANTAGE 1200 INTEGRATED AMP
ALCHEMIST FORSETTI 2 BOX PRE RCA/XLR
XTC PRE-1 (REMOTE)/POW-1 POWER AMP (£3000+)
ROKSAN S-1 PRE AMP NO PSU

DIGITAL

- LYNCGORFF CD-1 CD PLAYER/TRANSPORT
NAIM CDSX CD PLAYER ONE OWNER
DENON DVD-11 TOP FLIGHT UNIVERSAL PLAYER INC.SACD
AUDIO ALCHEMY ODE V3 & PSU LAST ONE (E900)
PIONEER ELITE MINIDISC (110V) URSUHI SIDECHECKS
PIONEER ELITE LASER DISC/CD PLAYER
PIONEER P05 CD RECORDER (WAS £1300) SPARES OR REPAIR
VACUUM TUBE LOGIC JTI SACD/CD PLAYER (£1300)
PROCEED (LEVINSON) P0T TRANSPORT
KRELL MDC-1 TRANSPORT/SBP-64 DAC/PSU (£15000?)
ORELLE CD 100 SE (SOUGHT AFTER CLASSIC)
MERIDIAN 200 TRANSPORT
MERGE S-2000 MKII HARD DISK MUSIC SERVER
CHORD 1500E DAC/DIGITAL PRE AMP (£6800)
RESOLUTION AUDIO CESCUII TRANSPORT(RARE)
SONY SCD B940 QS SACD/CD PLAYER
SONY MDS 920 MINIDISC PLAYER
THETA DATA UNIVERSAL CD/CD PLAYER (RARE!)
THETA PRO GEN III DAC GLASS & BALANCED OPTIONS
PERPETUAL TECH. P1A/P3A/1A/3A/PSU MOORIGHT SIG.2
PERPETUAL TECH. P3A 24/96 UPSAMPLING DAC
MIDWRIGHT SIGNATURE-2 (SUPERB)
OENON 2800 MKII GOLD (MDC)
THETA CARMEN CD/OVD TRANSPORT
THETA DATA II TRANSPORT (SILVER) AES/RCA ETC
SONY SMD5 J8920 MINIDISC PLAYER
ACUPHASE DP-90 TRANSPORT (£8000?)
MERIDIAN 602 TRANSPORT 606 DAC
MERIDIAN 200 TRANSPORT
MICROMEGA CLASSIC SOLO XLR/RCA (NEW MECH)
TRICHORD DIGITAL TURNABLE
MARANTZ CD63 (NO REMOTE)

VALVE AMPS

- VTL ULTRA LINEAR 75/75 STEREO POWER AMP (KT90)
ICON AUDIO STEREO 40 INTEGRATED TRIODE/PENTODE SWITCHABLE

- UNISON RESEARCH FEATHER PRE/35 POWER (REMOTE)
COUNTY PONT SA-5000A LEGENDARY PRE/PHONO STAGE (2 BOX)
ROGUE AUDIO M-150 MONOBLOCKS
EAR 509 MONOBLOCKS 25th ANNIVERSARY ED. (RARE LITTLE USE)
TUBE TECHNOLOGY SYNERGY INT.AMP
BALANCED AUDIO TECH. BAT VK-60 POWER AMP (E6K?)
ROGUE AUDIO 88 POWER AMP
ROGUE AUDIO 66 MAGNUM REMOTE PREAMP
ANTIQUE SOUND LABS 'THE WAVE' MONOBLOCKS (2 hours use)
ANTIQUE SOUND LABS L101 PRE AMP/HEADPHONE AMP
ANTIQUE SOUND LABS MINI PHONO (2 BOX WITH NOS. MULLARD VALVES)
MUSIC FIRST SILVER PRE AMP (E3K?)
MUSIC FIRST SILVER SPECIAL ORDER TWIN VOL.POTS
3 RCA/2 BALANCED INS.1 RCA/ 2 BALANCED OUTS

VINYL

- LINN LP12 AFROMOSIA/SMOKED LID CIRCUS ONE OWNER FROM NEW
LINN ITTOCK LV11 TONEARM ONE OWNER FROM NEW
TOM EVANS THE GROOVE PHONO STAGE
VPI HW-19 MKII & POWER LINE CON/SPEED CHANGE /A/QUEST ARM/ CART/LID
SME 20/2A SERIES V ARM/WIRE UPGRADE (UNDER 3 YEARS OLD)
ANTIQUE SOUND LABS MINI PHONO (2 BOX WITH NOS. MULLARD VALVES)
SME 309 TONEARM (MAGNESIUM TUBE)
PROJECT GENE ARM/CARTIDGE
AUDIO MEMESIS 1M PHONO STAGE
ROGUE AUDIO STEALTH PHONO STAGE (£800)
PROJECT PHONO BOX
BILL BEARD MM/MC PHONO STAGE
McCORMACK MINI PHONO

TUNER/TAPE/MISC.

- ARCAM DT 8T REMOTE DAB TUNER
MUSICAL FIDELITY TUNE DV3 VALVE BUFFER
MUSICAL FIDELITY X100 (ROUND ONE)
MUSICAL FIDELITY X TONE (VERY RARE)
MAGNUM DYNALAB FT-11 TUNER
SONY SMD5 JB 520 MINIDISC PLAYER
HITACHI 5500 MKII
AVI REF 7 BAND TUNER

INTERCONNECT CABLE

- NORDOST RED DAWN 1 METRE XLR 2 OFF
VAN DEN HUL THE FIRST 0.8 METRE
INCA DESIGN 1 METRE
STRATOS 1 METRE
DPA SLINK 1 METRE XLR
QUANTUM 'REFERENCE 1' METRE RCA
QUANTUM 'CD' 1 METRE RCA
QUANTUM DIGITAL REFERENCE 1 METRE RCA
BLACK RHODIUM ORATORIO 1M XLR
RENAISSANCE SILVER CABLE 2 METRE BALANCED
RENAISSANCE SILVER CABLE 2 METRE RCA
DPA SLINK 1 METRE BALANCED
NIRVANA DIGITAL COAX 4FT (SUPERB)
ATLAS ELECTRA 2 METRE BALANCED
BLACK RHODIUM CONCERTO 1 METRE RCA (£180)
BLACK RHODIUM CONCERTO 0.5 METRE RCA
XLO PRO 1METRE AND 0.5 M ETRE RCA (SIX OFF)
BLACK RHODIUM SYMPHONY 1 METRE RCA

LOUDSPEAKER CABLE

- NORDOST RED DAWN 4 METRE BI WIRE
RAPPORT (USHER) 5 METRE PAIR FACTORY TERMINATED
DPA SLINK 5METRE PAIR TERMINATED FOR 50S AMP
NORDOST SP4 3 METRE BI-WIRE PAIR (E3000 NEW)
NORDOST BLUE HEAVEN
NIRVANA SL-3 2.3 METRE PAIR
XLO SIGNATURE 2 TYPE 5.2 4FT PAIR
QED GENESIS SILVER SPIRAL 3 METRE PAIR
XLO REF 2.5 METRE PAIR
DPA BLACK SLINK £300? PER METRE.} 4.5 METRE PAIR WBT LOCKING PLUGS
SONORAM PLATEAU 4 METRE+ PAIR (HI END USA HEAVY COPPER CABLE)
MIT MH-750 BI WIRE 3 METRE PAIR
PS AUDIO X-STREAM 3 METRE PAIR (VERY HEAVY!)
DIAMOND HI SILVER 3 METRE PAIR (LAST PAIR)
BLACK RHODIUM S-300 BI WIRE 7 METRE BI WIRE PAIR (£560)
BLACK RHODIUM S-300 BI WIRE 5 METRE BI WIRE PAIR (£400)
BLACK RHODIUM S-300 BI WIRE 4 METRE PAIR (£240)
AUDIOQUEST INDIGO
QUANTITY OF ITALIAN ART AUDIO CABLE 3 INTERCONNECTS 1M/1.5M/2M
AND 4 LENGTHS OF 3 METRE LOUDSPEAKER CABLE

STANDS

- MANA REF TURNABLE STANO
SOUNDSTYLE ST-105
SOUNDSTYLE ST-105
SOUNDSTYLE ST 90 MUDI SIZE
SOUNDSTYLE LOUDSPEAKER STANOS
TARGET R-2 LEAD FILLED
ELEMENTAL AUDIO LOUDSPEAKER STANDS (E2K?)
PIRATE STANDS FOR SNELL K ETC
HUGENS STANDS FOR SNELL K ETC

MAINS CABLES/BLOCKS/CONDITIONERS ETC

- ISOTEK MINI SUB
ISOTEK POWER CORD
ISOTEK POWER CORD
RUSS ANDREWS 8 WAY BLOCK SUPERCLAMP/KIMBER CABLE
KIMBER STANDARD POWER CORD
PS AUDIO MASSIVE 600 WATT CLEAN POWER REGENERATION PLANT
TARA LARS RSC AIR-2 6FT POWER CORDS (SHUKO)
BLACK RHODIUM SUPER MAINS POWER CORDS
BLACK RHODIUM POWER CORD RHODIUM PLATED EASYGRIP PLUG
ISOTEK POWER CORD

- EXCLT/BOXED £1295
SERVICED/BOXED £1995
EX DEM/BOXED £2195
MINT/BOXED £3750
EXCLT £2999
EXCLT £2450
EXCLT £795
MINT/BOXED £2795
EX.DEM £300
MINT/BOXED £295
EX.DEM £295
EX.DEM £2250
UNIQUE £2495

- BOXED £595
BOXED £495
EXCLT £995
EXCLT £995
EXCLT £4750
EX.DEM £350
TBA £595
MINT/BOXED £395
GC/BOXED £475
EXCLT £395
EXCLT £49
EXCLT £375
EXCLT/BOXED £295

- MINT/BOXED TBA
MINT/BOXED £175
EXCLT £125
EXCLT £149
VGC £475
VGC £99
VGC £125
EXCLT £375

- MINT/BOXED TBA
TBA £149
TBA
TBA
EXCLT £275
EXCLT £175
EXCLT £125
EXCLT £99
EX £275
EXCLT £595
EXCLT £149
VGC £49
EX.DEM £249
BOXED/AS NEW £375
NEW £95
NEW £75
EACH 95/85
NEW £50

- BOXED TBA
EX.DEM £299
EXCLT £250
MARKED £395
GC £199
DEM/BOXED £450
DEM £495
MINT/BOXED £249
EXCLT £325
EXCLT £395
EXCLT £600
EXCLT £500
EX.DEM £500
NEW £300
NEW £170
NEW £140
CHEAP

- DEM £99
DEM £195
DEM £195
DEM £150
NOS £50
NOS £175
BOXED £695
EXCLT £225
EXCLT £225

ALL MAJOR CREDIT DEBIT CARDS ACCEPTED

248 Lee High Rd, London SE13 5PL (Mon - Sat 10am to 6.30pm Closed Thurs & Sun)

Billy Vee Display Stock - Rampant Reductions!

Call (020) 8318 5755 or 8852 1321. Now!

Web: - www.billyvee.co.uk email: sales@billyvee.co.uk We deliver nationwide from £8. E&OE.

More Ex-Display & Pre-owned bargains can be found at www.billyvee.co.uk

Creek Evolution CD Player E/D (2Yr G/tee)	(545.00)	£349.00
Linn Unidisk SC Universal CD Player E/D (1Yr G/tee)	(3145.00)	£1995.00
Linn Linto Phono preamp Blk S/H (1Yr G/tee)	(1180.00)	£599.00
Linn C 4100 PowerAmp Sil New (2Yr G/tee)	(1980.00)	£1295.00
Naim CDX 2 CD Player E/D (2Yr G/tee)	(3250.00)	£2595.00
Naim DVD 5 DVD Player E/D (2Yr G/tee)	(2600.00)	£1495.00
Naim Allae Speakers - Chelly E/D (2Yr G/tee)	(2500.00)	£1475.00
Naim SuperNait Amplifier E/D (2Yr G/tee)	(2475.00)	£1725.00
Naim NAP 250 Power Amp E/D (2Yr G/tee)	(2750.00)	£1995.00

All items listed below with full two year warranty

Arcam Solo Music System E/D	(Was 1250.00)	Now - £699.00
Arcam Solo Movie 2.1 System NEW	(Was 1450.00)	Now - £729.00
Arcam DV139 DVD Player Blk NEW	(Was 1800.00)	Now - £995.00
Arcam AVP700 Processor E/D	(Was 1399.00)	Now - £695.00
Arcam P1000 Power amp Sil E/D	(Was 1600.00)	Now - £769.00
Arcam AV9 Processor Silver E/D	(Was 3750.00)	Now - £1595.00

High End Cable

visit www.highendcable.co.uk

For the best prices telephone Dave Jackson on 01775 761880

Acoustic Systems
Argento Audio
Analysis Plus
Audience
Chord Company
Ecosse
Furutech
Hovland
Nordost
MIT Industries
Oehlbach
Purist Audio Design
Quantum
Stereovox
Tea Liquid Cables
Townshend
van den Hul
Vovox
Wyrewizard

Power Conditioning
Audience adept
Isotek
Kemp Electronics

CableSpike
Ayra Speakers
Bel Cantio Packages
STAX headphones
Asten Tread
Townshend Audio

Component cables
Digital cables
HDMI
Optical cables
S video
SCART
Firewire
XLR cables
Sub woofer cables
iPod cables
DIN cables
Chord cables for Naim
Mains & Power cables
Jumpers
Tuning Fuses

Up to 25% trade in allowed



C1.0, C2.0 and C3.0 Monitor Speakers



Power Conditioners and cables



Complete Nordost High End Range



IAN HARRISON HI-FI TEL: 01283 702875

HIFI AT DISCOUNT PRICES. FREE NATIONWIDE DELIVERY

SALE!

TRADE IN YOUR OLD MOVING COIL CARTRIDGE & SAVE UP TO 60% OFF THE RRP.

DENON DL304	£285	SUMIKO BPS EVO III	£195
DENON DL103	£105	STAX 3050 MKII	£750
DENON AHD7000	£700	WHEST AUDIO PS30R	£POA
DENON AHD5000	£480	WHEST AUDIO 2	£POA
MICHELL ORBE	£POA	TRICHORD DIABLO	£599
MICHELL ORBE SE	£POA	TRICHORD DINO MK2	£279
MICHELL GYRO SE	£POA	TRICHORD D300	£POA
MICHELL TECNOARM A	£POA	GRADO GS1000	£800
MICHELL GYRODEC	£POA	GRADO RS1	£605
MICHELL TECNODEC	£POA	CLEARAUDIO CARTRIDGES	£POA
MOTH TONEARMS	£POA	CLEARAUDIO TURNTABLES	£POA
MOTH RECORD CLEANERS	£POA	BEYER HEADPHONES	£POA
GRADO CARTRIDGES	£POA	EAR/YOSHINO	£POA
AUDIO TECHNICA CARTRIDGES	£POA	LEHMANN AUDIO	£POA
AUDIO TECHNICA HEADPHONES	£POA	BENZ MICRO	£POA
HARBETH SPEAKERS	£POA	TOM EVANS GROOVE X	£1700
ORTOFON 2M BLACK	£POA	ROKSAN CARTRIDGES	£POA
TRANSFIGURATION CARTRIDGES	£POA	CREEK DESTINY AMPLIFIER	£POA
SENNHEISER	£POA	CREEK DESTINY CD PLAYER	£POA
GOLDRING G1042	£POA		

I ALSO SUPPLY:

VAN DEN HUL, ZYX, CARTRIDGE MAN, SUMIKO, ORTOFON, RESON, SME, GRAHAM, MOTH, HADCOCK, THORENS, EARLYOSHINO, ACOUSTIC SOLID, HEED, GRAHAM SLEE, PURE SOUND, AESTHETIX, ACCUSTIC ARTS, NAD, SONY, NU FORCE, SUGDEN, HALCRO, C.A.T. GAMUT, GRAAF, MONRIO, AUDIO ANALOGUE, PATHOS ACOUSTICS, UNISON RESEARCH, OPERA, TRIANGLE, FINAL, HARBETH, USHER AUDIO, DIAPASON, TANNOY, AUROUSAL, ERGO, STAX, AKG, BLACK RHODIUM, TRANSPARENT, QED, IKOS, HI DIAMOND, SUPRA, WIREWORLD, KEMP ELEKTRONICS, JUAL, B.C.D. CUSTOM DESIGN, OPTIMUM, ASH DESIGN, APOLLO, ALPHASON, B.D.I.

PLEASE PHONE TO CONFIRM PRICE & AVAILABILITY PRIOR TO ORDERING. ALL GOODS ARE BRAND NEW & BOXED WITH FULL U.K. GUARANTEES. NO EX. DEM OR EX DISPLAY GOODS. NO GREY IMPORTS. GOODS ARE NOT SUPPLIED ON APPROVAL. SORRY, NO GENERAL CATALOGUES. PLEASE PHONE OR WRITE FOR SPECIFIC REVIEWS, BROCHURES OR PRICES. SUPPLIER OF HIFI PRODUCTS & ACCESSORIES SINCE 1986 MAIL ORDER ONLY FROM: IAN HARRISON, 7 MILL HILL, REPTON, DERBY, DE65 6GQ. TEL: 01283 702875. 9am - 9pm INCLUDING SUNDAYS.

Web classiquesounds.co.uk

Classic Sounds

Specialist Supplier of Vintage Audio

61 Aylestone Drive
Aylestone,
Leicester, Le289q

Tel 0116 2835821
Local rate 0845 1235187
Mobil 07815 188040



Leak Stereo 20 full rebuild using Paper in oil caps £299.00
Conversion of Leak valve pre to passive including Silver wired sockets/rhodium plugs £299.00

wanted classic and modern hi-fi eqpt.

FOR SALE PRE-POWER AMPLIFIERS			
Arcam Alpha 9 integrated with remote & MM/MC	£249	Studen Maestro amplifier Purchased 15/05/09 Only	£800
Quad 34 pre amplifier. Boxed. Nice condition	£199	Quad 405-2 power amplifier. Boxed. Ex condition.	£249
Musical Fidelity A1 Class A amplifier. Ex condition.	£219	Unison Research Simply one valve pre amp.	£895
Shanling MC2000 integrated valve transistor amplifier CD player Built in Ipod dock. Cost £1300. As new/bare.	£599	Quad 44 pre amplifier. Excellent cond with manual.	£349
Conrad Johnson PV10AL. 1 line pre amp. Champagne.	£299	CR Developments Amphion single ended monoblocks using 6CX3C B tubes. 12 watts class A. Boxed & bus mtr	£1099
Exposure 2010S integrated amplifier. Silver front	£399	Quad 303. Nice condition. Boxed.	£169
Truly stunning original pair Quad II valve power amplifiers with GEC valves. Boxed. An investment at only.	£1199	Pair Musical Fidelity M1A5 class A monoblocks.	£595
Pioneer A200X integrated amplifier. Nice condition.	£129	Quad 33 pre amplifiers. From ..	£75
Audio-AM-1. 33 int amplifier. Silver. Mint & boxed.	£69	Pioneer SA-608 integrated amplifier. A classic.	£99
Incarat Claymore integrated amplifier. Very rare	£299	CR Developments Romulus int valve amp. Superb.	£999
Musical Fidelity A100 pure class A integrated 50W	£199	Leak TL12s - 100% original. Champagne finish Mint	£449
Van der Heem single ended int valve amp C1964.	£299	Studen A48 & T48 tuner in wooden sleeve.	£299
Beautiful condition 100% original Quad 22 pre amp	£149	Leak Vanslope pre amplifier. Ex condition.	£149
Quad 303 power amplifier. Nice condition	£699	Nad 302 integrated amplifier.	£59
Criti series V1 valve power amplifier. Good cond.	£899	Leak Stereo 50. Buxite. Rebuilt with PIO caps. Rare	£899
Orange Audio valve pre amp with MM/MC. Boxed.	£999	Wilmslow Audio Mercury B power amp. Ltd edition	£295
Pair Marantz MA5's. Class A. 110W. Awesome.	£449	EPOA Leak Stereo 20 rebuilt with quality paper in oils.	£799
Quad II amps. Many in stock. Prices condition varies	£999	Quad 405-1. Excellent condition	£195
Arcam Alpha 10 in amp. Bvd remote & mint. £799	£375	Scott stereo user 201 American integrated amp.	£169
Nakamichi CA5 pre-amplifier. Ex cond. Cost £750	£399	Musical Fidelity A1 class A integrated amp. As new.	£225
Classic CP35 pre amplifier with remote and book.	£399	Regent cadel III integrated amplifier. Ex condition.	£249
Arcam Alpha 10 amplifier. Super condition. Remote	£399	Leak Vanslope point 1 pre amp. Converted to Passive. Pure silver wire solder Silver plate phono alps. pot.	£425
Leak Vanslope point 1 pre amp. Converted to Passive. Pure silver wire solder Silver plate phono alps. pot.	£99	Mendon 1 linear MC phono stage pre-amp. Boxed.	£149

TURNTABLES/CD PLAYERS

Arison RD11 turntable with hd. Good condition.	£149	Grace G707 tone arm. Nice condition.	£199
Pioneer PD-91 CD player. Ex condition & remote	£449	Marantz CD63 CD player and remote	£30
Mendon 506 CD player and remote. Boxed.	£549	Garrard 4HP headshell. Boxed	£30
Linn Kank CD player. Slimline. Ex condition.	£349	Linn Numark DAC. Excellent condition.	£349
Garrard 301. Excellent condition.	£799	Linnuplnt plinth for Garrard 301. SME 3009 out out	£40
Mission 774S tonetarm with damping trough	£349	Cambridge Audio CDS CD player with remote.	£90
Mission 775S turntable. Cut out for SME 3009 GC	£349	Reol RCD3470BX CD Ex condition remote	£119
Thorens TD125 transcription record deck with hd	£1499	Sony CDP-911F CD player remote book. Cost £200	£479
YS Audio - Audio experience. Concerto plus MC 2 MM/MC Valve phono pre amp. Well reviewed. Mint/bare.	£79	Sony MDS-JE530 CD Mini disc player/receiver.	£299
Pioneer PD-M550 CD player 5 disc. player. Mint/bare. Technic-SL 150 turntable. Cut out for SME 3009 GC	£249	Audiokete Arm 2. Silver wired. Coss. new £294.00	£99
Arcon DV 78 DVD player. Manual remote. Silver	£249	Goldring HD27G X cartridge. MM. Little use. Boxed	£99
SME 3009 Series II arm. Early split weight version.	£249	Thorens TD150. SME cut-out. With hd.	£399
Audiokete TT1 turntable. Requires arm. Rega mount.	£20	Arcam Dixa CD92 CD player. Silver. Good condition.	£159
Dennon DD-6301 CD player. Good condition	£549	Mendon 300 CD Transport. Excellent condition.	£169
EAR R34P MM & MC valve phono pre-amp. Boxed.	£129	Sony 3008 series II improved from improved from...	£275
Sony MDSJB20 mini disc player. Mint & Bvd	£129	Marantz CP73 CD player @ 1984. Nice condition.	£149
STD 3065 with SME mount. Black finish	£149	Thorens TD140B MK2. Black. SME cut out.	£59
Arison R180 turntable. Ready to fit SME tone arm	£49	Cambridge Audio CDS Black finish. Boxed remote	£99
Nad 505 BX CD player. Ex condition. No display	£149	Reol 865 BX CD player. Superb condition.	£99

SPEAKERS

B&W DM2 speakers. Awesome sounding	£99	Wharfedale Linton XP2 speakers. Ex cond/bare	£49
Axon Audio based linear speakers. Ribbon speakers.	£99	Kel Q35 floor standers in black. Good condition.	£125
B&W DM2 MK1 loudspeakers. Awesome sound	£175	Celestion DL 12 floor standing speakers	£129
Par Quad ESL63 loudspeakers. Fully reconditioned with all new panels/sockets etc. 12 months warranty. Awesome	£175	Wharfedale Diamond 911. Ex condition & boxed	£179
Castle Sevens in excellent condition.	£299	Wharfedale Diamond 911. Ex condition & boxed	£1699
Quad ESL57 speakers. Fully reconditioned including 2 new Dec treble panels. Awesome sound & dynamics	£169	Pioneer 3 piece speaker set. Brand new. Cost £200	£1150
Quad ESL57 speakers. All fully serviced with full 3 months warranty. Hear what ESL57's should sound like from	£49	Keft CD2. Black finish. Boxed & mint.	£99
Keft CD2. Black finish. Boxed & mint.	£49	Celestion Little one speakers in white. Boxed. 1999	£59

OTHER ITEMS

HiQ balanced phono prehead amp. Awesome.	£249	Alcar CS-F11 Cassette deck. Mint & boxed/instr.	£29
Alcar AT-K33 FM AM stereo tuner. Mint & boxed	£99	Russian EL24 tubes. Superb quality. Price each	£6.50
Pioneer CT-F600 Cassette deck. Mint & bvd/instr.	£29	Sony ST-S70 FM RDS tuner. Ex condition	£29
Keft T27 tweeters X 2. Good condition	£45	Keft B200 units X 2. Good condition.	£49
Keft B139 bass unit. Race track design	£35	Share M75 cartridge. Excellent condition	£25
Lentek battery operated MC pre-amplifier	£59	SME Fluid adaptor kit. Complete & boxed	£69
Quad FM1 stereo tuner. Serviced by One Thing Audio and fitted with top quality stereo decoder. Good condition	£149	Stonk Link S-Gold mains cable 1.2M	£45
Orion MCA-76 MC pre amplifier. Tiny condition	£49	Linn LP12 armboard for Linn arm. Ex condition	£30
Arcam Dixa 76 MC pre amplifier. Tiny condition	£49	Quad Multiplex FM decoder for FM1. Needs service	£129
Quad 850 stereo tuner	£189	Quad FM1 tuner in excellent condition. From...	£399
Yamaha YSP 9000 S1 speakers with digital amps.	£299	Quad 1313 tuner in excellent condition. From...	£399
Yamaha G36 valve reel to reel player. 3.75 and 7.5 IPS. Needs to be mounted in box cabinet. Nice original cond.	£799	Prismone 0.22uf paper in oil capacitors. 500V. 100%	£7.99
Phosone 0.1uf paper in oil capacitors. 500V. 100%	£49	Marshall EC308 12AX7 specially selected valves.	£9.99
Top quality paper in oil capacitors 0.1 and 0.22uf	£59	99.999% pure silver wire 0.5mm. Price per metre	£6.00
99.999% pure silver wire. 1.0mm. Price per metre	£29	Gamma stands for ESL63 speakers.	£299
Regent stands for Quad ESL57	£99	Reol RT840 tuner. Missing button	£39
Meridon remote for 205 series. Rare & good cond.	£159	Nakamichi CR1E cassette deck.	£129
Chord Chorus 1 interconnect. 1.5M. Cost £300	£29	Nad 602 cassette deck. Boxed with instructions	£39
Dennon TL200L stereo tuner	£199	Nad 412 tuner. Mint/bare/boxed/original receipt	£89
Nad 402 stereo tuner. Excellent cond. Great sound	£79	Quad FM1 Valve tuners. Various prices. From only	£POA
Musical Fidelity T1 FM tuner. Award winner. £300	£95		

QUAD ESL57 & ELS63 PANELS/SERVICING ETC

New One Thing Audio "Widget". All round improvement for 57's & a kinder lead for amp £79 pr
Full rebuild of 57's including latest Otac treble panels for only £1190.00
We sell serviced Quad ESL57 speakers from only £1200.00pr. Why spend £4000+?
ESL57 SPEAKERS STANDARD SERVICE £680. PR
Price includes 2 completely rebuilt treble panels etc. Ring for further info.
"Classic Sounds servicing restores the Quads to a position where they can hold their head high". Jon Marks. HIFI WORLD. April 1999. Full servicing facilities available.

Michell

Ever wondered what goes on when you send your tonearm to be rebuilt? David Price walks you through the restoration of his ailing Michell Focus Arm...

It was in such a sorry state, so I decided I'd no option but to get my classic Michell Focus unipivot rebuilt. Given that Audio Origami has made a name for itself restoring and rewiring Rega RB250s, I decided to enlist the services of their enigmatically entitled 'Johnny Seven', latterly of Syrinx Precision Instruments, to do the job. The prognosis was bad; the arm actually turned out to be very slightly bent, the aged wiring was in a dreadful state and the external condition was 'distressed' by its earlier life with a heavy smoker (not me, I hasten to add!) As such, the jobsheet entailed realigning the tube, rewiring the arm with Cardas 33ga OCFC litz cable inside and Super OFC cable outside, and a thorough 'chemical peel' of the aluminium parts. Here's how Audio Origami did the rebuild...



Johnny's first job was to evaluate the work involved. It was clear that there was cosmetic damage; the silver finish was tarnished in a few areas. Here is the arm as sent to Audio Origami by me, complete with some sticky label marks, thanks to the label applied to it in the junk shop in which it spent many months before I found it! Also, the internal wire was well worn and there were a few cartridge tags missing...



The arm tube seemed a little bent, possibly in transit as I didn't remember it as such. Johnny duly noted it down, and it was duly straightened later...



The first job was to strip the arm down and inspect the bearing shaft and cup assembly. As the arm was nearly thirty years old, Johnny said, "I would expect a little wear and tear on the bearing surfaces". He added that, "this type of primitive shaft in cup bearing needs oil to bring down the bearing friction, as it does not have the more normal shaft and 4 ball bearing assembly". The Focus arm uses a oil bath to damp and oil the bearing parts, and this had all but dried up!



The gunge on the cotton bud shows how dirty the threads on the bearing area had become; any moving part becomes like this over time. Classic hi-fi buyers take note!

Refocused



Inside the bearing housing, it's a plain aluminium cup and is not hardened; rather, the oil bath is designed to keep friction in check. After cleaning, Johnny replenished it with his special 'booster PTFE oil' which should last longer than the stock oil used back in the late nineteen seventies...



A closer look shows some machining marks and a dark area near the centre where the bearing shaft has worn in over the years...



This picture shows the bearing shaft point, and if you look close you can see some wear near the very tip. All to be expected in an arm of this age...



With a back light, we can see the silhouette of the shaft and happily it looks fine!



An even closer look at the hardened tip shaft shows very little wear really if you consider the arms age; testament to the fine build quality.

"The 10.1s take Wharfedale back to the forefront of budget speakers. Truly excellent"
– What Hi-Fi? Sound and Vision (September 2009)

WHAT HI-FI?
SOUND AND VISION



September 2009

WHAT HI-FI?
SOUND AND VISION
GROUP TEST WINNER

October 2009



DIAMOND 10 SERIES

For almost 30 years, Wharfedale's famous Diamond speakers have served as the classic entry point to true high-fidelity sound, their exceptional value for money earning dozens of awards around the globe. Now, with the introduction of the Diamond 10 Series, Wharfedale has again raised the bar for affordable, high-performance loudspeakers.

The latest evolution of this classic speaker range builds upon the success of its multi-award-winning predecessors with numerous enhancements, including a more rigid enclosure and a high-gloss, polymer-finished front baffle, giving greater support to the new, improved drive units. The result is a sound that's crisp, focused and spacious, effortlessly dynamic yet firmly in control. Add the visual appeal of elegantly curved cabinets, enhanced by a choice of six perfectly formed finishes, and it's clear: the new Diamond 10 Series is the sparkling jewel in Wharfedale's crown.

IAG House Sovereign Court Ermine Business Park Huntingdon
Cambs PE29 6XU Tel: 01480 447700 Fax: 01480 431767
www.wharfedale.co.uk

Wharfedale

Make the right choice

With 37 years' experience in the hi-fi market, nobody knows more about getting the most from music. Sevenoaks can help you choose individual components or design and install a complete system from scratch. When you arrange a demonstration at your local store, Sevenoaks' experts will give you the time you need to evaluate the various options to help find a solution that is perfect for you.

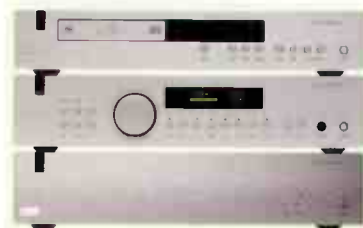
HI-FI COMPONENTS

Cyrus

Cyrus has introduced a new range of amplifiers. Featuring circuitry developed for its DAC, the **8 XP d** and **Pre XP d** include digital inputs ideal for playing music stored on your computer, while the entry model, **6 XP**, is based on the 8 XP but without the digital option. These new models also include two-zone multiroom capability.



The award-winning Silver Evolution CD players
CD6 SE, CD8 SE & CDX t SE



Arcam FMJ

Combining sleek design, flexible connectivity and a level of reproduction far beyond that of budget separates systems, Arcam's FMJ range includes two CD players, three integrated amplifiers, monobloc and stereo power amplifiers plus a DAB/FM tuner. A range of home cinema components is also available. Available in silver or black.

Leema ANTILA II CD PLAYER TUCANA II AMPLIFIER

With stunning sound quality and captivating speed, the new Antila II CD player features unique MCA's active differential multi-DAC converter technology to provide breathtaking realism.

The dual mono-designed Tucana II uses three heavy-duty toroidal power transformers, has a refined bipolar output stage and is capable of driving over forty low-impedance drivers, ensuring a vice-like grip and precise control of the speakers.



Roksan KANDY K2

The K2 amplifier sounds more accurate, more delicate and even more powerful than its award-winning predecessor, the Kandy L11. The matching CD player is an impressive performer and is the ideal partner.

The K2 speakers feature a custom-designed woofer and ribbon tweeter. These are housed in solidly built piano-lacquered cabinets for outstanding performance.

Rotel 15 SERIES

Rotel's highly-regarded 15 Series moves from home cinema to hi-fi with a new CD player, integrated amplifier, two pre-amps and two power amplifiers. Brand new technology, particular attention to detail and a stylish new look make Rotel's flagship line-up really appealing to all.



Marantz CD6003 PM6003

Replacing the highly-regarded 6002 series, the new PM6003 amplifier and CD6003 CD player, remain housed in Marantz's stylish MT casing. The CD player features a front-loading CD tray, allowing improved performance from devices such as an iPod or MP3 player when the amplifier has four line-level inputs along with a MM phono stage and two sets of speaker terminals for easy BT listening.

TURNTABLES



Michell Gyro SE

Essentially a 1970s classic, but without the costly acrylic plinth and dustcover, the Gyro SE brings the same quality in a more affordable and compact package. A Gyro SE can always be converted into a Gyro SE by purchasing a plinth and dustcover.

Pro-Ject Genie MKIII

This MKIII version includes a new motor, re-stabilised motor base and a new lower friction, traditional acetalite. Supplied with an OM4c Ortofon cartridge fitted, the Genie MKIII is available in standard Black with White Pearl Black and Red finish options available at extra cost.



NEW

ALL-IN-ONE SYSTEMS

Arcam Solo Mini

Award-winning integrated CD, Radio and Amplifier with iPod control via optional remoteDock.



B&W Zeppelin

This award-winning iPod docking station ticks all the boxes. It's beautiful, solid as a rock and sounds amazing!



HI-FI SPEAKERS



Dali Lektor

Dali complements its range with the Lektor 2. Only slightly larger than the award-winning Lektor 1, this new model represents outstanding value.

Wharfedale Diamond 10.1

The 10th generation version of the '80s classic, contemporary insight, precision and control along with fine build and finish.



NEW

Monitor Audio

Using techniques and materials from its Platinum and Gold ranges, the **Silver RX** series of slimline speakers are available in a choice of real wood veneers and high-gloss piano finishes to complement any room.

Spendor A SERIES

Introducing the AS and A6 speakers. These compact, high performance, floor standing speakers utilize drive units, tweeters and other design innovations developed for Spendor's flagship BT 3.5 SA1 speakers.

KEF REFERENCE

The first Reference speaker was launched in 1973 to world-wide acclaim. Several generations later the range remains for many the benchmark for high-end audio and a primary for its clarity and precision.

B&W CM SERIES

The CM Series from Bowers & Wilkins has long been a favourite among discerning customers. Offering a combination of high performance and exquisite styling at a very affordable price.



HOME CINEMA SPEAKERS

B&W MT-25

Combines the M1 satellites with a new subwoofer.



KEF KHT3005SE

Award-winning 5.1 speaker package available in high gloss, black or silver.



B&W Panorama

Stylish new Soundbar ideal for cinema, AV plus.



SEVENoaks

SOUND & VISION

HOME CINEMA
HI-FI
MULTI-ROOM
HOME AUTOMATION
BESPOKE DESIGN AND
CUSTOM INSTALLATION

PURCHASE
ANY A/V OR HI-FI AMPLIFIER/RECEIVER
AT RRP AND CLAIM UP TO

30% OFF

THE RRP OF THE SPEAKERS
OF YOUR CHOICE*

* MAX RRP OF SPEAKERS £1000, MOS, BUT NOT ALL BRANDS INCLUDED. NICWAOO, E&OE

AS IN-STORE FOR DETAILS
VALID UNTIL 17/10/2009

the experts in home entertainment

When you buy from Sevenoaks you are buying from one of the biggest, longest established and most respected Hi-Fi / Home Cinema retailers in the UK.

We have been making home entertainment come alive for customers for more than 37 years now. With a national network of stores and a hard-won reputation for outstanding customer service we are confident that we can do the same for you.

Our aim simply is to offer a total home entertainment solution, no matter what the customer's need.

INSTALLATION CARRIED OUT BY OXFORD STORE



Stores Nationwide



Demonstration Rooms



Expert Impartial Advice



Unrivalled Product Range

BRANDS STOCKED INCLUDE*

Arcam
Artcoustic
Atacama
B&W
Beyer Dynamic
Chord Company

Chord Electronics
Cyrus
Da-Lite
Denon
Draper
Escent

Goldring
Grado
In Focus
IxoS
KEF
Leema

Linn
Loewe
Logitech
Marantz
Meridian
Michell

Monitor Audio
Musical Fidelity
NAD
Nevo
Onkyo
Optimum

Optoma
Panasonic
Philips
Pioneer
Pixel Magic
PMC

Primare
Project
Q Acoustics
QED
Quad
Quadraspire

REL
Roksan
Rotel
Samsung
Sennheiser
Sim2

Sonos
Sony
Sound Org
Sound Style
SpeakerCraft
Spectral

Spendor
Stewart Screens
Teac
Van Den Hul
Wharfedale
Yamaha

* Some brands/products are not available at all stores - please confirm before travelling

news, the latest offers and more at www.SSAV.com

World Radio History

Exceptional Value from **icon Audio** of Leicester

Real Hi End Hi Fi to suit all pockets!

designed by David Shaw



New Stereo 40 MK III



All Designed to be
**"LISTENING FATIGUE"
FREE!**

ST40 MK III

designed by David Shaw

Our best ever mid range amplifier! The brand new Stereo 40 III has been upgraded with new features which make it one of the finest in its class! Smooth, precise and powerful. **New** bigger tertiary wound ultra-low distortion transformers. **New** Improved circuit with no feedback. **New** 274B tube rectifier. **New**, now with remote control. But still with the same 40+40w of the finest valve sound using the superb 6SN7/6SL7 driver valves. Silver audio cable. Triode output. Choke PSU. Beautiful Plexiglas cover included. Vital warm-up/Standby facility. (24kg)

From £1099 complete (EL34) or £1199 (KT88)
(Various upgrades available)

New Speaker MFV 3 "Made For Valves"

Release the full quality
of your valve amplifier!

Virtually all modern speakers are designed for transistor amplifiers. This means that you will not get the best out of your valve amp. Our MFV 3 was designed and tested exclusively using valves, using our experience of making a wide range of Push-Pull and Single Ended valve amps from 5-100W. An ideal partner to tubes, you will hear rich deep bass, wonderful lucid mid-range and smooth transparent treble. We use custom designed doped woven fibre bass/midrange cones with long life neoprene roll surrounds, superb silk dome tweeter, and simple high quality crossover, and long fibre MDF cabinets. Matched veneers, with a choice of dark walnut or light cherry finishes. Fully Bi-wireable, complete with plinth, spikes (and cover) we are confident that the MFV 3 will delight your ears on a wide range of music. Full leaflet on iconaudio.com or ask for a leaflet by post. **Only £999.00 per pair**



KingSound

Full range of these amazing electrostatic speakers
From £899! Full info on: www.kingsaudio.com.hk
UK Price list on our website. Leaflet on request.

You are welcome to visit our new listening room in Leicester to audition, Examine and discuss our complete range of 2 Phono amps, 4 Pre-amps, 3 Power-amps 8 integrated amps, Icon and Kingsound speakers. Plus Any custom mods you may require. Please ring for an appointment.

Common Features: Designs by David Shaw. Hand built 'Point to Point' wiring. Designed and finished in Leicester UK. No printed circuit board. ALPS Volume control. Gold plated terminals. Audiophile components. Silver Teflon audio cable. Steel & alloy plate construction. Soft start. Unique HT delay. Comprehensive manual Inc DIY valve change info. "Proper" valve amplifiers are heavy because good transformers need lots of iron!

...Buy direct from us, or through your dealer. Export no problem! Want to know more? See www.iconaudio.com or ask for a leaflet.

.....Or ring us on +44 (0)116 2440593 email sales@iconaudio.com **icon Audio** 351 Aylestone Road Leicester LE2 8TA (U.K.)

*Conditions apply

Prices correct with 15% UK VAT at time of going to press but subject to change. E & O E

Visa, MasterCard and debit cards accepted

World Radio History

Fabulous New MB 845s!

"Amongst the best amplifiers I have ever heard...Awesome dynamics and power! High Drama. Superb Value" N Keywood H F W



Not a quote you hear from NK everyday Especially a British design at this price! At 90+90 watts of pure triode magic they were designed to go into sonic territory inaccessible by 300Bs or KT88s. And their simplicity gives an openness impossible by transistors! The 1931 RCA huge power triode is still without equal, partnered with the superb 1941 6SN7/6SL7s using only 3 stages. Inspired by the QUAD IIs! They are the answer to

anyone jaded by their present system. Footprint=51cmx51cm, 52kg (pair)

From Only **£2499.00** per pair Upgrades available.

Stereo 25 A Serious 30w Valve Amp Only £499.00!



Based on our award winning £900 Stereo 40. "Entry level" does not have to mean low power or quality! Inspired by "Leak". Hand crafted "Point to Point" wiring. Versatile: can use 6L6, EL34, KT66 or KT88s.(£100 extra) Beautiful stainless steel and Plexiglas cover included. Limited offer of free EL34 upgrade worth £100

MP3 Starter Amplifier

A true ALL VALVE amplifier. 5+5W
Of pure magic. Ideal starter amplifier for bedrooms, study, office. Works with Ipod, Computer, CD etc. Incl headphone socket. Pure Class "A" SE design uses EL84 & ECC83. Will drive almost any speaker.

Only **£399.00** complete

PS 3 All Valve Phono Stage

"Our Fave Affordable High End Phono Stage" N.K. Hi Fi World. Awarded 5 "Globes"

Only a pure valve design can get the best from vinyl. All triode. No feedback. Passive RIAA. Custom British MC TX option. A supercharged PS1 with the best possible Power supply. Valve rectified & regulated for definition and smoothness
14kg. Upgrades available

From only **£1399.00** complete (inc MC TX)

PS 1 All Valve Phono Stage

"Nicely engineered with not a weakness anywhere"

N.K. Hi Fi World. Awarded 5 "Globes"

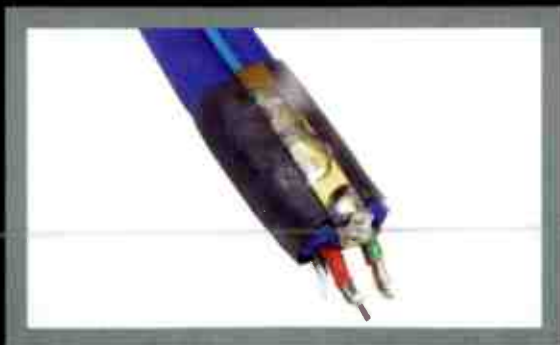
Only a pure valve design can get the best from vinyl. All triode. No feedback. Passive RIAA. Custom British MC TX option. Choke regulated PSU. High output. Volume control. Will drive power amps!
9kg. Upgrades available

From only **£549** complete (MC option £749)



See us at "Audio 2009"
Audio Show 26-27 Sept

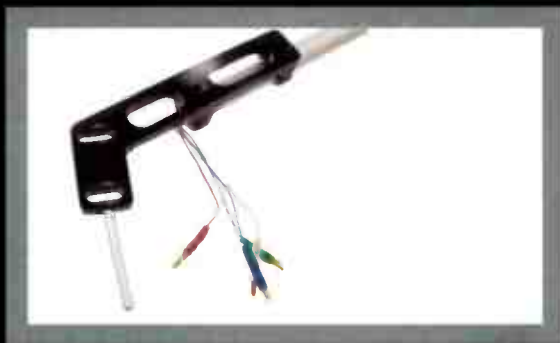
Syndicate 7, Whittlebury Hall Hotel, Whittlebury, Near Towcester



After cleaning and oiling the main bearing, the next job was to replace the wiring with Audio Origami's 'Super OFC' external cable. An additional earth strip was made up inside the arm for the main earth of the base, and a separate earth was made inside the arm tube. "This should improve the original idea of sharing the arm tube earth with the green wire", Johnny observed...



Once fitted to the base, this makes a secure external lead...



The arm was rewired with Cardas 33ga OCFC internal wire and VdH gold cartridge clips were fitted as a matter of course. This has to be done because thirty year old wiring does not make for great sound quality!



Now reassembled, the arm was cleaned with special solvents to remove the scunge. The excellent quality of the original machining is shown in its full glory; it's come up beautifully!



Job's a good 'un! Here we see the finished product; the tonearm looks new again, and now sports superior wiring to standard. Unipivots are simple things, so the rebuild wasn't complex; it just needed painstaking attention to detail. "I'm sure it will be able to perform as well as some other well known unipivot arms for a fraction of the cost", concluded Johnny.

Audio Origami
 ☎ +44(0)141 954 3794
www.audioorigami.co.uk

HOME CINEMA SEPARATES

Yamaha

Introducing the 2009 range including five new Hi-Fi receivers, a home cinema surround and two TV stands with built in surround sound.



Denon

Denon has introduced the 10 series AV receivers. Models include AVR1910, AVR1910D and AVR2310D.



Onkyo

Onkyo sets the bar once again in the compact hi-fi world of home cinema with its TX-SR607 which features Dolby Prologic II support.



Sony STR-DA2400ES & BDP-SS50

Highly acclaimed AV receiver and Blu ray disc player from Sony. DABIC Hi-Fi Group's Test Winner - March 2009.



BLU RAY

Panasonic DMP-BD60 & 80

These new players from Panasonic blend competitive features with top-drawer picture and sound quality.



Pioneer BDP-LX71

View film exactly as the filmmakers intended, in 1080p resolution, at 24 frames per second with the BDP-LX71.



Denon DVD-2500BT

For faithful transmission of Full HD video and HD audio signals bringing out the full quality of film.



SPECIAL OFFERS MORE AT WWW.SSAV.COM

PURCHASE ANY A/V OR HI-FI AMPLIFIER/RECEIVER AT RRP AND CLAIM UP TO 30% OFF

THE RRP OF THE SPEAKERS OF YOUR CHOICE*
*MAX RRP OF SPEAKERS £1500
MOST, BUT NOT ALL, BRANDS INCLUDED. NICWAOO, E&OE
ASK IN-STORE FOR DETAILS.

ARCAM

CD17
CD PLAYER

£599 RRP £700

ARCAM SOLO MINI
CLAIM MONITOR AUDIO
BR1 SPEAKERS FREE

£749 RRP £929

NAD
C545BEE
CD PLAYER

£299 RRP £350

MARANTZ
PM600Z
AMPLIFIER

£219 RRP £319

CYRUS
8vs2
AMPLIFIER

£599 RRP £899

DENON
TU-1800DAB
TUNER

£199 RRP £299

DENON
D-M37 (EX SPEAKERS)
CD/DAB RECEIVER

£199 SRP £299

MARANTZ
CD600Z
CD PLAYER

£219 RRP £319

CYRUS
DISCMASTER 8.0
DVD PLAYER

£399 RRP £799

DENON
DVD2500BT
BLU-RAY TRANSPORT

£549 RRP £899

DENON
DVD3800BD
BLU-RAY PLAYER

£899 RRP £1499

Q ACOUSTICS
1010i
A/V SPEAKER PACK

£449 RRP £549

SONY
BDP-S5000ESB
BLU-RAY PLAYER

£999 SRP £1199

KEF
KHT2005.3
A/V SPEAKER PACK

£679 RRP £899

PANASONIC
DMR-EX769
HDD/DVD RECORDER

£249 SRP £299

PANASONIC
DMP-BD80
BLU-RAY PLAYER

£259 SRP £299

PANASONIC
TX-L32X10B
32" LCD TV

£ VISIT SSAV.COM FOR LATEST PRICE

PANASONIC
TX-L32S10B
32" LCD TV

£ VISIT SSAV.COM FOR LATEST PRICE

PANASONIC
TX-L37G10B
37" LCD TV

£ VISIT SSAV.COM FOR LATEST PRICE

PANASONIC
TX-P42G10B
42" PLASMA TV

£ VISIT SSAV.COM FOR LATEST PRICE

PANASONIC
TX-P42V10B
42" PLASMA TV

£ VISIT SSAV.COM FOR LATEST PRICE

SAMSUNG
UE40B7020
40" LED TV

£ VISIT SSAV.COM FOR LATEST PRICE

PIONEER
PDP-LX5090
50" PLASMA TV

£2099

PIONEER
PDP-LX6090
60" PLASMA TV

£3199



Stores Nationwide

All Sevenoaks' stores stock a wide range of products, have comfortable demonstration rooms, provide first-class customer service and can deliver and install your purchase.



Custom Installation

Stores with Cedia qualified staff also provide a bespoke design and installation service. They have unrivalled expertise in all areas of home automation and can demonstrate a wide range of installation options.



Buy On-line

NEW E-COMMERCE STORE Looking for mail order? Then visit the new on-line shop at www.ssav.com. You'll find a range of great products* along with great prices.

A click-and-collect option is also available.



- Aberdeen** 01224 252767
- Bedford** 01234 272779
- Brighton Hove** 01273 733338
- Bristol** 0117 974 3727
- Bromley** 020 8290 1988
- Cambridge** 01223 304770
- Chelsea** 020 7352 9466
- Cheltenham** 01242 241171
- Epsom** 01372 720720
- Exeter** 01392 218895
- Glasgow** 0141 332 9655
- Guildford** 01483 536666
- Holborn** 020 7837 7540
- Kingston** 020 8547 0717
- Leeds** Wetherby 01937 586886
- Lincoln** 01522 527397
- Loughton** 020 8532 0770
- Maidstone** 01622 686366
- Manchester** 0161 831 7969
- Norwich** 01603 767605
- Nottingham** 0115 911 2121
- Oxford** 01865 241773
- Plymouth** 01752 226011
- Poole** 01202 671677
- Reading** 0118 959 7768
- Sevenoaks** 01732 459555
- Sheffield** 0114 255 5861
- Southampton** 023 8033 7770
- Swindon** 01793 610992
- Tunbridge Wells** 01892 531543
- Watford** 01923 213533
- Witham Essex** 01376 501733
- Yeovil** 01935 700078
- IRELAND**
- Dublin** 01 275 1100

Website

Can't find what you're looking for? Visit the Sevenoaks website where you'll find news, special offers, information, a comprehensive product range, massive savings on end-of-line clearance product, a free monthly competition and more.

www.SSAV.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.

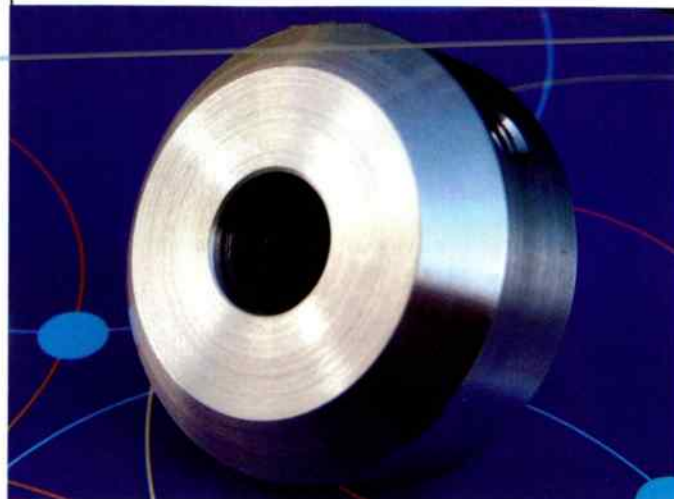
New vinyl records now stocked

Tel: +44 (0)1733 344768

JS Ridsdill Engineering

Email: jsridsdill@hotmail.co.uk

Tel: 07968 810275



Introducing the simple and excellent lockable counterweights to the already excellent Linn Ittok Akito and the basic tonearms. Bringing Life back into the old timers. Bringing them closer to modern super arms better detailed midrange bass and timing.



Linn Ittok Arm

MUSONIC STYLI

REPLACEMENT STYLUS REQUIRED?



CONTACT THE PEOPLE WITH OVER 50 YEARS EXPERIENCE



MANUFACTURERS AND SUPPLIERS OF MORE THAN 1,000 MODELS



PICKUP CARTRIDGES AUDIO ACCESSORIES



MAIN UK SUPPLIER OF NAGAOKA CARTRIDGES AND STYLI



MUSONIC (UK) LIMITED

271B WENTA BUSINESS CENTRE
COLNE WAY
WATFORD
HERTFORDSHIRE WD24 7ND

Tel: 020 8950 5151

Fax: 020 8950 5391

e-mail: sales@musonic.co.uk

For info and to buy online visit: www.musonic.co.uk

Got CD's?

The Brennan JB7 is a new kind of CD player that holds up to 2,500 CDs.

You can find and play a specific track or album from your armchair in seconds. Or play your entire music collection with one click.

JB7 is the size of a large book and is simple to use. There is nothing else like it.

Top buys of 2008

"compact and ultra-simple...the JB7 shows superb clarity of thought and engineering"

GRAMOPHONE - January 2009



www.brennan.co.uk

The Kudos Cardea C30...

...Hi-Fi Choice Loudspeaker of the Year 2008



'... measured performance is quite impressive...'

'...treble proper looks smooth and well judged...'

'...sensitivity is a generous 90db (as specified)...'

'... wonderfully realistic and engrossing sound...'

'... best of all, perhaps, is the exceptional timing. Its the most difficult thing to get right, especially with a multi way speaker, but it's also the most important element in musical communication.'

'...wide bandwidth, fine dynamic range, the sweet top end, the firm, clear agile and deep bass...'

'...fine control over cabinet colouration...'

'...the acid test of any loudspeaker is how well it communicates music and a crucial strength of the C30 was that it made the types of music that would normally make this reviewer switch off, (solo piano, opera) interesting and enjoyable. Even audience applause sounded obviously more realistic than usual and that is a very clever trick indeed.'

Paul Messenger Hi-Fi Choice September 2008

DIAL A DEALER

This is a comprehensive directory of Hi-Fi Dealers throughout the UK and Ireland.

BERKSHIRE

LORICRAFT AUDIO

Loricraft Audio is now open for visitors but please call to arrange for a visit. You can buy all our products directly from us or through your local dealer. Our internet shop site can take direct orders for our turntables and accessories! Loricraft Audio, The Piggy, Mile End Farm, Wantage Road Lambourn, Berkshire, RG17 8UE Office Phone/Fax : +44(0) 1488-72267 EMAIL : terry@garrard501.com website: http://garrard501.com

BRISTOL & BATH

THE RIGHT NOTE

Tel : 01225 874728. Happy with your system? Wonder why there's so much for sale secondhand? Avoid the frustration and expense of "upgrade-itis", never quite "there". With infinite patience we'll help you plan longer term. Brands selection : Accoustic Arts, Audio Physic, Aesthetix, Bel Canto, CAT, Chord Co, Clearaudio, Esoteric, Gamut, Graham, Halcro, Magnum Dynalab, Sumiko, VertexAQ, Wadia.

V'AUDIO HI FI CONSULTANTS

36 Druid Hill, Stoke Bishop, Bristol. BS9 1EJ. Tel: 0117 968 6005. ATC, AVI, Nola, ALR Jordan, Audio Analogue, Avid, Black Rhodium, Electrocompaniet, Edge amps/cd, Harman Kardon, Infinity, Jamo, Lyra, Origin live, Opera, ortofon, PS Audio, Michelle, REL, SME, Sugden, Townshend. Specialist in Video Projects by SIM2, Infocus, Sanyo, Power Plan. Screens by Stewart, smx and da-lite. Demos by appointment only. Home trial facilities.

CHESHIRE

ACOUSTICA

17 Hoole Rd, Chester CH2 3NH. www.acoustica.co.uk. Tel 01244 344227. HiFi & Home Cinema from Amphion, Arcam, ART, Ayre, B&W Nautilus, Classe, Focal, JM Lab, Monitor Audio, Naim Audio, Primare, Rega, REL, Rotel, Spendor, Sugden, Thiel, Wadia. We offer full demonstration facilities, interest free credit, delivery & install systems throughout Cheshire, Merseyside & North Wales. Tuesday to Saturday 10.00 to 5.30.

ACTON GATE AUDIO

www.acton-gate-audio.co.uk
4 Ruabon Road, Wrexham, LL13 7PB, (01978) 364500
Arcam, Atlas, Audiolab, Croft, Denon, Grado, JM Labs, KEF, Michell, Monitor Audio, Musical Fidelity, NAD, Ortofon, Opera, Onkyo, Pro-ject, QED, Quad, Rel, Roksan, Sugden, Sennheiser, Unison, van-den-Hul, Wharfedale, Yamaha.
Tuesday - Saturday 9.00 - 17.00
email: info@acton-gate.com

ORPHEUS AUDIO

Demonstrating : acoustic signature, Basis, Benz, Rcm, Whest, Consonance, Shanling, Luxman, Acoustic Masterpiece, Ear, Harmonix, Acoustic Zen, Monopulse, Wm, Deuve, Sound Mechanics racks and accessories, Brilliance, Albedo, Almarro, Demonstrations by appointment, home trials, no problems. Check website for winter bargains.
Tel 0161 4281539 www.orpheusaudio.co.uk

www.orpheusaudio.co.uk

DOUG BRADY HI FI KINGSWAY

Studios, Kingsway North, Warrington, WA1 3 NU Tel 01925828009 Fax 01925 825773. Visa Mastercard, 2 dem rooms, home trial, Agencies include : Arcam, AV1, Chord, Copland, Exposure, Krell, Lyra, Michell, Meridian, Musical Fidelity, Monitor Audio, Naim, ProAc, Roksan, SME, Stax, Isotek, Kudos, Sonus Faber, Spendor, Ortofon, Prima Luna, Quad, Avid, Moon, Nordost, Wilson Benesch, and many more.

CORNWALL

BIGEARS AUDIO

To find a system that will allow you to hear the music instead of the equipment phone Bigears Audio, here you will find an interesting array of new and good quality used equipment! my intention is to have satisfied customers whatever their audio preferences. Naim dealer for the South West. chrisbircchley@btinternet.com. Tel: 01736-740421

ESSEX

ROCOCO SYSTEMS & DESIGN

Essex/London Linn Specialist
Tel: 01371856407 - 02074541234
www.rococosystems.com
We have over 30 years in entertainment solutions, We can give you expert advice on your Linn Hi-Fi, Multi-room AV and Home

Cinema systems. P/EX, ex-demo and used Linn available, Demos by appointment. Home Demos welcome. Authorised dealers for Arcam, AMX, Artcoustic, Chord, Infocus Linn, Loewe, Lutron, Kaleidescape, Marantz, Nevo, Opus, Phillips Pronto, Runko, Systemline, Speakercraft Sonos Sim2

GLOUCESTERSHIRE

CERITECH AUDIO

Coleford, Gloucestershire. Tel: 0844 736 5719. Email: info@ceritech.co.uk. www.ceritech-audio.com.
We provide bespoke Hi-Fi and AV services to customers throughout Gloucestershire, Monmouthshire, Herefordshire and surrounding areas. We offer honest and expert advice, and professional demonstrations of an enviable range of top brand products. Authorised Agents for Abbey Road, DALI, Leema Acoustics, Moon, Naim Audio, Neat Acoustics, ProAc, Roksan and others.

LANCASHIRE

HOUSE OF LINN MANCHESTER

Telephone: 0161 766 4837
Email: Info@houseoflinn.com
www.houseoflinn.com
The Linn specialists. Independently owned by former Linn staff. Straightforward, professional expertise with demonstration, sales, installation and support for the Linn range of components and systems. The listening experience is so good that demonstrations can last for hours. Discover how we make music sound real in your home! Appointments only.

LEICESTERSHIRE

ZOUCH AUDIO

The Old Coach House, Off South St, Ashby de la Zouch, Leicestershire, LE65 1BQ. Tel : 01530 414128 Email : mike@zouchaudio.co.uk Specialist Audio Equipment from Audia, Audica, Apollo, Ayon, Black Rhodium, Boulder, Chord Electronics, DALI, Edgar, Fatman, Graham Slee, Isotek, LSA, Marantz, Mission, Monopulse, Musical Fidelity, NAD, Nordost, Ortofon, Project, Q Acoustics, QED, Quad, Roksan, Spectral, System Fidelity, Tom Evans, Usher, Vitus. Over 30 years experience and 4 demonstration rooms.

DIAL A DEALER

This is a comprehensive directory of Hi Fi Dealers throughout the UK and Ireland

LONDON

THE CARTRIDGE MAN LTD

88 Southbridge road, Croydon
CRO 1AF Telephone: 020 8688 6565
Website: www.thecartridgeman.com
email address: thecartridgeman@talktalk.net
UK Distributor: Hiaudio Distribution
Makers of the prize-winning range of MusicMaker cartridges and other desirable audio accessories. We also have a cartridge refurbishing service and rebuild classic valve equipment to the highest standards. "It doesn't have to cost an arm and a leg - but there is no such thing as a free lunch, either."

MY AUDIO DESIGN

35 Whitehall, London, SW1A 2BX
Tel: 020 7839 8880 / 07782 137 868 E-mail: sales@madengland.com
Website: www.madengland.com E-Shop: www.shop.madengland.com
We offer MAD, Benchmark Media, SONOS, WBT, Trichord Research, ATC, FatmanTube, Project, Lehmann, Ortofon, VandenHul, QED, NAD, Goldring, Grado, Focal, Musical Fidelity, Ex-demo & second hand gears. Custom Installation, Servicing, Custom Design. Appointment Only. Short walk from Embankment, Charing-X & Westminster Tube.

MANCHESTER

AUDIO COUNSEL

26 High St Cheadle SK8 1AL
www.audio-counsel.co.uk
TEI 0161-491-6090
e mail dave@audiocounsel.co.uk
Hi Fi and Home Cinema from , B&W Densen, Dynavec Cartridges Emm Labs, Hutter, Isoblu, In Focus, Naim, Neat Acoustics Pioneer, Piega, Quadraspire, Rega, Revolver, Rotel, Shahinian, Totem, Well Tempered Turntables, Zu Loudspeakers. Quality Hi Fi is not plug and play. We deliver and install all systems. 0% Finance available. Tuesday to Saturday 10.00am to 5.30pm Thursday till 8pm

MIDLANDS (WEST)

SOUND CINERGY

37 high street, aldridge, WS9 8NL
01922 457926
www.soundcinergy.co.uk
clive@soundcinergy.co.uk
Quality hifi and home cinema from black rhodium, chord co, creek, epos, exposure, linn, marantz, michell, monitor audio, mordaunt short, nad, okki nokki, ortofon, project, rel, roksan, themescene, trichord, vdh. Check our website for ex dem and secondhand bargains. free car parking. tues - sat 10 -5.30

NORFOLK

BASICALLY SOUND & VISION

Calveley Court, Southburgh Road, Reymerston, Norfolk NR9 4QD
Tel : 01362 820800
Email : enquiries@basicallysound.co.uk
Web : www.basicallysound.co.uk
We offer Naim, Rega, PMC, Bryston, PS Audio, Arcam, Wilson Benesch, Isoblu, Dynavec and others. Turntable Workshop & Multi-Room Solutions. Relaxing out of town location, 2 demonstration rooms & free parking. Home demos welcome. Opening Hours Mon - Sat 9:30 - 7:30 but please call in advance on Mon, Tues & Weds.

SOMERSET

ALTERNATIVE AUDIO,

Alternative Audio,
Taunton, Somerset, Tel: 01984 624242
Email: peter@alternativeaudio.co.uk
www.alternativeaudio.co.uk
We specialise in valve amplification and vinyl replay with the accent on high quality musical enjoyment, demonstration by appointment. Ex-Dem and used equipment for sale. Almarro, Art Audio, Border Patrol, EAR/Yoshino, Graham Engineering, Experience Filtration, Lector, LFD Audio, Lyra, Music First Audio, Nottingham Analogue Studio, Quadraspire, Shun Mook, SME, Vandersteen Audio, Wave Mechanic.

YORKSHIRE

THE AUDIO ROOM

2 George Street, Hedon, Hull, HU12 8JH.
01482 891375 www.theaudiroom.co.uk
Authorised agents for Ayre, Arcam, Bowers and Wilkins inc 800series, Classe, Cyrus, Densen, Dynaudio, Dynavec, Grado, Hutter, Isoblu, Isotek, Linn, Lyra, Mark Levinson, Meridian, Naim, Nordost, Proac, Quadraspire, Rega, Rotel, Stax, Stereovox and others. 0% finance available, free parking, 3 demonstration suites, friendly and quality staff and advice, mail order service.

AUDIO REPUBLIC

78 Otley Road, Leeds O1132177294
www.audio-republic.co.uk
For the best in quality hifi in West Yorkshire, representing Naim Audio, Rega, Sugden, Audio Research, VPI, Krell, Copland, Sonus Faber, Arcam, Nottingham Analogue, Roksan, Hutter, Martin Logan, Proac, PMC, M&K, Finite Elements, SME, Cardas, Kudos Loudspeakers and others. Open Tuesday-Saturday 9.30am to 5.30pm

FANTHORPES HI-FI, TV & CUSTOM INSTALLATION SPECIALISTS

HEPWORTH ARCADE, SILVER STREET, HULL, HU1 1JU
Established over 60 years
TEL: 01482 223096
Web: www.fanthorpes.co.uk
Email: shop@fanthorpes.co.uk
Part exchange welcome. High-end Second Hand Equipment. Multi-room installations. Demonstration by appointment. Home trials welcome. Interest free credit available. Experienced staff. We stock Arcam, Cyrus, Dali, Denon, Dynaudio, Exposure, Kef, Loewe, Onkyo, Primare, Roksan, Spendor, Sugden and much more.

IRELAND

tone-pearls records "REVOLUTIONARY OLD"

Tel: 353-87-942-7618
Email: info@tonepearls.com
www.tonepearls.com
New audiophile LP/vinyl records using the revolutionary new Tone-Pearls and pure analogue techniques. Live recording, unedited, unprocessed, pure analogue recording and cutting, 180g virgin vinyl pressing. New LP released: Piano Music in a Church of West Ireland, Classics of Chopin and Debussy and more...

NORTHERN IRELAND

KRONOS AUDIO VISUAL

Tel 02887753606
E mail david@kronosav.co.uk
Web www.kronosav.co.uk
Brands include Ayon, Atlas, BAT, Bel Canto, Boulder, Clearaudio, Consonance, Dali, Electrocompaniet, Focal inc Utopia, Kef, Leema, Lyra, Marantz, MF, Michell, Moon, Music First, Oracle, Project, Pure Sound, Roksan, SA, Triangle, Yamaha and much more. Up to 3 years Interest Free Credit. Demos by Appointment. Home Demos welcome.

To advertise in this
space please call

020 7372 6018

or email:

advertising@hi-fiworld.co.uk

MIDLAND AUDIO XCHANGE

The Old Chapel
Forge Lane
Belbroughton
Worcestershire
DY9 9TD

t. 01562 731100
f. 01562 730228

e-mail. sales@midlandaudiox-change.co.uk
web . www.midlandaudiox-change.co.uk



Ex-demo and second hand items

	Was	Now
Digital		
47 labs Dumpty S/H	1425	799
47 labs Gemini Progression dual mono DAC x-demo	3884	2499
Copland CDA823 X-demo	2300	1750
Krell Evolution 505 cd/sacd xdemo	8598	6875
Krell Showcase DVD x-demo	3698	1999
living Control Room Box4 BNIB	1712	1199
living Control Music Box 3 BNIB	2887	1995
Naim Audio CD555/PS555 Reference CD player S/H	14000	9500
Orpheus Zero CD Player S/H	4600	1599
Orelle CD100EVO S/H	1500	599
Roksan Kandy CD MK1 S/H	N/A	199
Theta Pro Basic II DAC with Oscom/Balanced S/H	2990	499

Analogue

Koetsu MCR-1 Transformer S/H	3333	1399
Kuzma Stabi XL4/313 x-demo	17945	2999
Kuzma Stabi S/ Stogi S double arm version Xdemo	2795	1950
Mark Levinson No320s Phono Module x-demo	995	649
Lehmann Black Cube Twin BNIB	900	599
Lehmann Black Cube Linear BNIB	1300	950
Roksan Xerxes DX2/XPS/DSU Standard Power Supply	800	640
Voyd Valdi with Origin Live motors and PSU S/H	N/A	549

Preamplifiers

Audio Research SP17 stereo preamplifier x-demo	2749	2199
Karan Acoustics KAL preamplifier S/H	3720	2250
Naim Audio NAC552/PS552 preamplifier S/H	11750	7999

Amplifiers

Audio research VT 60 S/H	N/A	799
Anatek A50R Remote class A integrated x-demo	1850	999
Gryphon DM100 Dual mono power amplifier S/H	15000	3999
Krell Evo 402 400w stereo power amplifier Black x-demo	12900	8999
Krell Evo 302 300w stereo power amplifier Black x-demo	8950	7160
Naim Audio NAP500 Poweramplifier S/H	11000	5750
Naim Audio NAP500 Poweramplifier S/H	11000	5750
Naim Audio NAP500 Poweramplifier S/H	11000	5750

Loudspeakers

Avalon Opus Cherry S/H	16000	6299
Konus Essence Floor stander zebrano x-demo	2800	1350
Martin Logan Vista Dark cherry x-demo	3490	2750
Martin Logan Fresco pair inc stands S/H	1500	699

Martin Logan Vantage dark cherry x-demo	5149	3999
Rega R1 Cherry x-demo	298	198
Sonus faber Cremona Elipsa Maple x-demo	12980	7999
Wilson Audio System 8 obsidian black S/H	23998	2999
Wilson Audio System 8 Obsidian Black X-demo	23998	5999

Cables and Accessories

Attacama Equinox 3 tier stand x-demo	375	199
Attacama Europa Reference 8 3 tier S/H	550	299
Cardas Cables Golden Cross 3m speaker cables	1999	999
Cardas Cables Golden Cross 6m set of RCA interconnects	2830	1415
Densen De-magic BNIB	10	5
Electrocompaniet ECS1 M6 feet x4 BNIB	189	49
Eichmann Express 4 interconnects BNIB	80	49
Madrigal MDC1 1mAES/EBU 110 ohm Digital Cable S/H	420	199
Siltech HF9 AES/EBU 1m Digital S/H	420	199
Spectral MI-350 20ft interconnect S/H	2100	899
Spectral MH-750 2x 2.5m Speaker cables S/H	1050	399
Target R4 stands 60cm S/H	379	175
Transparent Reference SC 2x10ft x-demo	6192	3399
Transparent Balanced Reference 2x30ft x-demo	6345	3499

Tuners & Tape decks, power supplies

Magnum Dynalab FTR remote/Tuner for Etude S/H	395	199
Nakamichi LX5 3 head cassette deck S/H	N/A	150

We have a large record collection mainly Jazz and Classical from £3.00 up to £20 for some boxed sets. Please call for more details.

Midland Audio X-change are looking for All high end audio separates best prices paid for good examples.

- Suppliers and installers of High Quality Audio Systems
- 47 Laboratory
- ATC
- Audio Research
- Cardas
- Clearaudio
- Conrad Johnson
- Copland
- Crystal Cables
- Dartzeel
- dCS
- Densen
- DNM/Reson
- Electrocompaniet
- Finite Elemente
- Jadis
- Koetsu
- Krell
- Kuzma
- Lavardin
- Living Voice
- Lyra
- Magnum Dynlab
- Mark Levinson
- Martin Logan
- Mimetism
- Nordost
- Primaluna
- Primare
- ProAc
- Rega
- Siltech
- Sonus Faber
- Sugden
- Transparent Audio
- VPI
- Wadia
- Wegg 3
- Wilson Audio

Midland Audio X-change are looking for Audio Research, Krell, Mark Levinson, Naim Audio, SME, Wadia.

FREE READER CLASSIFIEDS

TERMS AND CONDITIONS: Only one advert per reader. No Trade adverts. This section is strictly for readers selling secondhand hi-fi equipment only. Maximum length per advert is 30 words. Adverts over 30 words will not be accepted. Telephone numbers and E-mail addresses are treated as one word. Model numbers are treated as one word i.e. Quad 303 = two words. Email your advert to; classifieds@hi-fiworld.co.uk or fill in the form on page 129 and post it to Hi-Fi World Free Readers Ads, Suite G4, Argo House, Kilburn Park Road, London NW6 5LF. Sorry, we cannot accept adverts over the telephone. The Publisher reserves the right to judge submissions.

MICHELL TRANSCRIPTOR
Hydraulic Reference Turntable with SME 3009/2 arm, SHURE V15/3 cartridge. Excellent condition. £795 ovno. Tel: 01372 452160. Buyer collects.

WANTED: MISSION 767 loudspeakers. Condition relatively unimportant (within reason!) but must be in good working order and preferably complete with original LFAU amplifier. Email: audiolaurel@yahoo.com Telephone: 07906 336176

STAX SR-A Pro electrostatic ear speakers and dedicated SRD-X energiser. Stunning sound and comfort with new unworn ear cushions from this world famous manufacturer. £375. Call Robert on 07968 597 935 (Midlands)

PIONEER A300R Precision £250 ono. Marantz CD63SE and CD63II, one slightly faulty, both £80. Rega Kytes £150. Rogers Cadet III, modernised £250. Wanted: Icon Audio headphone amplifier. Tel: 07810 103908

SONY STRDB795 7.1 100wpc receiver, multi channel, Dolby Digital, DTC, home cinema. £120. Yamaha RXV596RDS 5.1 100wpc home cinema multichannel receiver, Dolby Digital, DTS. £99. Both excellent condition. Tel: 01277 227 037 (Brentwood, Essex)

FUBAR USB DAC, mint, £80, cost £125 new. Great little DAC for use with PC. See Sept 09 issue Hi-Fi World for review. Tel: Mike 01424 753 641 or Email: matthews.mike@btinternet.com (East Sussex)

HI-FI YEAR Books 1964 to 1971. £10 each plus postage. Tel: 07710 828 286 (Brighton)

FOCAL CHORUS 714v floorstanding speakers. 18 months old. Perfect condition. Amati colouring with boxes. £385 (£600) new. Call Darren 077725 44904 (Somerset)

FOUR EL34EH new, unused, boxed, £70. About 70 vinyls vgc plus belt drive turntable £50. Technics Direct Drive turntable £99. Musical Fidelity pre-amp, superb MM/MC, XLR etc, £100. Tel: 07951 553 091 (N.W. London)

NAIM CDX late olive £950. **NAC82** late olive £950. Hi-Cap power supply, late olive £500. **NAP250** late olive £950. **Shahinian Obelisk** speakers (cherry) stunning open detailed sound £1250. Tel: 07905 217 440

VELODYNE MICROVEE Subwoofer, as new, mint, boxed, (£575) £375. Kef Q35 black ash, good condition, lovely sound £100. Kef Q15 black ash, bit damaged, £60. Tel: Paul 07952 439 684 (West Sussex)

MARK LEVINSON 38.S pre-amp new (£6500) now £1400 ono. Mint condition. XLO Signature speakers cable 1.8 metre, new (£1800) now £500 ono. Very good condition. Tel: Tony 07868 714 812

LEAK STEREO 70 amplifier and Stereofetic tuner. Ruark Broadsword Mk2 speakers. All in working order. Can demonstrate. £135. Tel: 01825 722936 (Sussex)

MARTIN LOGAN Aeries electrostatic loudspeakers with brand new panels from 'Absolute Sounds'. Superb imaging, excellent condition, £895. Kef 104-2 (rosewood) floorstanders (£1800) £325. Musical Fidelity A5cr pre-amp (£1495) £550. Tel: 07872 955698 or Email pavz_01@msn.com

FOR SALE: Two black Target Hi-Fi stands, Model TT4, £20 each. Tel: 01743 793 323 daytime (Shropshire)

MICHELL ISO HR phono stage and Hera supply, unmarked, £150. Denon AU320 moving coil transformer, 3 ohm and 40 ohm settings. Van Den Hul cable WBT plugs, mint £100. Lentek battery step-up, very good condition, WBT plugs £50. Tel: 0116 288 2338

EASTERN ELECTRIC Minimax valve phono stage, approx 100 hours use. Genuine reason for sale. £790. Tel: 07784 701 629

NAIM AUDIO XPS power supply, olive green, big upgrade for CDS CD player. Naim 102 preamp with remote. (Croft) Epoch special valve pre amplifier. (Lector) Zoe valve pre amplifier. Two Russ Andrews Power Cords. Russ Andrews Silver Streak interconnect attenuated 0.5m great for Naim pre too CD. Please phone for sensible prices. Cabasse 100watt mono power amps, very cheap. Tel: 020 8524 2181

WANTED: ARMSTRONG 621 integrated amp 1970's most likely not working. Pay £30 plus carriage. Tel: 01938 553 559 (Welshpool)

AUDIO INSTITUTE VR70E integrated 40wpc EL34s mint £200. Zeta tonearm VDH wiring vgc £250. Avondale power supply Philips Airpaz motors £50. Tel: 01233 661 556

QUAD ESL57 speakers, granite stands. Full One Thing overhaul 2005. £1400. Graaf GM20-OTL power amp £1450. Graaf WFB2 pre-amp £550. Audio Analogue Paganini CD £295. All excellent, boxed, except speakers. Tel: 01706 365 838

THORENS TD124II, SME 3009/2 Imp, Shure V15 V-MR, oak plinth, £875. Denon DP3000 oak plinth, £375. Sony MDS JA20ES MiniDisk, £350. Rega RB300, £125. SME M10 arm, £550. Please telephone: 01474 326 220

REGA APOLLO CD player, Rega Brio 3 amplifier, Denon TU1800DAB tuner, Kef iQ1 speakers, £600. North London. Phone after 7pm. Tel: 07930 878 582

SALE: GOLDRING Lenco GL75 turntable, 4 speed. Trio model KA 2500 solid state stereo amplifier. Two loudspeakers teak cabinets with Kef baffles. JVC stereo video cassette recorder HRD 455EK. Tel: 020 8892 7077

LEAK STEREO 20 modified by Classique Sounds. Good condition, £525. Also World Designs power amp KT88 hand built, good condition, £375. Tel: 01384 79402 or 0121 569 3947

GARRARD 301 (oil bearing, strobe turntable) £550, SME 3009 (improved) £175, Quad 405 & 33 £170. Telephone 01189 413708.



Jordan Acoustics

freephone:

0800 121 4771 / 4772

e-mail:

ask@jordanacoustics.co.uk

web:

www.jordanacoustics.co.uk

A selection of Used Equipment

Credit available on most s/h & ex/d items*



Brand	Product	MSRP	Price
DK Design	VS 1 Signature Mk III Int Amplifier	£5,000	£2,195
Bel Canto	Ref 1000 Monos (Pair) Amplifier	£3,598	£2,295
Mastersound	Reference 845 Integrated Amplifier	£9,000	£4,995
Martin Logan	Ascent Electrostatics	£4,495	£2,195
Bel Canto	S300iu Integrated Amplifier	£1,999	£1,495
Audio Zone	Amp 2 Monos (Pair) Amplifier	£1,895	£1,095
Resolution Audio	Dpus 21 CD Player	£3,495	£1,895
Linn	Artikulat 320 Speakers	£9,250	£4,995
Nordost	Tyr 3M Pair Speaker Cable	£5,039	£2,995
Bel Canto	B44 Phantom Tonearm	£3,000	£1,495
Clearaudio	Champion Magnum w/wh Unify	£4,000	£2,795
Audio Research	100 2 Power Amplifier	£3,600	£1,495
Naim	CDX2 CD Player	£3,250	£1,795
Focal JM Lab	Electra 1027 Be Speakers	£4,400	£2,795
McIntosh	MX136 Processor	£9,995	£4,295
Wadia	302 CD Player	£4,000	£1,895
Accoustic Arts	Drive II CD Transport	£6,750	£4,495
Atlas Cables	Elektra 1M XLR Cable	£600	£295
Audioquest	Python 1M XLR Cable	£360	£130
Bryston	SP 17 Pre/Processor	£5,300	£1,695
LSA	Standard Integrated Amplifier	£2,500	£1,795
McIntosh	501 Monos (Pair) Amplifier	£11,990	£8,995
Bel Canto	S500 Dual Mono Amplifier	£2,699	£2,095
Bel Canto	Dac 3	£2,199	£1,595

Brand	Product	MSRP	Price
Bel Canto	CD2 CD Player	£2,699	£1,995
Martin Logan	Cinema Centre	£1,800	£749
Musical Fidelity	KW Phonostage	£2,995	£1,295
Musical Fidelity	DM25 Transport/Dac	£4,000	£2,495
Audio Zone	Pre-T1 Pre-amplifier	£1,695	£995
McIntosh	MCD201 CD Player	£3,500	£1,850
Bel Canto	Evo 2 Gen II Integrated Amplifier	£2,500	£1,249
Krell	Standard MkIII SACD Player	£6,600	£4,995
Adam Audio	HM2 Speakers	£1,400	£895
Theta	Dreadnought Amplifier	£7,500	£2,995
Denon	DVD-A11 DVD Player	£1,800	£495
McIntosh	MT-10 Turntable	£10,395	£6,495
McIntosh	M575D Music Server	£6,895	£4,395
Adam Audio	Compact Active Speakers	£3,500	£2,395
McIntosh	C46 Pre-amplifier	£5,595	£4,295
Adam Audio	Pencil Passive Speakers	£4,000	£2,695
Atlantis Acoustique	Esterel III Speakers	£3,500	£1,495
Coincident Technology	Total Victory II Speakers	£11,000	£4,595
Soundlab	M3 Electrostatic Speakers	£8,995	£2,795

*visit www.jordanacoustics.co.uk for full listing.

*subject to terms & conditions. written details on request.



Anatek Research

MCR Phonostage
A NEW Reference
is Born



Anatek-Research

Sussex
England
Tel : 01273 261 229

www.anatek-research.co.uk

JUNE 2009 ISSUE

HI-FI WORLD



Upgrading your Hi-Fi? Request our FREE DIY guide

Our FREE Hi-Fi DIY guide is packed with products, tips and step-by-step guides to upgrading your Hi-Fi.



FREE DIY GUIDE



**WATTGATE™
CONNECTORS**

WBT PLUGS & SOCKETS



KIMBER KABLE INTERNAL WIRE



DEOXIT™

KIMBER KAPS



... AND MUCH MORE

NEW CATALOGUE OUT NOW! • PACKED WITH OVER 300 PRODUCTS •

Order online at www.russandrews.com/diy

Call us on **0845 345 1550**

and request your FREE DIY guide and we'll include our NEW full product catalogue

NEW!



KIMBER KABLE
Exclusive UK distributor

Russ Andrews®
Solutions for better music & movies

• Mail Order Direct • 60 Day Home Trial • Cable Upgrade Scheme • FREE Delivery (on orders over £100 within UK Mainland)

ROKSAN CASPIAN M -Series-
1 CD player, current retail price £1450. Very little use, in excellent condition. £499 and two pairs of 1 metre Chord Chameleon Silver Plus interconnects £45 per pair. Tel: 07729 600 847

CAMBRIDGE DAC Magic
£80 ono. Chord Signature digital coax cable RCA £80 ono. Project cartridge alignment tool £40 ono. Cambridge optical cable £15. 01382 644 815

1 METRE Madrigal CZ Gel balanced interconnect cable £120. Crystal Connect Piccolo one set 0.5 metre RCA £65. Two Kef 2.5 surround speakers £95. Tel: 01772 315 723

FOR SALE: One pair Kef T27 tweeters. One pair SP1003 mid-bass units. Sensible offers. Inspection. Collection preferred. View Oxford. Tel: 07807 149 857

REGA PLANAR 3. Black Bias cartridge. 10 hours use since new. £150. Tel: 01263 515 511 (Cromer, Norfolk)

MAPLINS 50/70W HiFi amplifier modules. Ex-equipment, Full working order £35 each. Tel: 07779 199 392

PARTS TO build John Linsley Hood Class A amplifier. Includes torridial transformer, PSU caps, driver and output transistors. circuit diagram and PCB layout. £40 Tel: 07779 199 392.

HITACHI AUDIO MOSFETs. Ex-equipment, 2SK135 and 2SJ50 £7 each. Hart stereo tape head £10. Tandy L-pads attenuators £10. Tel 07779 199 392.

KEF XQ1 in silver. Matching stands. Excellent condition, as new. Genuine reason for sale. £500 ono. Telephone 07766 078281 (London).

SORBOTHANE HEMISPHERICAL feet, blue, 50mm diameter. Each set of 4 cost £60 new. £30 per set. (4 sets) 07879 460935

WANTED RATARP70 phono cartridge Te: 01606784767 Cheshire

MARANTZ CD5003 CD Player What Hi-Fi Best Buy black has pitch control and CD text still in warranty upgrading as new (£200) £130 no offers 01268 415 017 Basildon

NAIM HI-CAP (1998), Naim Flat-Cap (1998), Marantz PM66SE Amp., Tannoy 631SE Speakers, Richer Sounds Magnetically Shielded Speaker. All very good condition & boxed. Sensible offers considered. Tel. 07785 724 849 (Thames Valley)

AUDIO-TECHNICA MG-10 Magnesium Headshell as new. In original box. Unused. Bargain £40.00. Contact: 01922 644775.

COPLAND CSA14 Valve/Solid State Integrated Amplifier. Harma vintage valves fitted. Excellent, unmarked condition. Supplied in original box. £500. Email paul@redboxav.com Telephone 07949 910455 (Brentwood, Essex)

PS AUDIO POWER Plant Premier; Mains regenerator. Award winning patented product, converts poor AC to Pure AC with huge gains in performance to audio & video equipment. Read reviews. Long warranty Cost new £2000, Sell £1250 ovno. Forced sale. Bargain! Tel 07859388167

PARTINGTON SUPER Dreadnaught loudspeaker stands in black. Mint condition, boxed. £150.00 plus shipping. Tel. 07748-320549 (Suffolk)

FOR SALE. Linn Sondek LP12 with Akito arm and Ortofon MC15 Super 11 mc cartridge. Black with clear lid. Very good condition. £350.00 plus shipping. Can demo. Tel. 07748-320549 (Suffolk.)

1 PAIR OF Goodmans Axiom 201 loudspeakers. Were my fathers never been mounted and perfect except for 1 small mark on 1 cone. £100 ono. Tel, 01249 821407. E-mail douglas.curl@btopenworld.com.

NAIM DVD5 cd/dvd player 2005 hardly used £899 ono. 112x pre-amplifier £299 ono. 150x power-amplifier 2008 £549 ono. or £779 the pair. Chord Signature 2 interconnects 1m. RCA termination £325 ono. 01984 640588 am. or weekends.

ATC SCM50 ASL Active towers in walnut, only 2 months old, very reluctant sale due to loss of job. Amazing speakers, mint 'as new' condition, boxes etc. Cost £9500, Sell £6200. 07876 705266

MORDUNT SHORT Performance 860, floorstanding speakers-in piano black. These received excellent reviews, (can email reviews and photos). Cost new £1,900. Now £550. Tel: 01424 446282. Hastings Sussex

MICHELL TECHNOARM For Sale Excellent Condition-16 months Old Boxed Like New - Only £250 (£450 New) North Nottinghamshire 077 1111 5252

MYRYAD MXI 2150 amp silver serviced oct 2008 excellent condition 150 wpc included in price pure silver jumper leads fully boxed £725 ono tel 01652618420 (north lincolnshire)

SONY D-50 CD PLAYER, 1984, Sonys second player, compact unit, portable, sadly dont have battery pack but comes with AC power dock. Solid construction. Ex working order. Piece of rare hifi history. Offers 07876 705266

MUSICAL FIDELITY A308 choke regulated power amp, dual mono, 250 wpc 8 ohms. Massive spec, battleship build. Mint boxed as new, cost £2400, sell for £1100 07876 705266

MUSICAL FIDELITY TRI-VISTA 21 DAC, limited edition only 1300 made for worldwide sale. Mint boxed as new condition, very low use. £500 No offers. 07876 705266

TECHNICS SL1210 turntable with Audio Technica AT110E cartridge £150, NAD PPI phono stage £20, e-mail bpb1972@btinternet.com for photos, call 01737 765530 eves/weekends

Q.E.D X-TUBE 400 speaker cable 1@ 6 feet and 1@ 11 feet. £50.00 inc delivery. email: ikelsall@gmail.com Tel: 01782 256087

LEAK DELTA 30 FM tuner boxed in good nic £70.00+p&p hitachi ft5500am/fm tuner £70.00+p&p 01606784767 cheshire

WILKINSON Mk.II loudspeakers, KEF B200A, Audax HD13D34H, 24 element 4th order crossovers, black, 19"x13.5"x13.5", £99.50. Focal tweeters TC90Tdx, 30mm tioxid dome and phase cone, £31.50. Tel 01749 676174

AUDIOLAB 8000c pre and 8000p power. Good fully working condition £400. Nakamichi DV10s DVD player, boxed, remote, £120. West Yorks. Phone 07809 554827

MUSICAL FIDELITY X-P100 preamp complete with remote and original box, perfect working order. £350. 01202575503 jlc2me@aol.com

NAD 3020 good condition £60. NAD 3020i bit scruffy £30. NAD 370 no remote hence £130. Marantz PM66SE (not KI) £80. T-Amp with oversize power supply Dave 07899934110 davidarn6@aol.com

NAIM NAPI180 power amp (olive), pristine condition with original box, leads and manual. £425. Telephone: 07921 240028; email: andrew.pritchard@caparo.com. (West Midlands).

PRIMARE D30.2 High-end CD player (black) balanced/phono/coaxial outputs, c/w remote, boxed - heavyweight machine, excellent condition, fabulous reviews. (cost £1200 new) £495 ono. Call 01483-271669 or 07759205820. (Surrey)

PAIR DUEVEL Planets Speakers 6 months old, as new, fantastic open sound. Mint condition. Cost £800, accept £450. Tel: 02380 224003

QUAD ESL 988 Excellent Condition, Recent Service by Quad (£3,400) £1,450 Tel 02380 224003

FOR SALE Musical Fidelity Xa50 power amps boxed complete with power chords £250 call richard 01706841861 manchester.

2 MUSICAL FIDELITY A5 power amps £800 each and one A5 pre-amp £750, all in mint condition with boxes and manuals. Tel 0208 650 8185 or 077 0285 0275 or e-mail: vj.barnes@btinternet.com

AUDIOLAB 8000S silver integrated amplifier. Boxed unused due to house move £295. Sound Organisation metal 5 shelf gloss black CD rack £50. Telephone 07946 614754 (Preston)

LEAK 2075 transmission-line speakers mk1 rare 4 way design 60kg each VGC huge sound very detailed £545ono tel 07794953930 Brighton

WDKEL84 Valve Amplifier Kit

"The quality that can be gleaned from this amp is a fine introduction to the joys of the valve sound"

The WDKEL84 features a pair of EL84 valves in Push Pull configuration per channel, providing two channels each 18 Watts into an 8 Ohm load. Available as a 5 input integrated amplifier with ALPS volume control.

WDKEL84 kit £499

WDKEL84 built and tested £649



WD88VA Valve Amplifier Kit

"The result is an amplifier that combines majesty, transparency and rhythmic boogie factor with the ability to swing and sing on all types of music"

Often described as a 'sweet sounding' valve, our particular implementation of the KT88 makes sure that it is driven to its ultimate performance. Available as a 35W stereo power amplifier with single input volume control, or as a relay switched integrated with five inputs.

WD88VA kit £989

WD88VA built and tested £1289



WDHD3S Headphone Valve Amplifier Kit

"WDHD3S is a single-ended design with the power pentode wired up in triode configuration for added purity and is as quiet as a mouse"

A beautifully simple stereo headphone amplifier design using Mullard ECL83 valves. It works directly from any source. The circuit uses twin high specification E/I output transformers that can be switched to drive any headphones between 16 to 300 Ohms.

WDHD3S kit £398

WDHD3S built and tested £528



WD25A Standmount Speaker Kit

"The one aspect that stands out is the easy ability to resolve instruments and voices ... bass quality and definition is a revelation"

Cabinet kit (pair) £349

The aperiodic enclosure offers the bass clarity and definition of a larger closed box, together with the efficiency and easy amplifier load necessary for users of valve amplifiers. Available with SEAS STD soft dome treble unit, or high performance SEAS Millennium treble unit.

WD25A STD kit (pair) £269

WD25A EX kit (pair) £699



WD25T Floorstanding Speaker Kit

"The WD25T always sounds crisp and taut, but can 'rumble' menacingly giving impressive physicality reminiscent of far larger boxes. Imaging is superb, the midband is also special; it's very open with masses of detail about the condition of the recording"

Cabinet kit (pair) £549

Cunningly arranged as an aperiodic enclosure leading to a lower sealed compartment, the WD25T combines the optimum damping of aperiodic loading with the bass extension of a large closed box. Available with STD soft dome or high performance Excel treble units.

Both the WD25 kits are based around a SEAS 26cm (10") paper cone bass unit with an efficiency of 89dB for 1W. The crossover has been developed for an easy drive 6 - 8 Ohm load making the system ideal for all types of amplifiers.

WD25Tv2 STD kit (pair) £329

WD25Tv2 XL kit (pair) £499



All our kits are complete with pictorial easy-to-follow instructions.
All parts are included - all you need is a screwdriver and soldering iron.

www.world-designs.co.uk
Tel: 01832 293320

SOUND ORGANISATION AV stand, 36"Wx25"Hx16"D, silver metal/casters with 3 opaque glass shelves £55. Wanted: Mullard 5-20, bona fide kit using recommended transformers/choke/HT caps/chassis. 01323 500174 (Eastbourne)

MARANTZ PM4001 amp, Marantz CD5400 CD player, Wharfedale Diamond 9.1 speakers, speaker stands, QED bi-wire cables, Chord Cobra interconnect, all excellent condition, whole system £220. Buyer collects. Tel: 01268 774416 (Essex).

LEAK 2075 speakers immaculate teak £595 JBE Slate Mk3 directdrive turntable £395. EAR 834P mm/mc valve phonostage, as new, manual £395. B&W DMI800 speakers £150. 01798 813133 or reconcile@bdlrs.freerserve.co.uk

SANSUI G9000 rare classic receiver. Fabulous tuner, 160wpc amp, pre-power separator, just serviced, vgc. Original packaging, owners and service manuals. Offers? 01798 813133 or reconcile@bdlrs.freerserve.co.uk

NAIM HIGHCAP 2 (instructions missing) Serial 252876 built november 2007. Mint condition, original box, snaic and mains leads. Demo and pickup welcome £700 North Dorset. Postage add £25. Paul 01963363341.

FOR SALE. Audiostatic dcl wing loudspeakers, virtually as new finished in gloss black. Not room fussy, need a good amp (min 50w). £1500.o.n.o. Please contact on 01895 631299 for details (Ruislip)

DENON D-F012 DAB mini system (silver) inc SC-F102 speakers. Still in box, never used bargain at £295 ono (07966) 564063 or (0113) 2562046.

WANTED FAULTY or non working Quad 34 or 44 pre-amps, 405-2 boards, Quad fm2 tuners. Also required Leak sandwich speakers (not later Rank models). Contact Mike 01758 613790.

FOR SALE: Volt DVC 220 high quality dual coil subwoofer drive unit with Wilmslow Audio crossover. Offers around £50, buyer collects (Leeds). Tel. 0113 262 3865.

COMPLETE SYSTEM, Marantz AV receiver, CD player, MF Dac Kef/WAD Hybrid speakers, W/D centre speaker, all cables etc. some boxes, £450:00. Buyer to collect, phone for details 02392359808

AMPLIFIER PCBs and parts, ideal for DIY'ers. comprises of Lindsley Hood designs for mosfet power amp and also JLH Class A amp with Power supply. All good offers considered. Telephone 07779199392.

KEF XQ1 in silver. Matching stands. Excellent condition, as new. Genuine reason for sale. £500ono. Telephone 07766 078281 (London).

APOLLO WTI Turntable shelf. Isolate your turntable from vibration and feedback. Solid welded steel frame with particleboard platter, isolated on 4 adjustable spikes. Colour black. £25 01275 340 574 Bristol area.

LEAK TL12 point one plus mono Amplifier, in graphite, Mint condition, totally unmodified, all original caps, Mullard valves, Amp Working like new! Must be unique! One only £ 350 E-mail mikeh7@tiscali.co.uk or phone 01548 560913"

CASTLE PEMBROKE floorstanding loudspeakers in real wood maple veneer - excellent condition £100 ono Tel. 07758 218126 e-mail gmman@tiscali.co.uk

MONITOR AUDIO RSW-12 subwoofer. Rosewood/mahogany finish. 500 Watt class d amplifier. 12 Inch drive unit. £400 01706 600155 07900016032 Mobile. mick.golden@yahoo.com

CHAPTER AUDIO Preface plus preamp £2750 ono (£4500). Sugden Masterclass SPA4 stereo power amp £2450 ono (£3675). Revolver Cygnis speakers, £4350 ONO (£6000). Buyer collects. (Broadstairs) Tel: 01843 600722 evenings.

QUAD ESL 2905's One month old. The latest incarnation of this awesome speaker. 2 year parts and labour warranty from Quad. £4800 obo (£7K New) 07980 211447 troy@runbox.com

LINN KABER Aktive speakers black £500. 3 LK100s £200 each, (used with WDA valve pre sounds great) All excellent condition. Aktive cards included if bought together. Tel 01647 61421. pat.tranter@yahoo.co.uk

MOTH WALLNUT 11, twin shelf, wall mounted turntable support, constructed from tubular metal with medite shelves on spikes. £50. tel. 01254 705589

ORIGIN LIVE Resolution classic turntable with origin live silver mk2 tonearm Mint condition Cost £2900 Sell £1700 Contact alan395shona@btinternet.com

WANTED: MISSION 767 loudspeakers. Condition relatively unimportant (within reason!) but must be in good working order and preferably complete with original LFAU amplifier. Email: audiolaurel@yahoo.com Telephone: 07906 336176

FOUR EL34EH new, unused, boxed, £70. About 70 vinyls vgc plus belt drive turntable £50. Technics Direct Drive turntable £99. Musical Fidelity pre-amp, superb MM/MC, XLR etc, £100. Tel: 07951 553 091 (N.W. London)

CLASSIC CONTACTS

When a classic goes 'poof' your troubles have just started, but there may be a good ending. Replacing failing parts can improve the sound, so here is a short listing of all those companies who specialise in getting a classic up and running again after its deposited a small ring of soot on your ceiling!

GT AUDIO
(Graham Tricker, Bucks)
Leak Troughline specialists. Also Quad and most classic tuners, radios and amplifiers restored, repaired.
Tel: 01895 833099
Mob: 07960 962579
www.gtaudio.com

TECHNICAL AND GENERAL
(East Sussex)
Turntable parts - wide range of spares and accessories, plus arms and cartridges.
Tel: 01892 654534

CARTRIDGE MAN
(Len Gregory, London)
Specialist cartridge re-tipping service and repairs. High quality special cartridges.
Tel: 020 8688 6565
Email: thecartridgeman@talktalk.net
www.thecartridgeman.com

AUDIOLAB
(Phil Pimblott, Leeds)
Renovation, repair and restoration. Specialist in valve hi-fi, radio transmitters, cinema amps, kit building.
Tel: 0113 244 0378
www.audiolabs.co.uk

QUAD ELECTROACOUSTICS
(Cams)
Quad's service department, able to repair almost all Quad products, from the very first.
Tel: 0845 4580011
www.quad-hifi.co.uk

ARKLESS ELECTRONICS
(Northumberland)
Specialist in repairs, restoration and modifications to all amplifiers, valve or solid state, ancient and modern.
Tel: 01670 829891
Email: arklesselectronics@btinternet.com

SOWTER TRANSFORMERS
(Brian Sowter, Ipswich)
Large range of audio transformers for valve amps, cartridges, line drive, interstage plus all associated services.
Tel: 01473 252794
www.sowter.co.uk

WEMBLEY LOUSPEAKER
(Paul MacCallam, London)
Comprehensive loudspeaker servicing.
Tel: 020 8 743 4567
Email: paul@wembleyloudspeaker.co.uk
www.wembleyloudspeaker.com

EXPERT STYLUS COMPANY
(Wyndham Hodgson, Surrey)
Stylus replacement service for all types of cartridge. Including precise profiling for 78s
Tel: 01372 276604
Email: w.hodgson@btctick.com

ONE THING
(Coventry) Specialist in electrostatic panel manufacture and repair. Can refurbish ESL 57s and 63s as well as Leak Troughlines and Quad lls.
Email: one.thing@ntworld.com
www.oneathingaudio.com

CLASSIC NAKAMICHI
(Paul Wilkins, Worthing, West Sussex). Restore, Repair & Service Nakamichi Cassette Decks.
Tel: 01903 695695
Email: paul@bowersandwilkins.co.uk
www.bowersandwilkins.co.uk

HADEN BOARDMAN
Repair, service & modifications; classic & modern. Collection available. Redundant / faulty equipment purchased, selected new equipment available.
Tel 01942 790600
www.audioclassics.co.uk

Dr MARTIN BASTIN
(Shropshire) Garrard 301/401 restoration, renovation and service. Special plinths; rumble cures, etc.
Tel: 01584 823446

D.K. LOUSPEAKER SERVICE
(Dave Smith, Hornchurch, Essex)
Re-coneing of hi-fi loudspeakers, high quality loudspeaker systems, P.A., power loudspeakers.
Tel/Fax: 01708 447 344

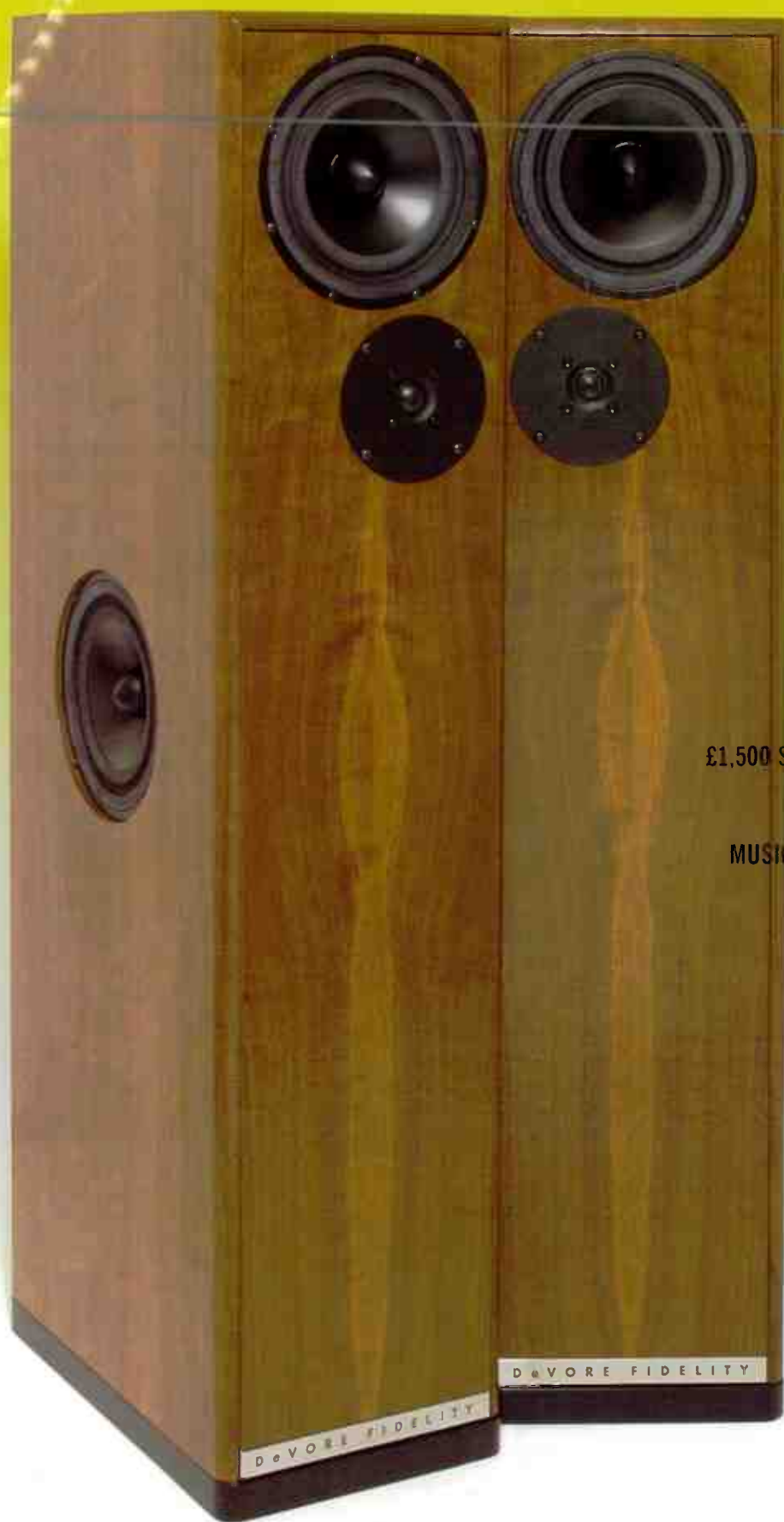
LOCKWOOD AUDIO
(London)
Tannoy loudspeaker parts, restoration and repair. Also Epos and TDL loudspeakers.
Tel: 020 8 864 8008
www.lockwoodaudio.co.uk

LORICRAFT AUDIO
(Terry O'Sullivan, Bucks)
Garrard 301/401 and their own 501 repair, spares and service.: Tel: 01488 72267
www.garrard501.com

REVOX
(Brian Reeves, Cheshire)
Revox tape recorder spares, service and repair. Accessories also available.
Tel: 0161 499 2349
Email: brian@revoxservice.co.uk
www.revox.freeuk.com

CLASSIQUE SOUNDS
(Paul Greenfield, Leicester)
ESL-57s restored, rebuilt, fully renovated or improved. Leak, Quad valves amps etc.
Tel: 0845 123 5137/
Mob: 0116 2835821
Email: classique_sounds@yahoo.co.uk
www.flashbacksales.co.uk/classique

OCTAVE AUDIO WOODWORKING
(Bristol)
Unit 2, 16 Midland Street, St Phillips, Bristol.
Tel: 0117 925 6015
www.octave-aw.co.uk



NEXT MONTH

As the leaves blow around your ankles, the light fades and the clocks go back, there's nothing better than snuggling up with your copy of December's Hi-Fi World magazine! It's packed with our customary mix of weird and wonderful kit, leading with the superb Digital Do-Main B-1A V-FET power amplifiers, which are already warming the cockles of Noel's heart! We've also got Spendor's brand new high end ST loudspeaker, the intriguing Devore Gibbon 9 speaker [pictured], and Marantz's treasurable KI Pearl system to name but a few more. Here's just some of the superb kit that we hope to bring you next month...

£1,500 SPEAKER SUPERTEST: AUDIOSMILE KENSAI, MOWGAN AUDIO ARTIO, AUROUSAL VS, ZU DRUID CREDENZA

MUSICAL LAB PAEONIA/MAEDUP PRE-POWER AMPLIFIERS
HARMAN KARDON HK-990 INTEGRATED AMPLIFIER
DIGITAL DO MAIN B-1A V-FET POWER AMPLIFIERS
DEVILSOUND DIGITAL TO ANALOGUE CONVERTOR
MONITOR AUDIO AIRSTREAM DAB RADIO
XTC POWERCON MAINS CONDITIONER
DENON DCD-710A/PMA-710A SYSTEM
ORIGIN LIVE CONQUEROR TONEARM
DEVORE GIBBON 9 LOUDSPEAKER
GENEVA MODEL L IPOD SYSTEM
ARCUS DAR-300 MUSIC SERVER
WHITTLEBURY SHOW REPORT
BEATLES CD REISSUE FEATURE
LEEMA AGENA PHONO STAGE
SPENDOR ST LOUDSPEAKERS
LYRA TITAN MC CARTRIDGE
MARANTZ KI PEARL SYSTEM
B&W CM9 LOUDSPEAKERS
SEEDCLICK SOFTWARE

PICK UP THE DECEMBER 2009 ISSUE OF HI-FI WORLD ON SALE OCTOBER 30TH, OR SUBSCRIBE AND GET IT DELIVERED TO YOUR DOOR: p82

ADVERTISERS INDEX

2nd Hand Hi-Fi	102
3GA	118
ABC Audio	60
Absolute Sounds	IFC
Acoustic Energy	68
Alto Products	94
Analogue Seduction	118
Anatek Research	124
Angel Sound	92
Atacama	64
Audio Emotions	42
Audio T	34
Billy Vee	108
Classique Sounds	109
Cymbiosis	106
Electrocompaniet	OBC
Emille Labs	24
Enjoy the music.com	64
Heathcote Audio	108
Heatherdale Audio	102
Henley Designs	86,87
High End Cable	109
Ian Harrison	109
Icon Audio	114
Inspire	22
ISO Kinetik	96
Jordan Acoustics	70,124
JR Engineering	118
Kudos	119
Leema Acoustics	40
Mantra Audio	106
Michell Engineering	90
Midland Audio Exchange	122
Musonic	118
Origin Live	96
Oxford Audio Consultants	92
Parts Connexion	96
Retro Reproduction	106
Ringmat Developments	60
Russ Andrews	124
Sevenoaks	115,116,117
Sound Dead Steel	64
Sound HiFi	102
Sound Location	94
Sounds Fowndation	14
Stereonow	90
Triangle	28
UKD Studio	74
Usher	IBC
Vivid	30
Wharfedale	112
Whest Audio	94
World Design	126
Yamaha	36

FREE READER CLASSIFIED ADS ORDER FORM

STOP PRESS

TERMS AND CONDITIONS: Only one advert per reader. Maximum length per advert is 30 words, Adverts over 30 words will not be accepted. No Trade Adverts. This section is strictly for readers selling secondhand hi-fi equipment only. Telephone numbers and E-mail addresses are treated as one word. Model numbers are treated as one word i.e. Quad 303 = two words. Sorry, we cannot accept adverts over the telephone. The Publisher reserves the right to judge submissions.

You can email your advert to us at: classifieds@hi-fiworld.co.uk
or write or type your advertisement copy in block capitals with one word per box and post it to us at:

Hi-Fi World Free Readers Ads,
Unit G4, Argo House, Kilburn Park Road,
London, NW6 5LF.

WE WILL ACCEPT PHOTOCOPIES OF THIS FORM

1	2
3	4
5	6
7	8
9	10
11	12
13	14
15	16
17	18
19	20
21	22
23	24
25	26
27	28
29	30

Name: _____

Address: _____

Post Code: _____

Daytime Tel: _____

FREE READER CLASSIFIED ADVERTS COPY DEADLINES

DECEMBER 2009 - 8TH OCTOBER

JANUARY 2010 - 5TH NOVEMBER



LINDA RONSTADT

HEART LIKE A WHEEL

1974

On the face of it, the album was no great shakes. Packed full of old songs and contemporary hits. However, 'Heart Like a Wheel' was much more than that, and in fact was much more than Ronstadt...

Songs like 'It Doesn't Matter Any More' written by Paul Anka, 'When Will I Be Loved?' via The Everly Brothers and 'You Can Close Your Eyes' via James Taylor would, in any other hands, more than likely resemble a conglomeration, the result of throwing a bunch of song-sheets up into the air and seeing which fluttered down to the ground first. Yet, in Ronstadt's hands, they all make sense. She delivered here, using her excellent interpretive abilities, in exactly the way she singularly failed to do with her more recent attempts at the Great American Songbook such as 1984's 'Lush Life' or 2004's 'Hummin' To Myself'. On 'Heart', however, she believes. There is both passion and drive in her delivery that allows the material to both come alive and sink into your soul.

She is more than ably supported. One of the most appealing and innovative aspects of the entire album was the series of arrangements by producer/manager Peter Asher. Yes, that one. The chap who was part of the successful Peter & Gordon pop duo of the sixties, older brother of Jane Asher, the actress and one-time girlfriend of Paul McCartney. In addition, the supporting musician cast do a cracking job, giving the album a superb, early-seventies period feel.

The album has now been released by Audio Fidelity, the outfit that has arisen from the ashes

"There's both passion and drive in her delivery that allows the material to both come alive and sink into your soul..."

of the legendary DCC Compact Classics label, as a 24 karat gold CD edition, limited and numbered. Audio Fidelity boss, Marshall Blonstein had always been a big fan of 'Heart' and wanted to reissue it as an audiophile edition. "It has that early mixture of California country with just a tad of kick-ass rock'n'roll", he told me.

When he ran the DCC Compact Classics album, he tried to license it. The problem, which derived from EMI/Capitol in the USA, was that there were no master tapes, they were all lost. "So we contacted Peter Asher who had the original multi-tracks. He said we could remix the album if we wanted to. We said, no, that's not what we do. We're not the painters, we take the paintings and bring them back to their original lustre."

The project was dropped but, many years later, under the label's new guise, Blonstein brought up the subject again with Capitol who suddenly announced that the 2-track master had been found. Steve Hoffman was put on the case, he confirmed that the master was the original and so the license was confirmed. "I then thought that it would be a great idea for Linda to place her signature that would show up on each one of the labels. So we contacted her manager who said that she loved the idea. Linda then sent us four different signatures completed in different types of pen thickness." The

results of which, you can see on the accompanying image of the CD.

Let me tell you now that this is a superbly mastered disc, the best method of hearing this album digitally. However, a note for all audiophiles out there; the gold on the CD? It doesn't make any difference to the sound at all. That is, this CD would sound just as good as a silver disc. Anyone telling you otherwise is suffering from a case of 'Emperor's New Clothes' syndrome. Despite the assertions all over the Internet that gold provides greater reflectivity, etc., the gold itself is nothing more than a badge of quality. The real source of the improved sound on this and similar discs is the sourcing of the master tapes and the correct processing of the same.

Blonstein made the point that, during mastering, they do not enhance the master in any way. There's no toning down of vocals and lifting of bass here. Blonstein's task is all about seeking clarity: polishing the painting to make the colours more vibrant, as it were. And that processing was partly Steve Hoffman's own ear, and partly Audio Fidelity's proprietary CD mastering system, called the Kensei Audio Transposer. "It gives the digital master a softer broader breath, a more analogue feel," said Blonstein. And that's exactly what this album gives you proving, once again, that beauty is more than (24 karat) skin deep. **PR**

USHER

DANCER mini small wonders



Size really doesn't matter.

Close your eyes when listening to the Usher DANCER mini speakers, and you forget about their size immediately. The weight, energy and scale of ambience reproduced by these speakers simply defy their physical size. You'll also be pleasantly surprised that coherence and precision, often unique to small monitors, are an essential part of the Usher DANCER mini experience.

DANCER mini one

2-way system
1.25" be dome tweeter
7" woofer
sensitivity: 87 dB @ 1 watt/1m
nominal impedance: 8 ohms
frequency response @ -3 dB: 38 Hz - 40k Hz
dimensions (w x d x h): 31 cm x 36.5 cm x 105cm

DANCER mini two

2-way system
1.25" be dome tweeter
two 7" woofers
sensitivity: 90 dB @ 1 watt / 1m
nominal impedance: 4 ohms
frequency response @ -3dB: 28 Hz - 40k Hz
dimensions (w x d x h): 34 cm x 48 cm x 123 cm



USHER AUDIO TECHNOLOGY

67 Kai-fong Street Sec.1 Taipei 100 Taiwan Tel:886-2-2381 6299 Fax:886-2-2371 1053 E-mail: usher@ms11.hinet.net

HI AUDIO

3 St Fort Place Wormit Newport on Tay DD6 8NT United Kingdom Tel/Fax:00 44 (0) 845 0 525259 Mob:00 44 (0) 7968 272614
Web: www.hiaudio.co.uk Email: hugh@hiaudio.co.uk

Audio & Cinema, Bodmin, Tel: 0870 458 4438.

Bigears Hi Fi, Cornwall, Tel: 01736 740421.

Classic Hi Fi, London, Tel: 0208 374 3958.

Hazlemere Audio, Buckinghamshire, Tel: 01494 865 398.

Hi Fi Sound, Co Durham, Tel: 01325 241888.

Hi-Fi Corner, Edinburgh, Tel: 0131 556 7901

Hi-Fi Corner, Glasgow, Tel: 0141 226 5711.

Oxford Audio Consultants, Oxfordshire Tel: 01865 790879

Rochester Hi Fi, Kent, Tel: 01634 880037.

The Emporium Willow House, Suffolk Tel: 01379 870873

Walrus Systems, London, Tel: 020 7724 7224.



ELECTROCOMPANIET

If music really matters...

audio T

Electrocompaniet products are now available from most branches of Audio T. For a complete list of dealers please visit our website



Made in Norway

WWW.ELECTROCOMPANIET.NO

World Radio History