



Last orders?

Buying your final analogue tuner? We test six of the best affordable FM/AM designs...

Reel life

Retro: Sony's classic TC399 open reel tape recorder remembered!



Hi-Fi Choice

PASSION FOR SOUND

Issue No. 363

October 2012

£3.99

Drive time

Exclusive: Boston Acoustics is back with the new M25!

It's magic

Cambridge Audio's great new music streamer



Laser vision

From sci-fi to Wi-Fi: a tribute to 30 years of the Compact Disc

28

top products from Atlas, Avid, Design Build Listen, Furutech and many more...



Spin cycle

Heed dt/da CD transport and DAC

Right angle

Choice Exotica: Wilson Benesch Square 3 speaker



SET YOUR MUSIC FREE


MARTIN LOGAN

*'Seduces the listener with realism and a sense of scale...
The Summit X will own your heart from its first notes'*
Ken Kessler, Hi-Fi News (November 2009)

*'Reference-grade performance that you'd struggle to match
at double the price'*
Alan Sircom, Hi-Fi+ (Issue 66)

*'The Summit X is just too addictive to live without. I'm putting
my money where my mouth is and buying the review pair as
my new reference loudspeakers'*
Howard Kneller, SoundStage! (September 2009)

Nothing brings music to life like
MartinLogan speakers. Unique
technologies, seamlessly fused to
create a sound so spacious, so open, it
makes ordinary speakers seem hopelessly
constrained.

26 years of electrostatic evolution has led to MartinLogan's latest creation: the mighty Summit X. Key to the new speaker's extraordinary performance are its advanced XStat™ electrostatic panel and perfectly integrated Controlled Dispersion Powered Force™ woofer section, effortlessly extending bass response to subterranean depths.

Yet the Summit X never sounds heavy. On the contrary, its performance is extraordinarily fast and open, painting an image that dances boldly before the listener, fully scaled and unconstrained, a sound that's natural, effortless and startlingly real.

The pinnacle of MartinLogan's hybrid electrostatic technology, the Summit X joins an extensive range of speakers encompassing freestanding, on-wall and in-wall models, from affordable hybrid designs and standalone subwoofers to the awesome CLX – the best full-range electrostatic speaker money can buy.

Set your music free with MartinLogan speakers, brought to you by Absolute Sounds – premier importer of the world's finest hi-fi.



absolute sounds ltd
58 Durham Road, London SW20 0TW
T: +44 (0)20 89 71 39 09 F: +44 (0)20 88 79 79 62
www.absolutesounds.com info@absolutesounds.com



Hi-Fi Choice

PASSION FOR SOUND

Welcome

www.hifichoice.co.uk Issue No. **363** October 2012



40

Laser visionary We celebrate 30 years of CD!



88

Retro Sony's classic TC399 open reel revisited

Music reviews



95

Elton John *Five Classic Albums*

BADGES EXPLAINED

OUR AWARDS



EDITOR'S CHOICE:
Awarded to those products that are judged to deliver reference-standard performance



RECOMMENDED:
Products that we feel meet a high standard of performance



GROUP TEST WINNER:
Comparative tests can only have one winner, and this badge says it all!



Ever come back to something after a long time away, only to be surprised by just how good it sounds? I often hear stories of lapsed vinyl junkies being beguiled by the sweet sound of LP after hearing it again, having just wrested their turntables from the loft. But you don't come across tales of Internet

radio listeners coming back to FM so regularly...

That's precisely what I did this month. I'll confess that I listen to a lot of radio online, simply because – like many people these days – I work on a computer so much. So when I came round to doing this month's analogue tuner group test, it proved a real ear opener.

There are all sorts of reasons why FM radio should *not* sound special. With a limited bandwidth, so-so separation and plenty of hiss, it hardly gets off to a good start. Oh, then there's the compression the broadcasters use, not to mention all sorts of other tweaking they do to the signal. No wonder it has traditionally been seen as hi-fi's poor relation.

But sit in front of a decent analogue tuner switched to FM stereo, and you may find yourself marvelling at how fulfilling the experience can be. I've been getting into Spotify lately, but it can still be second best to a top selection of tunes played by a presenter who really knows their stuff. And yes, this *does* still happen, especially on the BBC at night...

So when there's nothing on the telly – you've seen every last repeat of *Top Gear*, and *Eastenders* is more depressing than ever – consider turning on, tuning in and dropping out (from the tyranny of TV) with one of the excellent tuners we test on p22. Pick a good one and you'll be surprised by how fine it sounds, and the great selection of music out there in radio land!

David Price Editor
david.price@hifichoice.co.uk



HADLOW HOUSE, 9 HIGH STREET, GREEN STREET GREEN, ORPINGTON, KENT BR6 6BG

THE BEST SEAT IN THE HOUSE

Meticulously crafted since 1949, McIntosh Laboratory creates some of the world's most prestigious audio equipment. Fusing cutting edge audio technology with exquisite build quality and reliability, McIntosh is the No.1 luxury brand for the discerning music and film lover.



**Exclusive 0%
finance packages***

Available on McIntosh
products & systems.
Please call Jordan Acoustics
for more details.

McIntosh[®]

LEGENDARY PERFORMANCE™



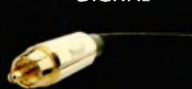
(NEW) Optimise your McIntosh system with the McIntosh premium cable series



SPEAKER



AUDIO



DIGITAL



POWER CONTROL

BALANCED



Bournemouth Showroom t: 01202 911 886

e-mail: bournemouth@jordanaoustics.co.uk | web: www.jordanaoustics.co.uk

Unit 2 - The Old Cart Building, Parley Court Barns Parley Green Lane, Hurn, Bournemouth, BH23 6BB. Open: 9:30-5:30 Tuesday - Friday / 9.30-3.00 Saturday.

Glenrothes Showroom t: 01592 744 779

e-mail: glenrothes@jordanaoustics.co.uk | web: www.jordanaoustics.co.uk

20-22 Cadham Centre, Glenrothes, Fife, KY7 6RU.
Open: 9:30-5:30 Monday - Friday / Closed Saturday.



1000  Like

Win a set of wonderful award-winning Focal Spirit One Headphones. All you have to do is 'Like Us' on facebook. Once we have reached 1000 'Likes', we will choose at random one lucky winner who will receive the set of Focal Spirit One Headphones. **What are you waiting for...**

Hi-Fi Choice Contents

hifichoice.co.uk Issue No. **363** October 2012

NEWS & OPINION

8 Audiofile

Latest developments in the world of hi-fi

71 Letters

Have your say on audiophile matters

80 Opinion

The Hi-Fi Choice team say it as they see it!

95 Music reviews

Essential new releases reviewed

130 Backchat

Assorted hi-fi hearsay...

READER SERVICES

104 Reader classifieds

Buy and sell your kit for FREE here

124 Next issue

What we hope to bring you next month...

FEATURES

40 Laser visionary

We celebrate CD's 30th anniversary

90 Year in music

It's 1970, and The Beatles split...

NEW!

111 Choice Extras

7 pages of the latest and greatest gadgets, gizmos, cables, supports and accessories



COVER STORY

16 Boston Acoustics M25 loudspeaker



08



Audiofile: Denon Advanced Evolution series

90



Year in music: 1970



66

Wilson Benesch Square 3 loudspeaker

"There's no shortage of energy with a live recording, you can feel the electricity..."

Jason Kennedy: Wilson Benesch Square 3 loudspeaker p66

TESTED THIS MONTH



44

Heed Obelisk dt CD Transport/da DAC



22 Group test
Tuners



48

Cambridge Audio Stream Magic 6 streamer

REVIEWS

Kit testing

16 Boston Acoustics

M25 loudspeaker

44 Heed

Obelisk dt CD Transport/da DAC

48 Cambridge Audio

Stream Magic 6 network streamer

54 Monrio

Asty Digital integrated amplifier

60 Design Build Listen

The Wand tonearm

65 AVID

Pellar phono stage

66 Wilson Benesch

Square 3 loudspeaker

88 Sony

TC-399 open reel tape deck (Retro)

GROUP TEST

TUNERS

£155-£699

25 Arcam

FMJ T32

27 Audio Analogue

Crescendo

29 Audiolab

8200T

31 Myryad

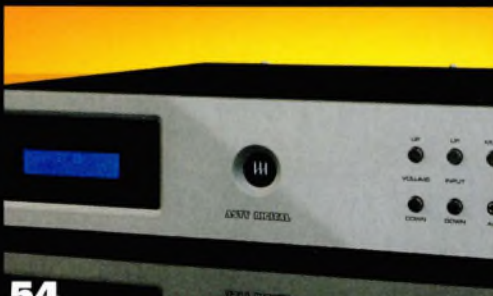
Z132

33 NAD

C426

35 Pro-Ject

Tuner Box FM



54

Monrio Asty Digital integrated amplifier



60

Design Build Listen The Wand tonearm

MINI TEST

Isolation platforms

102 Audiophile Base

o1 Platform

102 Hi-Fi Racks

Plinth

103 SRM Tech

Silent Stage SSXi

103 Russ Andrews

Torlyte Platform

Never miss an issue – turn to p39 for our latest subs offer

European evolution

When Japanese designed electronics are tuned for European ears, you get something akin to Denon's new Advanced Evolution series, says **David Price**...

PRICE: £179.99-£349.99
AVAILABLE: NOW
CONTACT: 02890 279830
WEB: DENON.CO.UK



Vinyl saves music biz?

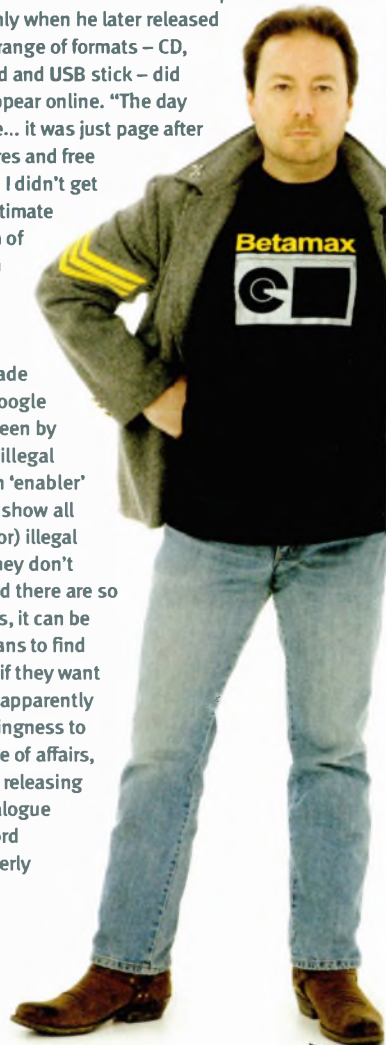
IT'S AN INTERESTING IDEA, BUT NOT IN THE WAY YOU MIGHT THINK! There's no chance of black plastic restoring itself to its former dominance, but perhaps there *is* a way that vinyl can combat piracy, which is arguably more of a problem than it ever was. "They used to say that home taping was killing music," says John Giacobbi of leading rights protection company Web Sheriff, "but in the digital age, online digital file-sharing is now doing the same thing. Record labels need to find a balance between embracing the positive aspects of fan file-sharing and protecting artists' ability to make a living from album sales".

Many see downloading free Internet music as a 'Robin Hood' gesture, depriving mega corporations of small amounts of revenue. However, file sharing hits small companies, too. BBC Technology correspondent Rory Cellan-Jones recently reported the case of Alastair Nicholson from UK hip-hop label Son Records, a tiny specialist imprint run by just one man in an attic flat. He found sales falling away badly as the Internet became ever more prevalent. "It seemed to me to be getting a worse and worse problem", he's quoted as saying.

Instead of handing out digital promo copies of a new album to reviewers, he decided to release it on vinyl instead. Some people complained, but there was no trace of unauthorised copies online. It was only when he later released the album on a range of formats – CD, digital download and USB stick – did illegal copies appear online. "The day after the release... it was just page after page of file shares and free downloads, and I didn't get to anything legitimate until the bottom of the fifth or sixth page", he said.

Cellan-Jones' *Newsnight* investigation made the point that Google searches were seen by some victims of illegal filesharing as an 'enabler' of theft, as they show all copies of (legal or) illegal files. Because they don't discriminate, and there are so many illegal files, it can be hard for music fans to find legal ones even if they want to. With Google apparently showing no willingness to change this state of affairs, perhaps only by releasing music in the analogue domain can record companies properly combat piracy?

Web Sheriff's John Giacobbi says illegal file sharing is killing music...



Remember when East was East and West was West, and never the twain would meet? Denon obviously does. Back in the nineteen seventies, successive generations of Japanese electronics were praised for their beautiful build and wide variety of features, but panned for their sound. It wasn't bad, just not really what British (and European) listeners considered their cup of tea...

Generally the balance was bright, detailed, explicit and upfront – this obviously suited Japanese tastes and listening rooms (which often sounded less lively due to tatami floor covering), but didn't work here. Brits tended to go for a more mellifluous sound – and still do. That's why Denon's Advanced Evolution series has been through a European sound tuning programme, to voice it for our more subtle sensibilities.

The £349.99 PMA-720AE integrated amplifier features new 'Advanced High-Current Single-Push-Pull circuitry' giving a 100kHz bandwidth with 2x85W per side. There are improvements in the volume circuit for lower noise and a mains

The Denons have been through European sound tuning, to voice them for our tastes...

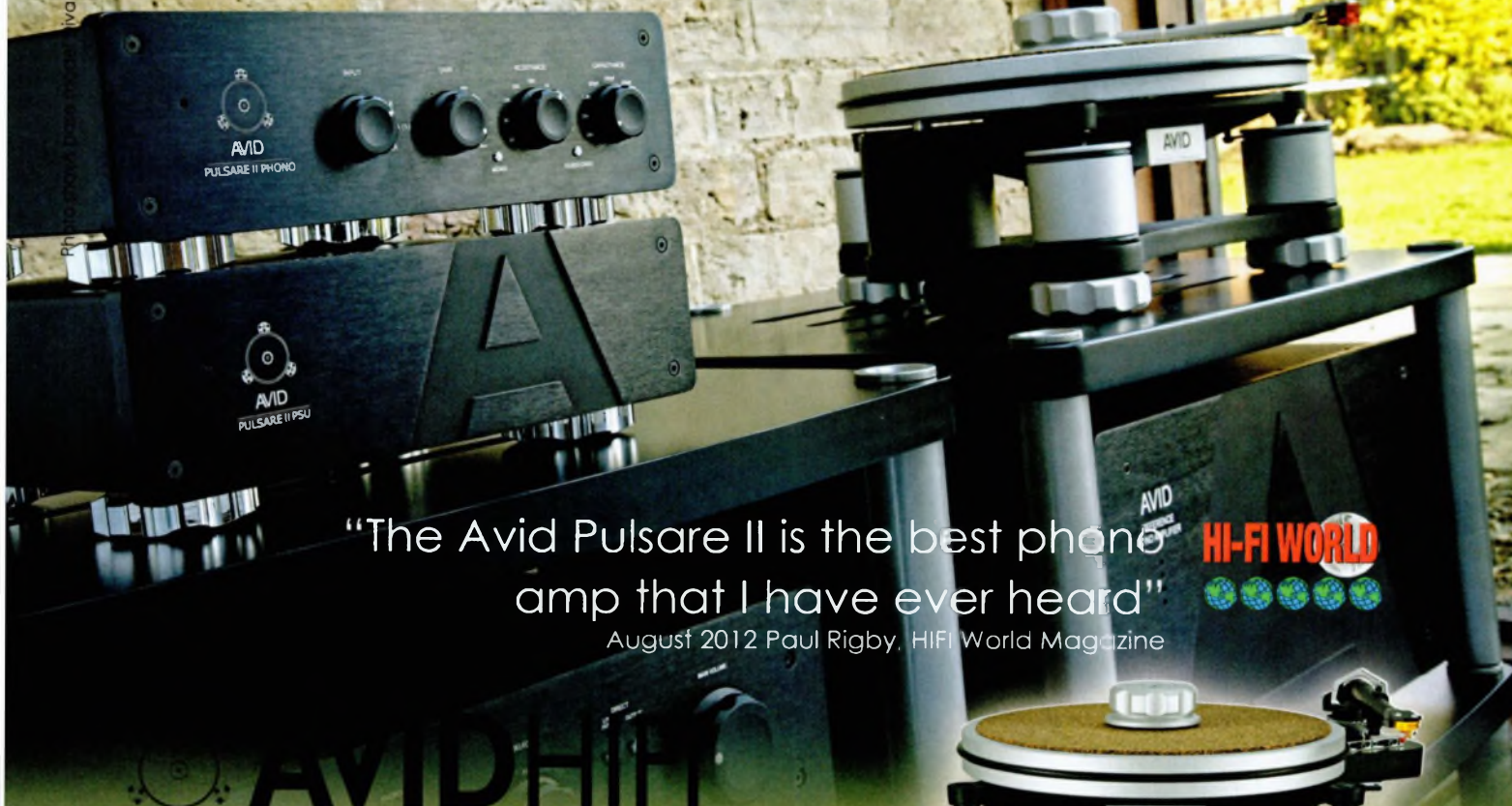
transformer with separate power supplies for analogue and digital circuits. The chassis is vibration-resistant, with Denon's Direct Mechanical Ground Construction. A moving magnet phono stage and headphone jack, plus a newly designed remote control that also operates Denon DCD and DNP products, complete the picture.

The £349.99 DCD-720AE CD player sports 'a high quality' 32-bit/192kHz digital-to-analogue convertor. Denon's AL32 processing expands audio data to 32-bits and upsamples it with proprietary algorithms to process it for the best possible sound, the company says. There's a high quality master clock, a port for playback from a USB memory stick or iPod. A Denon CD mechanism with central assembly drawer unit is fitted, and the topology of the digital circuits has been designed to provide maximum protection from unwanted noise, Denon says.

Two entry-level AE-series components are also offered, the £179.99 PMA-520AE amplifier and £179.99 DCD-520AE CD player also have European sound tuning, a cosmetic update and the newly developed remote handset. As with their more expensive bigger brothers, standby power has been reduced significantly and they feature an Auto Power Off function for additional energy saving, indicated by the new Denon eco-logo. The new AE components come in a choice of black and premium silver finishes with brushed metal fascias, and are out now.



"The Truth, nothing more, nothing less..."



"The Avid Pulsare II is the best phono
amp that I have ever heard"

August 2012 Paul Rigby, HiFi World Magazine



The Pulsare II raises the bar amongst phono-stages, not just at its price-point, but absolutely. As with all AVID products, it is born of a commitment to deliver the best through innovation and engineering excellence.

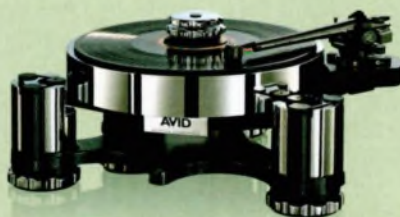
Volvere and Sequel SP models have both been updated and improved to bring the full experience of our highest level Acutus models to bear.

Brand new is the Pellar phono stage, which introduces the core philosophies employed throughout our amplifier range at a price which offers the opportunity of AVID ownership to all.

Analogue Seduction, 6 Manor View, Whittlesey, Peterborough Tel: 01733 350 878

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

Progressive Audio, 2 Maryland Court, Rainham, Kent, Tel: 01 634 389004



www.avidhifi.co.uk

AVID HIFI LIMITED, Bicton Industrial Park, Kimbolton, Huntingdon, Cambs, PE28 0LW
Tel: +44(0)1480 869 900 Fax: +44(0)1480 869 909 E-mail info@avidhifi.co.uk

Ray of light

User-friendly features are the highlights of this new CD player from NAD

CD is no longer flavour of the month, so it's interesting to see NAD releasing a new silver disc spinner, the C 546BEE. Building on the past success of the C 545BEE, it's said to support a wide range of formats including CD, CD-R, CD-RW. The new C 546BEE also plays encoded MP3 and WMA music files off CD-R/RW.

NAD's designers have re-engineered the circuitry and component choices to improve low frequencies. It uses a 24-bit high-resolution DAC and two

discrete power regulators for analogue and digital sections. This is claimed to give excellent low-level linearity.



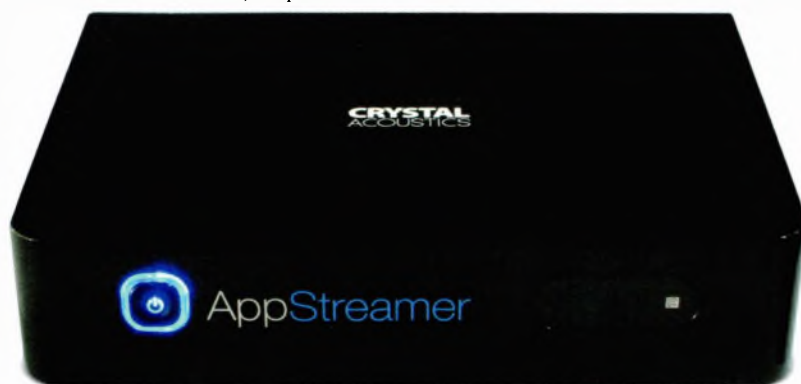
PRICE: £499 **AVAILABLE:** NOW **CONTACT:** 01279 501111 **WEB:** NADELECTRONICS.COM

Crystal clear

New gigabit media player with a variety of web applications

Crystal Acoustics has launched its AppStreamer, a Gigabit media player which lets you enjoy movies, music and photos from USB storage, the Internet and local networks. Users can also watch HD video from a local network, via Gigabit Ethernet and enjoy the Internet from the comfort of a couch. In addition, it's possible

to connect a wireless keyboard and mouse for extra ease of navigation, and download shared movie, music and photo files from P2P networks. The Realtek 1185 processor at the heart of the AppStreamer powers the device, letting you navigate the Internet and enjoy streaming content from popular on-line services.



PRICES: £89.99 **AVAILABLE:** NOW **CONTACT:** 020 8133 7066 **WEB:** CRYSTALAUDIOVIDEO.COM

Ooh la la!

LA BOITE recently unveiled its LD Series, said to be the first high-fidelity docking stations dedicated to laptops, which also work with any music device. Via a simple, single cable connection, the LD Series transforms your laptop into a fully-fledged music system delivering, says la Boite, hi-fi quality performance.

The range comprises the LD120 (£870) and larger LD130 (£1,180-£1,290). The latter includes Kevlar and carbon drivers, powered by three separate amplifiers, with low noise toroidal transformers delivering 2x 25 watts and 1x 80 watts. The LD120 offers the same configuration, though with 120W total power. Completing the package is a high-fidelity USB sound card that allows connection to a laptop computer. There's a choice of cherry wood, matt black and four luxury piano lacquer finishes. laboiteconcept.com

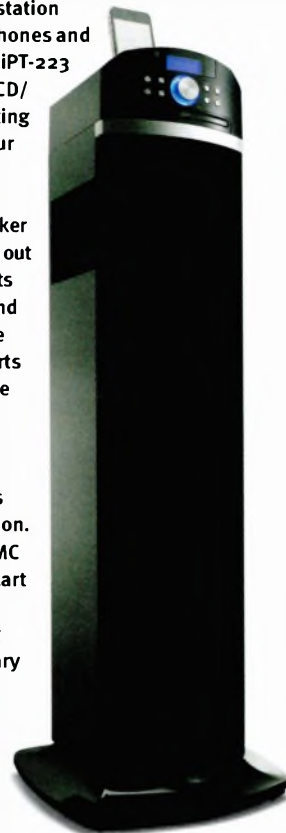


Tall boy

LENCO IS REACHING NEW HEIGHTS with the latest incarnation of its Speaker Tower, the £229.99 IPT-223.

Central to its improved audio performance is the 'Sonic Emotion 3D chipset'. This digital signal processing technology gives an unbelievable acoustic experience, says Lenco, filling the room with sound so as to remove any audio 'blind spots'. 'Absolute 3D Sound Technology' creates a 6.1 surround sound experience from a single unit, it's claimed.

The docking station supports all iPhones and iPods, and the IPT-223 has an inbuilt CD/DVD player letting you play all your favourite CDs, watch DVDs, while the speaker system pumps out 90W through its six speakers and subwoofer. The IPT-223 supports both recordable CDs and DVDs, while the FM radio has 10 station presets and RDS function. It has a SD/MMC card reader, Scart and HDMI outputs, along with an auxiliary input for alternative external audio sources. For info, see: lencouk.com



Who said we don't make anything in Britain anymore?



Naim has been designing and building world-beating hi-fi equipment in Britain for over 35 years. From the dedication of our technicians and engineers in Salisbury, to the passion of our customers and retailers around the world, this summer we are celebrating the people and products that make us A Great British Naim.

To get involved, and for a chance to win A Great British Naim music streaming system worth more than £7,000, visit:

www.naimaudio.com/a-great-british-naim



A Great British Naim

Join us at the Science Museum, London from 24th July to 9th September as we take our place among the elite of British manufacturing at the Make it in Great Britain exhibition.



Streaming bold

Naim launches its first network-enabled streaming preamplifier...

The NAC-N 172 XS is Naim's new network-connected streaming preamplifier. This interesting product is said to combine the convenience and choice of the streaming revolution with traditional Naim engineering techniques. A network player and preamplifier in one, the new '172 only needs to be paired with a power amplifier to form a neat two-box solution offering separate pre and power amplification along with integrated digital sources. Connectivity is very wide ranging, and includes the compulsory UPnP network streaming, Internet radio (optional FM/DAB), playback from iPod/MP3/USB plus five S/PDIF digital audio inputs. The new preamplifier is said to be compatible with WAV, FLAC, ALAC, AIFF, AAC, WMA, Ogg Vorbis and MP3 formats.

When controlled with the Naim n-Stream app, system automation can be enabled giving full control of all connected Naim sources, the company says.

PRICE: £1,650 **AVAILABLE:** NOW **CONTACT:** 01722 426600 **WEB:** NAIMAUDIO.COM



Head first

New headphones from Monster and Ncredible Entertainment

Monster and Ncredible Entertainment's new NTune On-Ear Headphone (£119.95) and the Nergy In-Ear Headphone (£49.95), are said to bring 'next-level design and high-performance audio to the most popular headphone styles'. Both are precision-tuned to reproduce all types of music,

from hip-hop and rock to house and pop.

The new lightweight, on-ear designs also feature Monster's advanced ControlTalk Universal, which provides easy music playback for most Android and Blackberry devices, as well as hands-free calling with many smartphones.

PRICES: £49.95-£119.95 **AVAILABLE:** NOW **WEB:** MONSTERPRODUCTS.COM



Play for today

Linn's new Kiko offers one box access to a wide range of music sources

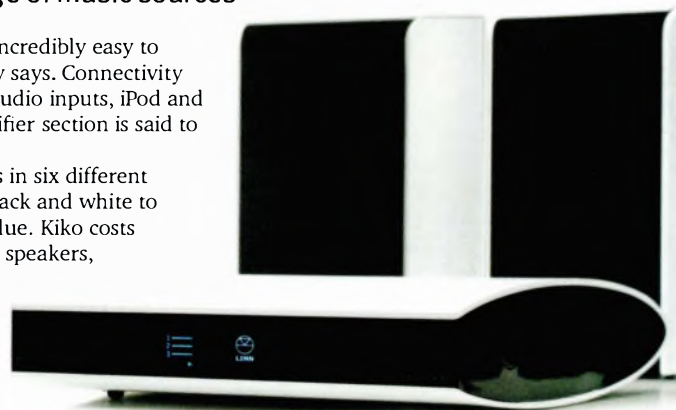
The new Kiko is a network music player that, Linn says, allows you to play all your digital content and control it using your smartphone, tablet or laptop. It will play out iTunes, Spotify and Napster from your laptop, as well as Netflix movies and programmes on BBC iPlayer, 4OD, etc. It will also, says Linn, upgrade the sound of a digital or satellite TV, Blu-ray player and games consoles.

The Kiko comprises a Linn DSM network music player with integrated amplification and a pair of bespoke loudspeakers. You can download the Linn Kinsky control app for your smartphone, tablet or computer. It's all

compatible and incredibly easy to use, the company says. Connectivity includes digital audio inputs, iPod and HDMI. The amplifier section is said to put out 2x30W.

The Kiko comes in six different colours – from black and white to silver, gold and blue. Kiko costs £2,499 including speakers, making it Linn's most affordable networked system package to date.

PRICE: £2,499 **AVAILABLE:** NOW **WEB:** LINN.CO.UK **CONTACT:** 0500 888 909



Essence-ial selection

Canadian high-end DAC debuts in the UK for the discerning audiophile

The Invicta Audio DAC from Resonance Labs been designed for both the audiophile and pro-audio markets. It features two independent headphone outlets and six source modes, comprising XLR, BNC1, BNC2, TOSLINK (S/PDIF), AES/EBU (S/PDIF), USB Audio 2.0(Mac) and SD Card. All units are sold with a remote control that provides volume control, playback, FF and rewind.

Most of the Invicta's features are programmable, with user options such as default source, headphone trim levels and display brightness.

The Invicta unit has also been designed to be upgradeable over the life of the product and, says the company, features will be added under software control over the coming months, including Word-Sync and HDMI connectivity.

The Invicta is, says Resonance, "the perfect combination of audio, electrical and mechanical engineering". Measuring 50x220x280mm, the Invicta is ready to be rack-mounted or form the centrepiece of a listening room.



PRICE: £3,495 AVAILABLE: NOW CONTACT: 020 8942 9567 WEB: RESONSENCELABS.COM

NEWS IN BRIEF

•YAMAHA HAS A NEW STYLE SYSTEM called Restio.

Described as having 'sophisticated modern styling matched by powerful, room-filling, natural and detailed sound', it's an ultra-slim (90mm) design that sits atop a slim aluminum pole, making it suitable for any space, or it can even be mounted on a wall. It sports the obligatory iPod/iPhone dock, plus a CD player and DAB radio, plus USB and Aux-in sockets for extra flexibility. Its two-way, four speaker system is said to be 'finely tuned to hi-fi audio standards', and there's a three-band parametric equaliser. The £499 Restio comes in a variety of colours, Purple, Black, Green and White. For more details, click on uk.yamaha.com



•AUDIO REFERENCE UK LTD has just announced the addition of two new Musical Surroundings phono stages to its range. Both the Nova Phonomena (battery powered) and the Phonomena II, feature rear panel switches for gain and loading, and RIAA equalisation that amplifies the output of a phono cartridge, whether moving coil or moving magnet. The Nova Phonomena retails for £880, while the Phonomena II is £525.



Now clear this!

THE CLARITY ALLIANCE is a new trade association for the UK's hi-fi and home cinema industry, with the primary purpose of promoting the benefits of quality home entertainment to new consumers, it's said.

It brings together hi-fi industry manufacturers, distributors, retailers, the media and PR/marketing consultants, with the aim of pooling the creative resources of its members to further the common aims of getting more people interested in good quality home entertainment. It will do this through a series of high profile communications campaigns aimed at consumers who are currently unaware either of the benefits of the industry's products, or indeed its existence.

The Alliance will run a series of training programmes for its members and non-members. Further short courses will be developed which will be delivered in-store after hours focusing on specific areas such as turntable setup, CD ripping and getting the best from iTunes and subwoofer placement.

Alan Sircom, chairman of the Clarity steering committee said, "We are clear as to what it is that the industry wants us to do - that is to help get more people going into more stores so that they can experience just what drives our collective passion. I would urge all people in this fantastic industry of ours to join the Alliance and work together to secure our future".



clarity

www.clarityalliance.co.uk

OPPO®



BDP-93EU



BDP-95EU



"...OPPO should be congratulated for a remarkable achievement."



"...BDP-95EU can be considered reference grade kit."



"...one of the best universal players we've seen."



"OPPO are to be congratulated for raising the bar yet again."



"...you will love the OPPO BDP-95EU. Recommended!"



"The OPPO BDP-93EU becomes the Blu-ray 3D reference standard."

For movie enthusiasts, audiophiles and those who take their entertainment very seriously.

www.oppo-bluray.co.uk



Drive time



For years, Boston Acoustics has kept to the B-roads of the British loudspeaker map. But now, its new M25 standmounter marks a real change of gear, says **James Michael Hughes...**

Boston Acoustics has been around since 1979, producing good quality, reasonably-priced loudspeakers without ever quite taking the world by storm. The new M series aims to change all that by delivering outstanding performance at wallet-friendly prices.

The new M25 is the entry-level model; a compact standmounted two-way reflex design created by the formidable audio brains and ears of Karl-Heinz Fink and Ken Ishiwata. At £579.90 it's very keenly-priced, and perfect for smaller rooms.

Inevitably perhaps, Boston's three larger impressive-looking M floorstanders will take centre stage, making it easy to overlook and undervalue the baby of the range. Big mistake; the little M25 turns out to be surprisingly accomplished...

Every small loudspeaker is a compromise between several conflicting parameters – bandwidth, sensitivity, power handling and price. The trick is to balance the various factors so that the end result is greater than the sum of the parts. With the M25, Fink and Ishiwata have opted for medium/low sensitivity of about 85dB, with an impedance quoted as 4 Ohms [see LAB TEST]. This means the M25 is power-hungry, making an amplifier with plenty of wattage essential.

This is not the speaker to partner with low-output tube amps – unless, of course, your room is tiny and you like to listen at miniscule volume levels. The M25 works best with an amp having ample power and good current delivery.

Despite the low efficiency, deep bass performance is fairly limited. Don't expect trouser-flapping lows from these speakers – it simply isn't there. Yet curiously, the tonal balance – while certainly crisp, bright, and open – isn't especially thin.

Adding a subwoofer would add heft to the bottom end, and create a bigger sound that's more dynamic. You'd achieve a more holographic soundstage, too. But while these things may be missing from the M25 used solo, they're not missed one jot. Speaking as someone who uses large efficient full-range horns, I tend to approach reviewing small inefficient speakers like the M25s with trepidation. Clearly, expectations have to be scaled back. You can't expect the same sort of power and presence. What's important is whether or not the smaller speaker makes a case for itself on its own terms; whether it delivers a convincing result that invites you to enjoy the music. These were the thoughts that ran through my head as I sat down to listen...

Sound quality

First impressions were of a forward, lively sound of sparking immediacy. The tweeter is a special Boston EWB (Extended Wide Bandwidth) design, claimed to extend the frequency response to about 30kHz. While this is interesting, of greater importance is the claimed freedom from breakup modes between 10kHz and 20kHz. The high frequencies are certainly impressive, combining openness with plenty of fine detail and lack of rough edges. Yet having an exceptional tweeter isn't always helpful when the lower frequencies are constrained by limited cabinet size. There's a danger the higher frequencies will overpower those lower down. But this is not the case here.

While *not* delivering deep powerful bass, the M25 avoids sounding thin and under-nourished. The sound is nicely balanced and very natural. Human voice sounds uncoloured and real, while instrumental timbres are convincing and truthful. Clarity is excellent, with a wealth of inner

► DETAILS

PRODUCT:
Boston M25
loudspeakers
£579.90

ORIGIN:
EU/China

TYPE:
two-way compact
standmount
loudspeaker

WEIGHT:
7.6 kg

DIMENSIONS:
(WxHxD mm):
176X314X 258mm

DISTRIBUTOR:
D&M Audiovisual
Ltd

TELEPHONE:
02890 279830

WEBSITE:
bostona.eu/en/

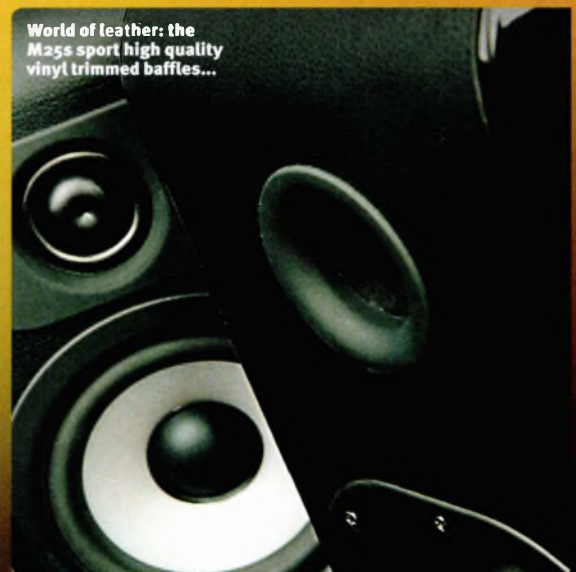
detail being presented to the ear. High-pitched percussion instruments reproduce with great immediacy, but the M25 is also good at reproducing subtle midrange detail.

Stereo soundstaging is precise and vivid. By virtue of their compact dimensions, many small speakers deliver impressive imaging, and the M25 is no exception. The sound is pin-point focused yet airy and spacious. The music seems to emanate from a space between, behind, and around the enclosures. This creates a sense of width and depth. The M25 sounds very integrated and together – although a shade 'toppy', the two drivers integrate seamlessly. Surprisingly, given the limits on bass performance, the M25 even does 'holographic'

The sound is pin-point focused yet airy and spacious, very integrated and together

quite well. Playing the classic Beach Boys track *Caroline No* from *Pet Sounds*, the sound had real walk-around depth and out-of-the-box spaciousness. Impressive!

Musically, the overall result proved very engaging. Whether rock, jazz or classical, you're very quickly drawn into the music. Timing is excellent, and the speakers seem able to convey the spirit of the performance in a way that rewards the listener. Of course, the M25 flatters to deceive. It's not nearly as capable as it makes out to be. But, that's hardly a criticism. The whole art of hi-fi is about fooling you into thinking you're experiencing a



World of leather: the M25s sport high quality vinyl trimmed baffles...

Q&A

JAMES MICHAEL HUGHES TALKS TO KARL-HEINZ FINK, CO-DESIGNER OF THE BOSTON M25...



JMH: What were your design aims for this new loudspeaker?

KHF: Natural tonal balance is a must for all music styles – period. But timing and rhythmic flow are equally vital for Jazz and Blues. Without proper timing, the fun is always halved. Our brains can compensate for tonal balance oddities, but not for rhythm and timing problems...

How important are the rounded cabinet corners, sonically?

You always have diffraction effects (like small second sound sources on the corners). A rounded cabinet makes these reflections smoother – but they're still there and we have to deal with it in the crossover. And honestly, the box just looks better with rounded corners!

Is there anything special about the design of the crossover?

We use an acoustic 4th order LRK filter. The electrical crossover is 2nd order with some compensation for the woofer and 2nd order for the tweeter. The rest of the 4th order is made by the drive units themselves.

Why have you chosen a long-haired wool for the internal damping material?

Compared with polyester, it works a lot better at lower frequencies and in the midband. We also found that this material helps reduce cabinet noise – the unwanted resonances radiated from the cabinet walls.

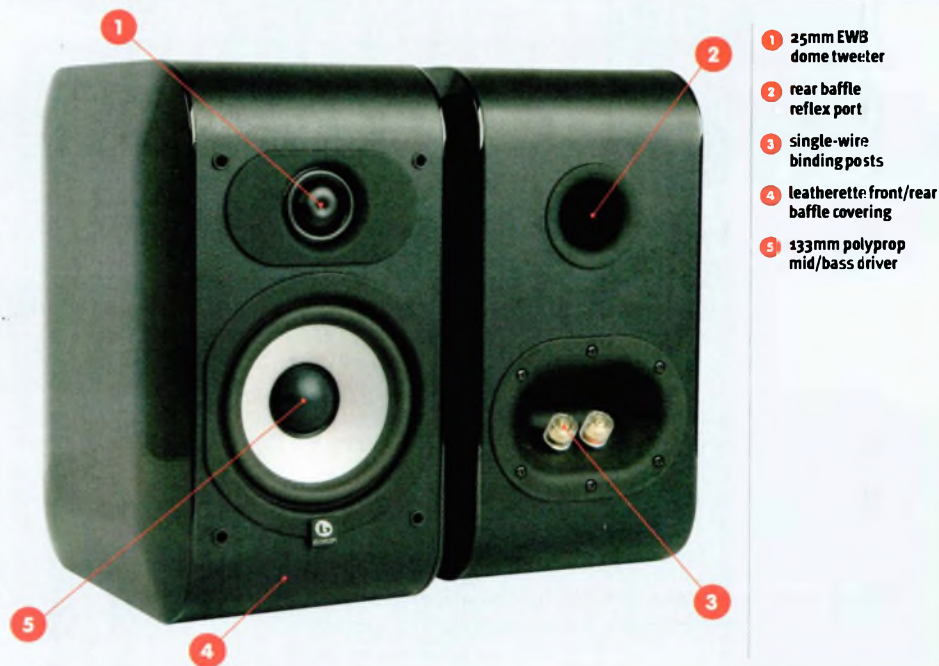
What's the purpose of the Ferrite ring on the back of the woofer magnet?

It's a second ring to optimise parameters of the woofer. A bigger main ring would have been too much, a single without the second ring not enough. These compensation rings are a tool for fine tuning.

How did you achieve the balanced sound of the new M25?

We always combine measurements with listening, using our many years of experience of drive unit design, along with careful work on a low resonance cabinet.

LAB REPORT



ON TEST

We measured a pink noise sensitivity of 85.4dB for the Boston M25, just a little below the specified 86dB. Although this is lower than average today, it's not surprising given the M25's very compact dimensions and the fact that, despite this, it achieves a creditable bass extension of 49Hz for -6dB ref 200Hz (diffraction-corrected near-field measurement). This good trade-off is partly achieved through low impedance, the specified

minimum modulus of 3.6 ohms corresponding exactly with our measured minimum at 232Hz. Impedance phase angles are quite large (-65 degrees at 104Hz), so the equivalent peak dissipation resistance falls to a minimum of 1.7 ohms at 140Hz, making the M25 a moderately challenging load to drive. Frequency response errors – measured on the tweeter axis with grilles removed – were a fine ± 3.5

and ± 3.2 dB respectively for the review pair, 200Hz-20kHz, the responses showing a shallow presence band dip before rising through the final audible octave above 10kHz. Pair matching was first class at ± 0.8 dB over the same frequency range. The cumulative spectral decay waterfall indicates fast initial energy decay across the band and well controlled breakup resonances. KH

real performance from a recording. On most music most of the time, the M25 manages to satisfy without leaving you wanting more than it is capable of giving; it doesn't showcase its limitations. By ensuring the music sounds engaging and interesting, it deflects your mind's scrutiny.

In some ways, these remind me of Mission 70s from the early nineteen eighties. They were compact two-way standmounts that punched well above their weight, and seemed a happy combination of the right drivers in a sympathetic cabinet. Indeed I was almost tempted to describe the M25 as a 'happy accident', but that wouldn't be right as meticulous care has been taken by Messrs Fink and Ishiwata over many aspects of the design. Actually, the M25 is deceptively sophisticated.

It works so well because there's lots of attention to small but important details – cabinet material and shape, internal damping and bracing, crossover, etc. No single ingredient makes this speaker work – there is no one 'magic' component. Rather, it's the sum total of many small but significant victories at specific points. The EWB tweeter has already been mentioned, but the bass/mid driver is also interesting with its special ferrite core on the back of the magnet. The cabinet is also crucial,

and Boston has employed dual-layer MDF to reduce resonance. Of course, the eye is charmed by the rounded cabinet corners, but these also play a part – creating a smoother wider response by reducing diffraction effects. Last, but not least, by using small amounts of woollen damping Boston has avoided the deadening effects of foam plastic. The result is a lively articulate midband, nimble bass performance, with excellent clarity and detail.

The M25 works because there's lots of attention to small but important details – there's no single magic part

I'd say the M25s are not overly sensitive to positioning, and can work reasonably close to walls and corners. However, each room is different, and much depends on the size and shape of your room, and where you sit in relation to the speakers. Certainly, because the deep bass response is limited, you won't suffer a smeared boomy bottom-end if the speakers are placed fairly near to walls or corners. Just the same, they need a little space to breathe and expand. So don't hem them in.

Finish is very attractive. The review speakers were trimmed in high-gloss black with leatherette trim. The drive units have rubber surrounds that hide fixing screws, creating a svelte stylish appearance. And those curvy bits – ooh er! Certainly, the M25s give the impression of costing more than they actually do. And they sound more expensive than they are. You could easily spend two or three times as much and not get such good sound, I feel.

On *God Bless the Child* from Keith Jarret's album *Standards Vol 1* (ECM) the M25s sustained the driving hypnotic power of this fifteen minute track. Jarret's piano had a crisp lively brilliance and Gary Peacock's acoustic bass sounded woody and warm.

Playing the Beach Boys' *Fet Sounds*, again, I was so pleased that the sonic limitations of this nineteen sixties recording were not exaggerated, despite the brilliant crispness of the sound. Due to lots of overdubs, the high frequencies on this album can sound a bit congested. The M25s did not disguise such faults, but neither were they exaggerated – no doubt the smoothness and linearity of the tweeter helped greatly here.

Sampling some vinyl demonstrated the innate couthness of the tweeter. Even while playing LPs which had mildly noisy surfaces, the M25s did not spit or snarl. Despite the brightness and immediacy of the top-end, treble remained surprisingly sweet and clean. On orchestral

music, instruments like cellos could sometimes lack a certain warmth and resonance. But this was only apparent on occasions. Although the M25 is not flawless, tonally the ear quickly adjusts to its particular musical presentation.

I was very impressed by the way the M25 clarified the dark scoring of Stenhammar's first symphony on BIS. The quiet atmospheric opening (for six horns) can easily sound overly rich and muddy, but here it sounded clear and open.

So what's the secret? First off, individual notes start and stop crisply; there is very little overhang. Definition seems remarkably good. You could clearly hear each individual note, with its precise pitch and dynamic shape. The opening movement of Stenhammar's first symphony can easily seem a tad boring – nothing much happening, and that at a slow pace, without much animation. But by clarifying each detail, the M25 brought the music, and the performance, to life.

Power handling is given as 50W to 200W, and given the low quoted sensitivity of 85dB and impedance of 4 Ohms, you'll need a reasonably capable amplifier. I used a Musical Fidelity kW750 power amp (which is precisely this, thanks in part to over 1000W in 4 Ohms) with excellent results. Given such a clean and powerful amplifier, the little M25s can be driven remarkably hard for their size, and can be pushed to



MOST SPEAKERS ARE RECTANGULAR BOXES. It's the traditional speaker shape. But corners and edges create diffraction effects that audibly alter the sound. So, some manufacturers go for smooth rounded edges, as with Boston's M25.

To be honest, cabinet shape is just one factor among many. By itself, it won't save a bad design, but it can enhance a good one. Having rounded contours creates a smoother more even dispersion of sound. This leads to better integration and coherence. Tonally, the sound is more open and natural, and there's noticeably less change in sound quality/tonal balance as you move around. This is much more akin to how real acoustic instruments sound.

You especially notice this as you get physically close to the speaker. With rounded contours the sound is more homogenous. At the same time, imaging is more precise. Tonal balance is smoother and less 'peaky'.

But there's another even more important attribute. With nice rounded contours, the cabinet looks better and less intimidating. For those constrained by WAF (wife acceptance factor) this is surely a major plus point!

deliver a surprisingly big room-filling sound, with the sort of impressive attack and impact you'd hardly think possible for such a small speaker. Playing at highish volume levels highlights the low-resonance qualities of the cabinets. Even pushed hard, the sound stays clear, and remains free from rattles and buzzes. In some ways, the little M25 is probably at its best when used as a near-field monitor. In such situations, its focus and precise imaging qualities come to the fore. But it also proved impressive when heard at a distance, and was perfectly able to fill a large room.

Conclusion

Although very much the baby of the new Boston range, the little M25 packs quite a punch. In the UK they will be exclusively sold through Music Matters and Superfi until 1st November 2012, after which they will be available from other outlets.

The M25 is a great all-rounder, being excellent on virtually all kinds of music. There are definite limits in terms of bass performance, and the lowish sensitivity and 4 Ohm impedance means you'll need a fairly powerful transistor amplifier to avoid compression and breakup during loud heavy climaxes.

Although perfectly usable in medium/large rooms, especially if partnered with a subwoofer, the M25 will be at its best in small rooms, where you're compelled to sit close. Luckily, their sheer coherence makes intimate listening a pleasure.

Boston's new babies are consummate fun to listen to, and capable of recreating the excitement and freshness of the performance. And that's a great thing; your attention focuses on the music, rather than the sound. The music wins out rather than the hi-fi – someday, surely every loudspeaker should be like this? ●



Hi-Fi Choice

OUR VERDICT

SOUND QUALITY



LIKE: Open, clean, transparent sound; compact size; value

VALUE FOR MONEY



DISLIKE: Inefficient; some lack of deep bass

BUILD QUALITY



WESAY: Exceptional coherence and natural tonal quality from this compact, affordable new loudspeaker

EASE OF DRIVE



OVERALL



Renaissance Amplification



For a naturally beautiful sound that is hand made in the UK

For your nearest dealer call 0845 6436299 (charged at local rate)
Another fantastic product from NuNu Distribution Limited
www.nunudistribution.co.uk

NuNu Distribution Ltd



C

oherent
Systems

Beauty is not only born for the eye to see,
it can also be heard... Call 0845 5191833
to hear what you have been missing!



www.coherent-systems.co.uk

tel. 0845 5191833

How we test

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

Group test

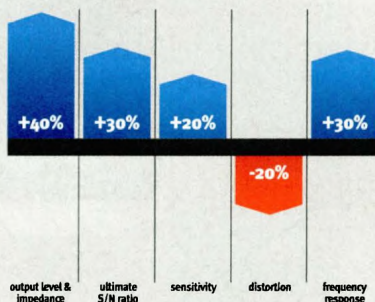
This month's *Group Test* involved extensive listening and lab testing procedures, explains **David Price**...

LISTENING TESTS

THIS MONTH'S TUNER TESTING was done over a protracted period of time, giving the chance to get an excellent sense of the sound of all six units in the group across a wide variety of programme material, and from a number of different stations. Listening to radio off-air, it is of course impossible to choose specific pieces of music, nor is it possible to control the equipment and/or signal processing used prior to the signal being broadcast. So this approach gave each product a proper chance to show its true colours. The variability of sound quality, not just across networks but even on the same station at different times, underlined the need for an extended audition.

An accurate assessment of sound quality can only be made when a tuner has a decent signal going to it, so a quality roof-mounted FM antenna was used. The pieces of 'wet string' supplied as 'get-you-going' aerials with all the tuners here simply are not sufficient to accurately gauge performance – even if several tuners tested managed surprisingly low background noise levels using them. As our measurements show, the signal strength meters fitted to some tuners proved variable, some giving a misleading account of the signal going in. Subjective listening tests over a period of several days confirmed the lab testing in this respect.

RESULTS AT A GLANCE



OUTPUT LEVEL & IMPEDANCE

This is an illustration of the FM tuner's maximum output level and its ability to deliver this level at all frequencies through long cables and into all amplifiers.

ULTIMATE SIGNAL-TO-NOISE RATIO

This is the tuner's maximum practical A-weighted Signal-to-Noise (S/N) ratio in response to an idealised FM input at a high 80dBµ (10mV RF at 75% modulation).

SENSITIVITY

Some FM tuners will break out of muting and achieve a useable stereo S/N ratio at far lower FM levels than others. These tuners have higher (bargraph) sensitivity ratings, the exact figures revealed in the lab reports.

DISTORTION

Rather than quote a single figure for distortion at one frequency, this value represents a measure of the FM distortion trend across the fullest audio band (60dBµ or 1mV RF at 75% modulation).

FREQUENCY RESPONSE

This is a measure of the 'flatness' of the tuner's FM frequency response from 20Hz (low bass) to 15kHz (high treble) – the practical limit before the pilot filter kicks-in.



OUR GROUP TESTS

and Lead Review are subject to exhaustive lab testing by Paul Miller using the QC Suite Functional Testing Station (left). Paul has tested more hi-fi equipment than any reviewer in the world, so you know you're in safe hands.

We don't publish pages of graphs, but we do understand the importance of transparency. So, readers may view full QC Suite test reports for our key reviews by clicking on the red download button on our website. www.hifichoice.co.uk

HOW WE TEST

▶ REFERENCE SYSTEM

Amplification:

- Musical Fidelity AMS35i

Loudspeakers:

- Quad 989
- Townshend Supertweeter

Equipment supports:

- Quadraspire

Interconnects:

- Missing Link Cryo Ref

▶ RADIO SOURCES

BBC RADIO



BBC RADIO



BBC RADIO



BBC RADIO



CLASSIC *fm*

heart
106.2



Group test

TUNERS £155-£699

Last orders?

Radio is still a sound salvation, but it's Internet-based digital that's cleaning up the nation, leaving analogue tuners in its wake, says *David Price*...

THE SCARE ABOUT ANALOGUE RADIO BEING SWITCHED OFF HAS PRETTY MUCH BEEN PUT TO BED. The cost of a full-blown switchover to DAB, where hundreds of expensive transmitters countrywide are scrapped and new Digital Radio ones put up in their place, is prohibitive. In these straitened times, our present government simply hasn't got the funds to do so, even if it wanted to – and I for one don't sense that it does. So, it's fair to say that FM broadcasting is safe for a good while.

But while we've all been worrying about the end of Radio 3 on analogue, we've taken our eye off the ball at the other end of the park, so to speak. The greatest threat to analogue radio is not DAB, but the Internet. This doesn't come from an evil, top-down scheme to legislate analogue out of existence, it's just that Internet radio is so convenient that a great many radio heads are now simply not so interested in FM or AM. Latest audience research figures show online radio listening is up a dramatic 37% year on year [source: RAJAR].

As such, hardware sales are falling. Instead of shedding a quiet tear for the passing of the golden age of analogue wireless, hi-fi manufacturers – being the unsentimental creatures that they are – have responded with a new range of streaming media players that offer full Internet radio access. Oh, and quietly ceased making analogue tuners...

Here are the last budget tuners standing – the affordable designs are quietly bowing out...

The result is that, when it would once have taken mere minutes to assemble an FM/AM tuner group test, this one took weeks! Many manufacturers said they'd rather their current analogue tuner wasn't reviewed as it was about to be quietly dropped from the range.

So, what you see here is effectively the analogue tuner equivalent of the last man standing – affordable designs are quietly bowing out, it seems.

ON TEST



Arcam FMJ T32
£649 p25

From one of Britain's great, innovating hi-fi companies, comes this beautifully designed tuner with FM, AM, DAB and iPod connectivity. It's extremely well built for the money, and has the sort of operational finesse you'd expect from the company first to market with DAB...



Audio Analogue Crescendo
£699 p27

An analogue tuner with a twist – digital radio connectivity. Plugging your PC or Mac into this box gives high(er) quality sound, thanks to its built-in USB DAC. But there's FM too, so in theory it brings the best of all worlds. No need for DAB, of course, if you're on the Internet.



Audiolab 8200T
£499 p29

The problem for this company is how to match the quality of its 8200CD (and CD Q) silver disc spinner, which is superlative at the price. So the 8200T has a tough fight on its hands. It's certainly well prepared, though – this AM, FM and DAB tuner looks a classy piece of work.



Myryad Z132
£475 p31

One of the unsung heroes of modern analogue tuner design, Myryad hi-fi radios often do very well in reviews and are much liked by buyers. Yet they don't seem to be as revered as some lesser, rival brands. Can the swish FM/AM Z132 change this unjust state of affairs?



NAD C426
£240 p33

Just as no James Bond film is complete without a villain, no tuner group test can possibly be considered finished until an affordable dark grey box bearing the NAD name is auditioned. The brand is a master of the budget radio art, and the C 426 shows why...



Pro-Ject Tuner Box FM
£155 p35

'Less is more' is the phrase that springs to mind here. Smaller than your average phono stage power supply unit, the little Tuner Box is – well – a little tuner box. It sports FM, a display, a tuning knob and a handful of presets, and that's your lot. It's cheap as chips, though...





Box-Design by Pro-Ject

Where performance meets convenience

Whether you want to add an iPod or computer music library to your existing Hi-Fi setup, or you're starting a main or secondary system from scratch, Box Design by Pro-Ject Audio Systems is a fantastic way for all music lovers to bring more high-quality audio into their lives. Every Box Design product combines premium build-quality and exceptional sound with a small size and an attractive price.

Stream



Stream Box DS

The Stream Box DS is one of the most affordable Streaming Clients available with high-end specifications.

- Stream 24-bit/192kHz HD Music
- Wi-Fi or Ethernet Connectivity
- Play from USB Hard-Drives
- Gold-Plated RCA Analogue Out
- S/PDIF Digital Out
- UPnP and DLNA Compliant
- Built-In Internet Radio Platform
- Play Digitally from Apple Devices
- Solid, Vibration-Free Construction
- Apple Authenticated

Play



Dock Box S Digital

- Take Pure Digital Feed from any Docked Device.
- Built-In 24-bit/192kHz DAC
- Gold-Plated RCA Analogue-Out
- S/PDIF Digital Output
- Apple Authenticated



Tuner Box S

- Low-Noise FM Tuner
- Manual or Automatic Tuning
- High-Contrast Display



DAC Box S USB

- High-Quality D/A Converter
- S/PDIF, Toslink & USB Inputs
- 24-bit/96kHz TI Chip

Listen



Speaker Box 5

- Two-Way Bookshelf Speaker
- Bass-Reflex System
- Three High-Gloss Finishes
- Magnetically Shielded
- Easy Placement Within a Room



Stereo Box S

- Integrated Amplifier
- 30 Watts Per-Channel
- Great for Desktop Systems



Head Box S

- One Headphone Socket
- Rotary Volume Control
- Low-Noise Semi-Conductors

Expand

NOW AVAILABLE

Box Design have just announced a new series of high-end power cables and distribution blocks at surprisingly affordable prices.

The Connect-It Power series is available now through most Pro-Ject dealers.



Box Design by Pro-Ject Audio Systems is distributed in the UK by Henley Designs Ltd.
www.henleydesigns.co.uk | Tel: 01235 511 166 | sales@henleydesigns.co.uk



Arcam FMJ T32 £649



Expensive yes, but this FM, AM and DAB tuner is superbly presented and impressively engineered...

DETAILS

- ORIGIN:** UK
- SIZE:** (WxHxD) 430x85x290mm
- WEIGHT:** 5.3kg
- FEATURES:**
- FM RDS, AM, DAB
 - iPod integration
 - optical and coaxial digital outputs
 - VFL display
- DISTRIBUTOR:** Arcam
- TELEPHONE:** 01223 203200
- WEBSITE:** arcam.co.uk

Arcam has been doing DAB since the technology's earliest days, and has unrivalled experience, so its implementation on this hybrid FM tuner should be good. Certainly the big T32 feels a class act, with excellently finished, low resonance casework (tap it and it doesn't ring like a bell, unlike some others here) and a precision feel to the controls. Being left-handed, I particularly like the location of the tuning knob, at the correct end of the fascia! Its action was superb, too.

This tuner has a dizzying array of abilities, from the aforementioned DAB and FM (with RDS, naturally) to AM and even Sirius Satellite broadcasts (depending on the market). I particularly like the bespoke iPod interface, which gives full integration via the tuner's remote control and crisp, green vacuum fluorescent display, if you plug in Arcam's rDock or rLead. Full duplex RS232 control for custom installers is also fitted.

Inside, a Wolfson 8740 DAC chip is fitted, aspirated via a toroidal power transformer and multiple low noise regulated DC power supplies. A rear panel RS232 socket is present for custom installations using Crestron or AMX style system controls, and there's an IR jack input, too. Two pairs of RCA phono output sockets complete the picture.

Sound quality

One of the most expensive designs here, it didn't come as a complete surprise to find that the Arcam is a fine performer, although it was better even than was anticipated.

Average FM can sound thin, harsh and compressed, just like most car radios – but the T32 proved way above this. It had lots of detail, letting the listener really get into a Radio 2 broadcast of 4hero's *Les Fleurs*, for example, but it managed to keep things rich and musical, too. Instead of sounding like a precision measuring instrument, which some good tuners at this price have in the past, it came over as quite natural and self-effacing. It was easily able to tell you all about the quality of the Beeb's broadcast CD players and/or hard disk playback systems, but didn't obsess over the fine detail.

Instead, it made for a smooth, relaxed listening experience. Male voices on Radio 4 are also a good litmus test for a tuner, and the Arcam performed adeptly. There wasn't a trace of nasal congestion, rather the voice pushed into my listening room like the proverbial heated utensil attacking animal fat. Again, I found myself aware of the compression system breathing slightly in the background, the T32 proving it was better than the actual source in this case, yet it was warm and smooth enough to confer a

sense of naturalness and ease. Soundstaging was excellent too on *The Archers*, the recorded acoustic falling out of my loudspeakers with confidence and scale. AM sound wasn't bad, either.

On DAB, it was excellent too. Few Digital Radio tuners match its accuracy, insight and sense of naturalness – most sound like the audio equivalent of processed cheese by comparison!

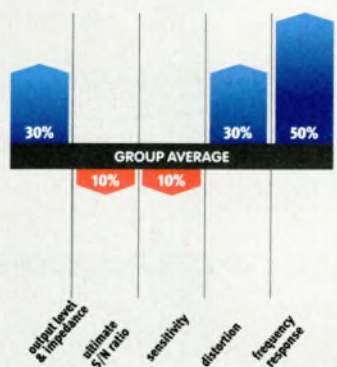
Overall then, this is a most fine performer across all the genres, stations and wavebands.

ON TEST

Signal strength meters are less common these days, but the Arcam T32 still provides this feature, its 10-step bargraph ranging from a mere 9dBµ to 35dBµ (2.8µV to 56µV at 60% modulation). The T32 drops out of muting at 27.5dBµ, about halfway along the scale, achieving a stereo S/N ratio of 36dB. At higher signal levels and modulation, the T32's ultimate A-wtd S/N ratio caps out at a respectable 69dB where the tuner's maximum output also reaches a high 1.42V.

Distortion is also impressively low at -0.1% through the midrange beyond which there's barely any increase to 0.13% right up to the effective cut-off point at 15kHz. Without doubt, the T32 is one of the 'cleanest' of the tuners here and although there's a slight shelving of high treble (-0.45dB/10kHz) its stereo FM response is otherwise very flat and well extended into the low bass. Stereo separation good to 52dB, midband. PM

RESULTS AT A GLANCE



Hi-Fi Choice

OUR VERDICT

- SOUND QUALITY** ★★★★★ **LIKE:** Warm, detailed, natural sound on FM; decent DAB; great build and feature count
- VALUE FOR MONEY** ★★★★★ **DISLIKE:** Crowded fascia; expensive
- BUILD QUALITY** ★★★★★ **WE SAY:** Excellent, but expensive tuner that does many things very well indeed
- FEATURES** ★★★★★

OVERALL



K2 Series

by Roksan Audio

"In short, the K2 system delivers musical delicacy and drama in flawlessly balanced proportion... That it looks so polished and presentable is an added bonus."

- Hi-Fi Choice, January 2009



M2 Series

by Roksan Audio

"The Roksan has solid stereo imagery and helps the ear interpret delicate ambient information ."

- Hi-Fi Choice, November 2010 (Integrated Amplifier and CD Player)



ROKSAN

Technology Driven by Emotions



Find your local Roksan retailer now by trying our new 'Where to Buy' tool!

Visit: www.henleydesigns.co.uk

Roksan Audio is distributed in the UK by Henley Designs Ltd.

W: www.henleydesigns.co.uk | T: 01235 511 166 | E: sales@henleydesigns.co.uk



Audio Analogue Crescendo £699

An imaginative mix of analogue FM/AM and USB DAC in one box makes this tuner stand out from the crowd...

DETAILS

- ORIGIN:** Italy
- SIZE: (WxHxD)** 365x75x210mm
- WEIGHT:** 4.5kg
- FEATURES:**
 - FM, AM
 - 24/192 USB DAC
 - backlit LC display
- DISTRIBUTOR:** Audio Analogue
- TELEPHONE:** 0039 0572 954513
- WEBSITE:** audioanalogue.com

Trust the Italians to do it differently. Given that DAB radio offers a paucity of stations, and that so many people now use Internet radio, some bright spark at Audio Analogue decided to add a USB DAC to an FM/AM analogue tuner, thus giving (via the connection of a computer) access to all those online streaming stations. It's an odd idea but in a way it sort-of makes sense! The result is a smart-looking device that looks like a conventional FM tuner, although it feels cheaper to use than the rival Arcam, with a very mediocre action to the main tuning knob. There are a number of presets across FM and AM, and the usual choice of manual or automatic tuning.

Build and finish is classic Audio Analogue, which is to say a lavish brushed alloy fascia bolted to a rather agricultural looking pressed steel case. Inside it sports Burr-Brown 24-bit/192kHz convertor chips, what's said to be a high-quality internal clock and a toroidal power supply. Sensibly, the tuner section has been placed in a metal 'cage' to shield the sensitive analogue circuitry from the (electrically) noisy digital bits. In addition to FM and AM aerial sockets, a rear-mounted coaxial electrical digital output joins the RCA analogue line outs, and a trigger is fitted for remote operation.

Sound quality

This tuner felt slightly more sensitive than some here, pulling in more stations more cleanly with its bundled wet string antenna. But with a decent twig, the Audio Analogue impressed less. The background was nice and quiet, but the sound beyond it was a little harder and more nasal across all stations. Speech on Radio 4 was clean and tidy, but nothing more. There was little sense of insight, or of the studio acoustic 'dropping out' of the speakers into the room. Rather, it seemed rather curtailed and constrained.

Elvis Costello's *Oliver's Army* on Radio 2 was a decently pleasant experience, but nothing more. The Crescendo was always tidy and decently detailed, but it simply never got past that. Indeed, it felt a bit like a budget CD player, never offending but just not taking you into the soul of the music. I appreciated its quiet backdrop, and its lack of obvious vices, but it was what this tuner left out that left me wanting more.

Wandering over to Radio 3, and a live classical broadcast again felt an unmoving experience. It was as if spending all this money got you a quieter background with fewer RF nasties than some cheaper designs, but simply didn't bring any improvement in sound. Rather,

there was a slight edge to strings and horns which made me recoil, after the smoothness of the Arcam. This suited the Kronos Quartet – broadcast later in the evening – more, but you still got the impression you were hearing too much of the tuner's lack of body and scale.

The USB DAC input worked well enough, but not exceptionally. It would certainly upgrade a built-in PC soundcard, but you'll not want to throw away a good streamer.

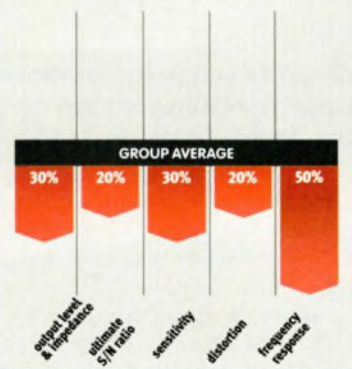
A quirky design, capable in some ways, but not the definitive article.

ON TEST

While Audio Analogue specifies the threshold of its auto-seek tuning at 28dBµ, in practice stereo broadcasts are typically only locked with stronger signals (39dBµ or 89µV RF at 75% modulation). The internal USB DAC may be responsible for various 'digital tones' that punch through the noise floor, but the Crescendo still only needs a mere 93µV RF to achieve a 50dB A-wtd S/N ratio and a heftier 64dBµ (1.6mV RF) to realise its ultimate 67.3dB. The suppression of subcarrier and pilot tones is especially impressive (110dB and 70dB, respectively).

Harmonic distortion improves with increasing signal strength from ~1.2% at 50dBµ to ~0.5% at 60dBµ through bass and lower midrange. The frequency response, with its loss in presence output, parallels that of the Myriad Z132, as does its 50dB stereo separation (and pilot suppression), but the Z132 is otherwise far more sensitive. **PM**

RESULTS AT A GLANCE



Hi-Fi Choice

OUR VERDICT

- SOUND QUALITY** ★★★★★ **LIKE:** interesting USB DAC facility
- VALUE FOR MONEY** ★★★★★ **DISLIKE:** USB DAC not for everyone; slight midband coarseness; fiddly tuning with poor action; resonant casing
- BUILD QUALITY** ★★★★★ **WE SAY:** Quirky tuner with unusual feature set, but poor value here...
- FEATURES** ★★★★★

OVERALL



6 Essential Questions To Ask Before Upgrading

1 Surely upgrading my cartridge is better than changing my arm?

Staggeringly, tests show that a £120 cartridge can outperform a £2500 one, just by virtue of being in a better arm. Not only this but in the long run it saves a fortune to run a good arm with a lesser cartridge. Arm installation is usually easier than cartridges, with help from adaptors and guidance - Visit our web site for help or phone us.

2 Is it worth changing my arm?

Users say they could never have imagined the level of improvement achieved by simply upgrading their arm. The below comment is typical.

"I'm extremely impressed with the sound and happy I made the right choice with your tonearm. I feel there's no other tonearm that could come close to the dynamics it produces. The sound I'm getting now is pure perfection. I am in total analogue heaven and enjoying my vinyl investments for the first time. In the past I was not happy with the sound and not interested in playing any vinyl. Now I'm looking forward to an entirely new experience. I feel very fortunate in discovering your product." Craig Larson

3 Do I need to invest more than the value of my current arm to get an upgrade?

You can actually invest less and still get a massive upgrade. This surprises many, but at Origin Live we think well outside the box - to create both awesome performance and higher value designs than normal. For example one editor stated in a review of the Silver arm "Price tag is laughably low could probably charge 5 times the amount words can't express how good this is one of the designs of the decade."

4 What about new innovations and materials – what do I believe?

The need for trusted high performance arms has never been greater. At Origin Live we have devoted over 25 years of continuous development to achieve ultimate sonic performance.

Origin Live arms consistently win awards around the world, year on year, testament to their leading performance. For example the Onyx arm won "Tonearm of the year 2011 award" in Hi Fi World. In addition to this, review endorsements from respected magazines could not be higher with comments such as;

"So far ahead of the pack...looks about to lap them" STEREO TIMES,

"The best arm I've heard" HI FI WORLD.

5 Who has an arm to suite my budget and needs?

The range of Origin Live arms is probably the most extensive in the world. Designs range from £4500 down to £250 - including a 12" version for every model.

6 What if I am not happy that the arm lives up to the claims?

You may be apprehensive about an investment of this nature without first hearing it in your system. Every arm ordered through Origin Live comes with a one month, money back guarantee if you are not absolutely delighted (dealers can offer this at their own discretion).

Why not start enjoying an entirely new level of performance?

To find out more, please visit our web site. You can order the arm of your choice either directly or through one of our dealers.



ORIGIN LIVE LTD
Tel: +44 02380 578877
originlive@originlive.com
www.originlive.com



Reproducing the original sound



Audiolab 8200T £499



From the team that brought us the talented Audiolab CD spinners comes this impressive new FM/AM/RDS tuner...

DETAILS

- ORIGIN:** UK/China
SIZE: (WxHxD) 445x74x335mm
WEIGHT: 5.2kg
FEATURES:
 • FM RDS, AM, DAB
 • optical and coaxial digital outputs
 • LED display
DISTRIBUTOR: IAG
TELEPHONE: 01480 447700
WEBSITE: audiolab.co.uk

The third of three hybrid tuners in the group test, the Audiolab is easily the swiftest feeling of all the designs in the test. This svelte package seems an ocean of flexibility compared to other analogue-only machines here, sporting a fully featured RDS FM tuner with plenty of presets, an alphanumeric LED display, a tuning knob (as opposed to just buttons) and remote control. The controls have an exceptionally nice feel, and their logical layout makes using the tuner a pleasant and stress-free experience. The crisp LED display, with useful signal strength readout, further augments the user experience.

The DAB section is selected by pushing a button on the fascia, and sports digital outputs in both optical and coaxial format for connection to an external DAC at 16-bit/48kHz resolution. As the sonics of Digital Audio Broadcasting are limited by its old MP2 codec, this isn't really going to offer much of an improvement.

Build and finish are to Audiolab's usual high standards, with an attractive brushed metal fascia and pressed-steel casework that improves even on the excellent Arcam in its sense of occasion. At 445x74x335mm including feet, it's a full size design but still pleasingly slimline and unobtrusive.

Sound quality

Just as I could discern that distinctively warm Arcam flavour in the T32, so it's possible to hear the Audiolab house sound in the 8200T. This means a slightly cleaner, more precise and detailed character, but one that's still musically meaningful. It doesn't succeed by dicing every last strand of the mix – slicing and dicing it into atoms – but rather grabs the main elements and strings them together very methodically, and ultimately successfully, into something highly listenable.

Radio Two playing Spaudau Ballet's *Gold* (surely not!), was more enjoyable than expected. From a quiet backdrop (better than the Pro-ject, not as good as the Myryad), I heard a full-bodied rendition that got toes tapping and imparted a sense of life to the proceedings. Vocals were a little thinner than the Arcam T32, but never grainy (unlike the Crescendo), bass was full and taut, and treble smooth. I did feel that hi-hat cymbals lacked a little sparkle compared to the Arcam and NAD, however. Soundstaging was strong, with excellent image location, although it wasn't quite as wide left-to-right as the Arcam.

Spoken voice via *The World Tonight* on Radio 4 was very palatable – smooth, subtle, sophisticated, but ever so slightly lacking in



atmosphere compared to the Arcam and NAD. Fortunately, its excellent midband clarity made up for this slightly, giving an even-handed and polished performance.

AM wasn't bad, but certainly nothing to write home about; it feels like most of the work has gone on FM. DAB was decent but nothing more – it didn't shine like the Arcam, which was unusually good.

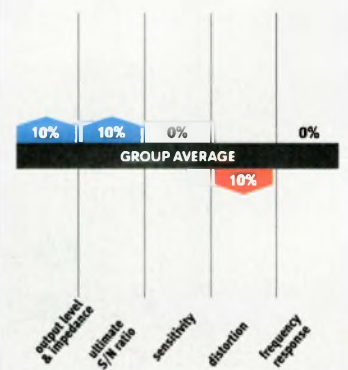
Overall then, a very strong proposition at the price, especially when you factor in the super build and comprehensive feature count.

ON TEST

Audiolab's 8-step FM signal strength meter spans a useful 3dBµ-44dBµ range with the second-to-last segment (40dBµ) delivering a respectable A-wtd S/N ratio of 50dB. The 8200T's separate FM stage is refreshingly sensitive with its stereo muting threshold set to 26dBµ or 20µV RF (about halfway along the indicator), but there's still a worthwhile improvement in noise performance with higher signal strengths where the A-wtd S/N ratio approaches 63dB at a moderate 60% FM (60dBµ or 1mV RF). Optimum performance occurs at 37dBµ where the A-wtd S/N ratio achieves close to 70dB.

Audiolab's 60dB pilot and subcarrier filtering is not aggressive just as the frequency response shows a very smooth treble roll-off amounting to -1.5dB/10kHz and -3dB/15kHz. Distortion, principally 3rd harmonic, is highest at -0.6% through bass frequencies and lowest at -0.2% through the presence band. PM

RESULTS AT A GLANCE



Hi-Fi Choice

OUR VERDICT

- SOUND QUALITY** ★★★★★ **LIKE:** Superb build and finish; excellent feature set; crisp, open sound; overall ease-of-use
- VALUE FOR MONEY** ★★★★★ **DISLIKE:** Nothing at the price!
- BUILD QUALITY** ★★★★★ **WE SAY:** The best all-rounder of the group, this combines strong sound with great value
- FEATURES** ★★★★★

OVERALL



FURUTECH
PURE TRANSMISSION



WWW.FURUTECH.COM

sound foundations
www.soundfoundations.co.uk

+44(0)1276-501-392
info@soundfoundations.co.uk

The ADL GT40 ...



WHAT HI-FI?
SOUND AND VISION
AWARDS 2011

PRODUCT OF THE YEAR
CABLES & ACCESSORIES
FURUTECH ADL GT40

TONE Audio Magazine
2010
Product of the Year
Award

PC ADVISOR
RECOMMENDED

AEx
オーディオ機器賞
Audio Excellence Award 2011

Hi-Fi
Choice
RECOMMENDED

a master of all trades.

phono stage • USB DAC • USB ADC • headphone amplifier

ADL
ALPHA DESIGN LABS by **FURUTECH** Tokyo • Japan
service@adl-av.com

sound foundations
www.soundfoundations.co.uk

+44(0)1276-501-392
info@soundfoundations.co.uk



Myryad Z132 £475

Always a contender in the tuner stakes, how does Myryad's latest all-analogue mid-price machine fare?

DETAILS

- ORIGIN:** UK/China
SIZE: (WxHxD) 436x78x300mm
WEIGHT: 4.7kg
FEATURES:
 • FM RDS, AM
 • 29 presets
 • Myryad My-Link
 • VFL display
DISTRIBUTOR: Armour Home Electronics
TELEPHONE: 01279 501111
WEBSITE: myryad.co.uk

An unusual marque, Myryad. The name has never managed to set the hi-fi world on fire, is rarely talked about by hobbyists and yet its products tend to do unerringly well in reviews, and are loved by owners. The Z132 is the company's entry-level design, although is still a lot more expensive than some here. It's an FM-only, RDS-equipped unit that lacks DAB functionality or any other gizmos. This makes it refreshingly easy to use, and the clean fascia layout helps in this respect. Thumbs down, however, for its lack of a tuning knob – it uses push-buttons exclusively, which I find more fiddly. The tuner sports 29 presets, although these aren't namable like some others here.

Build quality is generally impressive; the aluminium fascia and casing come in a choice of silver or black, and the unit certainly feels more expensive than the likes of the Audio Analogue, NAD and Pro-Ject. The soft, dark blue display is relaxing to look at and has a useful 'on tune' indicator. This tuner features Myryad's Smart My-Link functionality; when hooked up to a Myryad system there's an in-built clock alarm which powers up the source of your choice. By group standards its about average size at 436x78x300mm, and no remote control is supplied.

Sound quality

Able to pull a radio signal from the heavens better than almost all others here, this is one to use if you can't use a roof mounted aerial. With or without a proper antenna, it was very quiet, and gave a highly polished sound from the off...

It was a distinctive one however, not quite as neutral as the Arcam in its tonality. The Z132 felt like it had a built-in loudness button, Alex Cleave's dulcet tones on Radio 4's *Book at Bedtime* sounding ever so slightly larger than life. His voice had a little more body, yet a touch more air, than via the Arcam or Audiolab for example. Yet it still came over with a nice, velvety feel. Indeed, the Myryad proved a lovely thing to behold. It made the Audiolab – something I'd previously been rather impressed by – sound quite average. It has an immediacy that only the Arcam and NAD share, in this group. Things just sounded more organic and believable – although you'd have to be able to live with that slightly warm bass to really enjoy its magic. Announcers who normally sound a little anaemic suddenly become slightly barrel-chested!

MC Tunes' *The Only Rhyme That Bites* on Mark Radcliffe's Radio 2 programme was a riot, the Myryad getting into the groove in a way not even the Arcam could, sounding wonderfully animated and

compelling, making me want to listen for longer. Midband proved super smooth. It was detailed in a way that satisfies, yet doesn't soak you with everything that's going on. It's less analytical than the others here by a country mile, yet no less incisive. Indeed, the soundstage pushed out through my speakers with tremendous confidence, sounding expansive and natural.

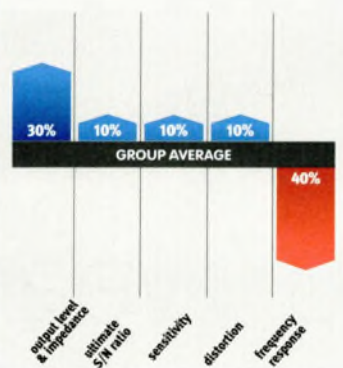
The best tuner here for sound quality by a good way, it is products like this that will have you leaving Internet radio for another day.

ON TEST

Second in sensitivity only to NAD's C 426, the Z132 provides a useable S/N ratio at just 24.2dBµ (16µV RF), a 50dB A-wtd S/N at 41dBµ and a full 66dB S/N at 60dBµ (1mV RF). Myryad's steep pilot filtering looks to cause a peak in the top-end of the tuner's frequency response (+0.3dB at 12kHz) following a broad depression of up to -1.4dB through the presence region. The excellent 61dB pilot rejection and 102dB suppression of the 38kHz subcarrier are benefits, but stereo separation does weaken from 45dB midband to 30dB at high frequencies.

Distortion is mainly 2nd and 3rd harmonic in nature and impressively low in level at just -0.25% from the deepest bass (20Hz) to the highest treble (15kHz) at 60dBµ/75% modulation. Finally, the Z132 has the highest maximum output of the group at 1.6V so, fed an appropriately robust FM broadcast, it'll sound the loudest of the lot! **PM**

RESULTS AT A GLANCE



Hi-Fi Choice

OUR VERDICT

- SOUND QUALITY** ★★★★★ **LIKE:** Superb sound quality that makes everything a pleasure to listen to; RF sensitivity
- VALUE FOR MONEY** ★★★★★ **DISLIKE:** No rotary tuning knob makes tuning more fiddly
- BUILD QUALITY** ★★★★★ **WE SAY:** Intelligently engineered tuner that brings the magic of FM!
- FEATURES** ★★★★★

OVERALL



KINGDOM ROYAL



85 years of audio innovation

Kingdom Royal is Tannoy's flagship loudspeaker. It represents the sum of the British company's rich 85 year heritage, its cutting-edge technical innovation and world-renowned acoustic engineering. Kingdom Royal brings together proprietary components, a radical cabinet design and the finest quality materials throughout, to deliver a true musical reference.

Distilling this high-end expertise throughout our loudspeaker range, everyone can enjoy Tannoy's class leading refinement and performance. From the award-winning Mercury V series to the classic Prestige collection, every Tannoy loudspeaker has Kingdom Royal DNA at its heart.

TANNOY®

For more information on Tannoy's extensive loudspeaker range visit www.tannoy.com



NAD C 426 £240

From the popular masters of the budget tuner comes this new, unassuming little box...

DETAILS

- ORIGIN:**
UK/China
- SIZE: (WxHxD)**
435x87x312mm
- WEIGHT:**
4.2kg
- FEATURES:**
- FM RDS, AM
 - 30 presets
 - nameable presets
 - VFL display
- DISTRIBUTOR:**
Armour Home Electronics
- TELEPHONE:**
01279 501111
- WEBSITE:**
nadelectronics.com

NAD's reputation for top quality FM tuners goes way back to the nineteen seventies. In group test after group test since then, the company has shone. So what of the latest C 426? Well, it's an FM/AM affair that sports the (now almost ubiquitous) Radio Data System that gives handy programme information. Thirty station presets are available and the AM and non-RDS FM stations can be named (up to eight characters) for extra ease of use – a nice touch. There's no Digital Radio functionality though, or other concessions to modernity (or otherwise)! It feels intuitive to use, thanks to the low button count. The large, smooth turning knob makes tuning a pleasure, and the vacuum fluorescent display is easily readable and informative.

With a thin pressed steel case and plastic fascia, this tuner won't win awards for build quality, but still its trademark no-nonsense NAD design is neat. For those of you who think it could possibly make a difference to the planet, the company says it has an ultra low power consumption on standby (<0.5W). Round the back there's an IR input and RS-232 port to let it talk to system controllers and custom installers. NAD's full function remote control is supplied, which is certainly nice to have considering its modest price.

Sound quality

Even in my poor reception area in the wilds of Wiltshire, the NAD plucked every BBC station out of the air faultlessly with its 'wet string' wire aerial, showing its superb sensitivity. Its sonics are pretty tasty, too. Despite this being far cheaper than most others here, there was little sense of it being any less expensive. Indeed, it shamed even the rather fine Audiolab and monstred the Audio Analogue on speech and music...

Aztec Camera's *Summer in the City* on Radio 2 showed the NAD's smooth, soft, even-handed nature. It lacks the insight and grip of pricier designs, but gives away nothing musically. Quite the reverse in fact, as Roddy Frame's strummed steel stringed guitars flowed beautifully, the track lilting from the speakers. Bass proved lighter than all here, except the Pro-Ject and Audio Analogue, and a little more diffuse, but what there was, was warm and wonderfully tuneful. The NAD came second only to the Myryad in its ability to get the listener into the groove, alongside the music.

Spoken voice on Radio 4 showed that slight lack of bass, a gently curtailed top, and a fractionally foggy midband. Yet the announcer still sounded there in the room, talking in a wonderfully tangible way. Somehow, the NAD manages

to draw your attention on to the enjoyable elements of what you're hearing, rather than its failings.

Radio 3 showed its soundstage to be a little diffuse, lacking a degree of depth; it didn't place the recorded acoustic on a big plate right there in front of you, unlike the Myryad or Arcam. Perhaps it was a little recessed, or oversmooth, but still it proved lovely to listen to for long periods at a time.

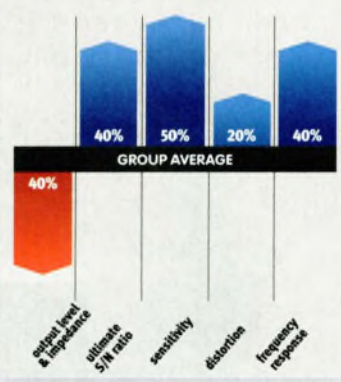
A superb budget tuner then, the NAD C 426 reminds us why analogue should never die!

ON TEST

In many important respects, NAD's C 426 is the 'over-achiever' of this month's group. Its 640mV maximum output is a full 7dB lower than that of the Myryad, for example, but its RF front-end is especially sensitive, dropping out of muting with (stereo) broadcasts as weak as 18dBµ (just 8µV RF). Moreover, the C 426 has the widest ultimate S/N ratio of our group, and by quite a significant margin at 75dB. So it's both very sensitive *and* very quiet.

NAD has also engineered a very flat and uniform response, not unlike that of Arcam's T32, albeit with a mild +0.3dB boost to the presence band. Naturally, stereo separation is at its widest in wide IF mode (48dB through the midrange), but collapses to 5-10dB in narrow IF mode as its hi-blend function trades stereo for even higher sensitivity. Finally, the C 426 also enjoys very low levels of distortion – at or below 0.2% across the audio range at 60dBµ. What's not to like? **PM**

RESULTS AT A GLANCE



Hi-Fi Choice

OUR VERDICT

- SOUND QUALITY**
★★★★★
LIKE: Lovely warm, analogue sound on FM; ease of use; clean and crisp ergonomics; superb RF sensitivity
- VALUE FOR MONEY**
★★★★★
- BUILD QUALITY**
★★★★★
DISLIKE: No RDS text; flimsy casework
- FEATURES**
★★★★★
WE SAY: A brilliant no-nonsense package for the money

OVERALL





PRECISION MACHINING

We are experts in Hi-Fi housing & speaker panels, all other machined parts specified. Machined to a very high standard and finished as per specification.



The Plinth



GREAT COMBINATION DEALS

THIS MONTH INCLUDES THE SME & GRAHAM ARMS

OFFER 1

- Clarity Dual
- Sme V Arm

£4,700 inc VAT

OFFER 2

- Clarity Dual
- Graham Arm

£5,900 inc VAT

TO DISCUSS ANY OF THE CLARITY DEALS

Please contact claro audio on:

01423 799933

OR EMAIL

peter@claro-audio.co.uk

VISIT

www.claro.co.uk



Pro-Ject Tuner Box FM £155

This little radio does what it says on the tin, but can the diminutive design hold a candle to the bigger boxes?

DETAILS

ORIGIN: Czech Republic
SIZE: (WxHxD) 103x38x141mm
WEIGHT: 565g
FEATURES:
 • FM stereo
 • 8 presets
 • AFC
 • trigger inputs
DISTRIBUTOR: Henley Designs
TELEPHONE: 01235 511166
WEBSITE: henleydesigns.co.uk

Something of an exception to mainstream tuner rules, this tiny box (103x38x141mm) tricks is a fraction of the size of the others here – which, of course, prompts the question, why do the rest need to be so big? Still, to be fair, it doesn't have as many facilities as some of the others here. You just get your bread-and-butter FM radio without so much as RDS, a DAB module, DAC or coffee percolator. It does come with an extra box, but alas it's not an exquisitely styled iPod dock, but rather a cheapo 16v, 200mA power supply without which, of course, it will not work. The main unit is made from black painted aluminium, and looks a little plain, but this is excusable given its very modest price.

The backlit LC display is small yet surprisingly informative; there's a fine tuning meter, signal strength meter and stereo pilot indicator. AFC is fitted to stop it drifting off station, and there's a choice of manual or automatic tuning modes, plus eight presets, which will be enough for most people. The fascia buttons are tiny, forcing you to use the equally miniature card remote control – don't lose this as it has numerous buttons not duplicated on the fascia.

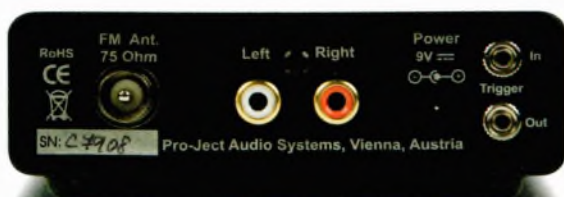
On its dinky back panel, you'll see a pair of RCA line outputs, and a single coaxial 75 ohm aerial input.

Sound quality

If it wasn't for the NAD's exceptional performance at just £95 more, it would be churlish to complain about this tuner's poor sensitivity. But you'll need a proper outdoor FM aerial to get quiet reception, which is ironic as TunerBox buyers are unlikely to have easy access to this sort of thing.

Sonically it's not bad, but again it has the ghostly hand of the NAD on its shoulder, which is much better for not much more money. The Pro-Ject sounds just like the good budget tuner that it is, albeit a slightly noisy and hissy one. This means it has a lively, well lit midband with lots of explicit detail – it shines a brighter, whiter light than the rosy, sepia-tinged NAD. Some listeners will like this, others not. Either way, I'd suggest the NAD's warmer balance is better suited to forward budget systems.

Radio 4's midday news announcer sounded spry and crisp – everything was well etched and clearly laid out before the listener. However, listening intently revealed a hint of nasal congestion. Moving on to Radio 2's Janice Long show later, and this didn't spoil things one jot – Keane's *Sovereign Light Cafe* was surprisingly enjoyable, more rhythmically direct than the Audio Analogue perhaps. The Tuner Box pushed the song's rhythms along with real aplomb. Bass wasn't too



sloppy either, the little box making a fair stab at reproducing the scale of the song. Vocals sounded a trifle diffuse and treble a little brittle perhaps, but no major crimes against music were committed.

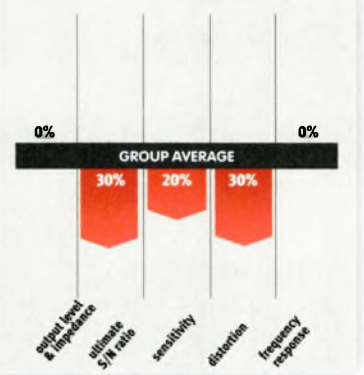
Moving to Radio 3's *Late Junction*, and the FM Box showed its humble origins; with all others here giving a better rendition of Omni Trio's *Higher Ground*. But still it caught the essential emotion of the music surprisingly well – all you can reasonably expect at this price. A cute thing, but there's better.

ON TEST

Diminutive it may be, but Pro-Ject's Tuner Box S still punches above its weight with a full 860mV output from a usefully low 170ohm source impedance, so long interconnects will prove no barrier. The FM response is not unlike Audiolab's with its gentle but progressive treble roll-off reaching $-1\text{dB}/10\text{kHz}$ and $-2\text{dB}/15\text{kHz}$ followed by an almost 'digital' brickwall filter thereafter that provides almost total pilot rejection. Interestingly, while distortion is only moderate at 0.2-0.4% through bass and treble, it escalates rapidly at HF, hitting 4% at 15kHz.

The Tuner Box S is not overly-sensitive, breaking out of muting at 30.5dBu (33.5µV RF), but still only providing a meagre 27dB separation under relatively ideal circumstances. Also, while its ultimate S/N ratio will be sufficient for the best 'real world' FM broadcasts at 66.5dB, it still requires a hefty 60dBu (1mV RF) to provide a 50dB stereo S/N. **PM**

RESULTS AT A GLANCE



Hi-Fi Choice

OUR VERDICT

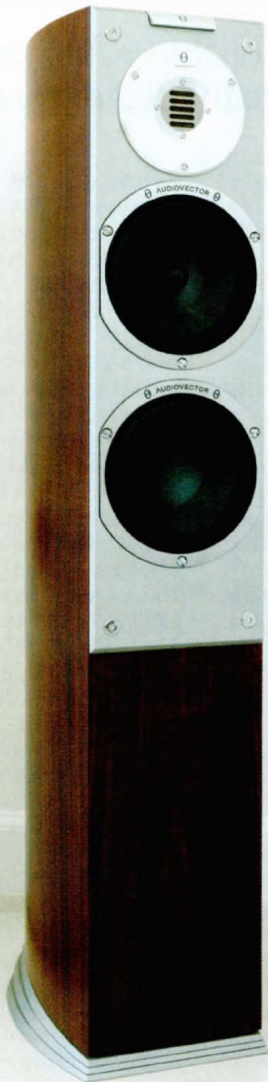
SOUND QUALITY ★★★★★
VALUE FOR MONEY ★★★★★
BUILD QUALITY ★★★★★
FEATURES ★★★★★

LIKE: Ultra compact size; neat packaging; informative display; low, low price!
DISLIKE: Poor RF sensitivity; fiddly to use; slightly brittle sound
WE SAY: Fine value niche budget tuner, but won't suit all tastes and needs

OVERALL



THE Si 3 RANGE BEAUTY BORN OF PERFORMANCE



SEE US AT...
THE NATIONAL AUDIO SHOW 12
 22 - 23 SEPT
 WHITTLEBURY HALL, UK



WWW.AUDIOVECTOR.COM

Audiovector speakers are available through a knowledgeable dealer network with superlative demonstration facilities:

- Acoustica** (Chester, Cheshire) 01244 344227
- Analogue Seduction** (Peterborough) 01733 350878
- Audible Fidelity** (Daventry) 01327 301006
- Audio Destination** (Tiverton, Devon) 01884 243584
- Audio Emotion** (Banbeath, Fife) 01333 425999

- PJ Hi-Fi** (Guildford, Surrey) 01483 504801
- Ripcaster** (Checkendon, Oxfordshire) 01183 218292
- Sevenoaks Sound & Vision** (Holborn, London) 0207 8377540
- Tavistock Audio** (Tavistock, Devon) 01822 618940

Audiovector is distributed in the UK by Henley Designs Ltd.

henleydesigns.co.uk · 01235 511 166 · sales@henleydesigns.co.uk

Listening test verdict

David Price puts this month's group testing into context. How do the contenders fare in the great scheme of things?

This proved a surprisingly varied group, not just in terms of sound but in build and ergonomics too...

One key area of sonic difference was tonal quality. Broadly speaking, there were light and bright sounding tuners (the Pro-Ject and the Audio Analogue), fairly neutral ones (the Audiolab and Arcam) and warmer, more euphonic designs (the NAD and Myryad). For the sake of completeness, it's fair to say that the Arcam was on the warm side of neutral, and the Audio Analogue was on the neutral side of bright.

It isn't just tonal quality that makes or breaks a tuner, however. Although this is important, as different

listeners have different preferences, the basic musicality of the design is vital. This ultimately determined the rankings – basically the tuner's ability to capture the magic of music...

The Pro-Ject did a bit of this, but was hardly exceptional. It was clean and detailed and reasonably good fun to listen to; what really marked it down was its poor sensitivity, which is an issue out there with less than ideal aerials. It is great value, though.

The Audio Analogue was a decent design, but nothing special. Worth buying to complete your Crescendo separates systems, but unless that USB DAC is important, then others offer better value.

The NAD is superb. It does so much for such little money, it's almost a scandal. Seemingly sensitive enough to pick-up extra-terrestrial broadcasts from space with a coat-hanger for an aerial, it's a brilliant real-world device. Sound is warm and musical, miles away from Digital Radio of any flavour.







The Audiolab is an excellent radio that's beautifully built, clean and crisp sounding and lovely to use all round. It is all most buyers would possibly want.

In some ways, the Arcam can't compete – build and useability aren't up to its lofty standards. But the sound is just more engrossing and enjoyable. It's a great tuner across all wavebands, but, of course, you do pay for it.



The Myryad Z132 is neither the nicest to use or the best built, but its sound proved superlative across all types of music. True, it's ever-so slightly coloured, injecting warmth into almost everything it plays, but it is just such great fun to listen to. No matter what's playing, you just can't get enough. Importantly, it is also ultra sensitive, ideal for those in poor reception conditions. Tune in on this!

RESULTS AT A GLANCE

Make/model	 Arcam FMJ T32	 Audio Analogue Crescendo	 Audiolab 8200T	 Myryad Z132	 NAD C 426	 Pro-Ject Tuner Box FM
Price	£649	£699	£499	£475	£240	£155
Sound	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★
Value	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★
Build	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★
Features	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★
Conclusion	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★
Key features	Excellent FM/AM/DAB tuner with a plethora of facilities, fine finish and big, musical sound	Quirky FM/AM tuner with USB DAC built-in; average sound makes it look poor value	Superbly finished, highly flexible FM/AM/DAB design with fine performance and build	Wonderful sounding FM/AM design that makes listening all day an absolute pleasure	The best value tuner here, it offers smooth, sweet sonics allied to excellent sensitivity	Interesting niche product that is both compact and cute; decent value, too
FM	Yes	Yes	Yes	Yes	Yes	Yes
RDS (FM)	Yes	Yes	Yes	Yes	Yes	Yes
AM	Yes	Yes	Yes	Yes	Yes	No
DAB	Yes	No	Yes	No	No	No
USB/iPod	No/Yes	Yes/No	No	No	No	No

TRY WITH THESE

AMPLIFIER: NAD C316BEE £234

Another great thing about the NAD C 426 tuner is its partnering integrated amplifier. Less than £250 buys you a very fine sounding little performer that goes louder than its 2x40 RMS per channel power rating suggests, and has a lovely warm and musical sound. It's not flashy, but gets the job done handsomely.



AMPLIFIER: Audiolab 8200 £749

The obvious visual match for Audiolab's 8200T tuner, this mid-priced integrated amplifier is nevertheless a good bet to use with any of the tuners here, save perhaps the drier sounding Pro-Ject. It's a very clean and detailed design, but offers plenty of power to push along the music with confidence.



AMPLIFIER: Arcam FMJ-A38 £1,595

If it's a big, powerful sounding integrated you want then this is a great choice. Not the most romantic performer, it's nevertheless neutral, open and smooth, and will be a fine sonic match for most of the tuners here, as well as being a perfect visual match for Arcam's own FMJ T32.



Small size BIG sound



how we do it . . .

Our new A3 loudspeaker really is small, only 75cm tall. It fits neatly into the smallest spaces.

A low Q enclosure ensures deep articulate bass in any listening room. Which means the A3 delivers a BIG clear sound even in small rooms.

It's easy to drive. So you don't have to own a big expensive amplifier.

'Making a good loudspeaker that falls within the price and size of the A3 is something wonderful.'

Hi-Fi + Issue 86, Feb 12



SPENDOR

www.spendoraudio.com

FREE GIFT

WORTH
£50

Chilli Air Bone CONDUCTION HEADPHONES

WHEN YOU subscribe!



HURRY OFFER CLOSES
12th September 2012

An innovative design from Chilli Technology, these headphones were developed from military technology. They allow users to hear their music clearly yet still be aware of their surroundings. This is because the headphones are positioned in front of the ear and use bone conduction (from the cheekbones) so there will be no impact on the eardrum at all. They are more comfortable than the popular ear bud style and are lightweight, weatherproof and robust. These headphones will ensure that the wearer retains situational awareness. An amazing design!

SUBSCRIBE TO THE COMPLETE PACKAGE AND RECEIVE:

- 13 PRINT EDITION ISSUES DELIVERED TO YOUR DOOR
- FREE CHILLI TECHNOLOGY AIR BONE CONDUCTION HEADPHONES
- FREE ACCESS TO THE DIGITAL ISSUE & ONLINE ARCHIVE
- FREE IPAD, IPHONE AND ANDROID ACCESS
- PLUS! SAVE UP TO 25% OFF THE SHOP PRICE



Digital Only Package also available

Gift for UK subscribers only, while stock lasts.

08456 777 807

quote ref. V300

www.subscription.co.uk/hificl/v300

Alternatively, you can complete the form below and return, with payment, to the address provided

YOUR DETAILS:

Mr/Mrs/Miss/Ms.....Initial.....Surname.....

Address

Postcode.....Country.....

Tel.....Mobile.....

Email.....D.O.B.....

THE COMPLETE PACKAGE - UK ONLY:

SAVE 20%

I would like to subscribe to The *Hi-Fi Choice* Complete Package, for 1 year (13 issues) with a one-off payment of £41.49

THE COMPLETE PACKAGE - OVERSEAS:

I would like to subscribe to *Hi-Fi Choice* Complete Package, for 1 year (13 issues) with a one-off payment: Europe (inc Eire) £61.26 ROW Airmail £65.00

For all Canadian, North and South American subscriptions please call 001 877 363 1310 or go to www.expressmag.com

DIGITAL ONLY PACKAGE (UK AND OVERSEAS):

I would like to subscribe to The *Hi-Fi Choice*, Digital-Only Package, for 1 year (13 issues) with a one-off payment of £19.99

PAYMENT DETAILS:

Postal Order/Cheque Visa/Mastercard

Please make cheques payable to MyHobbyStore Ltd and write code V300 on the back

Cardholder's name

Card no:

Valid from..... Expiry date.....

Signature..... Date.....

DIRECT DEBIT SUBSCRIPTIONS (UK ONLY):

SAVE 25%

CODE V300

I would like to subscribe to The *Hi-Fi Choice*, Complete Package, paying £9.79 every 3 months by Direct Debit. **BEST OFFER**

Instructions to your bank or building society to pay by Direct Debit. Originator's reference 422562



Name of bank

Address of bank

Postcode

Account holder

Signature

Sort code

Account number

Instructions to your bank or building society: Please pay MyHobbyStore Ltd. Direct Debits from the account detailed in this instruction subject to the safeguards assured by the Direct Debit Guarantee. I understand that this instruction may remain with MyHobbyStore Ltd and if so, details will be passed electronically to my bank/building society.

Reference Number (Official use only)

Please note that banks and building societies may not accept Direct Debit instructions from some types of account.

TERMS & CONDITIONS: Offer ends 12th September 2012. Subscriptions will begin with the first available issue. Please continue to buy your magazine until you receive your acknowledgement letter. Refund requests must be in writing to the Publisher and will not be given on accounts with less than £20 credit. A £5 admin charge will apply and will be deducted from any refund. Refunds will only be given at the Publisher's sole discretion. *UK offer only. We will use the contact details supplied to communicate with you regarding your Hi-Fi Choice subscription. Your details will be processed by MyHobbyStore Ltd & Hi-Fi Choice in full accordance with all relevant UK and EU data protection legislation. MyHobbyStore Ltd & Hi-Fi Choice may contact you with information about our other products and services. If you DO NOT wish to be contacted by MyHobbyStore Ltd & Hi-Fi Choice please tick here: Email Post Phone If you DO NOT wish to be contacted by carefully chosen 3rd parties, please tick here: Email Post Phone

SEND TO: HI-FI CHOICE SUBSCRIPTIONS, TOWER HOUSE,
SOVEREIGN PARK, MARKET HARBOROUGH, LEICS LE16 9EF

Laser visionary

Thirty years ago, one of hi-fi's greatest ever inventions was unveiled to a waiting world. **David Price** tells the Compact Disc story...

Economic austerity, inflation, unemployment, severe weather, humiliation for our national football team and wars in distant lands – some things never change! 1982 was hardly a vintage year, but one particular moment marks it out as special. On October 1st, Sony launched its CDP101 in Japan, and along with it the brave new Compact Disc format. Life would never be the same again...

These days, people's views of CD are coloured so much by their own personal experiences of the medium. Some love it and think it beyond reproach, others have been quietly seething that it's never quite matched the vinyl LP that it was supposed to replace in the sound quality stakes. Many now just see it as a data disk to rip music from, indistinguishable to a CD-R. In 1982 however, CD was about as exotic as new technology got – alongside digital watches and microcomputers, it was proof positive that we all were thrusting forward into a glittering, laser-etched future of digital perfection.

Marantz's Ken Ishiwata remembers the time well, "what a thrilling period that was! Coming from analogue, it was confusing at

first but then realising the potential of the new technology made me so excited..."

In the music sphere, all this *razzmatazz* was set against the backdrop of lingering dissatisfaction with the vinyl LP. Even before the announcement of CD, there was a sense that the format was in the late autumn of its life. The world's (then) universal music carrier was felt to be too long in the tooth, and its obvious drop in manufacturing quality was beginning to annoy many – noisy, static-prone recycled vinyl was increasingly being used, and quality control was on the wane.

Sales reflected this – the high watermark of the LP record was in 1975 (thanks in no small part to Mike Oldfield's *Tubular Bells*) when it sold 91.6 million [source: BPI] in the UK. By 1981 sales had dropped to below 60 million, and in 1982 alone were down by 9 percent. What the music and consumer electronics industries needed was the shiny, new Compact Disc. It didn't come a moment too soon...

Everything counts

Make a list of all that was wrong with the LP record, at least as far as the general public was concerned, and CD was the answer. From scratch resistance, surface noise and end of side distortion, to automatic track access, playing time and size, the new disc was a major advance on analogue vinyl. When launched, it was the state-of-the-art in music reproduction. This was achieved by cleverly combining two existing technologies in one apparently futuristic package that the public could readily use. Optical discs read by lasers weren't new, as LaserDiscs – which were already popular in Japan – had pioneered the technology in the consumer marketplace. Neither was digital recording a new thing, as this had been around for years.

So the wonder of Compact Disc was the way it brought these two technologies *together* in a cute, user-friendly, affordable package. It took the might of two of the world's largest consumer electronics companies to make it work though – Compact Disc had Philips and Sony DNA coursing through its digital veins!

On the storage side, year zero was 1958, when the laser was invented, but it was Dutch physicist Klaas Compaan who used a glass disc to store black and white holographic images at Philips in 1969. In 1973, Philips engineers started to plan a videodisc system. At the 1977 Tokyo Audio Fair, Sony, Mitsubishi and Hitachi all demonstrated digital audio discs, and this prompted Philips to develop an audio standard for it, which was shown in 1979. Sony signed up a year later and the famous 'Red Book' specification was formally proposed. A year later, Sharp successfully mass produced the semiconductor laser, making CD a commercial reality...

Much work on digital audio coding had been done by the time CD surfaced – it wasn't new. The basic theoretical work had likely started in 1841, when Augustin-Louis Cauchy first proposed sampling theory. Then Harry Nyquist developed on this idea in the nineteen twenties, before Alec Reeves conceptualised Pulse Code Modulation in 1937 – which is the coding system CD uses to this day. The invention of the transistor in 1948 made digital circuitry viable, and theoretical work on error correction in the nineteen sixties was the final piece of jigsaw. By 1967, Japan's NHK Technical Research Institute was demonstrating a digital audio recorder running 12-bit resolution and a 30kHz sampling rate, and by 1970 Sony had a 13-bit machine running at 47.25kHz.

It was the combining of these two technologies in a reliable and affordable way that made the new digital disc successful. This wasn't done by magic – key decisions about its specification were still being taken at a relatively late stage. Philips, for example, was reputedly expecting it to be a 14-bit system





until very late in the day, and together with Sony didn't finalise the precise disc size for a long time. Reputedly, the original target for storing music was one hour, but Sony president Norio Ohga wanted to fit all of Beethoven's *9th Symphony* on one disc, and fit that disc into his suit pocket. Hence the proposed size of 115mm had to be changed at the last minute to 120mm, which squeezed in 74 minutes of Red Book-standard digital audio!

When the 'Red Book' specification was finally signed off in 1980, it defined (what was called) 'Compact Disc Digital Audio' as an optical disc storing 650MB of linear PCM audio in 12mm deep pits on a single-sided, lacquer coated, 120mm diameter aluminium disc. This permitted up to 79.8 minutes of uncompressed stereo digital music at a bitrate of 1,411.2kbps. A 780nm semiconductor laser read the disc, which gave up to 99 tracks, with 99 index points. Minimum track duration was four seconds.

CD's 44.1kHz sampling frequency meant the theoretical frequency response was 20Hz to

22.05kHz, its 16-bit word length made dynamic range 96dB. The reason CD's sampling rate is 44.1kHz and not the 48kHz that was popular in professional applications, is said to have come from the coding system's early development work being done using video recorders to store digital data – it turned out that the NTSC and PAL video formats could only store a maximum 44,100 samples per second, which was carried over to Compact Disc.

CD was proof positive that we all were thrusting forward into a glittering, laser-etched future of digital perfection!

"The CD standard of 16/44.1 was depressing because it clearly was not enough to match, let alone usurp the LP in sonic terms", contends Linn's Ivor Tiefenbrun. "There was little understanding of how sensitive and discriminating our sense of hearing was and how demanding and challenging the task of equalling let alone surpassing the vinyl LP would be."

Laser love

Throughout the late nineteen seventies, there had been assorted reports of a new digital audio disc system being developed, but by 1981 there were pictures of working prototypes appearing. So the 1982 launch of CD didn't come as a *complete* surprise. There was also a steady news feed about the software too; news of the world's first CD being manufactured (at a Philips/Polygram plant in Langenhagen, Germany) in August 1982 was well documented.

Unsurprisingly, the first Compact Disc titles were very mainstream – Abba's *The Visitors* is said to have that distinction. There were also many classical music titles, reflecting the anticipated age demographic of the early adopters, who were unlikely to be Duran Duran fans! Around 150 titles were available at launch, retailing for around a third more than the equivalent vinyl LP.

"As there were so many classical digital recordings that Deutsche Grammophon had done in the nineteen seventies, it was very easy for them to come up with many classical titles, but the key was popular music," says Ken Ishiwata, "so Dire Straits was needed to get CD to take off. It helped a lot, I must say".

American and European customers had to wait until March 1983 to experience CD, even though Philips CD100 and Sony's CDP-101 had been on sale in Japan for nearly half a year by then. By this time, over 1,000 discs were available, and sold for around £15 in the UK. Along with obvious classical music standards, early titles included Roxy Music, Phil Collins and Dire Straits. Indeed the latter's digitally recorded and digitally mastered (DDD) *Brothers in Arms* album was the first to sell over a million copies.

Despite a warm reception in the media, the format got off to a slow start in Great Britain. Unsurprisingly considering the



Two tribes: Sony's CDP101 and Philips' CD100 were the world's first Compact Disc players, launched almost 30 years ago to this day!

FEATURE

COMPACT DISC ANNIVERSARY

parlous state of the economy and lack of consumer confidence, perhaps? The new CD hardware and software wasn't cheap – the first-generation Sony CDP-101 retailed for over £800 in 1983, and it took two years for prices of second-generation machines to drop down to the £300 mark. Although an outspoken critic of the format, Ivor Tiefenbrun doesn't think they were prohibitively expensive, though. "One of most remarkable things about the early CD machines is that they were priced very competitively; indeed small manufacturers were subsidised by Philips and Sony to spread the format and so maximise their licensing revenues", he argues.

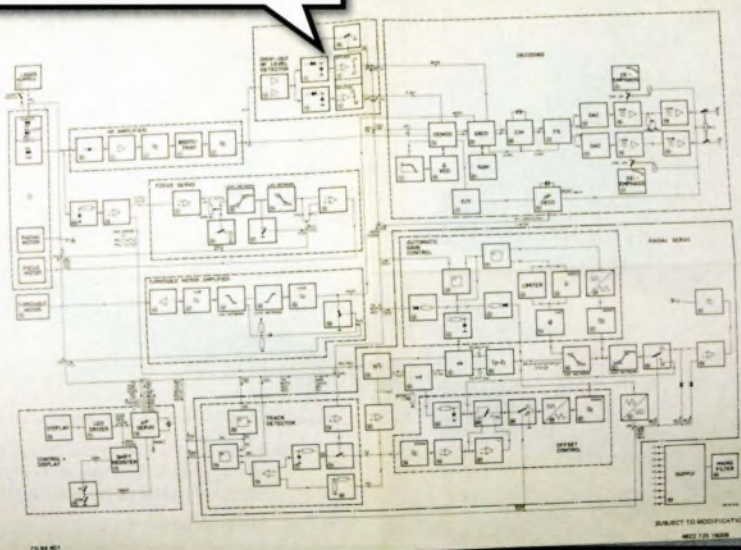
Let the dance begin...

In the wider consumer world, CD's high price meant it was originally seen as a premium product for people with luxury lifestyles – it was for a time the ultimate nineteen eighties 'yuppie' fashion accessory. But in the specialist hi-fi press, it wasn't universally seen as a good thing. Linn's Ivor Tiefenbrun was a vocal critic of the new format, arguing to anyone who'd listen that Philips' ambitious marketing claims of it giving 'pure, perfect sound forever' were untrue and misleading.

Whilst the general public seemed to like CD, some hi-fi journalists criticised it for a bright and relentless sound, along with a lack of subtlety and depth compared to high-end vinyl players of the time. It was certainly true that in systems set-up for the smooth, slightly dull sounding turntables of the day, a relatively flat CD player could sound bright. Also, few people were used to the starkness of CD sound, and the questionable mastering of some early discs didn't help either...

There were large differences between individual machines. The hardware

Brave effort: the technology inside the first machines was right on the limit of what was possible for consumer electronics in 1982...



market was divided into two camps – Philips (and Philips derived) machines running dual 14-bit, 4 times oversampling DACs and the Japanese 16-bit non-oversampling machines.

The general preference amongst hi-fi writers was for the former. Marantz's Ken Ishiwata later opined that this was down to the superior filtering of the European machines. Certainly Sony's use of just one DAC could give strange phasey artefacts across the upper frequencies, whereas the Philips CD100 sounded balanced, smooth and warm – albeit a little diffuse.

In the mass market, this didn't seem to matter so much. The hi-fi world was still obsessed by specifications, and to most casual buyers 16-bits sounded better than 14, with the vagaries

It was for a time the ultimate 'yuppie' fashion accessory, but in the hi-fi press, it wasn't universally seen as a good thing...

of oversampling and filtering lost on Joe Public. Those early Philips players suffered from the stigma of their 14-bit DACs so much that Philips swiftly started developing 16-bit versions.

Other problems for early CD included mastering and recording techniques which didn't acknowledge that digital distorts more at low levels, and is most accurate at higher ones. CD also showed up the miking techniques of the day, which had been designed around the slight compression that analogue systems give. With digital they sounded harsh, upfront and shouty, whereas with analogue the end result was better balanced. Ken Ishiwata believes that, "the mastering equipment in that period was poor, but the recordings were bad too – many people didn't know how to make good digital recordings". Ivor Tiefenbrun adds

that, "there were so many flaws in the process that in a way it was a shame to judge CD by the early releases... it took about ten or fifteen years before the recording engineers and others engaged in the process learned how to make the best of this format despite its limitations and critical lack of headroom and precision".

Get into the groove

After CD's slow start, it really began to move in large numbers by the mid-eighties. While many audiophiles remained circumspect, the buying public began to commit to the new format as soon as prices came down. By 1986, decent machines from the likes of Philips, Sony, Denon and Marantz could be had for £250; the second generation machines had a more plasticky build, but updated chipsets that boasted 16-bit, 4 times oversampling. This gave a clearer, cleaner sound without the opaque fuzziness of early 14x4 machines. CD was becoming better and cheaper, and sales duly followed. To a public still used to mediocre turntables, the convenience and crisp sound of CD was genuinely impressive.

The specs war raged for a few years in the late eighties, 16-bit 4 times oversampling was usurped by Sony players offering 18-bit, 8 times oversampling, and then Cambridge Audio came out with 16x16 (using four 16-bit DAC chips). Bitstream finally arrived in 1989 – just to confuse everyone who'd learned that more bits were better, we now had one-bit operation! Of course, this was done at very high speeds, with Philips' new Pulse Density Modulation (PDM) system transforming 16-bit samples into a high speed one-bit datastream, oversampled 256 times, which was then converted into analogue by a digital single-bit converter. The system cleverly sidestepped some of the problems of multibit, giving a smoother sound, but its main benefit was low cost – sales of portables and car players were destined to soar...

This same year, CD sales overtook those of vinyl for the first time, but this wasn't the silver disc's finest hour, as LP sales had long since fallen behind cassette. Philips' little dictation medium had been repurposed into the country's favourite music carrier, and was massive – no less than 83 million prerecorded tapes sold that year. Indeed, it wasn't until 1992 that CD finally pipped Compact Cassette off the top spot in the UK.



Afterglow

While Bitstream had brought some smoothness and civility to budget silver disc spinners, many audiophiles regarded it as too little, too late. There was an increasing belief that Compact Disc's specification simply wasn't good enough to offer a sound to better high end vinyl. Around a decade after the format's birth, rumours began to surface that various people were working on a replacement, offering a higher digital resolution over standard Red Book.

The first such format surfaced in 1995, with High Definition Compatible Digital (HDCD). Developed by Pacific Microsonics (now owned by Microsoft), it wasn't a new standard as such, rather a clever tweaking of the existing one. HDCD discs could be played back on standard CD players, but when they were used in HDCD players, could give a claimed 20-bit resolution by using custom dithering, audio filters, and some reversible amplitude and gain encoding. The system worked surprisingly effectively, giving a smoother, more powerful and dynamic sound. Over 5,000 titles were released, but HDCD finally fell victim to another technology, which arrived some five years later...

Super Audio Compact Disc was the *official* successor to CD. It arrived in 2001, and was a brave and imaginative attempt to address CD's weaknesses. Jointly developed by Compact Disc's own parents – Philips and Sony – the format used the (then) new Dual Disc technology to provide a music disc that was playable in CD format on CD players, but when inserted in SACD players it would read the deeper SACD layer on the disc, via a second 650nm laser pickup. This high density layer contained up to 7.95GB of data, compared to CD's miserly 700MB.

Cleverly, the new format used Direct Stream Digital coding, which is a one-bit system like Bitstream, but running at a giddy 2.8224MHz. This made for a 20Hz-50kHz frequency response and 120dB dynamic range, and – unlike CD's PCM coding system – didn't require heavy filtering which many think spoils CD's sound. The format combined the

easy convenience of CD with much of the sonic potential of the (then) rival DVD-Audio format. This was an immediate rival, launched at almost the same time, but wasn't compatible with stock CD players and relied on the PCM coding system to give up to 24-bit/192kHz resolution. It was fiddlier to use than HDCD, using a menu-driven navigation system that required a TV monitor to be hooked up, and soon fell from favour with audiophiles – despite its superior on-paper performance.

Neither of these high quality options managed to usurp the Compact Disc. Instead, ironically, it was MP3 that dealt digital music disc the death blow. The format had been around since the late nineties, and the rise in broadband Internet of the mid-noughties, allied to various file-sharing sites, meant that vast amounts of free, low-quality digital music was available to the mass market. Apple legitimised this with its iTunes Music Store, with pay downloads of lo-fi 128kbps AAC files. Meanwhile, CD soldiered on with global sales in freefall...

Never forever

In 2012, sales continue to decline sharply, and Compact Disc is now being talked about as a 'legacy format'. Many folk are ripping their digital music discs to hard disk and then consigning them to the bin, as the world moves to computer audio. Vinyl is widely viewed as complementary to a hard-disk music collection, whereas many see CD as simply a poor substitute for one. If you're going to have a physical format, you might as well get the superior sounding one with 12 inch cover art and a lovely tactile feel, or so the reasoning goes...

Yet Compact Disc still has much to offer. It's very convenient, with no need to fiddle with a computer network or back up your data. It can sound great too, better than cheap media players running higher resolution digital, as CD players have had three decades of development and network streamers have not.

Thirty years on, CD's star may not be shining so bright, but it's still massively popular. Globally, billions of Compact Discs have been sold, and many more will surely be bought before the format ends up relegated to the diehards. "CD will be in the household for a great many more years to come", opines Ken Ishiwata.

Whatever its fate, its life should be celebrated for what it is – the high watermark of the physical music carrier, the music disc's finest hour. In terms of sales, mass appeal, longevity and convenience it was the *last* and surely best. Once the shape of things to come, the little silver beermat is now reaching the final curtain – I wish it well in the next thirty years, gone but not forgotten. ●

SPEAK OUT!

Linn's Ivor Tiefenbrun on Compact Disc...

Oblivious to any criticism, the CD standard was adopted with a fanaticism which always seems to be on hand when people claim that a mediocre idea driven by the unstoppable tide of history represents an inevitable future. Anyone who criticised this standard, as I and others did, was accused of having a vested interest in the status quo – which was absolutely true, but it was not a blind prejudice or a commercial interest that was insensitive to quality, which was the case with CD and its backers.

When CD launched, Linn ran an advert showing that it (like other similar formats) would soon pass – because it clearly had limited scope and lifespan – and we were correct. We lost a generation of music lovers through CD and only high quality precision streaming is starting to re-enthusiast that generation about the potential of high-fidelity sound reproduction. People are now happy to rip their old CDs and then give them away or throw them in the skip. No one ever acquired much affection for CDs or their awful jewel case packaging. They ended up jumping much more than any well cared for record ever did, and the format in retrospect was an enormous mistake in terms of human musical progress.

It was a gigantic exercise in mis-selling, and clear evidence of how big companies telling big lies can get believed, and that rational and more truthful voices were dismissed or ignored entirely by the mass media. That the LP still persists thanks to its unique characteristics of being a universal standard – so that a record can be played anywhere on any record player in the world – is something we should aspire to replicate with open standards for streaming music in the future.

Proprietary systems that attempt to lock in the customer and exploit their naivety and subsequent captivity should be resisted at all costs, rather than be applauded no matter how seductive the monetary inducements are for such an approach. Human progress depends on open universal access to the things that unite humanity, and the last thing we need is big companies using music to divide and rule people for their own commercial benefit.



Disc o' tech: the first CD album releases were unashamedly mainstream. At around £15 a pop, it was the only way to tempt music buyers...





Spin cycle

Heed's Obelisk range includes this new two-box dt/da transport and DAC. Could it be the last of a dying breed? **Jason Kennedy** decides...

Never underestimate the ability of the human race to unlearn things we've learned before. You just need to jump a generation, and there we are, making the very same mistakes again! For example, why are we so surprised when every twenty or thirty years, our economy plummets into a recession? As if it never happened before...

Likewise, in hi-fi it was about twenty five years ago when the first separate CD transports and DACs appeared, accompanied by a welter of hype about why it was vital to

separate the two, what with Compact Disc spinners being such noisy places. The separate transport and DAC duly flourished – in the mid nineties there were umpteen on the market. But in the past decade it seems, everyone's gone back to one box.

So when Heed revived the Obelisk name earlier this year, it looked like the days of the CD transport were numbered. There are still a few high end examples, but on the whole they're a scarce variation on a digital replay theme whose time seems to have passed. But just because discs are being replaced by downloads,

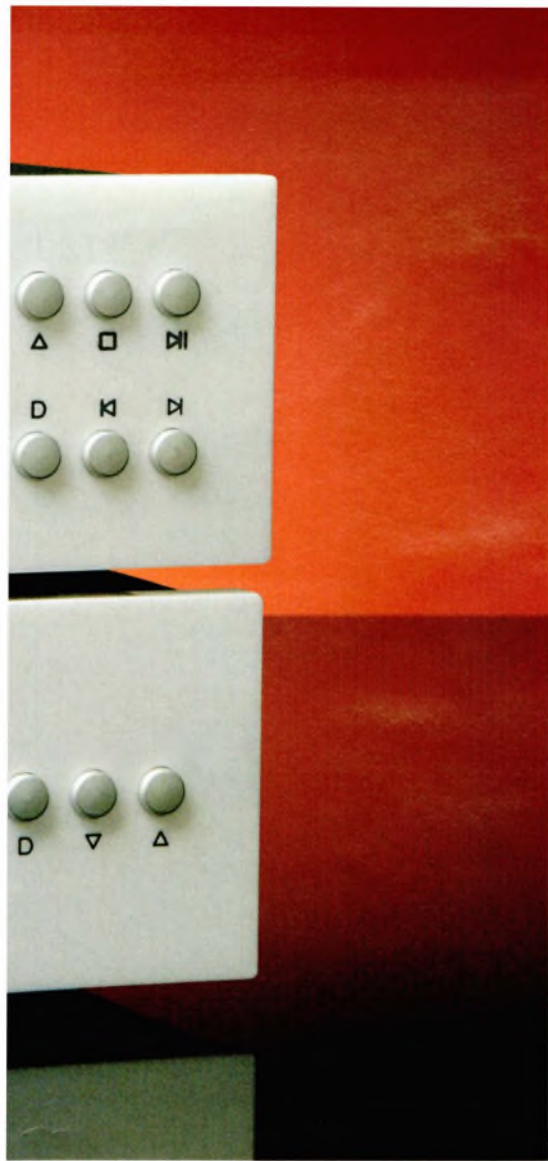
DETAILS

PRODUCT: Heed Obelisk dt/da
ORIGIN: Hungary
TYPE: CD transport/DAC
WEIGHT: dt 3.9kg, da 4kg
DIMENSIONS: (HxWxD):
dt 85x220x325mm
da 85x220x325mm
FEATURES:
• (dt) digital outputs: coax, TOSLINK S/PDIF
• supported disc types: CD-DA, CD-R, CD-RW (8, 12cm)
• supported formats: CD digital audio, HDCD, mp3
• (da) digital inputs: coax, BNC, 2x TOSLINKs, S/PDIF, USB
• outputs: direct 1.25V, buffered 2.5V RCA phono
• USB 2.0 receiver: XMOS 24/192
• DAC: 24/192
DISTRIBUTOR: Heed Audio
TELEPHONE: 01452 858269
WEBSITE: heedaudio.co.uk

that doesn't mean that our CD collections are any smaller. And there's still a demand for CD players, so why not a separate transport?

The Obelisk dt is available with a black or white acrylic front panel which looks attractively glossy and gives some indication of the shiny parts within the box. I got the impression that it had a CD-ROM drive under the hood, but when I managed to speak to the designer I discovered that he has adapted a DVD drive to Class 1 operation, making it effectively a dedicated CD spinner. It does however have a 32MB buffer from which the processor clocks out data with maximum precision [see Q&A for more on this]. The DSP operates at 27MHz, so has plenty of time to get things in order prior to the process of conversion. This approach is said to deliver, "up to 500 times lower jitter than conventional CD players can achieve", no less...

In use the drawer mechanism seems a little reluctant to open and none too swift to spin up a disc, but this I'm told is because it does a thorough job. However when combined with a basic remote



handset that does not include an open/close button on its roster you need a little more patience than usual to live with the thing. Apparently the handset runs the classic Philips RC5 control system so if you have an older handset from a number of brands these should allow such niceties.

The Obelisk dt has a linear power supply with one section for the laser and its transport system and another for the processor (the element that produces unwanted interference). This power is sourced from a low electromagnetic dispersion mains transformer that is made by a company called Noratel; you don't often read that sort of information in a product description so perhaps this is a good sign...

The dt has only two outputs, both being S/PDIF types and neither featuring a BNC connector. Such things are not that common unless we're talking Naim, but the reason for noting as much is that the da DAC has a BNC connector on one of its inputs. This is a true 75 ohm connector that eliminates the signal reflection problems of RCA phono plugs and sockets, so it would seem logical to include on the transport.

The Obelisk da DAC is rather better equipped on the connectivity front. Alongside the aforementioned BNC it has RCA phono and Toslink optical inputs for

S/PDIF signals. For computer audio users there's an asynchronous USB input fronting an XMOS receiver chipset that is USB2.0 compatible and thus accepts signals up to 24-bit/192kHz should you happen to have any on your hard drive. Such things are still rare but a quick browse of the web will reveal that a fair amount of music is available at this resolution and more will follow. The da's output socketry consists of two pairs of RCA phonos, one marked 'direct' and the other 'buffered', the latter delivering twice the 1.25 volt output of 'direct'. Apparently it has an output stage similar to that of the Obelisk pre and is intended for use with passive preamps.

The da's front panel is pretty spare with up and down buttons for inputs named 1 to 5 and a dim button which leaves only a period mark in the display. It would have been a lot more useful if the LED display could have indicated the type of input selected rather than a random number, USB for instance instead of 5, a trick missed methinks. The final grumble is about the remote handset which is of the credit card sized and very cheap variety, something that's just about tolerable on budget components but undermines products at this level.

Sound quality

That 1.25 volt output on the direct connection translates into a lower output level than average CD players (which have a 2 volt max) and a more relaxed, laid back sound that makes the combo sound slightly too mellow in some systems. That said it's a detailed and revealing sound that brings out low level aspects of the music such as the character of the reverb and the activities of the musicians that provide background sounds that make up the bigger picture.

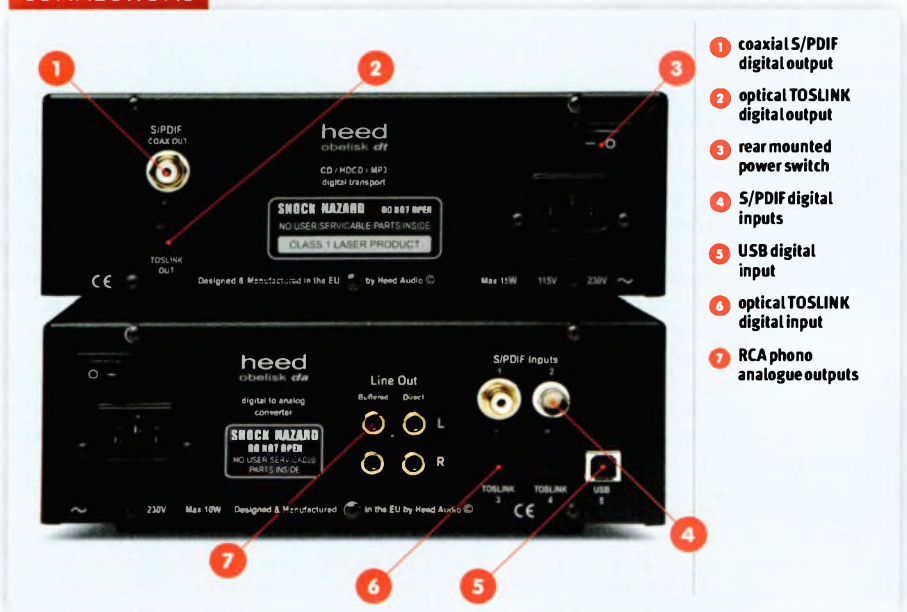
However the weighty and powerful sound of the buffered output is rather more engaging, even with integrated amps rather than passive preamps. It has a great sense of pace combined with a fully formed, three dimensional presentation that can deliver stunning musical perspective in the right system. That is a revealing but not too laid-back system, unless you just want to chill out and dig the vibe, man...

So it was a surprise to find that when comparing the dt transport with the digital output of a Leema Antila CD player the Heed proved to sound more punchy and dynamic, with a greater sense of timing precision. I guess this is why you build a dedicated transport, because it only has one job to do and therefore stands a chance of doing it well. The Antila is a more upbeat and energetic player as a whole than the dt/dt pairing but it doesn't necessarily

The da DAC is capable of producing excellent image scale and definition from the USB input...

outplay it when it comes to low level detail and imaging, which is not a bad result given the one box player's higher price. The Heed combo delivers a subtle, nuanced version of events that puts it into contention with computer audio in terms of image solidity if not absolute detail level. The Mac manages to get a more effortless sound via the da's USB input with a good balanced of tonal shading and leading edge definition. There is a flow to the timing that lets the music move with considerable ease, and the better the recording the more you hear as one might hope. Acoustic material such

CONNECTIONS



Q&A

JASON KENNEDY SPOKE TO HEED DESIGNER ATTILA OLAH ABOUT THE DT AND DA...



JK: Is it safe to assume that the dt is based on a ROM drive?

AO: No, it is a CD loader mechanism with dual-laser Sanyo DVD pickup used, however with the 790nm wavelength beam. Data gets processed after being read out instead of using the common CD-ROM standard sync and data-processing method.

What type of clock do you use for the output of the dt?

The dt's output delivers a standard S/PDIF signal with 44.1 kHz sampling rate and 16-bit resolution. In order for DC decoupling and impedance matching, a transformer is used directly at the output. The transformer is driven by four high-speed, parallel connected line-drivers. This enables it to drive high impedances (very long cables) due to its handling capability.

Up to this point (backwards from the output connector), the whole system is analogue, which means that its transmitting capability at the given frequency is not dependent on the speed of input signal variations, and as a consequence is jitter-free.

The line-driver block is driven by the processor with a non-standard clocked S/PDIF signal. It is much more tolerant of voltage noise this way. The processor transmits signal to the output stage by precisely adjusting it to the 44.1 kHz sampling frequency. Due to its generous buffer it is independent from the CD read-out speed. The processor is synchronous, the necessary clock signal comes from a buffered parallel 27MHz CMOS crystal oscillator that is ten times higher than the S/PDIF output's bitrate.

Due to the fact that the processor works with a constant division rate, the S/PDIF output signal is solely determined by the crystal oscillator. It means a few picoseconds in practice, provided a good supply circuit is used, as is the case with the DT's very sophisticated linear PSU.

Why isn't there a BNC connector on the dt to match the da?

It came later with the da, where we had 5 inputs and thought that we could dedicate one of them to BNC.

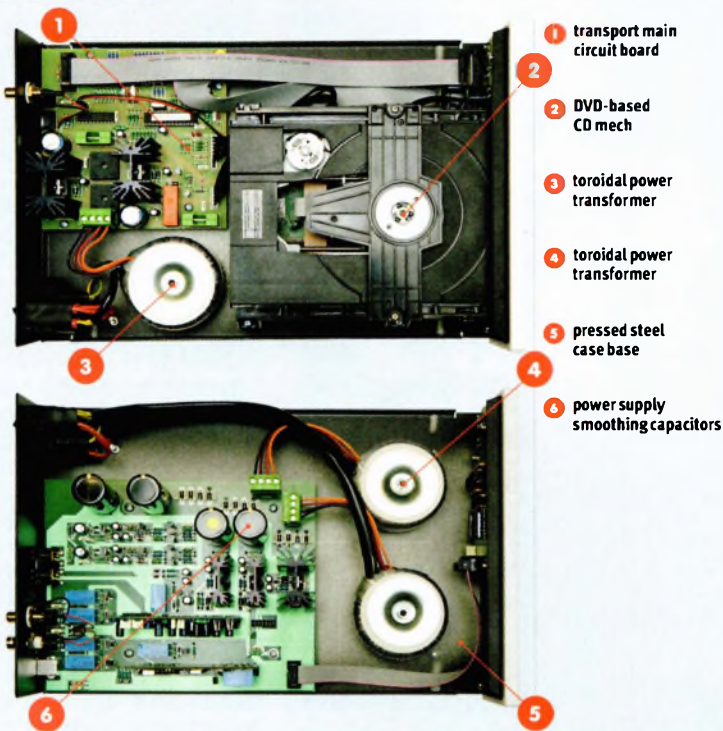
HOW IT COMPARES

IT HAS BEEN SO LONG since I encountered a transport and DAC combination in this price range that it isn't easy to compare, but the digital converter alone sure has plenty of competition – competition against which it is capable of holding its own, thanks to the quality of sound with both USB and S/PDIF sources.

The Furutech ADL Esprit reviewed recently is not as subtle or revealing, but does have onboard volume control and headphone out, plus better build but no remote. The toughest competition comes from M2Tech's Young DAC, which did well in both group and one off reviews last year. It too has a fine USB input, operates at up to 32-bit/384kHz, has an informative display and an AES/EBU input.

There is hardly any competition for the CD disc transport, save for the Cyrus at less than half the price. It doesn't sound quite as dynamic or powerful, but build is stronger, as are features like the remote handset.

IN SIGHT



as Corea, Clarke and White's Forever jazz trio sound engaging and fine detailed with the dt transport but rather more dynamic and open with a WAV file ripped from the same disc. The USB input is clearly not shabby and those looking to get more from their music files should give this converter serious consideration, it's subtle rather than demonstrative and takes a little while to get under your skin but once you start listening it's difficult to stop.

As a pair they work with faster sounding ancillaries. I ended up using interconnect from Vertere and speaker cabling from DNM which brought out the remarkable pace that they bring to the bottom end in particular, as well as the muscle available in this department when the buffered output is used. White Denim's *At the Farm* combines Captain Beefheart style juxtaposed rhythms and Lynyrd Skynyrd-esque guitar doubling, a remarkably successful hybrid that's mired in compression but which with the sort of coercion available from this source opens up enough for you to be able to hear into the mix and enjoy what's going on.

Conclusion

Heed's Obelisk dt faces very stiff competition from Cyrus' Transport, at £599 which looks on paper at least to be better value. The da DAC is

rather good though; finely detailed, well paced yet capable of producing excellent image scale and definition especially from the USB input. ●

Hi-Fi Choice

OUR VERDICT - DT

SOUND QUALITY



LIKE: Solid disc spinner with a very detailed, energetic sound

VALUE FOR MONEY



DISLIKE: Easy to lose remote handset; basic output connections

BUILD QUALITY



WE SAY: Price seems a little high for the features, and you need to be patient when loading/unloading

FEATURES



OVERALL



Hi-Fi Choice

OUR VERDICT - DA

SOUND QUALITY



LIKE: Delivers a smooth and pacey sound; good USB input

VALUE FOR MONEY



DISLIKE: Uninformative display, cheap remote, slow input changing

BUILD QUALITY



WE SAY: A fine DA converter, with a powerful, yet subtle and nimble sound

FEATURES



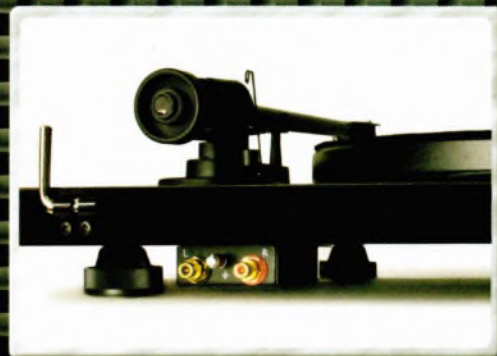
OVERALL



The Carbon Age



Introducing the award winning Debut Carbon from Pro-Ject Audio Systems. The Debut record player is an icon of the entry-level audiophile market, and this latest incarnation elevates the model to a new level of audio quality.



Debut Carbon

Brand new 86" Carbon Fibre tonearm - One-piece tonearm design - New motor isolation - Upgraded 12" platter with higher mass - New mains supply method - Cable junction box - Ortofon 2m Red Pre-Fitted - Available in 7 high-gloss colours

Pro-Ject Audio Systems is distributed in the UK by
Henley Designs Ltd.
Telephone : 01235 511 166
Email : sales@henleydesigns.co.uk
Web : www.henleydesigns.co.uk





Six appeal

Cambridge Audio has a new weapon in its streaming armoury, the Stream Magic 6. *Jason Kennedy* goes with the flow...

While many hi-fi brands are just getting to grips with streaming technology, Cambridge Audio didn't dilly-dally in the early days, and is already on to its second model. After last year's very well received half-width NP30 model, the new Stream Magic 6 is a fully featured, full-width design with all the bells and whistles that you'd expect from a second generation machine. Indeed, considering its modest £700 retail price, it's remarkably versatile. The only omission I spotted after weeks of looking is the ability to stream files

with greater than 96kHz sample rate from a NAS drive. Frankly that is not going to be a deal-breaker considering the paucity of music at the aforementioned resolution. Maybe it will prove a terrible hindrance in 2020, but we've a good way to go before you'll start to lament its absence!

Bristling with metaphorical digital bells and whistles, it adds digital inputs to the NP30's roster so you can now stream from a PC or pretty much any source that emits a digital signal – be that a CD player, set-top box or games console.

► DETAILS

PRODUCT: Cambridge Audio Stream Magic 6
ORIGIN: UK/China
TYPE: network streamer
WEIGHT: 4kg
DIMENSIONS: (WxHxD) 430x85x305mm
FEATURES:
 • DAC: Dual Wolfson WM8740 24-bit
 • digital inputs: coax, optical, USB 1.0 or 2.0
 • analogue outputs: RCA phono, XLR balanced
 • audio formats: WAV, FLAC, AIFF, WMA, MP3, AAC, HE AAC, AAC+, OGG Vorbis
 • digital filter: ATF2 upsampling to 24-bit/384kHz. Linear Phase, Minimum phase or Steep modes
DISTRIBUTOR: Cambridge Audio
TELEPHONE: 0870 900 100
WEBSITE: cambridgeaudio.com

The Stream Magic 6 will accept signals at up to 24/192 at these inputs. The other specific feature it adds is Anagram upsampling at 24-bit/384kHz, as found in the highly entertaining DacMagic Plus converter. This is one of the more successful upsampling systems to my ears, and is nice to have. Of value to some, but not all, are the user-selectable digital filter settings – three are selectable from the front panel and the remote, a bonus not afforded the DAC alone.

It can cope with pretty much any file type you care to throw at it, except Apple Lossless. Again this omission hardly holes it below the waterline, as the modern hi-fi enthusiast's choice of lossless packing is FLAC. Again, this is a significant improvement over the NP30, which is quite limited with AIFF (which can only be 16/48 at best) and won't accept anything above 96kHz.

In many respects then, the new Stream Magic 6 looks suspiciously like the result of a 'romantic digital encounter' between an NP30 and a DacMagic Plus some nine months ago. This seems a sensible move, as it brings improvements to all but



each of the Beeb's stations. So you can listen to gems like Tom Ravenscroft's fine show on BBC Radio 6 Music whenever it's convenient. The Stream Magic site also makes it easy to find and preset live streaming stations, this can be done from the front panel too but it's a relatively laborious process.

The BBC radio iPlayer is one of four streaming services available on the Stream Magic 6, the alternatives include Aupeo! which seems to be a variation on net radio that you can customise content-wise, and includes the option to find stations by mood. So you can have melancholic blues – which makes me wonder what other flavours there are – or even stressful jazz, so there's no shortage to choose from there! Apparently Aupeo! provides a higher quality stream if you pay for the privilege. Radio stations can be preset via the app or portal and you can find similar stations by touching the pointing hand symbol. The portal allows you to add some of the more popular streaming services including Pandora and Rhapsody but only if you are in North America, and not even they can get Spotify...

The unit can be controlled with either the supplied remote handset or a free app for Apple iDevices, as yet there is no Android app. I used an iPod Touch to drive the Stream Magic because this approach makes finding your music considerably easier than trying to navigate via the unit's own display. It also lets you queue tracks or albums which makes for very easy long term listening.

Despite all these bells and whistles, the major difference between Stream Magic 6 and NP30 is in the quality of digital and audio circuitry. This isn't immediately apparent on the spec sheet, but the different and dual DAC chips are one clue as are the balanced as well as single ended outputs, and more obviously by the sound that comes out of them, as we shall see...

Sound quality

The noise that comes out of the Stream Magic 6 is in another league to the NP30.

I guess that, with another fifty percent of budget spend, you should expect some real improvements, but still this seems a major upgrade – it now sounds a pretty refined piece of kit. And even though it looks like Cambridge Audio has put an NP30 and a DacMagic Plus in a nice box, it sounds better than I recall that DAC ever sounding with a variety of sources. Set up proved very straightforward with an Ethernet connection; it's virtually plug and play so long as your NAS drive is up and running prior to switch on and the network is running smoothly. I used a WD MyBook Live NAS which runs the Twonky media server software and had pretty much instant access to the music stored on it.

The Stream Magic app makes this quicker and easier than the remote, mainly because of the limitations of the SM6's display – four lines of LCD text are not up to sifting

Jazz had strong presence and very appealing timing thanks to a 'thrumalicious' double bass line!

through a library of music unless you are patient or organised. The app also makes it significantly easier to find your way through the myriad Internet radio stations; I particularly like the fact that you can type in a station name and search for it.

You can take the so-called 'sneakernet' approach (because you have to walk over and stick in a drive) and stream from a USB stick or drive and the app will let you select from whatever material is on it. This does offer a clear margin of sound quality with greater low level resolution, and thanks to greater leading edge definition it times more precisely, so it's a useful option for those occasions when you're aiming high.

Direct connection to my iMac via USB also offered a useful increase in resolution over the streamed result, suggesting that the USB receiver is none too shabby. This stream delivered a very vital, dynamic

the front end which was already well sorted in the more affordable unit. Its feature count is pretty extensive, but the key details include the ability to stream gaplessly from any DNLA or UPnP equipped computer or NAS drive on a wired or wireless network. It can access over 20,000 Internet radio stations, and these are apparently 'vetted' which sounds like a tough job! You can add podcast URLs via the Stream Magic portal and then play them from the unit, but it's easier to access BBC radio archives at least by going into the on demand listing for

CONNECTIONS



Q&A

JASON KENNEDY SPOKE TO MATTHEW BRAMBLE AND BEN BEAUMONT OF AUDIO PARTNERSHIP...



JK: On paper it looks like an NP30 and a DacMagic Plus in the same box, is this the case?

MB: To some extent yes, as we used the same twin Wolfson WM8740 DACs as per DacMagic Plus, in conjunction with our ATF2 upsampling and the streaming engine we developed originally for the NP30. Of course, those are just the building blocks and actually the PCB layout is all-new, plus we also used a bespoke to this model internal switched-mode design with secondary linear regulators and various other small differences.

Why no UPnP material above 96kHz?

BB: There's enough bandwidth in the module to support 192k. This gave us the choice of supporting either gapless playback (to do this you have to buffer up to 2x 24/96 files, which uses up the full 192k), or supporting 192k files with no gapless support. It was deemed that gapless playback was the far more important feature to have. Also, the relative lack of 192k material supported this decision. We've released a firmware update for the NP30 and SM6, which will support gapless playback. The USB audio and S/PDIF inputs support 192k.

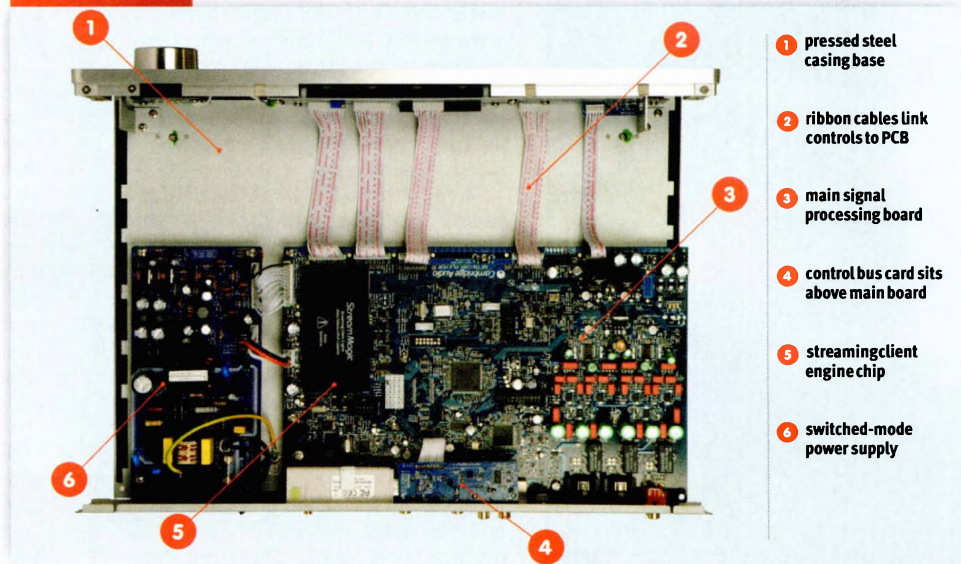
Does it upsample everything that comes in to 24/384, and if so does this really benefit low bitrate MP3?

MB: Yes all audio gets upsampled to 24/384. The benefit with lower bitrate material comes from the more natural Bessel filtering we are able to do in the analogue domain, plus the asynchronous jitter reduction the process imparts rather than the conversion to 24/384 data *per se*.

Why is it that the most popular streaming services like Spotify are so rarely found on network players?

BB: It's actually the streaming services themselves that won't cooperate with us. However, as the Stream Magic 6 and NP30 both support the BT100 Bluetooth receiver, then you can use your phone or tablet to play back the Spotify (or other) app and send the audio wirelessly to the NP30 or Stream Magic 6.

IN SIGHT



- 1 pressed steel casing base
- 2 ribbon cables link controls to PCB
- 3 main signal processing board
- 4 control bus card sits above main board
- 5 streaming client engine chip
- 6 switched-mode power supply



THE NEW STREAM MAGIC 6 JOINS a competitive and growing band of network players that offer a large range of features. Its nearest rival surely comes from the Marantz NA7004 (£430), Pioneer N-50 (£499) and Denon DNP720AE (£230).

Of these, the Denon and Pioneer offer Airplay, but the Denon doesn't have a USB input and the Marantz doesn't have the resolution of the SM6, but it does have a timely and dynamic sound that certainly appealed to Malcolm Steward when he reviewed it in these pages recently.

The Pioneer has the advantage of being able to stream up to 192kHz from a network, but as a result cannot deliver gapless playback. The Cambridge prioritises this latter feature, and I suspect that most music lovers would do the same.

As it stands, it looks like you have to spend the sort of money demanded for a Cyrus Stream X or Musical Fidelity CLiC to clearly better the Stream Magic 6 in sonic terms, and that's a glowing endorsement of the fine value for money it offers.

and three dimensional sound that was particularly engrossing when compared directly to the same resolution music streamed from the network attached storage device.

The streamed sound quality has a slightly sweetened or smoothed sound by comparison, and this is not typical of Cambridge Audio products but does mean that lower resolution material such as low bitrate MP3 files sound nicer than they are inclined to when played through a revealing system. I was quite taken by the result I got with a 320kbps file of some late John Fahey (issued on 78rpm in tiny quantities in the nineties, talk about 'records to kill for!'). It had plenty of energy as well as decent contrast, the upsampling clearly delivering a better result than I'm used to with MP3.

Higher quality files in the FLAC format fared well too, Samuel Yirga's excellent *Habasha Sessions* acoustic Ethiopian jazz had strong presence and very appealing timing thanks to a 'thrumalicious' double bass line that had weight and texture aplenty. WAV files deliver a bit more detail especially at the quiet end of the spectrum, here there is a clarity to the decay of notes that only totally uncompressed formats seem able to deliver properly...

I found the Stream Magic 6 to be a musically adept device that works well with a range of musical genres. I am greatly enjoying the output of Internet radio station *Dub Beautiful* which despite its 128kbps MP3 quality pumps out some properly lumpy bottom end! Higher quality source material such as an AIFF copy of *The Legendary Marvin Pontiac* is

even more engaging and can be pushed harder because it's oh-so-clean. It's John Lurie's finest hour to be sure, and this new streamer shows why!

Conclusion

Cambridge Audio's new Stream Magic 6 is a very fine sounding media player at the price, and comes with the full smash of features that let it function as a high quality DAC too. Basically then, it's pretty much all that the modern digital audio enthusiast could want, at a very reasonable price. Impressively, it delivers all this with an ease that many other designs lack – and I particularly like the effortlessness with which you can stream from local or Internet sources using the app. Indeed, access to this feature is a key element in this machine's appeal. With a smooth yet detailed and revealing manner, there's plenty to get your attention aroused. Here's a network music player that you'll surely want to take home. ●

Hi-Fi Choice

OUR VERDICT

SOUND QUALITY



VALUE FOR MONEY



BUILD QUALITY



FEATURES



OVERALL



LIKE: DAC functionality; Internet radio access; lovely app control

DISLIKE: Won't stream above 96k from NAS; USB sources sound better; no Android app

WE SAY: Superb streamer at a very nice price, what's not to like?



Naim arrives at Sevenoaks



Naim's Uniti range and Ovator S-400 speakers are now available in selected Sevenoaks stores nationwide.

Consisting of the UnitiQute, NaimUniti 2 and SuperUniti all-in-one players, and the UnitiServe hard disk player/server, Naim's Uniti range represents a new way to enjoy your music. Controlled via the n-Stream or n-Serve app for iPad, iPhone or iPod Touch, these innovative all-in-one solutions liberate your listening experience and put a world of music at your fingertips.

The Ovator S-400 loudspeaker is the perfect partner for the SuperUniti or NaimUniti 2. Its precision engineered design and innovative use of BMR technology create an immersive, room-filling sound.

Visit your local Sevenoaks Naim dealer today for a demonstration.




KEF
LS50 Speakers

Introducing the LS50 Mini Monitor speaker; an innovative concept derived from the legendary LS3/5a and designed to bring professional studio monitor concept into the home. Rarely the case in such a compact design, the LS50 monitor delivers a rich, multi-dimensional 'soundstage experience' that is out of all proportion to its size.



ROTEL I2 SERIES

The new Rotel I2 Series takes the concept of entry-level audiophile quality to new heights. Thanks to a new advanced system approach, streaming options and the addition of a dedicated iOS app for system control, the six new hi-fi components have their feet planted firmly in the future while retaining Rotel's sense of heritage and quality of its past.



RA-10	£349	RA-11	£499	RA-12	£599
RCD-12	£499	RT-11	£279	RT-12	£649

STORES NATIONWIDE

- Aberdeen* 01224 252797
- Bishop's Stortford* 01279 506576 ● **NEW**
- Brighton (Hove)* 01273 733338
- Bristol* 0117 974 3727 ●
- Bromley 020 8290 1988 ●
- Cambridge* 01223 304770
- Chelsea* 020 7352 9466

- Cheltenham* 01242 241171 ●
- Chorleywood (Watford)* 0845 5046364
- 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 ●
- Loughton* 020 8532 0770
- Maidstone* 01622 686366

- Norwich* 01603 767605
- Poole* 01202 671677
- Reading* 0118 959 7768 ●
- Sevenoaks 01732 459555 ●
- Sheffield* 0114 255 5861
- Southampton* 023 8033 7770 ●
- Tunbridge Wells 01892 531543 ●
- Weybridge 01932 840859 ●
- Witham (Essex) 01376 501733 ●
- Yeovil* 01935 700078

VISIT OUR WEBSITE



For more information on our comprehensive range of products along with the latest news, offers and a convenient option to order many products on-line or reserve before you travel, go to www.ssav.com

● NAIM PRODUCTS ARE CURRENTLY ONLY AVAILABLE AT THESE STORES - WITH MORE STORES BEING ADDED SOON!

PLEASE NOTE: SOME BRANDS/PRODUCTS ARE NOT AVAILABLE AT ALL STORES. SPECIAL/ADDED VALUE OFFERS ARE NOT IN CONJUNCTION WITH ANY OTHER OFFER (NICWAOO). ADVERT VALID UNTIL 21/09/2012. E&OE THESE STORES ARE FRANCHISED AND OPERATE UNDER A LICENCE AGREEMENT TO SEVENOAKS SOUND & VISION.

www.SSAV.com

SEVENOAKS
SOUND & VISION

REAL STORES

Sevenoaks Sound & Vision have stores nationwide - each carries the very best in home cinema and hi-fi equipment on display, ready for you to watch, listen to and compare in our dedicated demonstration rooms.



REAL PEOPLE

Our staff are friendly, knowledgeable and passionate about music and film and the equipment needed to get the most out of your collection. They will be delighted to assist you in making the right selection to ensure you enjoy your system for years to come.



REAL PRODUCTS

A wide selection of products from the world's leading manufacturers is in stock and available for you to take home. We also offer a delivery and installation service as well as a convenient on-line click and reserve option for many of our products.



REAL VALUE

Fantastic value for money is our aim. Although we remain independent, you'll be pleasantly surprised just how competitive we can be - with the added benefit of seeing, hearing and touching the product before you buy, and someone to help if things go wrong.

FOR OUR LATEST PRICES AND OFFERS VISIT WWW.SSAV.COM



CYRUS CD6 SE2 • 6A **CD PLAYER / AMPLIFIER**
With its impressive 40 Watts per channel and six analogue inputs, the 6a amplifier is the perfect partner for the CD6 SE2 CD player.



AUDIOLAB 8200CD OLED • 8200A **CD / AMPLIFIER**
The award-winning 8200CD features a wealth of digital inputs that will keep it playing all your music regardless of how it may be stored.



LEEMA ELEMENTS **CD PLAYER / AMPLIFIER**
The Elements Series is the latest in the line of Leema high-performance audio equipment.



MARANTZ CD6004 • PM6004 **CD / AMPLIFIER**
This award-winning CD player and amplifier is the result of extensive research and development by Marantz's engineering team, under the direction of Brand Ambassador Ken Ishiwata.



ROKSAN CASPIAN M2 **CD / AMPLIFIER**
The M2 amp boasts 85wpc and five line inputs while the matching CD features a 24-bit DAC plus dedicated power supplies for the outputs.



SANSUI SAP201V • CDD201V **CD / AMPLIFIER**
Sansui returns to the UK with a wide range of hi-fi components including this CD player and 40W integrated amplifier. Available in silver and black finishes.



DENON D-M39 **CD/DAB SYSTEM**
Replacement for Denon's award-winning system. Now adds digital inputs for iOS devices and TVs, and a complete electronic rework from power supply to disc transport.



MARANTZ M-CR603 **CD NETWORK RECEIVER**
Features CD playback, a DAB/DAB+/FM/AM tuner along with a USB connection and network capability via its ethernet port.



ARCAM SOLO MINI **CD RECEIVER**
The award-winning Solo Mini provides premium performance in a discrete and stylish unit.



PROJECT DEBUT CARBON **TURNTABLE**
With its Carbon armtube and supplied Ortofon 2m Red cartridge, the Debut Carbon sets new standards in its price range.



REGA RPI **TURNTABLE**
Excellent build quality, reliability and ease of use combine to make the RPI a product that will offer a lifetime of musical enjoyment.



PROJECT XPRESSION III **TURNTABLE**
Features an improved, carbon-fibre tonearm, superior isolation feet and comes supplied complete with a factory-fitted and aligned 'Ortofon 2M Red' cartridge.

SPENDOR A-LINE
A3 • A5 • A6 • A9

These high performance, floorstanding speakers combine smart styling with natural veneer finishes. Each model benefits from important advances in Spendor's drive unit technology, cabinet design and crossover engineering



ESSAV.COM



ESSAV.COM

BOWERS & WILKINS
PMI

This luxury, compact loud-speaker is the latest in a long line of Bowers & Wilkins audiophile mini monitors. It offers an extremely high-quality audio performance and features several technological innovations including a new tweeter and ground-breaking cabinet design.



ESSAV.COM

TANNOY
REVOLUTION DC6 T

Award-winning compact, floorstanding speakers featuring Tannoy's unique Dual Concentric™ drive unit along with luxurious real wood finish trapezoidal cabinets.



ESSAV.COM

MONITOR AUDIO
GOLD GX

Monitor Audio's new Gold GX speakers use technology that has filtered down from their flagship Platinum PL range. The range comprises two standmounts, two floorstanders, two centre speakers, a pair of surround speakers and a single subwoofer.

KEF AUDIO
R SERIES

Using trickle-down technology from the company's flagship Blade speakers, the R Series comprises standmount, floorstanding, centre, surround and subwoofer models.



ESSAV.COM

PMC
TWENTY RANGE

The twenty series is the next generation of elegant, hand-crafted British loudspeakers that follow in the lineage of worldwide acclaimed PMC designs. The 4 models use PMC's innovative ATL™ technology, providing a supremely rich and detailed performance ideally suited to all styles and sizes of interior.



ESSAV.COM



PIONEER N-50 NETWORK AUDIO PLAYER
Audiophile Network player supporting AirPlay® and DLNA wireless technologies, allowing you to stream music wirelessly from your iTunes libraries or iOS devices.

DENON DNP-720AE NETWORK AUDIO PLAYER

Enjoy a wide variety of internet radio and on-line digital content. The DNP-720AE also supports AirPlay® so that you can stream music from any compatible device.



NEW £499 OR LESS

MARANTZ NA7004 NETWORK AUDIO PLAYER

This AirPlay® compatible player lets you connect to all your favourite music, whether it's from your PC, external hard disc or as an FM / DAB radio station broadcast or even on the other side of the world via Internet Radio.



£999 OR LESS



ARCAM SOLO NEO NETWORK MUSIC SYSTEM
Combines superb music performance, network audio capabilities along with an internal CD player and radio tuner.

CYRUS STREAM X2 MUSIC STREAMER

The Stream X2 is based on the Stream XP2, but without the preamp section. This model is the perfect source to add to a Cyrus system that already includes a DAC. Supplied with the stylish and intuitive n-remote control.



NEW ESSAV.COM



NAIM UNITI 2 ALL-IN-ONE NETWORK SYSTEM
The new and improved Naim Uniti 2 now has a 70W per channel amplifier, whilst also boasting a whole new CD player section with a new and improved tray and transport and a new Burr-Brown PCM1793 DAC.



SONOS • THE WIRELESS HI-FI SYSTEM

Play your digital music all over your house without a PC in every room. The award-winning Sonos lets you play your favourite tunes all over the house and control them from the palm of your hand. You can even play different songs in different rooms.

Q ACOUSTICS
2050i SPEAKERS

These new floorstanders combine excellent build quality with clarity, refinement and dynamic ability. Walnut or black graphite finish.

GLOSS FINISHES AVAILABLE £495



£379 OR LESS

NEW

2020i SPEAKERS

Medium sized bookshelf speaker with extended bass, open mid-range, astonishing transient response and exceptional high frequency clarity.

GLOSS FINISHES AVAILABLE £180

NEW

ARCAM
rSERIES DACs

These affordable and discreet DACs are an easy way to upgrade the sound quality of almost any digital audio source. The new drDock (right) crams audiophile-grade components into a sturdy cast aluminium casing, along with HDMI-out.



- drDOCK DIGITAL DOCK FOR IPAD / IPHONE / IPOD.....£199
- rPAC USB DAC / HEADPHONE AMP.....£149
- rLINK OPTICAL / COAXIAL DAC.....£149
- rBLINK BLUETOOTH DAC.....£149



AUDIOLAB M-DAC

Award-winning DAC featuring a USB input with asynchronous data processing along with two coaxial and optical digital inputs. High-res 24-bit/192kHz music files can be played via its coaxial input.

£599 OR LESS

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

ADVERT VALID UNTIL 21/09/2012. E&OE.

SEVENoaks
SOUND & VISION



Socket set

Monrio's Asty Digital integrated amplifier boasts a variety of inputs, including USB. **Jason Kennedy** interfaces with them!

This interesting integrated snuck in beneath my radar until this year's Bristol *Sound and Vision* show, where I discovered cable company Vertere using it to show that you could get great sound for sensible money. The company picked up on it because integrated amps that have USB inputs which are worth using are still pretty rare beasts, especially in the sub £1,000 sector...

Monrio is an Italian company based near Milan that's run by Giovanni Gazzola, founder and designer of its products. He mixes valve and solid-state technologies to produce amplifiers and CD players that embody a particularly pragmatic approach to music reproduction in the home. His stated aim is, "to

create a true emotion of satisfaction and happiness in the listeners". Refreshing stuff, after some of the spiel you get about bringing the orchestra into your room and changing your life that some manufacturers cook up!

The Asty Digital is *not* a digital amplifier, but has a digital input – just the one – but its existence warrants the inclusion of digital-to-analogue convertor inside the box, which in turn justifies the name. And it's a pretty decent DAC for a largely analogue device, a 24-bit/192kHz-capable unit from Crystal that wouldn't look out of place in a DAC or CD player at this price.

I must confess to have being rather surprised not to find any other digital ins on the Asty however, as they'd

▣ DETAILS

PRODUCT:
Monrio Asty Digital
ORIGIN:
Italy
TYPE:
integrated amplifier
WEIGHT:
10kg
DIMENSIONS:
(HxWxD)
84x438x365mm
FEATURES:
• power output:
70w/8 ohm (quoted)
• analogue inputs:
5x RCA phono,
3.5mm minijack
• analogue outputs:
tape
• digital inputs: USB
16-bit/48kHz
• formats supported:
MP3, WAV, FLAC,
Ogg Vorbis, WMA
to 320kbps
• DAC: Crystal
24/192
DISTRIBUTOR:
UKD
TELEPHONE:
01753 652669
WEBSITE:
Monrio.it

surely improve the flexibility of the amp exponentially? Still, I suppose such things inevitably add to cost, and the Monrio is a modestly priced machine...

This amplifier has a nicely executed front panel with neat little buttons and a handy 3.5mm minijack for (analogue) connection to iPods. The large display reveals volume level and input selection. What's immediately obvious is the lack of a volume knob, buttons perform the same function via a digitally controlled but functionally analogue volume control. This is a less expensive way of doing the job than a decent volume pot, but is not necessarily a compromise in sound quality terms.

The specs list a variety of the digital sources and formats that the USB input can cope with, although it only works at a maximum resolution of 16-bit/48kHz. This is the first example I've encountered that isn't 24-bit. It will accept most of the popular formats with the exception of AIFF, Apple's uncompressed alternative to WAV, which most dedicated USB DACs are happy with.

There are five conventional analogue inputs including a direct input which bypasses the volume control and gives direct access to the power amp, a useful feature if you need to combine your stereo system



with an AV surround rig. Power output is specified as 70 watts into eight ohms but there is no indication of what it can achieve with lower impedance loads.

When it comes to using the Asty, the first thing that strikes you is the frankly cheap nature of the remote control, a credit card size device with dire graphics and horrid buttons. But, you can adjust volume in half decibel steps which is quite rare with affordable amps – the flip side is that this makes it very slow to achieve big changes in volume level, of course.

Sound quality

You can hear that Monrio appreciates the qualities that valves bring to an amplifier in

Monrio has got closer to imbuing a transistor amp with the qualities of valves than most...

the effortless musicality on offer from this solid-state design. It is instantly enjoyable, whether it be the mellow sophistication of Bill Evans or the multi-layered studio genius of Steely Dan. It almost has that tight, but loose quality that musicians strive for, it's more organic and fluid than most transistor amps and brings out the most appealing aspects of the instruments whether they be acoustic, electric or vocal.

This might make it sound like a soft and cuddly amplifier that adds its particular colourations to the music, but it's not soft and any colouration is very subtle. This characteristic is a little more pronounced on the USB input than it is with analogue connections, you'd expect a lower resolution input to sound cruder, but while it's not as holographic as full HD examples it has depth and detail plus the aforementioned warmth. The bass isn't bone-crushing but it's tactile enough and if you spin Led Zeppelin's *Immigrant Song* through a pair of sensitive speakers you're going to know all about that band's phenomenal energy and power.

Compared to one of my favourite amps in this approximate price region, the Rega

CONNECTIONS



- 1 direct input for use as power amplifier
- 2 decent quality loudspeaker binding posts
- 3 rear mounted mainspower on/off switch
- 4 standard IEC mains input socket
- 5 USB input goes to onboard DAC

Q&A

JASON KENNEDY SPEAKS TO MONRIO'S FOUNDER GIOVANNI GAZZOLA ABOUT THE ASTY DIGITAL



HFC: Why the low 16-bit/48kHz sample/bit rate for the USB input?

GG: The project started about two years ago. At that time this was the only good USB receiver chip available (made by Burr-Brown). However, very soon a new 24-bit/192kHz version will be available; this will have an S/PDIF connection and one of the most advanced USB receivers available on the market (C-M Device)!

Is the absence of a volume potentiometer a necessity of cost?

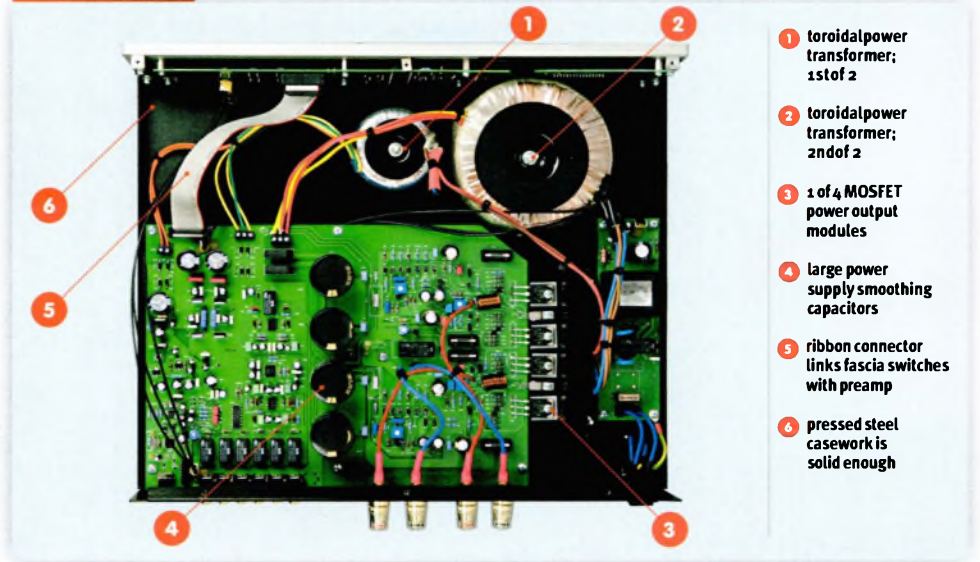
Not for the cost (indeed, the difference between the two solutions is very small), but because it seems Alps will soon stop production of all of its motorised volume pots. Also it gives us experience with the Burr-Brown device, too.

What new products does Monrio have in the pipeline this year?

We have recently introduced three computer audiophile and home theatre systems. The Monrio CAM21 is a true headless design and no mouse, keyboard or monitor is required. It is available in two basic version: Musica Maestro and Cine Roma. The former is designed to introduce you to the new computer audiophile era without loss of time and in the most simple way. This is a USB/DAC-based design that's unlike almost every other music server. This system can also be configured to provide you the best digital and analogue outputs for easy integration into your existing system.

The CAM 21 can rip your favourite CDs and transfer the audio data in lossless format into its internal storage drive. You can also load the unit with music you already have in your digital collection for playback and sharing on your home network with others. You control playback of the audio data with its own remote control or with free iTouch/iPhone/iPad/Droid apps. Now we are working on the revision of our integrated amp Mini Amp, a Class D design that will be equipped with a USB 2.0 24bit/192kHz interface for better HD audio quality.

IN SIGHT



- 1 toroidal power transformer; 1st of 2
- 2 toroidal power transformer; 2nd of 2
- 3 1 of 4 MOSFET power output modules
- 4 large power supply smoothing capacitors
- 5 ribbon connector links fascia switches with preamp
- 6 pressed steel casework is solid enough



I PUT THE MONRIO ASTY DIGITAL up against one of the relatively few budget amplifiers that does have USB input, namely the TEAC A-H01. True, it's considerably more affordable at £400 but it can usually hold its own with lots of more expensive stuff.

Not here however, it's more exciting for sure but seems rather frantic and dry next to the Italian which has more power and delivers it in a considerably more refined and fluid fashion. The extra 40 watts clearly helps, but it's the relaxed and timely presentation that gives the Asty a distinct advantage against the Rega Brio-R (£498), which doesn't have a USB input but does have a decent MM phono stage, and a far nicer handset.

When it comes to line input performance, the price difference is more than warranted, the extra dynamics and harmonic detail that the Monrio delivers is surprising, the improved timing is frankly shocking. You may have to spend twice as much to clearly better the Asty Digital.

Brio-R it is smoother, more refined and revealing, yet has a very similar ability to draw the listener into the music and focus his or her attention on the message. It doesn't sound as powerful as the Rega but neither does it seem lightweight, it's just rather more refined and doesn't have quite as much headroom.

The Asty Digital is designed for the music lover who is looking for the sophistication and openness of a decent valve amplifier without the compromises of practicality and power that is usually the case with the breed. It delves into the ambience of recordings extremely effectively, pulling out the auditorium on Rainer's *Live at the Performance Center* and building a solid grounding for his superior skills on the guitar. Bass is not emphatic but attractively strong in terms of timbre, whether it be a piano or an electric bass you always enjoy the tone of the instrument across its full harmonic range.

Those after a warts and all sound of the Arcam persuasion might not be so enthralled by its easy fluidity, and if you like the power and incredible neutrality of the new Cambridge Audio Azur 851A this is likewise unlikely to be your glass of Chianti. Its charm lies in the ability to reveal the harmonic richness of the instruments and the soul of the music, this at least is the sound you get with a pair of Bowers & Wilkins 802 Diamond loudspeakers. A pair of PMC 20 series might be a better match thanks to their remarkable openness and precise sense of timing.

Source choice will likewise have its consequences, I got better results with the very definite Blue Horizon

Profono phono stage and the supremely articulate Resolution Audio Cantata DAC. A smoother digital source, the remarkable Aurender S10, even with the immensely clean and fast Metrum Octave DAC, proved to be too laid back a combination.

Conclusion

With the Asty Digital, Monrio has got closer to imbuing a transistor amp with the qualities of valves than most have. The USB digital input is nice to have, but you can't help thinking it's a lost opportunity; happily news comes that this aspect of the Asty is soon to be upgraded.

When Giovanni asked me my thoughts on his product, I told him I thought it sounded as sweet as a nut. This was meant as a complement, but he didn't take it that way, because apparently Italian nuts are bitter! Whatever your position on nuts though, its sonics are such that it does an awful lot for the money, and all else is a bonus. ●

Hi-Fi Choice

OUR VERDICT

- | | |
|---------------------------------|--|
| SOUND QUALITY
★★★★★ | LIKE: Tonally rich sound; rhythmic fluidity; handy USB input |
| VALUE FOR MONEY
★★★★★ | DISLIKE: Cheapo remote handset; limited resolution of USB input |
| BUILD QUALITY
★★★★★ | WE SAY: Possessing rare musical finesse, this offers a direct line to the musical message |
| FEATURES
★★★★★ | |

OVERALL





“D&W Aural Pleasure”

Limited Edition

99 pairs in Phosphor Bronze (£40,000)

5 pairs in Stirling Silver (£200,000)

1 pair in 18ct Gold (£3,000,000)



www.hartaudio.com

Drop into one of our **Top 20**

The Music Chain

Much is written about music and the musicians who entertain us, and we rightly exalt great musicians. But there is an interlinked chain of participants, two of which are I believe are crucial to our music scene in today's world.

For centuries the music chain was a very short one – composers or songwriters, musicians and listeners, and the judgement on quality was immediate. Recording technologies have changed all this exponentially.

Today, we listen to most of our music from a recording and this gives recording engineers the opportunity to avoid poor acoustics, duff notes and off days. This, of course, means the chain has grown to include the recording engineers, the music distribution system (retailers or downloads), hi-fi manufacturers, hi-fi sellers and the hi-fi purchasers, the latter being the listeners.

I should start by saying that hi-fi has become an adulterated term that no longer has its original meaning because it's applied to much equipment that certainly should not be termed high-fidelity.



It's said that a chain is only as strong as its weakest link. However, I believe there are two particularly strong links that, if removed from the chain, would seriously damage the quality of recorded music. These are the audiophile, or hi-fi connoisseur, and the specialist hi-fi

retailer, the latter in nearly all cases also being the former because it's their interest that has driven them into their particular business. These are the people who most appreciate how exciting and involving music can be and how it can deliver an emotional experience.

Hi-Fi Connoisseurs

So why is the hi-fi connoisseur so important to the music industry? By their nature, audiophiles are generally avid music lovers who enhance their enjoyment through listening to music at its very best quality level, which means playing great recordings through hi-end hi-fi to achieve the most outstanding results. Without the audiophile, the main driver for quality would probably be removed from the chain. Let's be honest, over recent years the majority of

music listeners now settle for MP3 convenience and, therefore, mediocre sound quality, that is 'pre-ruined' music. If the pendulum ever swings so far that all but a few listen to highly compressed formats such as MP3, music producers will not waste their resources on producing high quality recordings because it would be commercially unnecessary, even if their recording engineers wanted to achieve the best they could. After all, an MP3 or AAC file, the iTunes default format, downloaded at 128 kbps (the most popular download speed), is about one-eleventh the size of a full resolution CD track, 1411 kbps, so the quality is inevitably far inferior. Information is irretrievably lost and the full dynamic

range is lacking. Using an iPod while jogging does not really raise a quality issue but playing low-resolution tracks through an iPod docking station that feeds into a decent hi-fi system, is a disaster area. It's rubbish quality made louder. Fortunately, there is still significant demand from audiophiles committed to sound quality to sustain the production of high quality recordings, but it would be a tragedy if there weren't. For example, most classical recordings downloaded as an MP3 or AAC file are a complete waste of time because there is so much information missing that they are reduced to just the essence of a tune.

Specialist Hi-Fi Retailers

Just as essential a link in the chain as the hi-fi connoisseur is the specialist hi-fi retailer and the two are rightly dependent on each other. Without the specialist retailer the hi-end hi-fi manufacturer would have to rely on the internet and hi-fi magazine reviewers to try and assess the relative merits and performance of their products against that of their competitors – a notoriously unreliable decision making process. Specialist hi-fi retailers are constantly being offered new products for assessment and potential stocking and, as it is also their hobby as well as their livelihood, they are greatly interested in achieving the best performance and seeking out the most outstanding products and combinations. More than that though is their relationship with audiophiles for, if they are to stay in business, they must satisfy the most discerning customers in the industry. The reality is that audiophiles and specialist hi-fi retailers are essential to each other.



UK Hi-Fi Dealers near you



Future of Recorded Music

What are the future prospects of maintaining high quality music recordings? We must hope that audiophiles, or hi-fi connoisseurs, or perhaps most accurately described, music lovers, will continue to drive the demand for quality. But another important reason for hope within the mass-market is that there is no longer any over-riding reason for MP3 and AAC to have such a following. These formats were designed to overcome very slow download speeds and expensive memory capacity. These are not significant factors for most people now. Full resolution audio streaming, as well as CD quality downloads, are already available and will become the norm as the wider public becomes aware of the tremendous quality benefit. This has happened with HD TV so we know this awareness can grow rapidly. In the meantime, we must highly value hi-fi connoisseurs and specialist hi-fi retailers, of which the ones listed on this page represent the UK's finest. Specialist dealers know how to choose the products that combine as a superb system and how to get the best out of it by expert installation in the home. If there's a price premium over an internet purchase, it's probably a small one, but it's unquestionably worth the difference.



STAR QUALITIES

VALUE FOR MONEY.....	★ ★ ★ ★ ★
SERVICE.....	★ ★ ★ ★ ★
FACILITIES.....	★ ★ ★ ★ ★
VERDICT.....	★ ★ ★ ★ ★



OUR TOP 20 UK HI-FI DEALERS

SOUTH

Ashford, Kent

SOUNDCRAFT HI-FI
40 High Street.
t: 01233 624441
www.soundcraftthifi.com

Chelmsford, Essex

RAYLEIGH HI-FI SOUND & VISION
216 Moulsham Street.
t: 01245 265245
www.rayleighhifi.com

E. Grinstead, W. Sussex

AUDIO DESIGNS
26 High Street.
t: 01342 328065
www.audiodesigns.co.uk

Kingston-upon-Thames

INFIDELITY
9 High Street,
Hampton Wick.
t: 020 8943 3530
www.infidelity.co.uk

Maidenhead

AUDIO VENUE
36 Queen Street.
t: 01628 633995
www.audiovenue.com

Norwich, Norfolk

MARTINS HI-FI
85-91 Bcr Street.
t: 01603 627134
www.martinshifi.co.uk

Rayleigh, Essex

RAYLEIGH HI-FI
44a High Street.
t: 01268 779762
www.rayleighhifi.com

Southend-on-Sea, Essex

RAYLEIGH HI-FI SOUND & VISION
132/4 London Road.
t: 01702 435255
www.rayleighhifi.com

LONDON

Ealing

AUDIO VENUE
27 Bond Street.
t: 020 8567 8703
www.audiovenue.com

N1

GRAHAMS HI-FI
190a New North Road.
t: 020 7226 5500
www.grahams.co.uk

SW11

ORANGES & LEMONS
61/63 Webbs Road.
t: 020 7924 2043
www.oandlhifi.co.uk

SW20

O'BRIEN HI-FI
60 Durham Road.
t: 020 8946 1528
www.obrienhifi.com

SOUTH WEST

Bath

AUDIENCE
14 Broad Street.
t: 01225 333310
www.audience.org.uk

Exeter

GULLIFORD HI-FI
97 Sidwell Street.
t: 01392 491194
www.gullifordhifi.co.uk

MIDLANDS

Banbury

OVERTURE
3 Church Lane.
t: 01295 272158
www.overture.co.uk

Birmingham

MUSIC MATTERS
363 Hagley Road, Edgbaston.
t: 0121 429 2811
www.musicmatters.co.uk

Coventry

FRANK HARVEY
163 Spon Street.
t: 024 7652 5200
www.frankharvey.co.uk

Leicester

CYMBIOSIS
6 Hotel Street.
t: 0116 262 3754
www.cymbiosis.com

Nottingham

CASTLE SOUND & VISION
48/50 Maid Marian Way.
t: 0115 9584404
www.castlesoundvision.com

NORTH

Cheadle

THE AUDIO WORKS
14 Stockport Road.
t: 0161 428 7887
www.theaudioworks.co.uk

Chester

ACOUSTICA
17 Hoole Road.
t: 01244 344227
www.acoustica.co.uk

Hull

THE AUDIO ROOM
2 George Street, Hedon
t: 01482 891375
www.theaudiroom.co.uk

York

SOUND ORGANISATION
2 Gillygate.
t: 01904 627108
www.soundorg.co.uk

These specialist dealers have been selected because they are known to do an excellent job in guiding customers towards hi-fi that will give years of musical enjoyment and total satisfaction.



Could it be magic?

Design Build Listen's Wand tonearm promises magical sound at a budget price, but will it be alright on the night? **Neville Roberts** decides...

As any of my friends will tell you, I can get excited about the strangest things, so perhaps I was always going to be a little curious about this distinctive looking new unipivot tonearm that was a finalist in the 2011 New Zealand BEST Design Awards. And with a name like The Wand, I was certainly anticipating something pretty magical about its performance. Then my pulse really started racing when I found out just how much, or *little*, it costs...

Launched last year, Design Build Listen's distinctive pick-up boasts that rare combination of innovative design, precision engineering and high performance at a price that real people can afford. Just \$690 New Zealand dollars, or around £355, buys this slice of budget esoterica. It's the brainchild of a man called Simon Brown, an engineer who

started off designing turntables in the nineteen eighties and now has over twenty five years of product design experience.

It shows. He's spent a considerable amount of time rethinking the concept of tonearm design. He'd originally thought of the unipivot system as a way of delivering a bearing solution more cheaply than conventional types, but he now considers it to be conceptually better than conventional ballraces, which require some tolerance in them so that they don't seize up. You could say that the use of a unipivot in a tonearm is a marriage made in heaven, but Simon describes it more as, "a behind-the-bikeshed liaison between a Zeta and a Hadcock"!

Out of the box

The Wand is certainly an unusual-looking device; very solidly built, it shows off its engineering like

► DETAILS

PRODUCT:
Design Build Listen
The Wand

ORIGIN:
New Zealand

TYPE:
tonearm

WEIGHT: 500g

FEATURES:
• 12.5g effective mass
• carbon-fibre armtube
• underslung counterweight

DISTRIBUTOR:
Design Build Listen Ltd

TELEPHONE:
+ 64 3 4773817

WEBSITE:
designbuildlisten.com

a Formula One racing car rather than hiding it away under a saloon chassis! The unipivot is fashioned from a 50mm diameter machined billet of stainless steel. The counterbalance weight is provided by a combination of a heavy screw and metal shims for coarse adjustment. In addition, side plate shims are provided to ensure sideways balance, which is very important for a unipivot design. The arm utilises a black carbon-fibre armtube, which is thick in comparison to many other arms.

Used in a wide variety of applications in New Zealand, from Round the World yachts to the Britten motorbike, Simon has found that carbon-fibre is readily sourced and easy to work with. Although very light, the armtube is much wider than the norm because rigidity increases significantly with diameter. Carbon-fibre, being so light of course, lets you get away with this, without a weight penalty. Its counterweight sits as close as possible to the pivot in order to reduce angular momentum. In fact, the tube's so light that most of its mass is at the pivot.

The arm is fitted with Cardas wire and plugs as standard, but is also available in a short lead/no plugs option. This Cardas arm wire is taken straight to the phono plugs in a continuous length which, while making the flying leads a little fragile, bodes well for sound quality. Bias adjustment is provided via a hanging weight system.

HOW IT COMPARES

THE WAND comes with a mounting plate that can be used with most turntables, built to facilitate the replacement of an existing arm. It is said to be a drop-in replacement for Rega geometry arms, so it should be easy to fit to most turntables.

The arm weighs in at around 500g, which is similar to that of the SME 3009, so should be within your existing turntable's adjustment range.

Design Build Listen provides a downloadable PDF of detailed instructions to fit The Wand to several types of turntable. The standard fitting will be fine in existing 28-30mm Linn holes and mounting kits are available for the Technics and SME, as well as a special kit for Lenco L75 family.

At 12.5g effective mass, The Wand is a mid-mass tonearm and should therefore work well with most moving magnet and moving coil mid-compliance cartridges. Even a high compliance cartridge like a Shure V15Vx gives a measured resonance at 7Hz.

Conventional low compliance cartridges also work well in this tonearm, as most systems have some low frequency roll-off, so resonance should not be a problem.

The headshell is actually fashioned from the tapered end of the arm tube, giving the whole arm a fairly chunky appearance. Indeed, the literature says the arm has an "ergonomic finger lift integrated with arm tip" which is actually the front of the headshell area!

The Wand employs the Baerwald alignment system and the cartridge is set at a fixed angle, which might worry Stevenson aficionados, and therefore cannot be adjusted to a different geometry. I myself have always used Baerwald as I find this gives the best compromise across the entire record. In addition to the usual array of mounting hardware and accessories, including an Ortofon stylus balance, The Wand is shipped with a superbly engineered stainless steel tool that is a combined spanner, height gauge and alignment protractor, as well as a template for drilling plinths if required. An excellent and thoughtful item.

This precise model is now named 'The Wand Classic'. It aims to provide maximum performance for the money, hence the slightly minimalist specification and the fact that it's only available direct from the manufacturer's website. A higher specification version called 'The Wand Plus' will soon be available which will include an arm lifter, more robust mounting and captive phono sockets, but this will only be made available from retailers. A 12 inch model is also planned in both Classic and Plus variants.

Sound quality

Fitted with a Lyra Clavis DC MC cartridge that I use for all my testing, The Wand certainly lives up to its promises. With my favourite baroque music it revealed all the detail in the individual instruments and the image

placement across the soundstage was astounding. No sloppy violins drifting from side to side if you moved your head an inch or so - they were rock-solid in their rightful place. This indicates a great top-end performance with no nasty artefacts being introduced at the higher frequencies and causing potential phasing errors.

Moving to a full orchestra, bass response was superb, as expected. Kettle drums were tight and punchy with no wallowing or boom. Given this performance, I had to try it out with one of my test records - side 2

This is a very powerful performer, punching way above its class of entry level tonearms...

of Laurent Garnier's *Tales of a Kleptomaniac*, which has a massive techno bass that can often swamp the triangle twinkling away in the background. Not so with The Wand - all was clear and controlled. It let my cartridge do its stuff, without adding colouration of its own.

Thelma Houston's vocal line on *I've Got The Music in Me* did sound a tad recessed across the upper midband however, rather than standing out in front, which I was more accustomed to. It's difficult to quantify the effect, but it certainly didn't detract from my overall enjoyment of the music. Indeed it could simply be its obvious lack of coloration manifesting itself, this tonearm not possessing the usual ringing resonances of your typical aluminium tube. In fact, some may prefer the blending of vocals with the orchestra which arguably presents a more integrated performance.

Indeed, neutrality, clarity and control is what epitomises this tonearm - The Wand certainly pulled something wonderful out of the hi-fi hat with a piece of Bach organ music that really got my adrenaline going. It sounds completely out of its price class, letting you get lost in music. I loved the way it let rhythms flow, which is surely a key strength of the unipivot design. Whilst they might not be quite as assured at frequency extremes, they let the music wash through the midband like fine wine at a good party. You witness the wonderful ease that a good turntable affords, and how poor digital systems generally are by comparison.

Conclusion

Design Build Listen's The Wand is a powerful performer, punching way above its class of entry-level tonearms. If you want something that's at home with a wide variety of music, yet delivers that all important analogue wow factor, look no further. And I await the Plus version with eager interest - can Simon Brown pull another audiophile rabbit from his grand designer's hat? ●

Hi-Fi Choice

OUR VERDICT

SOUND QUALITY



LIKE: Sweet, smooth, sound across a wide variety of musical genres; design; build; price

VALUE FOR MONEY



DISLIKE: No arm lift or proper finger lift; fragile interconnects

BUILD QUALITY



FEATURES

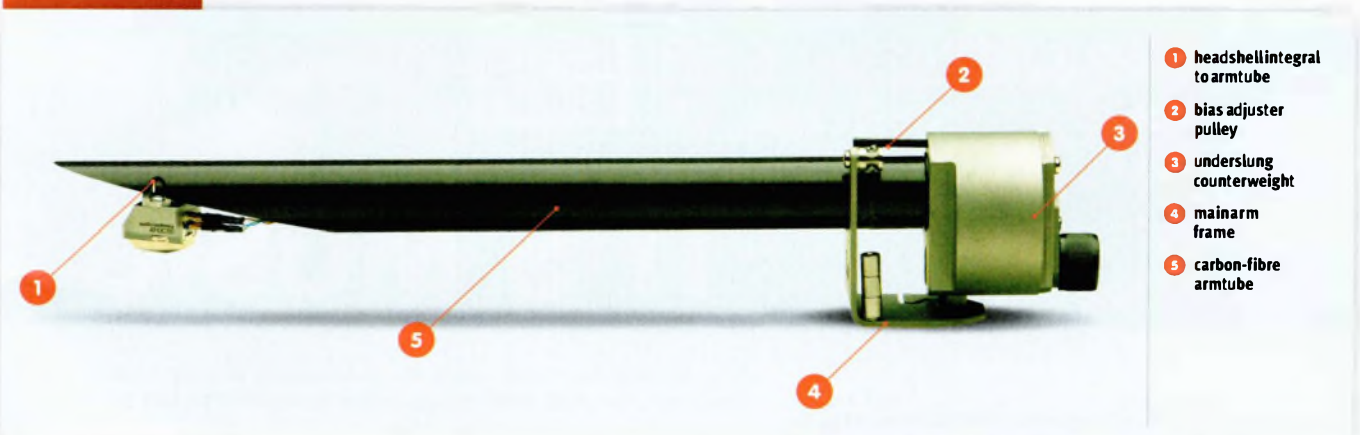


WE SAY: Super budget tonearm offering great value for money

OVERALL



IN SIGHT



- 1 headshell integral to arm tube
- 2 bias adjuster pulley
- 3 underslung counterweight
- 4 main arm frame
- 5 carbon-fibre arm tube

LISTENING TOGETHER,



**Over 50 individual top quality demo rooms, manned by experts!
The very latest technology, the finest in Audio & AV at every level.**

Of course what we all come to see, the very latest products, all under one roof presented and demonstrated by those that distribute them, market them or the dedicated band of people who make them.
VISIT OUR WEBSITE TODAY FOR A FULL EXHIBITOR LIST!



SEMINAR ROOM - Brought to you in association with Hi-Fi + including **"Meet the Editors"**



LIVE PERFORMANCES FROM..

fiona CLAYTON **The Luck** **adam pluse**



See **the first public screening** outside of London of the documentary film **'Last Shop Standing'**. An Inspiring and engaging film for music fans worldwide.



Classic Album Replay Sessions
An organised dedicated listening session in conjunction with Classic Album Sundays & Loud & Clear

OTHER SHOWS FROM THE CHESTER GROUP..



Scan this with a QR Code reader for full details, tickets, latest exhibitors and much more.

Visit our website for full details about all of our upcoming shows.

WWW.CHESTERGROUP.ORG

IT'S MUSIC TH

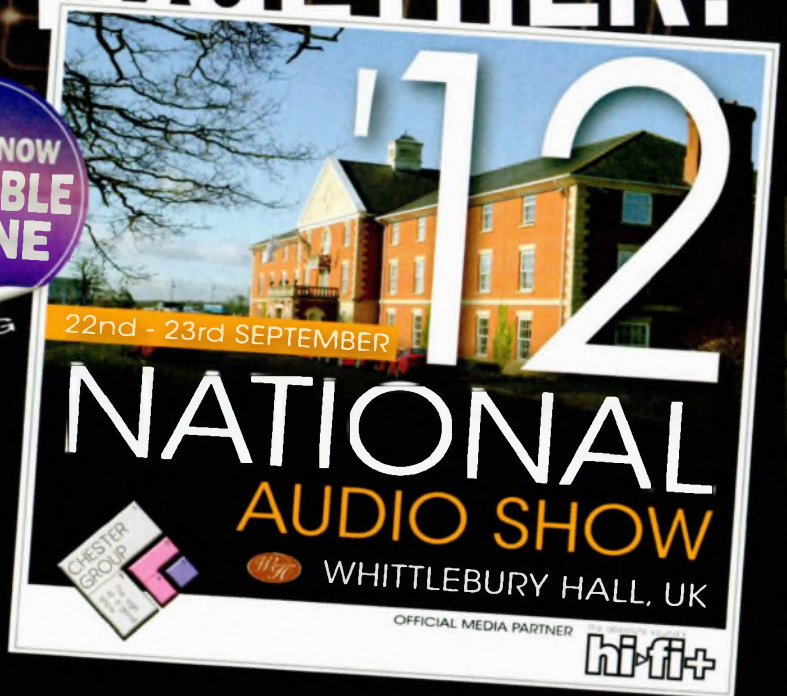
headzones
22-23 SEPTEMBER 2012
WHITTLEBURY HALL, NORTHANTS

See & Hear the very latest in an exciting line up of some of the best headphones and accessories from around the world.

Names already confirmed include Sennheiser, Hifi-Man, Schiit Audio, Stax, Audio Technica, Omega Headphone Stands, Cavalli Audio, German Maestro, Audeze, Sound Magic, Just Audio, AKG, harman/kardon, GRADO and psb.

ENJOYING TOGETHER!

CHESTERGROUP.ORG
TICKETS NOW AVAILABLE ONLINE



ONE DAY E-TICKET
£11.50
PAY ON THE DAY £14.00

WEEKEND* E-TICKET
£17.50
PAY ON THE DAY £20.00
*VALID BOTH SHOW DAYS



DOWNLOAD YOUR E-TICKET ONLINE FOR THE CHANCE TO WIN THIS FANTASTIC BUNDLE
Ipad2, Audio Technica ES7 headphones, £50 iTunes voucher and a 12 month online subscription to Hi-Fi+

LOCATION & GETTING THERE
GREAT ACCESS FROM MAIN MOTORWAYS
FREE PARKING FOR ALL SHOW VISITORS
SHUTTLE BUS SERVICE FROM MILTON KEYNES CENTRAL STATION
JUST £4 RETURN

VENUE ADDRESS
Whittlebury Hall Hotel & Spa
Whittlebury, Nr Towcester
Northamptonshire, NN12 8QH



AT UNITES US!

CONTACT DETAILS

Justin Bird | justin@chestergroup.org
Office: +44 (0) 1244 559033
Mobile: +44 (0) 7760 623713
Chester Group (Exhibitions) Ltd
Show Organisers. All Intellectual rights reserved.

MEDIA SPONSORS CURRENTLY SUPPORTING THE CHESTER GROUP





851 Series hi-fi



The quest for perfect music reproduction keeps our designers awake at night...

When we set-about developing our 851 Series the brief was simple. To make a hi-fi system that not only sounded better than anything else, but one that's capable of delivering stunning results from computer audio, connected home entertainment devices and of course, good old CD or vinyl.

Developed over a period of two years at Cambridge Audio's Research and Development Centre in the heart of London, the new 851 Series offers the perfect balance of powerful detailed performance and the ability to deliver exceptional results from music of all formats. Our flagship range also benefits from a raft of proprietary technologies developed for one reason only; to guarantee you a spine-tingling performance every time...

Music flexes the mind and stirs the soul and no amount of component design, scientific measurement or analysis can replicate the true judge of amazing sound; your ears. We call this our Sound First approach to hi-fi design and believe it's what sets Cambridge Audio apart from the crowd.

Available exclusively from
richersounds
www.richersounds.com

We invite you to audition the 851 Series at your nearest Cambridge Audio specialist. To locate yours visit www.cambridgeaudio.com/851



Sam Ellenby, one of our 851 Series designers

Sound First comes as standard

"While some audio designers spend every waking moment on the test bench, we like to take time as our creations progress to listen to them and hear how they benefit our favourite music. We take them home, play them to our friends and throughout the development process, we make subtle changes to deliver the best results we possibly can."

Cambridge Audio

Your music + our passion

Charm offensive



In its new Pellar, AVID has unveiled its most enticing phono stage yet. **Ed Selley** listens in...

AVID is best known for its extensive range of turntables that make use of a sophisticated damping system that contributes to their distinctive appearance. In parallel, the company has also moved into phono stages and having already released the Pulsare and Pulsus, is entering the sub £1,000 category for the first time with the £600 Pellar.

The Pellar is a simplified Pulsus. The most obvious example of this simplification is that the Pellar is a single chassis containing both the electronics and the power supply, while its bigger brother has an offboard one. The two designs share some components and both make use of a passive RIAA circuit as an aspect of the design.

The Pellar is capable of both moving magnet and moving coil operation. Out of the box, it comes set for moving magnet cartridges and has a default resistance of 47 Kohms, which should be ideal for most moving magnet cartridges. The Pellar can then be set for moving coil operation via a series of dip switches on the underside (and thank you AVID for not putting them under the hood!) with high and low gain settings available. Resistance for moving coils is a bit more involved than some rival designs.

The rear of the Pellar has an additional pair of phono connections to which you can add loading plugs to suit your cartridge. There are two ways of looking at this approach. It is more complex than designs where load is selected by switch, but equally, you can

select resistors that are exactly what your system needs for optimal replay results.

Visually, the Pellar is best described as 'no nonsense'. The black casework has a single visible control in the form of the power switch with LED and an AVID logo for adornment and that's your lot. This might not be the most visually striking device going, but fit and finish is excellent and I was impressed with some of the design touches like the rubber feet that provide good traction if the Pellar is placed on an amp, while at the same time avoiding marking it. AVID also provides a five year warranty which is impressive and generally suggests that they feel construction is pretty solid, too!

Sound quality

Connecting the Pellar to my Michell GyroDec, Roksan Tabriz and Dynavector DV20X combination, the overriding initial impression is how quiet it is. Background noise is a non-event on clean vinyl and even older pressings are still largely free of any audible interference. Once you stop listening for things that aren't there and pay attention to things that are, the news is equally positive...

► DETAILS

PRODUCT:
AVID Pellar
ORIGIN:
UK
TYPE:
MM and MC phono stage
DIMENSIONS:
(WxHxD)
305x110x250mm
WEIGHT:
2.2kg
FEATURES:
• quoted noise:
◀ -81dB MM,
◀ -67dB MC
• quoted distortion:
◀ 0.001%
• quoted RIAA:
5Hz - 70kHz,
+/- 0.5dB
• gain : 48dB - 60dB
- 70dB
• resistance loading:
47k - Custom
• capacitance loading : 100pf
DISTRIBUTOR:
AVID
TELEPHONE:
01480 869 900
WEBSITE:
avidhifi.co.uk

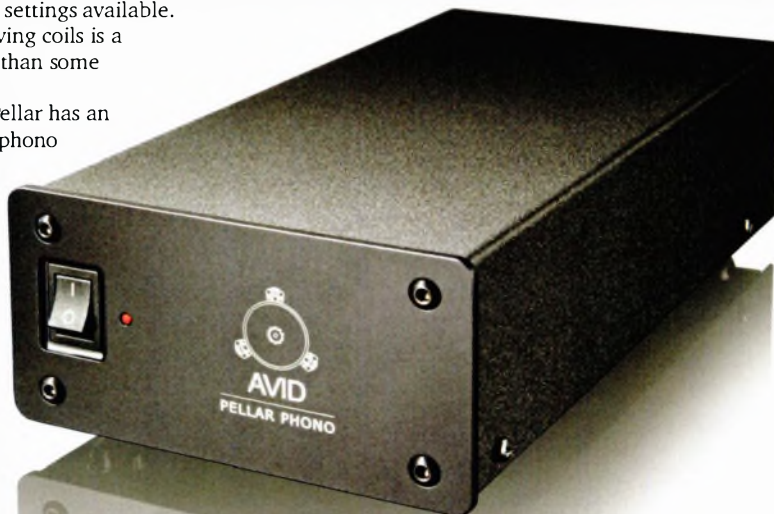
The Pellar is open, explicit and almost always entertaining.

Two Dancers, the latest release from Wild Beasts is an eclectic mix of falsetto voices, potent percussion and stark guitar work. The AVID latches on to the rhythm of the title track and arranges the complex layers of voices and instruments in a wonderfully open and easy to follow presentation. Details that can be lost in the overall mix are reproduced without seeming forced or out of place. Tonality is good without being overblown.

Compared to something like the slightly pricier Primare R32, the AVID can seem a little lean, but the more I listened, the more I came to prefer this calm and slightly more 'matter of fact' presentation of the Pellar. This honesty extends to a stark performance with poorer recordings, but it rendered nothing unlistenable.

The Pellar is also something of a champ in terms of timing. It could be argued that connected between a Michell GyroDec and Naim SuperNait, it is unlikely that any phono stage would be lacking in this regard, but there was no question for me that the Pellar is seriously accomplished with up-tempo material. Better still, this doesn't spill over to 'forcing' slower recordings. Part of this is down to the low end drive it possesses. Bass is deep and full of the texture that gives the necessary sense of realism to pieces. This low end shove is extremely well controlled and starts and stops with the agility that sits at the root of all good timing.

The Pellar is a welcome addition to the ranks of phono stages at the price. It's well built, flexible in terms of cartridge choice and has a genuinely appealing presentation that is an intelligent mix of enthusiasm and accuracy. AVID should be very pleased with its new arrival, and it warrants inclusion on any audition shortlist. ●



Hi-Fi Choice

OUR VERDICT

SOUND QUALITY



LIKE: Impressively built at the price; flexible setup; excellent sound quality

VALUE FOR MONEY



DISLIKE: Lacks euphony of some rival phono stages

BUILD QUALITY



WESAY: Talented and extremely well thought-out design that should win many friends

FEATURES



OVERALL



Choice
exotica

WILSON BENESCH SQUARE 3
LOUDSPEAKER £4,450



Right angle

Wilson Benesch's conventional speaker design approach goes off in another direction with the new Square 3, says **Jason Kennedy...**



Folks from Sheffield like to talk straight. They call a spade a spade, and if they are Wilson Benesch they call a square speaker a Square. You and I might get the impression that most speakers are square, or at least rectangular, but this isn't generally the case with Wilson Benesch – which uses carbon fibre in the cabinets of most of its models and, therefore, doesn't stick to rectilinear shapes. So when it made the first Square series in 2007 using MDF cabinets, the name seemed appropriate.

Five years later the company has revamped the range with the Square series 2, which introduces some useful revisions to the design, and a larger floorstander – this two-and-a-half way Square 3.

The main change has been to balance the speakers for free space siting, the original Squares were designed to sit against the wall in British living rooms where space is usually restricted. What happened, however, was that Square became popular world-wide, and its price meant that buyers were sufficiently dedicated to the pursuit of good sound to position them out in the room. This improves imaging but reduces the bass reinforcing effects.

Series 2, therefore, has greater bass output, which is achieved by using heavier cones. These remain WB's Isotactic polypropylene weave design, which are found across the company's model range, in this case they are seven-inch examples for both bass and midrange. The bass unit has a stiffer, heavier cone and a lower inductance flat wound aluminium coil to suit its task.

The Scanspeak soft dome tweeter is open on the rear to avoid reflections and has a first order low-pass filter, which hands over to the mid at 5kHz. The mid itself is mechanically filtered by the size of its enclosure, and the only other crossover component in the speaker is an

air cored bass inductor that rolls off output above 500Hz.

You may have noticed how close these drivers are to the edge of the cabinet, this reflects the fact that Square series 2 has steel-framed grilles. This seems a bit of an expensive approach, but WB's argument is that the thinner profile allows for distinctly greater dispersion, because a steel frame is stiff enough to be spaced away from the cabinet, and does little to impede sound travelling in all directions.

It also has the aesthetic advantage of sharp, precise corners which reflect the square shape of the cabinet. It probably helps WB that this brings Square in line with the rest of its speaker range, including the Curve floorstander which has the same driver array in a carbon fibre cabinet.

Designer Craig Milnes has gone to great lengths to control vibration in this speaker, it may look like a regular if shiny wooden cabinet from



Although the Square 3 has a more conventional look than traditional Wilson Benesch loudspeakers, build quality remains superb...

DETAILS

- PRODUCT:** Wilson Benesch Square 3
ORIGIN: UK
TYPE: 2.5 way floorstanding loudspeaker
WEIGHT: 32kg
DIMENSIONS: (WxHxD): 200x975x255mm
FEATURES:
- 25mm soft dome tweeter
 - 170mm WB Tactic midrange driver
 - 170mm WB Tactic bass driver
 - sensitivity: 87dB
 - quoted impedance: 6 ohms nominal, 4 ohms minimum
 - gloss wood finishes: piano black, white, red tulip, red bird's eye, bird's eye maple, burr walnut, ebonised walnut, walnut, Zebrano
 - satin wood finishes: natural cherry, maple, oak
- DISTRIBUTOR:** Wilson Benesch
TELEPHONE: 0114 285 2656
WEBSITE: wilson-benesch.com

the front, but one peek at the back reveals something different. This consists of two drive units that sit directly behind the bass and mid units on the front, their purpose is to dissipate the initial energy from the driver rather than to act as an ABR (auxiliary bass radiator), which is usually a substitute for a reflex port. These so-called energy absorbers are made with a heavy rubber surround that turns a large amount of the rearward driver output into heat.

The cabinet is internally divided into three sections with the bottom bass section being ported, leaving the rest effectively sealed. The midrange section is braced with carbon composite and the panels throughout the box are controlled by 5mm metal plates that are attached with a ring of visco-elastic damping,

There's no shortage of energy with a live recording, you can feel the electricity...

WB uses steel and aluminium plates to combat resonance at different frequencies.

The cabinet itself is superbly finished, and sits on a gloss black plinth that's wider at the back to provide a bit of stability and anchorage for four sharp spikes that Craig is very keen should be used at all times, but it's easy enough to take them out if you're feeling rebellious! There's a brace of cable terminals in a horizontal line, but no colour coding, just moulded indicators, the terminals themselves are substantial, even industrial.

Sound quality

With Leema solid-state power, the Square 3 proved to be a very pacy and direct sounding loudspeaker. A little tonally dry and bass-light perhaps, but with trial and error I was able to balance this with placement and the right choice of partnering components.

Although the Square 3 is designed for free space siting, it doesn't need as much space as some other speakers of similar size. My room is a little dry in bass terms and tends to suit bigger speakers, but by placing this one with the front baffle 65cm away from the rear wall it was possible to produce a good balance between bass speed and power. This allowed the steel strings of Nils Lofgren's guitar to really zing in the way that only new strings played by an extremely able

Q&A

JASON KENNEDY SPEAKS TO WILSON BENESCH FOUNDER AND DESIGNER CRAIG MILNES...



JK: What is the difference between an auxiliary bass radiator and the energy absorbers on the back of this loudspeaker?

CM: You get more energy from an ABR because you're using it essentially like a port. With this you've got a really heavy rubber surround on a diaphragm structure which is not intended to try and generate sound energy. The key objective is for the rubber to dissipate a lot of the energy.

There is movement at the back, and especially when it's driven hard you will get a little bit more power from the back, but it's not the main objective. Its purpose is really to get rid of energy that would go into the enclosure and cause noise which results in smearing. What Wilson Benesch loudspeakers are all about is trying to get rid of noise from the cabinet – that's why we have introduced carbon composite and metal structures. Essentially then, what we have taken from all our previous high end speaker designs into this design is trying to control materials that are hard to control!

Is this the case with the midrange drive unit as well?

The midrange driver is to a large degree controlled by the energy absorber, you could view it as a sealed enclosure, it rolls off very nicely. This gives a faster response that's tighter and because we're not using a filter we want to control the bass extension and the absorber gives excellent mechanical damping of the midrange unit without having to have filters on it.

What then happens in the bass region, where you have an absorber and a reflex port?

The bottom bass driver is ported as well, so you are getting some port energy from the bass driver to augment the bottom end somewhat. The energy absorber tends to flatten the Q of the system, so that the output from the port is not so aggressive. I have found that this is a nice way of getting the port energy that you want.

HOW IT COMPARES

THERE IS NO SHORTAGE OF COMPETITION at this price point. Bowers & Wilkins has the 805 Diamond at £3,750 plus stand, which is arguably more refined than the Square 3, offering greater high frequency extension from its well controlled cabinet. But it is certainly not as fast as the Wilson Benesch, and suits rather different partnering electronics.

I would also be tempted by the PMC twenty.24 which is less expensive than the WB (£3,100), but feels arguably more musical. However, it doesn't have the cabinet quietness and the rewards of transparency that this brings. It does have a similar bandwidth and footprint, though.

If you wanted a speaker that is more in the same mould as the Wilson Benesch Square 3 then I would point to the Naim Ovator S-400 (£3,250), which also has a firm grasp of pace and the potential for edge-of-the-seat intensity, albeit not in quite such an attractive package.

IN SIGHT



- 1 Scanspeak soft dome tweeter
- 2 170mm Tactic midband driver
- 3 rear-mounted energy absorber
- 4 rearpanel binding posts
- 5 170mm Tactic bass driver
- 6 high quality veneered cabinet

musician can. There is, as a result no shortage of energy with a live recording like this, you can feel the electricity of the original event.

I took another tack and brought in a Quad II Classic integrated which has a more relaxed demeanour, but one which can work extremely well with certain speakers. This valve-powered beastie maintained the exciting pace of the Leema, but brought a mellowness to the midband that made for more enjoyable listening, and the ability to appreciate the tonality of instruments and voices. It helped bring out the music's richness, combining well with the searching transparency of the WB midband.

You don't have to be told that there are no crossover components on this crucial drive unit, because it gets you extremely close to the low level details and nuances that can turn a recording into a musical event. This was apparent time and again with well worn tracks, and for a while it distracted me from noting how much decay could be heard. This is a result of the cabinet damping techniques that WB employ and makes for a cleaner backdrop to the music. Piano sustain, for instance, is considerably clearer even when there are other notes being played. This could be heard on Keith Jarrett's *Testament* disc, a recording for which a 24-bit/ 96kHz version has been released by ECM. Moving over to the higher resolution version brought immediate increases in low-level detail combined with an ease to the presentation that makes it considerably more natural.

The only thing missing from this Quad/Wilson Benesch pairing was

bass power, but by using a valve preamp (the rather charming Shindo Laboratory Masseto) with the power amp section of the Leema Tucana, more low end grunt arrived. Still, the Square 3 is unlikely to be the basshead's choice, because it delivers very tight and timely bottom end rather than the blustery power you get with some floorstanders. It revels in high quality recordings like Gregorio Paniagua's *La Folia*, which really came to life with the texture of the strings and the vitality of the music making a convincing case for a more nuanced approach.

Conclusion

Wilson Benesch's new Square 3 is a very special loudspeaker. Breath-takingly fast and dynamic, its facility and visceral speed is remarkable at the price. But this balance won't be to all tastes, neither will it work with all systems. It demands careful partnering and placement to give of its glorious best. Maybe it's still not hip to be square, but it sure is fun! ●

Hi-Fi Choice

OUR VERDICT

- SOUND QUALITY**
★★★★★
LIKE: Ultra fast, nimble sound; engineering depth; superlative quality of finish at the price
- VALUE FOR MONEY**
★★★★★
- BUILD QUALITY**
★★★★★
- EASE OF DRIVE**
★★★★★
- DISLIKE:** Dry, bass-light balance not for all tastes; needs right ancillaries
- WESAY:** Lovely, if you like this sort of thing. An exotic taste of what music is like!

OVERALL





Inspire Hi-Fi



SUPPORTING BRITISH
MANUFACTURING

Bespoke Award Winning Turntables & Turntable Upgrade Packages



Quest
REGA
UPGRADES

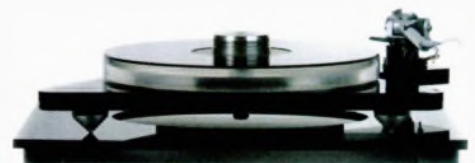
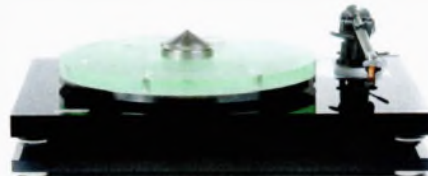
for Rega
Turntables

For: • excellent midband focus • super bass grip
• fine speed stability • enhanced dynamics • fit and finish
Against: • nothing

vivid
UPGRADES

for Linn LP12
Turntables

For: • silky, spacious midband • superior grip and focus
• enhanced dynamics • fit and finish
Against: • nothing



See all our Award Winning Turntables and Turntable Upgrades including the Monarch Direct Drive at the **National Audio Show '12** Whittlebury Hall Hotel & Spa, Whittlebury. September 22nd & 23rd

MONARCH
TURNTABLE

MONARCH Junior
TURNTABLE

eclipse SE V2
TURNTABLE

eclipse SE V2 12
TURNTABLE

Apollo
TURNTABLE

vivid
UPGRADES

vivid 12
UPGRADES

Quest
REGA
UPGRADES

Quest
CLEAR

THORENS
UPGRADES

Call our specialist Turntable **HOTLINE** to discuss any of our products

T: 01246 47 22 22

www.inspirehifi.co.uk



M: 07932 367555 E: robert@inspirehifi.co.uk

Part Exchange available on all our Turntables

While you wait rebuilds available. Visit our Demo Suite J29A M1.

Crystal Cable® has been trendsetting in creating and designing high-end audio components combining innovative technologies and a superb sound quality with an elegant and aesthetic look.

ARABESQUE

by



This trend is being continued with the Arabesque™ series of loudspeaker systems.



ARABESQUE
GLASS MASTER



ARABESQUE
MINI



ARABESQUE

Using advanced technology and exceptional materials, Crystal Cable® chose to challenge conventions. By using advanced computer technology for building 3D models, we understand how a loudspeaker will interact with various acoustic conditions imposed by the various room shapes and room sounds. Crystal Cable® is one of the very few companies to actually apply predictive engineering to truly optimize a loudspeaker for multiple room situations.

For more information about the Arabesque loudspeaker range or Crystal Cable's comprehensive range of cable series please contact Absolute Sounds, +44 (0) 20 89 71 39 09, www.absolutesounds.com

www.crystalcable.com

Sponsored by


 Russ Andrews
Solutions for better music & movies

Hi-fi choices

Email us at letters@hifichoice.co.uk or write to:
**Hi-Fi Choice Letters, My Hobby Store Ltd, Hadlow House,
9 High Street, Green Street Green, Orpington, Kent, BR6 6BG**

THIS MONTH:



CHANNA VITHANA
EXPERTISE: REVIEWER

CV GOT LOST in music when he was young and has never recovered. With a background in design and architecture, he's been a published journalist for nearly a decade.



ED SELLEY
EXPERTISE: REVIEWER

FOR THE BEST PART of ten years, Ed was developing and supporting products from some of the biggest names in audio. Enjoys blogging about his favourite tunes too.



TIM JARMAN
EXPERTISE: ENGINEER

ELECTRONICS BOFFIN Tim drives a 1959 Beetle and maintains the best B&O resource on the internet. When he's not rebuilding faulty review kit, he enjoys scouring audiobumbles.



PATRICK CLEASBY
EXPERTISE: TECH GEEK

PATRICK WORKS in a high-level technical support role in the broadcast industry, when not fiddling with his new iPad and his rapidly expanding eighties LP record collection.

Squeezed out

There have been a few articles on the Squeezebox Touch over the last few months, which I have enjoyed. Indeed, on the back of one of these articles I bought the aforementioned device!

It plays my FLAC files, which are held on both a PC and a QNAP NAS drive with the Squeezebox server installed. It also sounds fine through my Meridian G91 player and DSP5000 speakers.

But having used it for a few months now, I am afraid I don't quite understand what all the hype is about? The analogue output is very mediocre, so most people would need to be able to process the digital output for a quality sound, which is further expense!

Okay, it has a touchscreen, but it is pretty small and has an unfathomable menu system. The remote is useless, because the screen is so small you can't see it unless you are pretty close. And your latest tweaking article advocates tuning software that turns the screen off to make the Squeezebox sound better! And so surely the fundamental point (of the touch screen) is now declared a hindrance?

More than that, the server software has proved very unreliable. Both the PC version and the NAS (Linux) version are unstable. With databases that corrupt so easily how can you play any music? I have had to reload the software several times. A hugely time consuming and

irritating business! So maybe I am missing something?

Can anyone remind me why I should be loving my Squeezebox, and also why I might want to spend as much as the original Squeezebox price in upgrading the power supply? And where are the comparisons with Sonos, and indeed the articles about Sonos?

Michael Olney

CV says: Hi Michael, I am not currently a fan of servers and the like, for some of the reasons you outline. I used to build and 'tune' computers for my personal computer audio needs in the late nineties (indeed this kind of tinkering is a hobby that is very popular in normal hi-fi) and then

got annoyed with the amount of time, breakdowns and fiddling that this would take.

Currently I have very little time to tinker with the latest software/algorithm and updated 'card'. However, there are lots of people, including David Price, Patrick Cleasby, Ed Selley, Jimmy Hughes and Malcolm Steward (i.e. pretty much everyone else except me) who seem to have found a good way of extracting good music from current computer audio and apparently have the time and/or enthusiasm to do so in a seemingly efficient and in some cases transcendent way.

It is a philosophical point for me at the moment, as I have

quite a few CDs and LPs and the equipment to play them, so it is, ironically, more efficient for me to listen to music the 'old fashioned' way. I have heard really great computer audio-based systems in the past,

Can anyone remind me why I should be loving my Squeezebox?

like the very expensive Linn Klimax DS system (current price; £12,950 for just the DS), which work and sound really good (but only after being installed by a Linn dealership).

However, at the far more affordable budget to mid price scale, and as standard (without aftermarket or third party enhancements), the sound quality of streamers can be somewhat sterile and homogenised, even with uncompressed WAV files, and makes CDs played by the same system (or same make CD player) sound analogue and more natural, just like vinyl!

Until computer audio genuinely matures into something that doesn't go out-of-date as soon as it's made, is actually easy to live with, and sounds good, then I simply do not have the time.

ES says: I don't want to come across as the 'streaming fanboy' of the magazine, but I feel it is worth pointing out that the reliability of the product itself and the software being run on other units are not the same thing. I've run both Slimserver and other UPnP software on various sever solutions over the last few years and found them to be very stable indeed. Your supporting hardware for a streaming system is vital and quality counts.

As to the performance of the Squeezebox itself, I think the most important thing to keep in mind is that it can frequently be bought new for less than £200.



Squeezed out: The battle lines are being drawn around Logitech's ubiquitous Squeezebox Touch...

For the record

Hi folks, do you have any advice or recommendations on something to connect up to my CD player and valve amps, so as to record to CD discs? There is nothing here in Australia. I have contacted Cyrus Audio, Musical Fidelity and Arcam, and they have nothing....

Steve, Australia

TJ says: A good way to do this is to use one of the excellent pocket-sized digital recorders which are now available from the likes of Tascam and Olympus to record from your system (most have stereo line level inputs), then upload the files into a computer and record a CD-R/CD-RW of them using that (there is a good choice of software available for doing this sort of thing).

This gives a great amount of flexibility for titling and editing and you won't need special 'audio CD-R' discs, something which isn't always the case with CD recorders.

DP says: If it's just CDs you want to record (i.e. copy), then do them on your computer – either a PC or Mac will do this nowadays. Set the burn speed to the slowest it will go for the best sound.

Alternatively, if you want to do it via your hi-fi, then find a second-hand CD recorder. Something like a Marantz DR-6000 can be bought for pennies on eBay these days, and will do just what you need; there are lots of other worthy choices from Pioneer, TEAC, Philips and Sony.

Mail forwarding

I currently run an Inspire Eclipse turntable with 309 SME tonearm and a Grado Sonata cartridge. I'm considering upgrading my Lehmann Black Cube phono stage to either a Whest 2 or

EAR Yoshino. Have there been any reviews on either of the above, as the Whest retails at £799, while the Ear is around £1,400? Amplification is Astin Trew, speakers are Isophons.

John

DP says: Emmm... that's like saying 'I'm considering purchasing a Ferrari F50 or a Ford Galaxy, which should I buy?'

Basically, the Whest and EAR are not similar products purposed to do the same thing. The former is a very incisive, revealing, detailed, spry, bright and fast phono stage, the latter is about as opposite as you can get – a classically 'valve sounding' design that's smooth, mellifluous and soothing, yet hardly the musical equivalent of a white-knuckle ride.

So, my question to you John, is which sort of sound do you prefer? In the absence of an answer, I'd recommend the ANT Audio 3T Ltd. (£1,000 approx.), which gives the best of both worlds; it's a great middle way that is smoother and sweeter than the Whest, yet far more incisive and dynamic than the EAR. It's a great phono stage, just don't use it as the visual centrepiece of your listening room – it wins no prizes for style!

Computer says no!

What a clown this guy Patrick Cleasby must be! Okay, CDs could be better, but does he not consider the fact that not everybody has got a bloody computer, and in my location I could not download even if I wanted to?

Doug, Australia

PC says: I write from the point of view of someone living in a country where the government has a stated aim of making broadband Internet available to as close to everyone as possible. Device-wise we will soon be in an environment where we won't

need a computer per se, or even need to be at home to download lossless audio – our kids carry around more connected computing power in their pocket than we had on our desktop ten years ago. CDs are soon to be a thing of the past, and when there's no record shops anymore, how are you going to buy the second-hand ones from Amazon? Here's hoping your infrastructure improves...

TJ says: You have my sympathies. Even in the UK, Internet use is far from universal so this 'download everything' scheme does have a few shortcomings.

However, all is not lost, CDs (unlike downloads) do have a residual value, so there's an established second-hand market for them and given that modern music is rubbish anyway there'll be a CD of just about everything worth listening to out there somewhere. Beyond that there's always the LP, so chin up, you don't have to be a nethead if you don't want to be!

CV says: Hi Doug – I have called Patrick much worse, and he is good friend! However, I have to disagree that he is a clown, rather I think of him more as a boffin (and not a geek or nera). Knowing him, he'll probably revel in the attention that your missive has generated!

DP says: Patrick Cleasby a clown? Shurely shome mishtake!

For the record: reader Steve wants to know how to record music on CD. The modern way is of course using a computer with a USB analogue-to-digital convertor, but if you want a simpler solution then we recommend buying an old hi-fi CD-R machine – these are now cheap as chips secondhand...

Is it a true giant killer? Maybe not (although blind listening tests can still be a surprise), but it is exceptional value.

PC says: Hi Michael, your findings are echoed by many. Most audiophiles use the digital output of the Touch, and once you have experienced the joy of iPengHD for control from an iPad there is little use for either the Touch surface or the now-retired Controller.

With regard to software – you don't state which QNAP you have, but as a fellow user I would advocate making sure you are not using the official QPKG, but the much more up-to-date and tuned SSOTS (Squeezeserver on Turbo Station) environment with SL1000's 7.7.2 package implementation. Check the SSOTS section on forum.qnap.com for details.

Power supply upgrades really are worth the money – trust me! The audible results are amazing. And finally, one of the most compelling reasons for using Squeeze is its hi-res abilities up to 24-bit/96kHz (even 24/192 digitally by using certain tweaks), and historically this has been the reason for its pre-eminence over the even-more-lifestylely Sonos in the eyes (and ears) of true high-resolution fans.

DP says: The Squeezebox is a sort of twenty first century Rega Planar 3 turntable, not perfect but very good if it's set-up properly, and tweakable, too. It's also nice to use, much more so than many far more expensive designs. That's why we love it, although we'd never pretend it's a Linn Klimax DS-killer! We're running a full Sonos review, complete with extensive comparisons to the aforementioned Squeeze, in the next issue. Malcolm's fiddling with his NAS drive as I speak!

From Genesis to revelation...

Having been a reader of Hi-Fi Choice since day one (and beyond), I thought it was time I sought your advice on my system instead of throwing money at it and ending up with yet another compromise.

My current equipment consists of a Michell GyroDec (Orbed),



Origin Live OL1 arm, Goldring 1042 cartridge, Ayre CX7 CD, Ayre AX7 amp and B&W CM9 speakers. Interconnects are Chord Chameleon Silver Plus.

Now, this does sound pretty good, and improvements have been had in all departments, but there's an overly neutral emotionless sound, especially at volume when the sound seems to harden instead of gaining power and can be a little bass shy, too. Can't knock the detail and soundstage though, and it does produce a very clean sound, maybe too clean?

I did audition the Ayre amp against the Sugden IA4 integrated, Naim SuperNait and Leema Tucana, and thought at the time that the Ayre sounded less 'transistory'

I have auditioned some valve gear but it made everything sound a bit samey

than the other two, but has proved to be a little lightweight and cool, maybe lacking power even though I know the Ayre does have a very robust power supply. I was running a pair of Castle Conway III speakers at this time though...

I have auditioned some valve gear (i.e. Consonance amplification and CD), but came away with the overall impression that it made everything sound a bit samey – thuddy bass and generally soft. Fine I'm sure for those whose thing is classical, but not ideally the best for Zeppelin, etc., in full flight! So I'm not sure if valves would be a step too far in the other direction. The results from vinyl are, as you'd expect, less cold but the same trait is there...

I don't want to throw the baby out with the bathwater and there's not a helluva lot wrong with the system, I just want a sound less monochrome with more colour, more euphony and at the same time a more powerful sound.

My guess is the amp is probably the culprit in this (or maybe the B&W midrange driver), and have considered the Creek Destiny 2 could be the answer, or is that just a sideways move? Or maybe the B&Ws are a mismatch?

Hopefully you'll be able to offer some solutions. In brief I'm aiming for a more powerful, bassier,

but more 'listenable' sound, while retaining the detail and soundstage. I would also be grateful for any advice on the next most cost-effective upgrade to the deck I could make, bearing in mind my aversion to the overly analytical, thin end of the audio spectrum.

Roger Playle

CV says: *Hi Roger, I think improvements can be made in your system by upgrading the tonearm to one of OL's better models (you don't mention budget, so I can't be specific).*

For a more 'bassier' sound you might also want to audition the high-end SME V tonearm which works well with Michell turntables like the Orbe.

Having had experience with Ayre amplification I concur with you about them being less transistor-like and you might want to audition the Ayre interconnects, loudspeaker cables and power leads as these are really good (which I think were made using/by Cardas cable), but also quite pricey.

Ayre also does a good power block conditioner called the L-5xe, which sounds great with its products, and other hi-fi also.

I haven't heard Ayre with B&W loudspeakers, but you might want to compare one of the new PMC models which have transmission line for powerful, controlled bass to the B&W.

If you really want to replace your Ayre amplifier then I would suggest auditioning it against the Moon 250i by Simaudio (£1,600) which I think has the wonderful attributes of a Sugden Class A (super clear sound), but without the limited power output, and with excellent bass tunefulness and good, almost effortless timing.

Mail forwarding

I love my vinyl and music, and have just replaced my old Linn Basik turntable, which had a faulty Linn Akito tonearm. The deck I picked up second-hand about seven years ago for £150, so I think I've had my money's worth!

I have recently replaced it with a Pro-Ject RPM 1.3 Genie Mk 3, which I find a brilliant deck. I also purchased a Pro-Ject Speed Box 2. I have had a few problems with it, such as records not playing (stylus sticking in one place). Pro-Ject said it was my vinyl, so I thought it must be, but I didn't like the mat on the platter, so I bought an acrylic mat and now my vinyl now plays absolutely perfectly!

Anyway, I'm thinking of buying a Pro-Ject Phono Box for the deck; I was wondering if it's worth it for my system? My system isn't that expensive, but I love it, and consists of the aforementioned turntable, a Rotel RA-04 SE amplifier,

Cambridge Audio Azur 340 CD player, and a pair of Linn Keilidh speakers (which I bought second-hand from a Linn shop in Cardiff), with Linn K400 bi-wire speaker cable.

Please can you advise me, as I just want to know if the phono tages in the amp is good enough?
Michael Austin

DP says: *Hi Michael – your system is ever so slightly unbalanced. Basically, the speakers are a little too good for the rest of your system, but don't panic as some gentle upgrading will take it in the right direction.*

The Phono Box will be a subtle improvement over the Cambridge; you'll get more detail and grip. If you intend to upgrade the rest of your system later though, a Trichord Dino 2 (£300) would be a better long term solution, with loads more insight and dynamics. It will give a considerably more musical sound and is well worth the extra expense.

ES says: *If it was me, I would be pointing fingers at the CM9s; in this instance Ayre equipment is never exactly lush, but it is capable of great results when thoughtfully matched.*

If you don't mind the idea of a standmount, then something like the big Spendor SP3/2R2 or Tannoy DCB will give that fuller, slightly warmer sound without losing the detail and insight that makes your system what it is.

DP says: *Lots of ideas for you Doug, but I think you need to do some homework. First, see if you can demo a pair of PMC*

twenty.22 speakers – if these take you in the right direction then you need a change of speakers (i.e. to the PMCs)! If not, the Simaudio Moon 250i is a great next step, being punchier than the Ayre; others to hear are the Creek Destiny 2 and the Roksan Caspian M2. The latter might just be the right balance of power and musicality for you. Finally, I'd upgrade your cartridge to a Lyra Delos MC and your phono stage to the ANT Kora 3T, with an arm upgrade next on the cards. And if you haven't discovered this already, take the lid off your Gyro – it sounds much better that way.



From Genesis to revelation: Simaudio's Moon 250i is a very feisty sounding premium-priced integrated amplifier, just the job for Roger Playle's system, thinks CV...

Keeping the dream alive...

Hello to everyone at *Hi-Fi Choice*. Firstly, may I congratulate you on a fine magazine and how you keep the vinyl dream alive.

Over the years, I have always sought out entry-level amps as big things that usually come in small packages. After researching gear from Cambridge Audio, I purchased a 340SE two years ago and promptly connected it. CDs sounded okay and LPs a bit better, but at almost full volume. Referring to the manual, it said thirty hours playing time was needed to break it in which I did and still no cigar...

About four months ago I paid a visit to my favourite hi-fi shop, Jim Tate Stereo, here in Adelaide, Australia which sells gear for a certain Mr. Ivor Tiefenbrun, and looking around I noticed an out-of-the-box condition Creek 4140 integrated amp and 3040 tuner.

Turns out, they were purchased by an intern and given to his mother back in the nineteen

Mike Creek must have intended these amps to last a lifetime!

eighties and were seldom used, except for maybe Dean Martin singing *That's Amore*.

They invited me to try it before buying it and presto, it blew the Cambridge out of the water! On my old NAD 502, *Brothers in Arms* took on a whole different light with the soundstage front and centre, while on my Rega P3-24/Ortofon 2M Red, Donald Fagen's *Nightfly* had a different meaning. The phono stage beats my old Rega Phono mini hands down!

My speakers are Dali Concept 1s, and seem to coincide perfectly with the 4140. On eBay, there were a couple of 4140s for sale, with the wood veneer scratched, bits missing and one missing an on/off button. I was somewhat sceptical about something this old, but quite surprised how well it has held up as Mike Creek must have intended these amps to last a lifetime! Please tell me your thoughts and opinions on this important matter!

Dave Plumley, Australia

TJ says: Part of the allure of vintage gear is that it gives you access to sounds which are not



Keeping the dream alive: classic Creek integrated amplifiers like this are better than a new Cambridge Audio, reckons reader Dave Plumley!

fashionable at present, be it the rich warm bellow of 1970s gear or the razor-sharp edge of 1980s kit. Since current tastes dictate that everything should sound rather dry and upfront, it is great to have a way to access alternative presentations and, as you have found, some of these can be very pleasant.

Well-designed electronic equipment should be extremely durable if it is operated carefully, and as a consequence I've encountered many amps and tuners that date from as far back as the early 1970s, which display no faults at all and still sound great (built-in obsolescence must have been less of a feature of the audio scene in those days).

Personally I've never believed the running-in thing for electronics beyond the usual ten minute warm-up; loudspeakers and cartridges yes, but not boxes of wire and transistors (or, would you believe it, cables)! The mechanisms which would be in play for this to be a factor are hard to envisage, given how stable modern components are.

DP says: One of the mistakes we make in our consumer society is to assume anything new is automatically better than everything old – that applies right across the board, from hi-fi to people! The Creek CAS4140 was a fine sounding budget audiophile amp of the early-eighties, and still has many fans today. Now it seems it has found yet another!

Silver dream machines

To comment on your recent articles regarding the death of the good old Compact Disc, I will be sad to see The People's Physical Format fade to black. People felt compelled to

treasure music more when they went to the record store to hand over their hard-earned cash for a CD of their favourite artist. Or even better an LP...

Now for many, it's all about downloading a file, be it legal or not. Some friends of mine haven't bought a real album (LP or CD) for a decade. The CD production houses will go the way of newspapers very soon, if not already, which is sad. Record companies will save lots of money without warehousing, distribution and design of a tangible product.

I too have a massive collection of CDs, records (both LPs and singles), Blu-ray, SACD and DVDs. You feel like you have, to some extent, contributed to the furthering of a particular artist's life and work.

SACD is great and was snubbed by the masses and record companies to a large extent. When you get an SACD from an artist like Sara K, it sounds that much better in the midrange for starters, as the music has space and presence. So I will very much miss searching for new music through record stores or second-hand dealers when it's all replaced by a ghostly digital datastream!

I have to some extent embraced computer audio, via iTunes and Spotify, but results vary and while it is acceptable for most, for me it lacks something tangible. iTunes is limited to 256kps (I think) and Spotify to 320kps, so it still falls short of normal 16-bit CD, let alone 24-bit/96kHz or 24/192...

Steve Jobs was a smart man, an audiophile to be sure, but he knew something about ninety five percent of his customers the world over. So, I say bring on hi-def downloads for us audio folk, as a premium attachment for iTunes and the high-end specialist HD tracks, etc.

An audio engineer I spoke to recently said that these companies get files or recordings of the artist in 24/96 and then compress the life out of them for the masses, so why not offer them as a full monty for those audio types that are willing to pay and can hear the difference?

Finally, I do enjoy picking up your magazine at the newsagent. Flicking through the pages, looking at the hi-fi porn and acknowledging that its existence is giving real people a job producing it and bringing it to me!

Ben

PC says: Hear hear to your penultimate point! I too will miss the crate-digging in charity shops, when we exhaust the vinyl (and CD) legacy, and prices for the gems will no doubt get extortionate. But we are gradually moving towards high-resolution availability as HDTracks gets ever more catalogue and ever more current.

Similarly in France, Qobuz is bringing us 24-bit from UK acts like Hot Chip and Wild Beasts, that you can't even get hold of here, and homegrown joys like Saint Denis and Jean Michel Jarre. When will a UK equivalent arise? This is definitely not a case of 'vive la difference'!

ES says: A part of me wants to see Apple move into lossless audio, but another part of me feels that the longer they stay on the sidelines, the more opportunity that other sites have to develop more flexible platforms with a wider selection of artists and formats.

Even in the short time that lossless purchases have been legitimately available, the quality of the purchasing experience and the materials that come with your purchase have improved dramatically. I've no doubt that Apple could make it slicker still,

but there would be costs involved (both literal and metaphorical) in them doing so.

Digitally dazed, conceptually confused...

I am certainly confused as to which way to go with my digital side. Currently I use a PC with Windows XP/Foobar feeding a Cambridge Audio DacMagic via MFV-Link. My analogue side consists of a Roksan Xerxes 20/Artaxerxes into McCormack pre-power and Ruark Prologue 25. I also have a MF A3.2 CD and NAD FM tuner. I would like to upgrade my digital system, but the choices available leave me dazed.

There are tuners with DACs, CD players with DACs, DACs with preamps and, of course, streamers. I have a 1TB hard drive full to the brim with FLACs and have to say enjoy the computer interface. I had a Squeezebox for twelve months and most of the time it functioned as a clock! I've demo'd a Naim streamer and not been particularly taken with the

So, I say bring on high definition downloads for us audio folk!

interface or sound, although I am quite taken with the Cambridge Audio 851C, but still enjoy my MF even though it is getting on a bit. I don't listen to FM much, DAB won't be coming to our area any time soon, and I can get Internet radio via my PC, so upgrading that side of things doesn't interest me very much.

Oh, I also love my amps, so where do I go from here? My gut feeling is a standalone DAC, which can significantly improve on my current one, but I'm open to ideas. Please help!

Andy Aldridge

DP says: Hi Andy, you don't specify a budget, but I'd say look no further than the Cambridge Audio Stream Magic 6 (see review on p48). It's effectively a DAC with streaming functionality (or the other way round), and should cover all the bases. If you're wanting something a little more expensive, with a snazzier user-interface, Musical Fidelity's M1 CLiC is also a good choice.

(Lamp) standing your ground...

I don't think I am alone when I say my wife is less than enthusiastic about hi-fi. After many hints and promises over the last six months she reluctantly approved a speaker upgrade. Her only criterion was that I come back with some furniture, the cost of which should in no way impact on her plans for a downstairs makeover.

As lamp stands go, Monitor Audio RS8s (in light oak) are probably slightly over engineered, but nevertheless very handsome, wife-friendly and cost less than curtains – something of a result, then!

My current set up is an Audiolab 8200 CD player, Rotel RA05 and RB06 amplifiers, bi-wired with Chord Carnival silver screen. I am not unhappy with the sound, but then again I don't know any different. Are our new lamp stands performing to their full potential or is there more to be had? I am thinking amplification is possibly the weakest link, so if I was to replace them, what would you recommend? I listen to everything from Bach to the Beatles and lots of early nineteen seventies rock.

Those of us who tread a fine line between domestic bliss and the joy of sound will appreciate where I'm coming from, but before you can say Cyrus it will, of course, have to be compatible with my wife's overall vision, which at the risk of stating the blindingly obvious means something of a similar size, shape and finish to the Audiolab.

Chris Barker

CV says: Hi Chris, in this system and for your needs, I would recommend a Densen integrated amplifier such as the B-110, B-130, B-150 or even

Less is more

I want to do is reduce the number of electronic boxes that I have collected over the years and wired up, with bunches of cables behind the skirting boards, mainly because I have a lovely wood floor, no carpet!

I have rearranged them, trying to put all the boxes on two shelves of a substantial TV stand, but obviously no chance if I keep everything. I want to start with the heart of the hi-fi, which currently includes a Naim SUPERNAIT/Hi-cap amplifier, Leema Antila Mk1 CD player and Rega Radio 3. Replacing the Naim with a single-box integrated amplifier would get rid of one box, but it would have to be even better than the Naim.

I have drawn up a list of what I think is possible, all a good deal more than 100W per channel. The Naim's 80W is not very much these days. I'm thinking along the lines of Bryston's 100-DA, Musical Fidelity's M6i, Rega Osiris, AMR's DP-777 and Electrocompaniet's ECI 5 Mk 11. All are expensive and my limit would start at around £3,500.

Alan Stanway

ES says: I'll be honest, I don't see any of these amps providing a real upgrade from the SUPERNAIT (and it must be said, I rarely find 80W of Naim amp to be underpowered!), but if you could find a Rega Osiris for £3,500, you would be securing an amp of rare ability that might just be what you're looking for.



Naim's SUPERNAIT is very hard to improve upon as a one-box, integrated amplifier package

a B-175 (depending on funds) as these sound superb, with excellent timing and engaging sound quality with one of the best industrial and sleekest modernist designs (in either silver Albino or Black aluminium finishes) I have come across – quite a combination.

If you like the Densen sound, you should also look at its D-shoulders, which punch way above their weight in terms of performance, and will form an aesthetic match to the amplifier.

The optional aluminium-bodied Densen Gizmo remote is also one of the best of its kind in both operation and design, and not a cheap-looking plastic type.

Finally, you could also look at using a single run of better loudspeaker cable from Chord or Atlas as these will complement the Densen component(s), with matching cable links made from very short runs of the same cable to replace the standard bridging plates/cables from the RS8s, if single-wired.



Pre ordination: There's no one right way to do an audiophile preamplifier – be it active or passive, says DP...

Pre ordination

Dear Editor – Jason Kennedy stated in his review of the CAD DAC that it sounded better straight into a power amp and that a preamp was possibly no longer necessary.

In my experience, an active preamp is the most important part of any high-end system. An active preamp reveals the true beauty of the music contained in the recordings. It may be that since Jason has started using a passive preamp he is missing out on what a good active preamp, from the likes of Audio Research, Gryphon or Conrad Johnson, can do. Cue preamp shootout?

Rex Pointon

ES says: *I'm not in any doubt about the abilities that a good preamp brings to the performance of a system, but I also think that a degree of realism is needed as well. As many systems move to being a single combined digital source (with streaming, Internet radio and on occasions digital inputs), the actual need for a dedicated preamp to act as an input collator is null and void.*

Sonically, if a preamp is still adding something, it is making a compelling argument to stay in the system, but I have used a few of these entirely digital systems now and many of them are extremely sonically impressive.

DP says: *I'd agree with Rex that a good active preamp can really make a profound difference for the better, but sadly these are few and far between – and often tend to subtract more than they add. Conversely, passive preamps are often overrated and even the more sonically purist solution – a really high quality 50k ohm potentiometer in a box with top-notch silver wiring – can be a big disappointment.*

Transformer preamps can be better, although there's always electrical matching issues with these. So, like loudspeakers, there's no one way to do a preamplifier right – you need to suck it and see what improvement (or not) it makes in your system.

LETTER OF THE MONTH

UPON EVALUATING SOME OF THE CDS I HAVE BOUGHT LATELY,

it is becoming clear that buying them for the music content is not enough incentive to listen to them more than a few times. Some audio systems are more ruthless than others. This can be good for well-recorded music you have whether it be on LP or CD, or even as a download. The standard issue iTunes download is often very digital sounding and compressed if you have a good ear. I am convinced that the sound quality of popular music is on the decline, excluding most of the audiophile label stuff and rarities from audio nuts like Neil Young

I am going to try and coin a new phrase – 'MP3 deaf', because I see so many people of my age group and much younger losing their hearing to music that sounds terrible. Be it on the stock standard white horrors that come in the tin with various iDevices or in nightclubs where the same poor quality noise is pounded out!

In the 1980s, back in the day we budding audiophile kids listened to music that aspired to sound at least decent. In the night clubs, properly set up JBL speakers powered by high-quality Crown amps with 12inch singles as the source were worth sustaining some hearing loss too, well almost! There was an aspirational theme in many cases to put out music on Compact Disc that sounded well balanced.

CD in the early days wasn't great admittedly, but these machines were evolving all the time. Now, with the demise of CD it is clear that we are accepting less. For many young folk it is all about computer games and Facebook. Audio as a hobby is under threat in the mainstream. Computers have made audio redundant. Computer audio is the answer I hear you say. Well I will concede to some extent, but like the revival of black plastic it is a marginal marvel at best.

Like many other audiophiles with revealing systems (i.e. JBL monitors tri-amplified with active crossover and quality sources like the amazing Oppo BD95 and Linn LP 12 turntable), my system gets to the truth, yet some of the music I buy gathers dust soon after the first play. You have to have other less revealing, more pleasant gear to enjoy the content on offer. You get depressed and buy new music less and much more cautiously, which is a crying shame.

Ben Stewart

DP says: *Thanks Ben – I have very little to add. Modern pop is so compressed, and often so poorly recorded.*



WIN A RUSS ANDREWS POWERMAX PLUS MAINS LEAD WORTH £50!

Letter of the Month winners receive a Russ Andrews PowerMax Plus mains lead worth £50. Write to us at letters@hifichoice.co.uk



Bowers & Wilkins



Mini Theatre

MT-60D Looking for big movie sound from a small system? You've just found it. MT-60D is the latest in the award-winning mini theatre range from Bowers & Wilkins, makers of the world's most advanced home cinema sound systems. Compact and discreet it may be, but don't let the size fool you: MT-60D will fill a room with rich, detailed multi-channel surround sound, thanks to a perfect partnership between the M-1 satellite speakers and the powerful PV1D subwoofer. Music, movies and games just got a whole lot more exciting. **Listen and you'll see.**

bowers-wilkins.co.uk

WHAT HI-FI?
SOUND AND VISION



"A true all-rounder: adept at everything you'd want a surround speaker package to do"

Cables / Interconnects AV Receivers AV Bundles Speakers TV Stands And Mounts

Home Cinema Bundle Specialists • Speaker Installation Service • Custom Cable Service

<p>1</p> <p>Monitor Audio Vector V10 Compact Bookshelf Speaker Pair Gloss White</p> <p>★ HALF PRICE</p> <p>was £169.00 £79.00</p> 	<p>2</p> <p>Q Acoustics Cinema 2000 Speaker Pack Gloss Black</p> <p>★ SAVE £290</p> <p>was £649.60 £359.00</p> 	<p>3</p> <p>Yamaha Aventure '10 AV Receivers RX-A1010, RX-A2010 RX-A3010</p> <p>★ SAVE 10% £700</p> <p>prices from £649.00</p> 
--	--	--

AV Receivers

 <p>Denon AVR-1713 7.2 Receiver</p> <p>for best price £ CALL</p>
 <p>Onkyo TX-NR3009 9.2 Receiver</p> <p>£1,999</p>
 <p>Marantz SR6007 9.2 Receiver</p> <p>★ NEW</p> <p>£899.00</p>
 <p>Pioneer SC-LX75 9.2 Receiver</p> <p>for best price £ CALL</p>

Speaker Packs

<p>WHAT HE FIT? ★★★★★</p> <p>Jamo D500 THX Black</p>  <p>£1,700 Seen it cheaper? Call Us</p>
<p>WHAT HE FIT? ★★★★★</p> <p>AWARDS 2011</p> <p>DALI Fazon 3 Gloss Black or Gloss White</p>  <p>£1,699 Seen it cheaper? Call Us</p>
<p>WHAT HE FIT? ★★★★★</p> <p>AWARDS 2011</p> <p>DALI Zensor 5 3 Finishes</p>  <p>£1,299 Seen it cheaper? Call Us</p>

Headphones

★ **BEST BUY**

 <p>Grado SR60i Open Backed Headphones</p> <p>WHAT HE FIT? ★★★★★</p> <p>£90.00 Seen it cheaper? Call Us</p>
 <p>Grado SR325i Prestige Open Backed Headphones</p> <p>was £349.95 £314.99</p>
 <p>Audio Technica ATH-W1000X Closed Backed Headphones</p> <p>WHAT HE FIT? ★★★★★</p> <p>our price £629.00 Seen it cheaper? Call Us</p>

Headphone Amplifiers & Accessories

 <p>Grado Headphone Carry Case Black</p> <p>fits most headphones</p> <p>our price £19.95</p>
 <p>Arcam rPac USB DAC & Headphone Amplifier Black</p> <p>WHAT HE FIT? ★★★★★</p> <p>our price £149.00</p>
 <p>Pro-Ject Head Box II Headphone Amplifier Black or Silver</p> <p>£100.00 Seen it cheaper? Call Us</p>
 <p>Grado RA1 Headphone Amplifier Wood Finish</p> <p>our price £360.00 Seen it cheaper? Call Us</p>

Hi-Fi Racks and Shelving

 <p>Atacama Elite Bamboo Modular Hi-Fi Rack Natural</p> <p>per module £159.00</p>
 <p>Atacama Eris Eco Bamboo Modular Hi-Fi Rack Four Post Finishes</p> <p>WHAT HE FIT? ★★★★★</p> <p>per module £99.00</p>
<p>★ SAVE £230</p>  <p>Soundstyle ST560 Hi-Fi Rack Posts: Silver Shelves: Piano Black Glass</p> <p>was £399.00 £169.00</p>

Music Servers & Streaming

 <p>Airplay</p> <p>Denon DNP-720AE Black or Silver</p> <p>was £429.99 £249.00 Seen it cheaper? Call Us</p>
<p>★ BEST BUY</p>  <p>AVA Rip-n-Play 1 TB or 2 TB</p> <p>prices from £799.00</p>
 <p>NAD C446 Digital Tuner Graphite</p> <p>WHAT HE FIT? ★★★★★</p> <p>£535.50</p>
 <p>Olive O4HD Black or Silver</p> <p>£2,250</p>
 <p>Olive O4HD Black or Silver</p> <p>our price £925.00 Seen it cheaper? Call Us</p>

Digital To Analogue Converters

 <p>Pro-Ject DAC Box FL Black or Silver</p> <p>our price £205.00</p>
<p>WHAT HE FIT? ★★★★★</p> <p>AWARDS 2011</p>  <p>Audiolab M-DAC Black or Silver</p> <p>£599.00 Seen it cheaper? Call Us</p>
 <p>Arcam rLink SPDIF DAC Black</p> <p>£149.00 Seen it cheaper? Call Us</p>
 <p>Peachtree Audio DACit Silver</p> <p>our price £349.99</p>

Power Amplifiers

 <p>Audiolab 8200P Black or Silver</p> <p>our price £649.95 Seen it cheaper? Call Us</p>
 <p>Arcam FMJ P38 Silver Only</p> <p>£1,099</p>
 <p>Roksan Caspian M2 Black or Silver</p> <p>our price £1,249 Seen it cheaper? Call Us</p>
<p>★ BEST BUY</p>  <p>Roksan Kandy K2 Black or Silver</p> <p>our price £695.00</p>

Bookshelf Speakers



£249.00 Monitor Audio Bronze BX2
4 Finishes
Seen it cheaper? Call Us



prices start at **£425.00** Monitor Audio Silver RX1 5 Finishes



prices start at **£950.00** Monitor Audio Gold GX 5 Finishes



prices from **£199.00** DALI Zensor 1 Three Finishes



prices start at **£144.00** Q Acoustics 2010i Graphite, Walnut Gloss White or Black



was £129.00 **£108.99** Wharfedale Diamond 10.0 Three Finishes

Barebones Hi-Fi Bundle Deals

The best way to get your true hi-fi project off the ground. By purchasing the speakers and stereo amplifier together, we will throw in cables for even further savings! Use the grid below to define your total price and saving!

Stereo Amps. ► Speakers ▼	Denon PMA-520 NEW Black / Silver		Arcam FMJ A18 Black / Silver		Yamaha AS500 Black / Titanium	
	Price	Saving	Price	Saving	Price	Saving
Monitor Audio BX2 Four Finishes	£358.00	£108	£720.00	£67	£489.00	£98
Monitor Audio BX5 Four Finishes	£609.00	£107	£949.00	£87	£719.00	£117
Tannoy Mercury V4 Four Finishes	£418.00	£199	£699.00	£237	£529.00	£207
Q Acoustics 2020i Walnut / Graphite	£294.00	£103	£589.00	£98	£379.00	£108
Q Acoustics 2020i Gloss White / Black	£324.00	£113	£629.00	£108	£429.00	£110
Q Acoustics 2050 Gloss Black	£444.00	£263	£749.00	£277	£525.00	£301
Mission MX1 Black / Walnut / Cherry	£299.00	£67	£599.00	£87	£399.00	£87
Mission MX3 Black / Walnut / Cherry	£479.00	£87	£749.00	£137	£579.00	£107
Wharfedale 10.1 Five Finishes	£299.00	£67	£599.00	£87	£399.00	£87
Wharfedale 10.3 Five Finishes	£359.00	£157	£649.00	£187	£458.00	£178

Pioneer
You Can Have It All

WEBSITE: WWW.AUDIOVISUALONLINE.CO.UK

FORUM: WWW.AVOFORUMS.CO.UK

TWITTER: @AVONLINE

FACEBOOK: AVONLINEUK

Subwoofers



Monitor Audio RXW-12
5 Finishes
prices start at **£799.00**



Jamo D600 Black
call for **BEST PRICE**



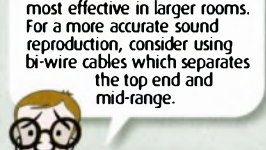
prices from **£799.00** Monitor Audio Silver RX6 5 Finishes



prices from **£199.00** DALI Zensor 1 Three Finishes



prices start at **£144.00** Q Acoustics 2010i Graphite, Walnut Gloss White or Black



was £129.00 **£108.99** Wharfedale Diamond 10.0 Three Finishes

Hi-Fi Essentials

The best way to get your true hi-fi project off the ground. By purchasing the speakers and stereo amplifier together, we will throw in cables for even further savings! Use the grid below to define your total price and saving!

Stereo Amps. ► Speakers ▼	Denon PMA-520 NEW Black / Silver		Arcam FMJ A18 Black / Silver		Yamaha AS500 Black / Titanium	
	Price	Saving	Price	Saving	Price	Saving
Monitor Audio BX2 Four Finishes	£358.00	£108	£720.00	£67	£489.00	£98
Monitor Audio BX5 Four Finishes	£609.00	£107	£949.00	£87	£719.00	£117
Tannoy Mercury V4 Four Finishes	£418.00	£199	£699.00	£237	£529.00	£207
Q Acoustics 2020i Walnut / Graphite	£294.00	£103	£589.00	£98	£379.00	£108
Q Acoustics 2020i Gloss White / Black	£324.00	£113	£629.00	£108	£429.00	£110
Q Acoustics 2050 Gloss Black	£444.00	£263	£749.00	£277	£525.00	£301
Mission MX1 Black / Walnut / Cherry	£299.00	£67	£599.00	£87	£399.00	£87
Mission MX3 Black / Walnut / Cherry	£479.00	£87	£749.00	£137	£579.00	£107
Wharfedale 10.1 Five Finishes	£299.00	£67	£599.00	£87	£399.00	£87
Wharfedale 10.3 Five Finishes	£359.00	£157	£649.00	£187	£458.00	£178

Pioneer
You Can Have It All

WEBSITE: WWW.AUDIOVISUALONLINE.CO.UK

FORUM: WWW.AVOFORUMS.CO.UK

TWITTER: @AVONLINE

FACEBOOK: AVONLINEUK

iPod Dock Speakers



Arcam rCube
Gloss Black or White
£329.00



Geneva Labs Model S DAB
3 Colours
£399.00



Arcam Solo Mini Silver
was £765.00 **£599.00**



Arcam Solo Neo Silver
was £1,399.00 **£999.00**



Marantz M-CR603 Black or Silver
was £529.00 **£479.00**



Yamaha CRX550 Black
£189.00

Three Demo Rooms

Experience the North-West's finest cinema & hi-fi demonstration facilities here in Bacup, Lancashire. Please call first an hour prior to arriving: **01706 878444**

Unit 5, The Sidings
New Line Ind. Estate
Bacup, Lancashire
OL13 9RW



HDMI Cables



Wireworld Chroma Starting at 0.3m
prices start at **£41.95**



Audioquest Pearl Starting at 0.6m
prices start at **£22.50**



Audioquest Forest Starting at 0.6m
prices start at **£26.00**



QED Profile 1m | 2m | 3m
prices start at **£22.95**



QED Performance HDMI-e 0.6m to 5m | Graphite
prices start at **£26.95**

Speaker Cable

QED (Priced per metre)	QED
Classic 42 Strand	▶ 90p
Classic 79 Strand	▶ £1.75
Micro	▶ £1.65
Silver Micro	▶ £3.60
Original	▶ £3.15
Original Bi-Wire Mark II	▶ £5.00
XT-C	▶ £3.60
Silver Anniversary XT	▶ £4.80
Silver Ann. XT Evolution	▶ £6.00
S. Ann'v XT Bi-Wire	▶ £9.45
Revelation	▶ £13.50
X-Tube 300	▶ £11.25
X-Tube 400	▶ £20.25

Fisual (Priced per metre)

Fisual (Priced per metre)	FISUAL
Miniature	▶ 40p
Low Profile Ultra-Flat	▶ £1.20
Low Profile Flat Adhesive	▶ £1.45
Covert	▶ £1.50
Covert Ultra Silver Plated	▶ £2.50
Dualcon Bass Enhance	▶ £1.40
Dualcon Bi-Wire	▶ £2.40
Super Pearl 1.5mm	▶ £1.60
Super Pearl 2.5mm	▶ £2.20
S-Flex Studio Grade (2 x 0.75mm)	▶ 80p
S-Flex Studio Grade (2 x 1.5mm)	▶ £1.50
S-Flex Studio Grade (2 x 2.5mm)	▶ £1.95
S-Flex Studio Grade (2 x 4mm)	▶ £2.49
Hollywood Dark Twist	▶ £3.95
Havana FX	▶ £4.00

Wireworld (Priced per metre)

Horizon 5 Super Flat	▶ £3.22
Stream 16/2 Gauge Install	▶ £5.40

Van Damme (Priced per metre)

Studio Grade Blue (1.5mm)	▶ £1.90
Studio Grade Blue (2.5mm)	▶ £2.60
Studio Grade Blue (4mm)	▶ £4.00
Studio Grade Blue (6mm)	▶ £6.00

Custom Banana Plug Service

Fisual Surefix (price per plug)	▶ £3.00
QED Airlocs (price per plug)	▶ £5.00

Stereo Amplifiers



£299.00 Marantz PM6004 Black or Silver Finish



£795.00 Roksan Kandy K2 Black or Silver Finish



our price **£799.95** Audiolab 8200A Black or Silver Finish

CD Players



£299.00 Marantz CD6004 Black or Silver Finish



£795.00 Roksan Kandy K2 Black or Silver Finish



£799.95 Audiolab 8200CD Black or Silver Finish

Turntables



£159.95 Pro-Ject Essential Black



£300.00 Pro-Ject Debut Carbon 5 Finishes



£775.00 Pro-Ject Xperience II Clear Acrylic

AUDIOVISUAL ONLINE
EX-DEMO & B-STOCK

SAVE UP TO 70% ASK FOR LATEST DEALS

EX DEMO

Cable talk

David Price expounds on the meaning of life, the wonder of the universe, and just how interconnects fit in to all this...

One of the things that's such fun about hi-fi as a hobby is its space for great debates. My early memories of reading hi-fi magazines in the late seventies include enjoying some highly polemical missives from journalists and readers alike about the relative merits of the Linn Sondek LP12 turntable against its rivals. No sooner had that particular squall died down (if indeed it ever did), and we were on to the great vinyl versus CD showdown. The eighties was the decade when the Cold War reached its peak, and that was just in audio!

Since then of course, the valves vs. transistors question has had something of a resurgence, a topic I'm sure our more veteran hi-fi scribes thought they'd put to bed in the late nineteen sixties. Oh, and just when you thought it was safe to emerge from behind your listening room sofa, play has restarted with CD versus streamers, physical against virtual and/or 'real hi-fi' against computer audio – depending on your choice of wording!

One area of controversy that's never come and gone however, is cables. Basically, round about 1979 – when QED 79-strand and Monster cable surfaced – the topic imprinted itself on the hi-fi world and has remained here ever since. I have to say that sometimes it makes me lose the will to live. Like left-versus-right politics, the relative (de)merits of the England football team and/or the failure of British tennis, it's not a conversation that exactly promotes original thought. Instead, it's all about repeating prejudices and reheating old orthodoxies. In a nutshell, this boils down to either 'they're all a rip-off and hi-fi mags only write about them because of the advertising', or 'they're the biggest improvement you can make'...

I enjoy dipping in and out of various online hi-fi forums when time permits, but I have to say that these have become a repository for such group-think. One charge that sends me into a narcoleptic daze is that 'we can't prove by measurement that one cable is sounds better than another, so they must all sound the same, so they're all a rip off'...

Here, I feel some clarity of thought is helpful. The more enlightened technical hi-fi journalists amongst us will surely admit that – while useful information can be garnered from measurements, some of which can partially predict how something might sound – lab testing is no substitute for subjective listening in itself. If it was, there would be no need for hi-fi magazines, dealer dem rooms, and/or golden-eared people burning the midnight oil

voicing products to sound better than those of their rivals. Instead, it would all be on a spec sheet, and that would be that.

It logically follows then that, just because we can't directly correlate specific subjective differences in sound quality to measurements, it doesn't mean there *are* no differences. This holds for precisely the same reason that just because they couldn't measure oxygen in the atmosphere in the fifteen century, it didn't mean there wasn't any! Indeed, we can accurately speculate that there was, otherwise we wouldn't be here arguing about hi-fi cables!

So, it's back to those rather neat analogue measuring instruments we're all equipped with – the human ear. Last month's *Blind-Listening Group Test* did a fantastic job of reminding us that differences in sound between cables do exist. The simple expedient of yours truly throwing a 'joker' into the pack in the shape of a freebie OEM cable underlined that expensive upgrade interconnects are all noticeably better than cheap, freebie patch leads, too.

Most interesting to me though, was the wide variety of sounds on offer. Few of the cables seemed genuinely 'neutral' – if indeed there is such a thing anyway. Certainly the Mark Grant and Black Rhodium sounded quite organic and natural, and that's why they were marked highly. But beyond these, we had one poor sounding OEM patch lead and nine other cables, all of which had a distinctive character – just like any nine different people do! It then came down to the panel identifying that character, and deciding if they liked it.

Of course, a cable's character is defined by its proficiency at a wide range of challenges. For example, the van den Hul was tonally spry, crisp and dry, and spatially wonderfully wide and open, but rhythmically it seemed a little less fluid than the Mark Grant. Part of the evaluation process then depends on each member of the listening panel prioritising the good (and bad) aspects of the performance. In this instance, I'd suggest that your average guitar playing, beer swilling rocker with roach burns all over his Deep Purple LP inners might respond less positively to this than a besuited classical musician craving for the majestic air and space of his favourite concert hall to be recreated in his own listening room.

All of which takes me back to something that needs restating more than the platitudes of any great debate – go and listen for yourself. As far as hi-fi is concerned, the wisest judges of any argument are your very own ears.

Last month's *Blind-Listening Group Test* did a fantastic job of reminding us that differences in sound between cables do exist...



DAVID PRICE
Audiophile, record collector and
Hi-Fi Choice editor

Good vibrations?

Well no, actually! **Richard Black** explains why the very slightest of shudders can and will damage your system's sound...

Sitting here surrounded by isolation platforms intended to reduce the effects of mechanical vibration on hi-fi equipment makes me ponder the subject of 'microphonics' – turning vibration into electrical signals. It's hardly a mystery how this is achieved in vinyl playing turntables – detecting vibration is fundamental to their operation and it's intuitively obvious that externally applied vibration has the potential to disrupt and interfere with this. But what about other devices in the typical hi-fi system?

Surprisingly perhaps, just about any electronic device has the potential to turn vibration into an electrical signal – even a cable can do it. In general, there are two kinds of process that can cause this. One is relative motion of two conductors with a voltage between them. The motion will cause a change in the capacitance between the conductors and this in turn will cause a change in the voltage between them. In fact, this is exactly the mode of operation of the type of microphone most widely used in music recording, the capacitor microphone. Of course, it's designed to maximise the effect, but even in something as mundane and a bit of mains cable, the effect occurs...

The resulting signal is often really, really tiny, but you can't safely assume it's negligible. Especially in high-impedance circuits, perfectly ordinary capacitors can show easily detectable microphonic behaviour. I can recall trying to fix circuits which responded to vibration – that's often a sign of faulty assembly such as a bad solder joint, and indeed tapping a circuit board while it's working, and looking for a disturbance in the output, is a common enough way of checking for such faults. But more than once, the fault turned out to be a capacitor which was not in fact, faulty, just in such a situation that it was likely to respond to vibration in this way. Sometimes a different make or type of capacitor will fix the problem (if it is in fact a problem in context), but in some cases one just ends up doing a small redesign to eliminate it.

The other kind of process that can ease microphony is generally referred to as 'piezo-electricity'. Most people have come across a 'piezo igniter', which uses a piezo-electric crystal to generate a spark which ignites the gas in a boiler or stove. Basically, a spring-loaded plunger gives the crystal a hearty whack which causes it to generate several thousand volts. That's clearly rather extreme, but a similar process on a very much smaller scale applies to various materials used in electronic construction.

'Piezo-' means to do with squeezing, but in practice it's often hard to distinguish piezo-electric effects from 'tribo-electric', those due to friction. Just as one can induce a static charge on a balloon by rubbing it, one can produce tiny voltages and currents by rubbing (for instance) the insulation of a cable over the oxide layer on the copper conductor, and such rubbing can be the result of vibration.

All these effects do tend to be very small indeed, at least in the context of the amount of vibration actually caused by typical sound waves in a typical domestic listening environment. Sometimes however, results can be much more obvious. The best-known example is electronic valves, which are fundamentally microphonic as the distances between internal elements are absolutely critical in determining performance. Mechanical tuning capacitors, as found in older FM tuners, are also quite seriously microphonic.

And then there are CD players and other optical storage devices, where vibration can cause a considerable increase in the jitter of the data read from the disc. In theory, this jitter should be reduced to insignificance by circuits that follow, but this is not by any means always the case. CD players also include crystal oscillators which critically control the internal timing, but these are mechanical devices and so are not by any means immune to vibration.

The end result of all this is that while microphony of audio electronics is not usually a big problem (unless you are making a valve-based, moving-coil head amp, in which case, take it from me, it is!), one cannot simply assume it's a non-issue. On the contrary, a little care in vibration isolation is generally not a wasted effort – just one more smear removed from the window, if you like!



Just about any electronic device has the power to turn vibration in to an electrical signal...



RICHARD BLACK
Prolific musician, recording engineer and reviewer



Come and visit Track Audio at The National Audio Show 2012
We will be in The Brooklands Suite, stand T23 showing our full
range of precision engineered loudspeaker stands, isolation
feet and audio accessories

Visit www.trackaudio.co.uk for more information, product reviews and dealer listings.



Telephone: 01494 723755 **Email:** sales@trackaudio.co.uk
www.trackaudio.co.uk

Track Audio

Negative equity

Tim Jarman gives short shrift to so-called purists who deny the palliative powers of negative feedback!

One reads a lot about feedback these days, usually in hi-fi manufacturer's advertisements where claims are made about its absence, or failing that its moderate use. Is this necessarily an advantage? I'm not convinced...

The feedback used in audio amplifiers is more correctly described as Negative Feedback (NFB). Years of subtle Neuro-Linguistic Programming (NLP – look it up if you get the chance) in politics and management may have left you thinking that anything 'negative' is necessarily bad but that isn't so, in this case it's a serious scientific and engineering term which simply means that feedback signal is in opposite phase to the main programme signal and so its application tends to reduce a system's overall gain through the process of subtraction. There is such a thing as positive feedback too, but this is of little use in audio amplifiers, since it normally leads to instability and oscillation, two things you definitely don't want to happen.

NFB is a natural part of life, you subconsciously apply it yourself when you do things like picking up a delicate object or regulate the speed of a vehicle. In fact, most dynamic systems are made stable by its application somewhere; it is a very useful process. In electronics, NFB arrangements were first devised in the early twentieth century as a way of making amplifiers for telephone systems whose characteristics were independent of the valves that were used to construct them. This was an important advance, since valves are not particularly consistent from sample to sample and change as they age.

In a correctly functioning NFB amplifier, it is the passive components in the feedback loop that define the unit's basic performance, and since these can easily be made stable over long periods, the result can be made to be a predictable, reliable performance. NFB can also 'tune out' problems such as distortion and frequency response errors, as well as determine the amplifier's performance at the edges of its pass band (the bass and treble cut-offs). The application of NFB to a power amplifier also tends to artificially reduce its output impedance, which in hi-fi terms means that the loudspeakers are kept under better control.

Philips even went as far as producing a combined amplifier and loudspeaker in which the NFB loop was extended to include the mechanical action of the loudspeaker cone with its 'Motional Feedback' models. Good performance from small cabinets was easily obtained, but technical problems with what was a really adventurous scheme finally lead

to the series being sadly dropped in the early nineteen eighties.

It was difficult to apply very large quantities of NFB to valve audio amplifiers, since the output transformers which most of them have produce phase distortion. In extreme cases this can cause the feedback to become positive, usually with disastrous results that involve the destruction of the loudspeakers! Transformerless transistor amplifiers, of the type that became widely available in the nineteen seventies, have no such limitations though, and this lead some manufacturers to apply NFB to an excessive degree, since by these means it was possible to produce cheap and basic amplifiers whose output impedance and harmonic distortion were both near zero (both of which looked good in catalogues)!

However, although these models measured superbly, they were often pretty gruesome to listen to, since with complex music signals the NFB was worked so hard that the corrective signals that it was forced to generate were too large for the struggling amplifier to handle, resulting in odd forms of distortion which were not present when making simple measurements using single tones.

Upon these failings were built the myths of the no (and low) feedback amplifier. The argument was that the basic circuit worked so perfectly that no corrective action was required to get excellent results, so NFB wasn't needed and its associated problems simply disappeared. Is this the answer? Not in my view. If you look at the measured performance of these machines you will often find high distortion, far from flat frequency response and high output impedance. Diehard fans of this type of equipment often talk about 'musicality' and 'insight', but what you are actually hearing in most cases are response peaks and distortion.

After those crazy years of the seventies, lessons were learned, and NFB was normally applied sensibly and proportionally, so that ruler-flat frequency response and vanishingly low distortion are obtainable from even quite moderately priced equipment. Done correctly, NFB should be celebrated and not feared. It's as close as hi-fi has to a universal panacea for a whole range of problems, and is usually behind that tight, fast sound that many listeners love. Still, you can't please all of the people all of the time and sections of the 'valves 'n vinyl' brigade still deplore it. Perhaps they should consider how the massive amplifiers that drive the cutting heads of record lathes are made stable and accurate – negative feedback of course!

Negative feedback is as close as hi-fi has to a universal panacea for a whole range of problems...



TIM JARMAN
Electronics engineer, classic kit collector
and author of **BeoCentral.com** and
WalkmanCentral.com

YOUR MUSIC NEEDS
YOU!



QUALITY AUDIO AND AV SINCE 1985



Kiko is here!

Kiko is a network music player that allows you to play all your digital content. Control it all using your smartphone, tablet or laptop. It combines the convenience you love with brilliant sound quality. It provides a hub for all your music & TV!



RP6 record player by REGA.

ARCAM cinema systems



SUPERUNITI music streamer by Naim.



PMI speakers from B&W

Surface tension

Forget aero-grade aluminium or lustrous carbon fibre – surely wood is hi-fi finest material, says **Channa Vithana**?

While there have been many component upgrades for the august Linn LP12 turntable, some of which I have heard to be truly great, I still think it's a shame (and a waste of material) to have to replace its wooden plinth if there is nothing wrong with it. Indeed, I think some of the earlier plinths with those grooved, profiled face-on edges were rather attractive in a way that other finishes and styles, particularly the smoother, more flush versions, (though in some cases much better built and finished) are not, being somewhat blander by comparison.

Material finishes are important in how light reflects off contours or raised surfaces, and how it doesn't quite look so good when there is little texture or high-quality grain to reveal, when the material surface is less well detailed. In the right hands of a good craftsman, suitable cleaning and refinishing can bring back the beauty of a good piece of wood (and occasionally a veneer also) – some old LP12s come up wonderfully like this.

This is no skinflint, miserly outlook in these hard times of recession, rather it's about preserving something cherished – or indeed discovering the intrinsic value and beauty of a product instead of just throwing it away... It gives me great pleasure to revive, repair or just see, something like a wooden LP12 plinth being brought back to a more natural state by an experienced maker or artisan. It's a tangible *souçon* of what's real and true in the sea of built-in obsolescence that is manufacturing and purchasing culture at its worst!

Working with timber is truly an art in itself, and some car manufacturers go to great lengths to provide the most polished interior wooden surfaces with multitudes of lacquers for that perfect 'piano' finish, only for their creations to be so picture-perfect that ironically they look and feel fake, like shiny plastic facsimiles! Certainly, some hi-fi timber manufacturing can also look like this, where loudspeaker cabinets or turntable plinths may look initially impressive in ultra high gloss, especially in a good photograph, but the more I look and analyse, the more disappointing the finish becomes when under the unflinching truth of pure, natural daylight.

But what if your beloved hi-fi component is damaged, or even worse it has marred wood veneer? Well, it's a tricky one because you have to be very careful in matching a repair to the rest of the cabinet, and similar to car spray-painting you may have to cover or redo more

than just the distressed area, and sometimes a complete new veneering is required to provide a more convincing finish. And for this only a reputable furniture-grade company or craftsman will do...

In manufacturing, wood veneering is obviously a lower-cost method of production in comparison to using solid timber, and done well it can also cover joints in the cabinet materials that would otherwise be expensive to perfect. It also looks and feels really expressive when the best timber and grain/book matching are achieved. Solid timber in loudspeakers is a rarer, more expensive occurrence, but Sonus faber makes beautiful cabinets in the tradition of fine Italian craftsmanship, where solid pieces of wood such as maple are used in stack layers to form componentry in wonderfully curved and angled cabinet geometries – particularly elegant is the original Cremona Auditor with matching curved stand (in Graphite) and Amati Homage floorstander (in Red).

Finish brand Penaudio crafts some of its loudspeaker designs in solid birch-faced plywood (see the Charisma standmount), and these look sensational because fine birch-faced ply, especially edge-on, reveals so much texture and fine detail when it reflects light – having used birch-faced plywood in my own designs for furniture I know it is also somewhat difficult to craft as the edges of the plywood can be very delicate, even on half-decent grading such as B/BB which guarantees a consistent laminated finish.

Some other plywood examples are Nordic Concept which made a beautiful birch-faced turntable, and Clearadio which uses a type of pressure-bonded ply (which is reportedly bullet proof) called Panzerholz for better sound quality in its turntables.

My preference in wood is for Japanese Joinery. The Japanese were using sustainable methods of reforestation and more efficient timber crafting using frames instead of solid tree trunks centuries before sustainability became the political and commercially driven buzzword it is now. The use of high-quality jointing in the details of manufacturing not only confers beauty, but also structure and longevity too. Therefore, I consider good design to be sustainable. My favourite Japanese Joinery detail is the striking Hako-dome (rabbeted tenoned mitre joint), which I think would look outstanding on the four corners of a brand-new Sondek LP12. What say you, Linn?

Material finishes are important in how light reflects off contours or raised surfaces...



CHANNA VITHANA
Reviewer, design aficionado and music fan

ANTHONY GALLO
ACOUSTICS

ARCAM

ATLAS | Cables

audiolab

AUDIOVECTOR

Barr | audio

B&W

BEOSTERO

THE
CHORD
COMPANY

CHORD

CREEK

CRESTRON

CYRUS

DALI

DENON

epos

EXPOSURE

GENELEC

Goldring

GRADO

IMAGE audio

ISOtek

JVC | PHILA

kaleidescape

KEF

kudos

LINN

Lumagen

marantz

MICHELL ENGINEERING

MISSION

MUSICAL FIDELITY

NAD

naim

neat

ONKYO

Panasonic

PMC

ProAc

Project

Q

QUAD

REGA

ROTEL

SANSUI

spendor

Trichord Research

Velodyne

Wilson benesch



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

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

Tel:
01483 504801 or 01483 304756

Email:
info@pjhifi.co.uk

Web:
www.pjhifi.co.uk

▶ ▶ ▶ ▶ ▶ The only real hi-fi shop in Guildford

Box set go!

Jason Kennedy goes off on a quest for an altogether better type of loudspeaker enclosure...

Flapping panels have always been a problem in loudspeakers. Wood is not the most inert material and yet it's the most popular thing to make a speaker out of because it is relatively affordable and more domestically acceptable than the alternatives. It was originally used because there was nothing more suitable, and although concrete horn systems were built back in the day they weren't a commercial proposition. Wood is, however, gradually disappearing from loudspeakers at the high end at least and technology is coming to the aid of necessarily wooden speakers at midrange prices...

I have had a number of speakers recently that have either usurped wood entirely or feature techniques that are designed to keep it under control. The most extreme example was the Hart Aural Pleasure, where the chassis is made from cast bronze, that did things that no wooden speaker could hope to do largely because it didn't join in with the energy coming off the drive units. This was most apparent in the bass, which although not particularly extended, was uncannily swift!

More recently I have been enjoying another exotic design from Vivid Audio, called Giya G2. This multi-driver floorstander has a curvaceous cabinet made of two skins of GRP with end grain balsa in-between. It's an approach that takes stiffness-to-weight ratio to a new level and results in a formidably revealing, uncannily low distortion loudspeaker. It almost sounds soft by normal standards because there is so little in the way of cabinet noise, but the proof is in the resolution, the layers and nuances revealed by the Vivid are extraordinary. This is particularly apparent with the decay of notes, something that is usually smeared, albeit subtly by the resonance of wooden cabinets. It's a cleanliness of sound that's different from the sort of crystalline starkness that's usually described as clean – often that sort of sound indicates that low level details are being left out, a sort of fake transparency if you will!

The transparency created by cabinets that aren't joining in with the music is a richly detailed one, full of spatial and timing cues that bring the music into the room with not inconsiderable realism.

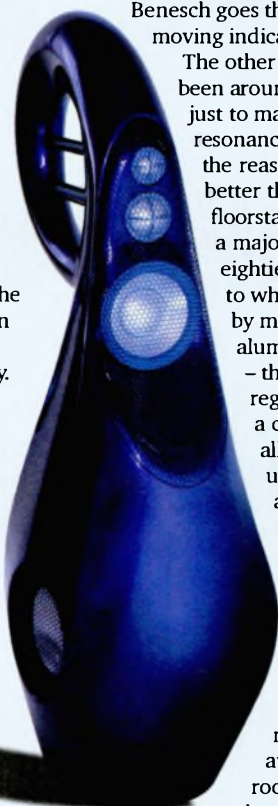
One approach that's gaining ground with speakers that have to inhabit wooden cabinets in order to make them affordable, is to use modern damping techniques on the inside. The preferred technique used to be to apply damping of some form, be it bitumen, rubber pads or merely wadding to the inside of a box and hope that it would stop panels being excited. More recently however, companies like KEF have started to use constrained layer damping at key points on the cabinet wall to minimise resonance. This is used on the R700 floorstander which sounded dramatically better than its Q series sibling, partly because its higher price allows for this relatively high tech approach.

The latest variation to hit my listening room floor is Wilson Bensech's Square 3 floorstander, this has a number of techniques for quietening the MDF cabinet. There are heavyweight passive drive units on the rear of the box behind the main drivers, a separate chamber for the tweeter, which lessens energy from the main drivers getting to the top panel, and metal pads strategically placed on the cabinet wall with visco elastic damping. The fact that Wilson Bensech goes this far to keep the wood from moving indicates just how big a problem it is!

The other solution, and one which has been around for a long time is of course just to make a smaller box. Cabinet resonance is not always discussed as the reason why standmounts can sound better than similarly priced floorstanders, but it's almost certainly a major contributing factor. Back in the eighties Celestion took this approach to what then was the high tech limit by making a cabinet out of twin-wall aluminium with an aerolam core – the SL600 was very highly regarded at the time and remains a cult product even today, but all-metal cabinets remain uncommon, at least in the affordable arena. Magico and YG Acoustics both make their enclosures from machined aluminium billet and the resulting speakers have garnered considerable critical acclaim.

So surely it's time to abandon wooden boxes and welcome more technologically sound audio furniture into our living rooms? If great sound is the goal, then I say make it so!

A number of loudspeakers either usurp wood entirely, or feature techniques to keep it under control...



JASON KENNEDY
Former *Hi-Fi Choice* editor and veteran hi-fi scribbler

The reel thing

Tim Jarman remembers a time when men were men and tape decks were like Sony's last ever domestic open reel recorder, the long-lost TC-399...

Open reel tape recorders have a certain something which makes them a very attractive proposition to many audiophiles, even though few of them can explain exactly why. It's that intoxicating mixture of visual drama, mechanical engineering and professional connotations I suppose.

Reel-to-reel machines are often temperamental devices however, and many – designed as they were for the professional user – are dependant on nearly constant maintenance in order to preserve their performance. A class of models did exist for the domestic user though, in fact before cassettes they were the only practical tape recorders available. The cassette, with its ever-improving performance during hi-fi's golden age of the nineteen seventies, marginalised open reel as a domestic medium. Despite the advances in technique available off the back of cassette development, open reel recorders changed very little during this time, both in appearance and performance.

One domestic open reel machine that seemed to hit the sweet spot, was Sony's sleek TC-377 of 1971. Acknowledging the rise of cassette, it was a neatly proportioned design of fairly diminutive dimensions. Indeed, it became a worldwide best seller which had everything that a domestic user would want, without too much in the way of cost and bulk adding complication.

In basic terms this was a three speed, four track machine which could be mounted in its wooden outer cabinet either way up so that the deck could be placed vertically or horizontally. It also featured three wear-resistant ferrite heads which allowed for 'off-tape' monitoring,

something that cassette machines couldn't offer until 1975 when Sony themselves offered the first three head cassette deck, the TC-177SD.

The TC-377 sold strongly for much of the nineteen seventies, defining its market segment and appealing to serious home recordists who didn't want to lower themselves to the realm of cassette, but who couldn't afford to invest in semi-professional machines like ReVox's A77. Mid-decade however, Akai stepped up to the plate to compete in this sector with its new 4000DS. It, too, proved very popular and began to steal sales. Indeed, by 1978 the Sony was looking dated and a replacement was needed, which duly arrived not a moment too soon, wearing the TC-399 nameplate...

The TC-399 was Sony's last ever domestic open reel tape recorder – by the time it reached the market in 1978, Compact Cassette was king...

Essentially, this was a subtly, but effectively restyled and lightly re-engineered '377. It used much of the design language of Sony's semi-pro TC-760-series machines, and at first glance looked like a high end design. Only its inability to take 10.5 inch NAB spools gave away the '399's more humble status in life; in every other respect it looked the business. The deck was superior stylistically, mechanically and ergonomically to the '377, but didn't match its sales. This was down to the declining market for tape recorders, rather like the place CD players find themselves now. As such, it turned out to be Sony's last ever domestic open reel recorder; it was current from 1978 until stocks finally ran out in the early eighties. Selling originally at over £300 (more than a Linn Sondek turntable back then), by 1982 it was appearing heavily discounted for less than half that.

The TC-399 most commonly appeared in the UK with black fascia and a light coloured simulated wood wrap, although European markets got the option of a grey outer sleeve [see left]. Either way, it's hard to deny that the TC-399 is a nice looking machine. The rather odd angled reversible cabinet of the TC-377 was replaced by a more conventional arrangement intended for vertical use only, something that was very much the fashion at the time. The simple rotary mechanical control for the deck's mechanical functions is still there, unchanged since the nineteen sixties and a far more practical arrangement than mechanical keys for the heavy mechanisms of a reel-to-reel deck. The two record keys are also still present, most (if not all) stereo open



reel recorders allow the two stereo tracks to be used individually for mono recordings and editing, which makes for a standard of operational flexibility and tape economy that was not offered to the cassette user.

Uncommonly for an open reel, there are switches offering three bias and EQ settings, mainly so that Sony's own Ferrichrome tapes could be used to full advantage. Open reel tapes are typically ferric, with BASF's LP35 being a loosely accepted international standard. Unlike cassette machines, open reel recorders don't need exotic tape formulations to achieve acceptable frequency response and noise levels, wide tracks and high tape speeds take care of that!

Inside, a single (and large) AC motor runs all the deck functions through a series of large belts, clutches and pulleys. Everything is constructed from heavy gauge-pressed metal. Connections are by standard RCA-type connectors which operate at standard impedances and levels so connecting up to almost any amplifiers with a tape loop presents no problems at all.

Sound quality

With the dearth of decent pre-recorded material on open reel, the main use for a machine like this is probably the archiving of valuable LPs without the need to resort to digital techniques. Therefore, what counts most is record/replay performance and the accuracy to which the process can be achieved. Looking at the figures, it doesn't seem too promising, with standard LP35-type tapes the signal-to-noise figure is quoted at an unspectacular 55dB and the high end roll-off is 18kHz (-3dB).

A late nineteen eighties budget cassette deck could challenge results like these and a decent one would be some way ahead, even before the likes of Dolby noise reduction and TDK SA tape were brought into play. These figures are achieved at a tape speed of 19 cm/s (7 ½ ips), at which a standard reel of tape will give about 45 minutes per side of recording time, things get slightly worse at 9.5 cm/s (3 ¾ ips, the standard 'domestic' tape speed) and greatly worse at 4.75 cm/s, which is the same as cassette.

Despite all these technical issues, a well-made recording does sound good. Open reel's trump card is that high tape speeds mean that the



How we used to live – typical late seventies Sony back panel, with RCA phono socketry next to the (then) obligatory 5-pin DIN

recording process is simple and only very gentle EQ is needed to cover the whole audio band with reasonable flatness. The effect of this is that phase integrity can be maintained in a way that some even quite sophisticated cassette decks struggle to compete with and, in musical terms, this translates into big, clean soundstages that sound very similar to those of the source material.

The big ferrite heads of the TC-399 also give good transient performance, so things like high-energy cymbal crashes retain their sparkle and detail if you get the recording levels right, something that isn't difficult with off-the-tape monitoring.

the recording retains much of the energy of the original material

Even though it seems odd, it's better to make a test recording and to trust your ears than to rely on the two big VU meters when it comes to getting the levels right. Since there is no noise reduction system like Dolby (with its critical reference levels which must be strictly adhered to) you are free to experiment to a much greater degree over exactly how recordings are made with open reel.

To test the LP archiving qualities of the TC-399 I made a copy of Supertramp's *Breakfast In America* onto BASF LP35 stock, using one side of the tape only. To its credit the machine seemed well suited to this task and the recording that resulted

BUYING

These machines are tough, but in time the lubricants used do dry up, leading to seizures of the mechanical parts. Tape transport problems normally resolve this, cleaning and re-lubricating the affected parts normally provides a cure. The parts are all big so you don't need tiny Geisha Girl hands to work on these models!

The electronics seem reasonably trouble-free, but avoid anything where the head adjustment has been tampered with; realignment is a complex business. Heads are hard ferrite but can eventually wear, dull sound and a channel imbalance are the normal symptoms.

One problem that you will have is tapes, new open reel stock is expensive and much of the older stuff is now beginning to shed its coatings, resulting in the need for frequent head cleaning. Sometimes usable old stock can be found, strangely it is often the newer types of tape which give the most trouble, so don't turn your nose up at early BASF LP35 (clear reels, grey plastic boxes) if you're offered it!

retained much of the energy and detail of the original material. I wasn't convinced that the speed stability was perfect, however. You would think that the large rotating masses that exist in open reel recorders would ensure perfectly consistent speed, but in practice dragging the tape over all those heads and guides takes its toll and an occasional waver during sustained single notes was observed with this machine.

Conclusion

Overall then, the performance of the Sony TC-399 cannot be described as state-of-the-art in open reel terms, although it's still very listenable. The deck is a fine introduction to the medium, not least because the machines are still fairly cheap (£100 to £150 should secure a really good one) second-hand, and relatively easy to find. If you fancy having a go at 'real' tape recording then Sony's last ever mainstream open reel recorder is a great way in. ●

1970

Our year in music is 1970 and the Sixties officially come to a close with the collapse of The Beatles. Now it's 'back to basics' time for Lennon, McCartney and ex-Pink Floyd leader Syd Barrett, as **Simon Berkovitch** explains...

Fact: bands always split up in the end. And when they do, it's scarcely front-page news. But on April 10, 1970, the Sixties officially came to a close: Paul McCartney announced he was leaving The Beatles. Cultural historians routinely level the so-called 'death of the Sixties' at two key events that unfolded in California, 1969 – Charles Manson and The Family's murderous spree and the bad acid and bad vibes of The Rolling Stones' disastrous Altamont Speedway Free Festival. But the public announcement that the most mythical pop group of all time was breaking up – and for good, as it turned out – was the loudest and furthest-reverberating death knell for the 'Swinging Sixties'.

Paul quits The Beatles

By 1970, disillusion and disagreement was rife in Beatles' inner circle. Ringo Starr had already quit and returned to the group during 1968's sessions for the *The White Album*.

Cultural historians routinely level the death of the Sixties at two key events – Charles Manson, and The Rolling Stones' disastrous Altamont Speedway festival

George Harrison also temporarily walked out in January 1969 – and John Lennon's immediate reaction was to replace him with Eric Clapton (who had already played uncredited lead guitar on Harrison's *While My Guitar Gently Weeps*). But although Lennon had already told his bandmates that he was leaving The Beatles in September 1969, he had been persuaded to keep the news private until new contract negotiations for the group were completed. So, it was Paul McCartney that eventually stole Lennon's thunder in going public with the news that



The BEATLES

the group was history, announcing their break-up in a 'self-interview' to promote his debut solo album, *McCartney*.

The straw that broke The Beatles' back was that the other members of the group had insisted that McCartney had delayed

the release of his solo debut to avoid competition with Beatles 'product' – namely the film and album of *Let It Be*. The Beatles' split made the front page of the *Daily Mirror* – under the retrospectively misleading headline "Paul quits The Beatles" – and sent a shockwave round the world.

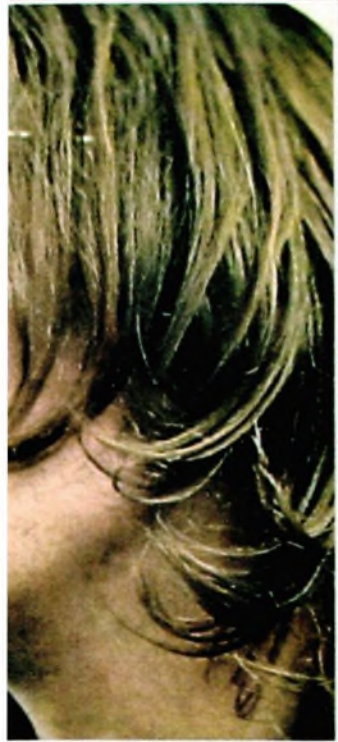
McCartney goes it alone

McCartney may have climbed to the top of the US charts for three weeks on its release in April 20, 1970, but the majority of critics had their knives out, criticising it seemingly



LET IT BE

Let It Be, the film and the album, appeared at a time of great turmoil for the world's greatest band



▶ ALL KINDS OF EVERYTHING

From Hendrix's phenomenal – and posthumous – outer space voodoo blues to the 1970 England World Cup Squad's optimistic terrace chant, the top of the singles chart was a broad church in 1970...

- Edison Lighthouse *Love Grows*
- Lee Marvin *Wand'rin' Star*
- Simon and Garfunkel *Bridge Over Troubled Water*
- Dana *All Kinds of Everything*
- Norman Greenbaum *Spirit in the Sky*
- England World Cup Squad *Back Home*
- Christie *Yellow River*
- Mungo Jerry *In the Summertime*
- Elvis Presley *The Wonder of You*
- Smokey Robinson and The Miracles *Tears of a Clown*
- Freda Payne *Band of Gold*
- Matthews Southern Comfort *Woodstock*
- The Jimi Hendrix Experience *Voodoo Child (Slight Return)*
- Dave Edmunds *I Hear You Knocking*

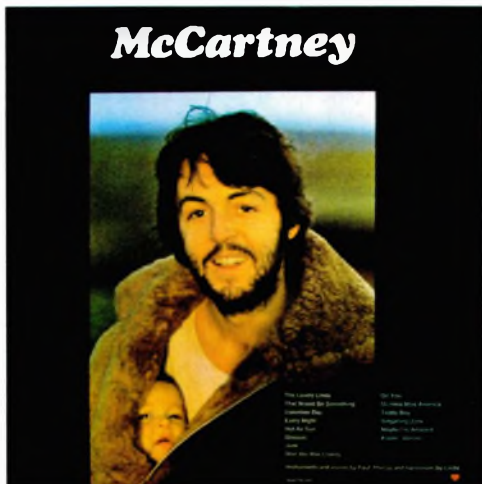


▶ THE 27 CLUB

Unlike *Club 18-30*, nobody wants to be a member of this youth cult!

Two counterculture musicians who didn't survive the excesses of the Sixties were Jimi Hendrix and Janis Joplin, who both died in less than dignified circumstances in 1970, joining 'The 27 Club'. This refers to the coincidence – or as the more paranoid would have it, the conspiracy – of some of the most free-living innovators of Rock and Roll checking out – sometimes in suspicious circumstances – at just 27-years-old.

Other famous members of The 27 Club include blues legend Robert Johnson, The Rolling Stones' Brian Jones and Nirvana's Kurt Cobain. Interest in The 27 Club was reactivated in 2011 by the death of singer Amy Winehouse.



Paul McCartney's first solo album was another sign that all was not well in The Beatles camp

unfinished 'back to basics' nature. This was a true solo album... if you discount wife Linda's vocals. McCartney played every instrument and some of the recordings themselves were made at home. Revisited in 2012, those loose and stripped-back arrangements are now arguably the album's greatest strengths. It could almost be seen as an MOR cousin to ex-Moby Grape man Alexander 'Skip' Spence's skeletal masterpiece *Oar* (1969), or the much more respectable – and together-sounding sibling to ex-Pink Floyd leader Syd Barrett's debut solo LP *The Madcap Laughs* (of which we will hear more later). What sets *McCartney* apart from these cult classics, however, is the presence of the much-covered composition *Maybe I'm Amazed* within its grooves.

Plastic Ono Band

After John Lennon's avant-garde collaborative albums with Yoko Ono, the now ex-Beatle's debut solo album 'proper', released in December 1970, was superficially a stripped-back affair like his ex-songwriting partner's, but the comparisons ended there. *McCartney* was an angst-free affair. *John Lennon/Plastic Ono Band* was a primal scream. Kicking off the proceedings with the infamously

John Lennon's solo album was, unlike those of other ex-Beatles, a move in a totally new direction



harrowing *Mother*, Lennon's debut solo album points the way forward to songwriters as disparate as Nirvana's Kurt Cobain [see *The 27 Club*, p91], Joy Division's Ian Curtis and Van der Graaf Generator's Peter Hammill; all artists who've mapped the darker territories of inner space. The album concludes with the double whammy of *God*, an epic dismissal of false deities – including The Beatles themselves – and the low-fidelity, high-emotion burn-out of *My Mummy's Dead*.

Yoko Ono's companion album, the experimental *Yoko Ono/Plastic Ono Band*, is just as innovative. It was recorded at the same time as Lennon's, utilised the same core musicians (and featured Lennon's most challenging sounding guitar performances on record to date) and was released on the same

Both *The Madcap Laughs* and *John Lennon/Plastic Ono Band* confounded the expectations of what a pop star's solo album should sound like...

day as Lennon's debut solo LP. The album's ferocious cuts like *Why* and *Greenfield Morning I Pushed an Empty Baby Carriage All Over the City* are astonishing, still sounding like they've fallen back in time from the post-Punk future.

The ultimate cult album

Both Lennon and McCartney's debut solo albums naturally commanded plenty of column inches, rising from the ashes from the most popular group of the Sixties. The release of the debut solo album by the ex-captain of the good ship Pink Floyd was a more muted affair.

The gestation of Syd Barrett's *The Madcap Laughs*, released that January, had been drawn-out since 1968, with multiple producers in the chair, including Barrett's old Pink Floyd colleagues David Gilmour and Roger Waters, both also at work on their own album, 1970's *Atom Heart Mother*. Tales of Barrett's eccentricities – which inevitably form part of the appeal of *The Madcap Laughs* for some – may be legion, but have no place here. In the rush to rattle off another 'crazy diamond' anecdote – as the former leader of Pink Floyd was eulogised on the band's 1975 album *Wish You Were Here* – too few evangelise about the astonishing songs within.

By the time of 1970's *The Madcap Laughs*, the psychedelic colours that daubed Barrett's compositions on 1967's Pink Floyd album *The Piper at the Gates of Dawn* have long been returned to the paint box. Like *McCartney* and *John Lennon/Plastic Ono Band*, *The Madcap Laughs* is largely a raw, uncluttered affair, but, in songs like *Octopus* and *No Good Trying*, rhyme and metre is anything but simple. Lyrically, Barrett has retreated into a more melancholic place: the jolly cats, space travellers and gnomes of his previous work are replaced with phrases like "a broken pier



While his Pink Floyd chums were at work on *Atom Heart Mother*, Syd Barrett was hard at work on his 'cult' album

on a wavy sea" (*She Took a Long Cold Look*) and "with Eskimo chain, I tattooed my brain all the way" (*Dark Globe*) haunt the air long after the compositions have finished. The 'warts and all' approach is taken to extremes on the album's second side, where false starts and abandoned vocal takes are clustered together in a suite of three songs (*She Took a Long Cold Look*, *Feel and If It's In You*). *The Madcap Laughs* is as stark and unsettling as it is uptempo and upbeat – just one of the reasons why it enjoys the status of arguably the ultimate 'cult' album.

File under Popular?

Both *The Madcap Laughs* and *John Lennon/Plastic Ono Band* confounded the expectations of what a pop star's solo album should sound like. These releases were less commercial products and more like audio maps of troubled psyches. Pop had both matured and grown weary since the optimism of 1967, when Lennon argued that all we needed was love and Barrett exhorted us to lose our minds and play. Clearly the kitsch legend 'File under Popular' printed on many an album cover was going to have to be rethought in the uncertainty of this new decade. The next wave of artists – like Black Sabbath, who released both their self-titled debut and *Paranoid* this year – certainly sounded like they planned to mine darker seams of popular music. ●

Well Connected!



Using only the highest quality conductors, shields and plugs the Atratus interconnect by Epiphany Acoustics is designed to provide outstanding performance at a price that is simply unbelievable.

"...the bargain of the decade." Hifi Pig

Epiphany
Acoustics

www.epiphany-acoustics.co.uk



available
white now

Audio
Cinema
Multi-Room
Network
Installation

Bryston
Chord Co.
Dynavector
Heed
HiFi Racks
Isoblu
Lehmann
Linn
Naim
Neat
Okki Nokki
PMC
Rega
REL
Sennheiser
Wilson Benesch
Wireworld

Calveley Court, Reymerston, Norfolk. NR9 4QD

01362 820800

enquiries@basicallysound.co.uk
www.basicallysound.co.uk



**BASICALLY
SOUND**



The Ultimate Reference cable...



Simply comparing one cable to another may reveal audible differences, but the only way to really hear how well a cable preserves music, is to compare it to a Direct Connection.

Visit us at the **National Audio Show**
and hear the 'Cable-Bypass
Demonstration System' for yourself.

Platinum Eclipse™ interconnect & speaker cable.



WireWorld cables - "providing the closest possible sound to a Direct Connection".



Drop in to Syndicate 7

- Live Demos
- Daily Prizes
- Special Offers

T: 020 8991 9200

www.wireworldcable.co.uk

WIREWORLD®
CABLE TECHNOLOGY



hifi - streaming - home cinema - multi-room - installation

TELEPHONE
01865 790 879

E-MAIL
info@oxfordaudio.co.uk

WEB SITE
www.oxfordaudio.co.uk

ADDRESS
Cantay House
Park End Street
Oxford, OX1 1JD

BUSINESS HOURS
10am to 6pm Mon-Fri
10am to 5pm Sat
Closed Sunday & Bank Holidays

FINANCE
Ask about our Buy Now
Pay Later 0% Finance
with No Deposit



Vinyl is the original high resolution music format and here at Oxford Audio, we are turntable specialists and deliver a variety of analogue products to ensure you get the very best from your records.

Call us on 01865 790 879 to find out more and to arrange an audition.

British engineering at its finest

For nearly four decades, Michell Engineering has been at the forefront of turntable design, engineering and manufacturing.

Still a family run business dedicated to the continued development of the turntable range whilst retaining a belief that build quality, performance and value for money is essential.

The pursuit of excellence

Pro-Ject Audio are widely recognized as one of the best turntable manufacturers in the world. Their mission is simply to produce the best sounding turntables and analogue components at the lowest possible prices. There is a well-held belief that Pro-Ject were a key driving force behind the vinyl resurgence the UK and Europe experienced in the early 2000s.

Wide selection of cartridges, phono stages and vinyl accessories

Including: Koetsu, Lyra, Ortofon; Audio Research, Naim, Musical Fidelity, Pro-Ject; Okki Nokki and others.

Setup

When you buy a turntable from us, we are more than happy to set it up for you to ensure you get the very best performance from your purchase.



96 Neil Young
Official Release
Series Discs 1-4



97 Beethoven
Symphony No 9



**97 Jimi Hendrix
Experience**
Jimi Plays Berkeley

Music reviews

The latest music releases...

ALBUM OF THE MONTH



Elton John

Five Classic Albums (1970-73)

mercuryrecords.co.uk

★★★★★

Mercury

5 CD box set

BEFORE HE DECIDED to become rock's answer to Liberace, Elton John was a serious-minded troubadour who believed in the primacy of the song, rather than the power of bling. It's there for all to see on the covers of his early albums.

On 1970's *Elton John* he wears a pair of studious librarian's spectacles that he wouldn't have been seen dead in later in his diamond-encrusted career. In 1972, *Honky Chateau* finds him sporting a beard and earnest demeanour that are more left-wing sociology lecturer than flamboyant rock star.

It was the era of the sensitive singer-songwriter, a bedenimed breed whose poetic lyrics and insights into the human condition were meant to strike a chord in every tender heart in bedsit land. Or so it seemed in the nineteen seventies.

Elton played the part with skill and conviction, even though he was primarily a tunesmith who relied on Bernie Taupin to supply the words. The John-Taupin songwriting collaboration reached its commercial apogee on 1973's *Goodbye Yellow Brick Road*, the best-selling album of Elton's career. But by then, the pair had already collaborated prolifically on five albums, the sixty or so songs from which are collected here.

To many of us, they represent the height of Elton's artistic achievement, when the music was still paramount and before the ostentation and the tantrums got in the way. Did he really once call his manager to ask him to stop the sound of the wind outside his hotel room because it was disturbing him? He did, and it's hard to

Before he became rock's answer to Liberace, Elton John was a serious-minded troubadour...

reconcile the wonderful humanity and honesty of these early songs with the out-of-touch celebrity excesses that lay a little further down the road...

Your Song, the opening track of 1970's *Elton John* (actually his second album) sets the bar high – a string-laden instant standard that after forty years of over-familiarity still sounds like one of the most affecting love songs in the popular music canon. 1971's *Tumbleweed Connection*, took a different turn, a thrilling set of rootsy-sounding songs evoking the American west and clearly influenced by The Band.

Within little more than six months, Elton followed it with *Madman Across The Water*, an introspective and haunting set, led by the

darkly brooding title track and songs such as *Indian Sunset*, characterised by the profoundly rich, cinematic string arrangements of Paul Buckmaster.

The eclectic *Honky Chateau* traces a further development and showcases John as the growing master of memorable melodies and unforgettable pop hooks, equally adept at ballads and rockers and hinting at the blue-eyed soul he would later explore on *Philadelphia Freedom*. It also includes *Rocket Man (I Think It's Going To Be A Long Long Time)*, another instant classic and a career highlight that has endured long after America abandoned its Apollo moon landings.

The five-album sequence ends with 1973's *Don't Shoot Me I'm Only The Piano Player*, the record which marks John's move towards a more mainstream pop style in which Tin Pan Alley craft begins to edge out the authentic troubadour on songs such as the 1950s rock 'n' roll pastiche *Crocodile Rock* and the pop-lite *Daniel*. **NW**

Elton John, glorious nineteen seventies rocketman and crocodile rocker...





HOT PICK

Neil Young Official Release Series Discs 1-4

warnerbrosrecords.com

★★★★★

4 CD boxset

Reprise

WITH HIS OBSESSIVE

retooling of his vast archive, there was no way Young was going to let the fortieth anniversary of *Harvest* pass unmarked – but rather than the deluxe edition of his multi-platinum 1972 landmark we might have expected, he's opted to commemorate the occasion by remastering his first four albums in a box set containing the entirety of his 1968-72 solo work. From electric guitar wig-outs to semi-acoustic balladry, this is the material that defined both his career and an era.

The 1968 self-titled solo debut is rescued from the murky production that marred the original vinyl release. The guitar epics with Crazy Horse on *Everybody Knows This Is Nowhere* (1969) sound more dynamic than ever. And there's such a warmth emanating from *After The Goldrush* (1970) and *Harvest* that your speaker cabinets almost seem to glow. If you don't already have them, all four albums constitute an essential cornerstone of North American rock. **NW**



Vangelis The collection

rhino.co.uk

★★★★

CD

Rhino

WHY DO WE NEED a new Vangelis collection? Of course, it's the Olympics and time to roll out again his biggest and best-known hit – the iconic theme for 1981's *Chariots of Fire*. Few pieces of film music are so inextricably linked in our minds with the images they accompanied and the Greek composer's skills have been in demand ever since, with many of the leading directors of our time.

Vangelis's combination of synths, orchestral strings and rock beats is frequently bombastic – but perfectly suits the cinematic medium and the larger-than-life style of the directors who have employed him, including Roman Polanski, Ridley Scott and Oliver Stone.

It's anthemic music full of splashy primary colours, and is probably best heard in 5.1 surround. **NW**



Fleetwood Mac 25 Years – The Chain

warnerbrosrecords.com

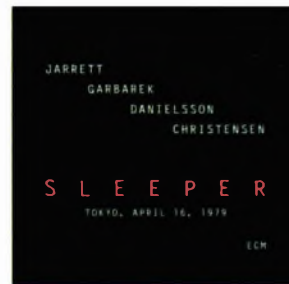
★★★★

4 CD box set

Reprise

YOU WOULD EXPECT any band that survives for several decades to show some artistic development. But in the case of Fleetwood Mac, it's extreme to the point of schizophrenia, for this compilation of the group's recorded work between 1967-92 features two quite different groups. Peter Green's late 1960s gritty blues band and the easy-listening 1970s soft-rock group were both brilliant in their different ways. But including both in the same compilation is akin to a musical bipolar disorder.

The compilation deals with the problem by filling the first three discs with 53 radio-friendly classics from the Stevie Nicks/Lindsay Buckingham era. The revelation is how good the material from 1979's *Tusk* sounds – now it seems genuinely experimental and imaginative. **NW**



Keith Jarrett Sleeper

ecmrecords.com

★★★★★

2 CD

ECM

THIS TWO-DISC RELEASE takes us back to 1979 when Jarrett had big hair and a moustache, but more significantly it was the period of his great Scandinavian quartet. Jarrett himself contributes some pretty lively percussion and the band makes some of the most vigorous and joyful music in the Jarrett cannon. *Sleeper* documents a concert in Tokyo and reveals just how dynamic and intuitively the quartet played.

Originally an analogue recording, this has a clarity of sound that lets you hear all the tonal depth of the instruments as well as the skill of the musicians. You can hear right into the performance and all you need to provide for a full-scale reenactment of the event is the smoky ambience of the late seventies Tokyo jazz scene. **JK**

AUDIOPHILE VINYL

Trondheim Solistene Souvenir Part II 21.no



★★★★★

180g vinyl
NORWAY'S 2L LABEL is a pioneer of high-resolution digital recording, offering downloads in formats ranging from 24-bit/96kHz FLAC to its own DXD, the

2L

24/352.8 system used for all its recordings. So it's a surprise to find 2L releasing vinyl. This second album in the Souvenir series contains two pieces from Tchaikovsky's *Souvenir Of Florence* (op.70), and two from Neilsen's *At The Bier Of A Young Artist*.

Trondheim Solistene (The Trondheim Soloists) is highly regarded and it's easy to hear why. These pieces sound almost as if they were a full orchestra, there is real power and energy to the playing which produces a full

scale soundstage in a good system. Try downloading one of the free tracks from 2L, with very hi-res versions of the first Tchaikovsky piece available...

The vinyl sounds more guttural than the 96k FLAC, with greater openness and energy. But that's not the point, this was recorded at the highest resolution known to digital audio and as a result has a dynamic range that's in another league, something that vinyl benefits from as much as any digital format. **JK**



Yuja Wang
Fantasia

deutschegrammophon.com
★★★★★ Deutsche Grammophon
CD and download

YUGA WANG'S latest disc is a collection of encores. While some of the works are quiet and reflective, most are brilliant virtuoso showpieces designed to get an audience on its feet stamping and cheering. Among many highlights are Horowitz' *Variations On Bizet's Carmen* and the Liszt/Horowitz arrangement of Saint-Saens' *Danse Macabre*.

Wang has a fabulous technique, playing with fantastic dexterity and panache. The most finchish difficulties hold no terrors for her, and she is equal to every demand. The piano is nicely 'distanced', but not too much. The sound is spacious, but there's not too much hall reverberation. This allows climaxes to expand naturally and lots of detail to be heard. **JMH**



Beethoven
Symphony No 9 'Choral'
Consensus Vocalis,
Netherlands SO

challenge.nl
★★★★★ Challenge Classics

SACD including 5.1 surround
WHILE THIS IS NOT a grand, imposing, heaven-storming performance, playing and singing *are* spirited. The soloists in the finale are a well-matched quartet, and the smallish choir are beautifully integrated.

The Netherlands Symphony Orchestra favour period brass instruments, which produce a smaller, sweeter tone than their modern counterparts. The DSD recording sounds very open and natural, with lots of clear, clean detail. Yet there's no sense of microphone spotlighting, and the potential balance problems between the four soloists, chorus, and orchestra in the finale are perfectly solved. The recording sounds best when played at a generous volume level – it can seem a bit subdued if played too quietly. **JMH**



Laetitia Sadier
Silencio

dragcity.com
★★★★★ Drag City
CD

LAETITIA SADIER has carried the torch of Stereolab ever since the group broke up following the untimely death of singer/guitarist Mary Hansen in 2002. This is her second solo album and sure enough, the Farfisa organs are still here, the off-hand, detached vocals, bossa nova strums, motorik beats and harmonies derived from vintage French TV shows of the mind. This is a more reflective and introverted affair though, with fewer pop hooks and sparser arrangements, but moments of rare beauty.

Recorded in various studios between Toulouse, France and Chicago, the seeming lack of polish has the effect of making the instruments more immediate, more intimate, and gives these gentle tunes plenty of room to weave their deceptively understated magic. **DO**

HIGH RESOLUTION DOWNLOADS

Travis & Fripp
Discretion

bowers-wilkins.co.uk
★★★★★ Bowers & Wilkins
24-bit/48kHz



FORMER KING CRIMSON founder and experimental guitarist Robert Fripp joins classically

trained jazz flautist/saxophonist Theo Travis to play a selection of soundscape compositions that range from gentle and thoughtful to challenging and atmospheric. I'm not normally a great fan of ambient music, but this download by Theo Travis and Robert Fripp might well change that. It avoids meandering melodies, offering a sense of progress and the sort of worthwhile movement that so often escapes the genre.

The 24-bit recording is sympathetic to the almost theatrical texture this music presents, for example, clearly revealing the character of the subtle wah-wah saxophone lines on the track *Rotary Symmetrical*. **MS**

Jesca Hoop
The House That Jack Built

bowers-wilkins.co.uk
★★★★★ Bowers & Wilkins
24-bit/48kHz



CALIFORNIAN-BORN, but now Manchester resident, Jesca Hoop began writing her individualistic

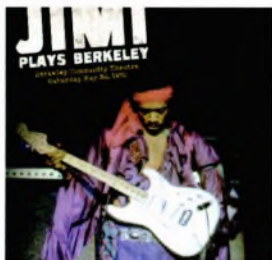
songs at the age of 14 to occupy herself on her long walks to school. At 16, she broke away from her strict Mormon upbringing and began what she calls her pioneering "life as a racoon". Her songwriting is individual and distinctive, and betrays no obvious influences, although I strongly suspect her performance will appeal to fans of Aimee Mann.

This 24-bit recording made in Los Angeles benefits from the delightful colour and character of vintage guitars, a variety of instruments, and enjoys the natural reverb of the studio. **MS**

BLU-RAY DVD

Jimi Hendrix Experience Jimi Plays Berkeley sonymusic.com

HOT PICK



★★★★★ Sony
Dolby Digital 5.1, DTS 5.1 Audio
THIS DOCUMENTARY focuses on two concerts at California's Berkeley Community Theatre in May 1970, the year Hendrix died. He had reformed the Experience with Mitch

Mitchell on drums, but replaced Noel Redding with Buddy Cox on bass. Alongside the performance there are clips of the protest movement in Berkeley at the time – this was the same month as the shooting at Kent State – and some good comments from fans.

The sound with the concert footage is compressed and bandwidth limited, but the picture makes up for this and there's no getting away from the energy the man could extract from a stack of Marshalls and a Stratocaster. Hendrix was a force of nature whose

talent has never been matched despite countless attempts.

This release features an extra 15 minutes of footage, alongside 11 audio-only tracks from the second set that are dramatically more open and substantial sounding than those with footage; these are also available in DTS 5.1 Master Audio.

Despite the small crew on hand to record the event, you get a good idea of just how phenomenal a performer Hendrix was and why his appeal has proved so very enduring... **JK**

Go west!

After an extensive refit, KJ West One is back, and as *Ed Selley* discovers, the systems are as beautiful as the premises...

Located just off Marylebone High Street, KJ West One is one of the longest running dealers in London. Tracing its origins all the way back to late nineteen sixties, they have become a mainstay in the area. The arrival of new backers last year prompted the decision to extensively refit the store, a process that has taken some six months to undertake. While it might have been time consuming, the result is astonishing. The store is exquisitely finished and is a space that truly does justice to the products on display.

As Arif Huseyin, my guide and facilitator for the day explained, the store portfolio is comprised of products that combine excellent performance with simple desirability. This means long standing industry stalwarts like Quad and Harbeth rub shoulders with rising stars like Devialet to achieve this end. The intention is to create systems that are effortlessly talented and a visually stunning – something that generates real pride of ownership.

Given its location in what is a very affluent part of London, the store has adapted to the demands of the area and as a result, systems start at a slightly higher level than might be the case elsewhere. I asked Arif to demonstrate three systems that captured what KJ West One is about and settled back to hear the results...



THE EXPERTS



KJ WEST ONE
26 New Cavendish Street, London W1G 8TY
020 7486 8262, kjwestone.co.uk

krellonline.com/
sonusfaber.com/en/
steinwaylyngdorf.com/
audioresearch.com/
metronome-technologie.com/en/
dagostinoinc.com/



PRIMAL SCREAM
SCREAMADELICA
CD



ADELE
ADELE LIVE
AT THE ROYAL
ALBERT HALL
BLU-RAY



IMOGEN HEAP
ELLIPSE
CD

SYSTEM 1 – BIGGER TOYS

The first of the three systems I listened to is situated in the store's upper demonstration room and represents a common starting point for a KJ West One system. The ingredients are all present and correct – attractive, beautifully built components that have a real desirability and combine to produce a system that's equally pleasurable to the eyes as it is to the ears.

Unashamedly handsome

The source and amplification for the system is courtesy of Krell. The S300i amplifier and S350 CD player could technically be described as Krell's 'entry level' components, but this demeans two very serious pieces of high-end audio.

The S300i is small by Krell standards, but this is still a very substantial 150 watt amp, with the same indifference to loads that would have other amplifiers running for the hills. It is unashamedly handsome, too – details like the knurled volume knob and the diminutive metal buttons have the just the right amount of travel and raise the user experience beyond the ordinary. If you don't want to get up and interact with it, the remote is an equally sumptuous metal block that is a pleasure to use.

The matching 350 CD player is similarly impressive. The same combination of high-quality internals – in this case twin 24-bit/192kHz DACs matched to a Class A output stage – and elegant external design is present and correct. As a pairing, this is potent hi-fi with some useful real-world features like iPod connectivity, digital input and even optional DVD playback.

All they need to sing is a suitable pair of speakers, so enter the Sonus faber Toy Tower floorstander. I can't pretend I fully understand the naming strategy behind the Toy range but curious title aside, the Toy Tower is the perfect partner for the musical Americans. A three-way design standing a little under a metre tall, it might be relatively inexpensive by Sonus faber standards, but the attention to detail is still outstanding. Finished in leather, they are unlikely to look out of place in any environment and appear smaller

and more compact than they actually are. So how does this little ensemble sound when powered up?

Extremely beguiling

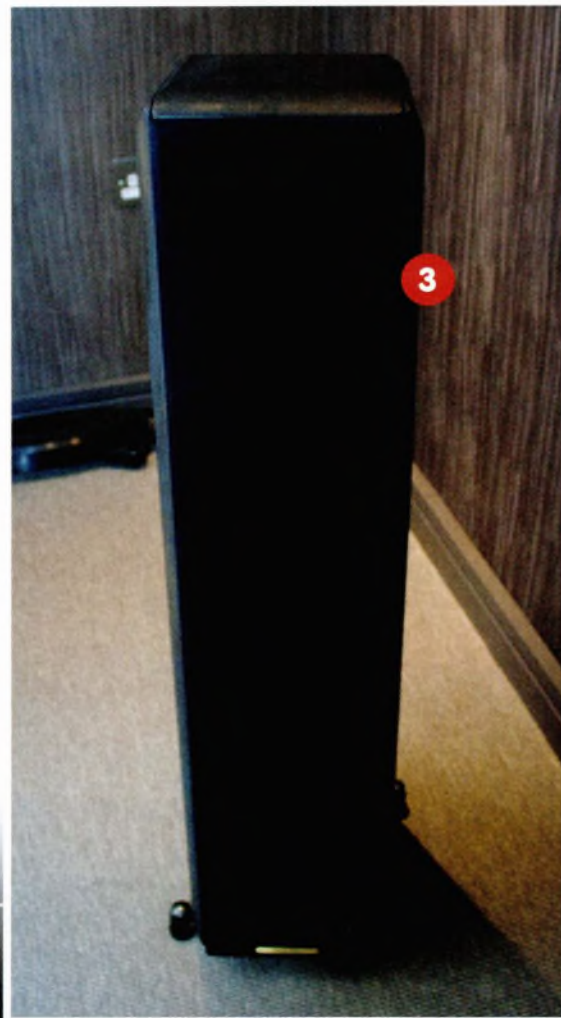
Selecting Imogen Heap's *Ellipse* album as a starting point, the answer is unequivocal. This is a system that is more than the sum of its parts. The Krells impart a fantastic sense of grip and timing to the performance. The subtle electronic bass in *Little Bird* is reproduced with a deftness and speed that gives a real sense of life to proceedings. Sonus faber reproduce this speed effortlessly, – but impart a richness and warmth that's extremely beguiling.

It can actually take a few minutes to realise how much detail this system can extract from a piece because the overall performance is so unforced. It is a sound that's

extremely easy to listen to for long periods, and one that still has real dynamics to it. It also manages to keep poorer recordings listenable without smoothing the detail off good ones.

This is a system that made more and more sense the more I listened to it. It is capable of exceptional dynamics and can stop and start in an instant, but equally can bring body to voices and instruments that is wonderfully fulfilling. It does this from four exquisitely finished boxes that take up a negligible amount of space and look fantastic while they do so.

- 1 KRELL S300I INTEGRATED AMPLIFIER £2,795
 - 2 KRELL S350A CD PLAYER £2,795
 - 3 SONUS FABER TOY TOWER L £1,395
- TOTAL SYSTEM PRICE:
£6,985



SYSTEM 2 – I DID IT STEINWAY

At this point some of you will be thinking, “hang on, what’s home cinema doing here?” Well, the name of the magazine is *Hi-Fi Choice*, not ‘Stereo Choice’ and this system might have more than two speakers, but it is unquestionably hi-fi! KJ West One has offered multichannel solutions for some years, but Steinway Lyngdorf is a new addition to the portfolio since the completion of the refit and the addition of a dedicated multichannel demonstration room.

Unimpeachable quality

Steinway is best known as a purveyor of grand pianos of unimpeachable quality, but they also have an electronics wing producing a range of speakers, subwoofers and partnering amplification. Perhaps the most important aspect of these electronics is that they are developed in partnership with Lyngdorf. This means that they all benefit from extensive experience that Lyngdorf has with digital amplification and room correction software.

The technology doesn’t end there either. Each of the S15 satellite speakers makes use of a unique ‘AMT’ tweeter that is a hybrid designed to combine the high frequency performance of a ribbon, with the dispersion and crossover of a dome. The satellites are partnered with a pair of S-210 ‘boundary’ subwoofers. These are designed to be

placed in a corner and use side firing drivers to ensure that the full spectrum of sound reaches the listener at the same point.

To help achieve this, the partnering P1 Surround processor makes full use of the extremely sophisticated Lyngdorf room correction that takes multiple measurements of the room it is placed in and allows for any room anomalies to be corrected. The P1 also applies ‘bass steering’ that further assists those corner woofers achieve their design intention. Partnered with four A1 digital amplifiers for power, this is a very serious piece of audio equipment, but one that is still extremely compact. All very impressive, but why I am so adamant this is hi-fi?

Incredibly compelling

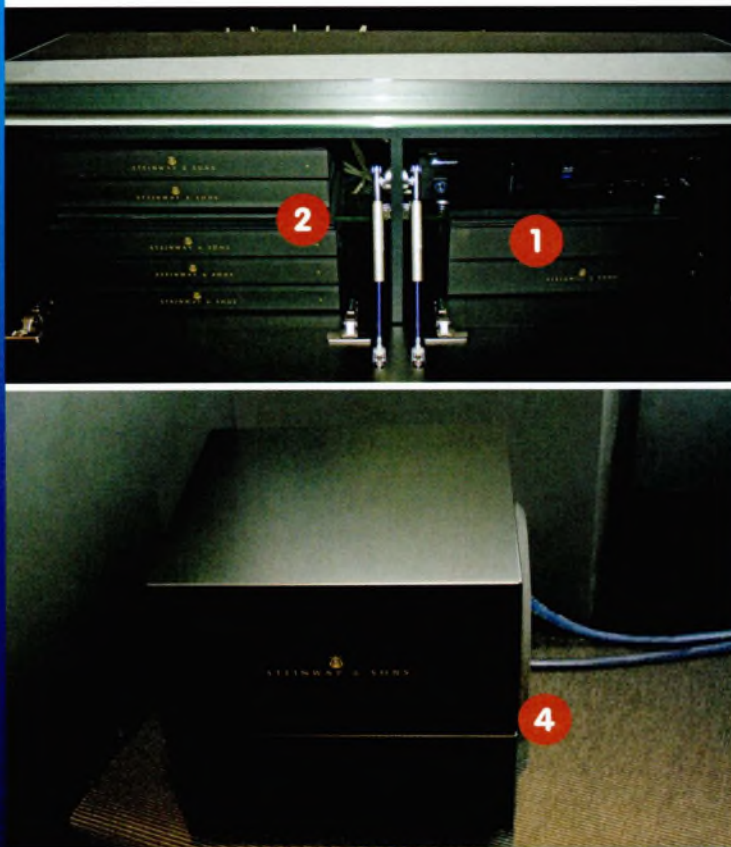
As a demonstration piece, Arif had selected the Blu-ray of *Adele Live at the Royal Albert Hall*. Neither of us are stand-up fans of Adele, but the performance of this system is so extraordinary that in many ways he could have put anything on and elicited the same response. The way this system goes about its business is incredibly compelling. It only takes seconds before you stop thinking about it as a multichannel setup and simply listen to it for what it is – a wonderfully musical system.

There is no forced placement of effects or overblown bottom end. Instead all nine speakers conspire to give you the most

exceptionally spacious and vivid soundstage you could wish for. The handover from speaker to speaker is seamless and those corner-mounted subs – placed in such a way that you cannot believe initially they can possibly work where they are – have an imperceptible crossover to the satellites. The result is perfectly cohesive in a way that some stereo systems cannot manage, let alone something with nine speakers!

All the other requirements of a truly believable system are present. Timing is pinpoint, tonality is wonderfully real and everything is never anything less than believable. This is a truly versatile all-rounder that manages to take some very clever technology and make it work in a simple and likeable way and that surely, whether the system has one, two or seven channels, is what hi-fi is all about?

- 1 STEINWAY LYNGDORF P1 SURROUND PROCESSOR \$15,000
 - 2 5X STEINWAY LYNGDORF A1 (2X 400W) POWER AMPLIFIERS \$32,400
 - 3 7X STEINWAY LYNGDORF S15 ON WALL SPEAKERS \$21,840
 - 4 2X STEINWAY S210 BOUNDARY WOOFERS \$6,240
- TOTAL SYSTEM PRICE: \$75,480**



SYSTEM 3 – A SENSE OF OCCASION

The final system of the day reverted to stereo for a demonstration of what KJ West One can do when they let their hair down. The resulting system combines state-of-the-art technology and sumptuous aesthetics in the true spirit of the KJ West One philosophy.

Art and science

All four products that make up this system ooze class. The Metronome Kallista is a stunning combination of art and science – it manages to make playing a CD have a sense of ceremony that many turntables would kill for. Only fractionally behind it for visual brilliance is the Dan D'Agostino Momentum, which in the black and copper finish of this demonstration unit combines the twin effects of lab equipment and steampunk prop.

Compared to the visual drama of these two components, the Audio Research Reference 5SE preamp and Sonus faber Amati Futura speakers look almost sedate, but both of them are beautifully built and are by any standards still incredibly handsome bits of equipment. The system achieves in every respect, the aim of KJ West One to create systems that inspire a genuine satisfaction of ownership.

It conveys incredible desirability before you even turn it on and is such an impressive collection visually that it is able to be the focal point of a room rather than something you try and integrate into an existing space. So it is unquestionably beautiful, but can £90,000 worth of equipment deliver an equally spectacular sonic performance?

Seriously accomplished

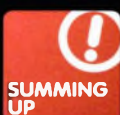
Arif selects Primal Scream's *Screamadelica* to open proceedings. The contemplative guitar at the opening of *Damaged* reveals in short order that this is a seriously accomplished collection of equipment. The single most notable feature of this ensemble is the dynamics of the performance. Even at relatively low levels the system conveys an incredible amount of detail within a recording, and can rise effortlessly from near silence to musical peaks. Increase the volume and the same absolute control remains.

It can time with the best of them, too. Switching to Depeche Mode's *Violator* and there is a punch and drive to *Personal Jesus* that can seem slightly incongruous from a speaker as visually elegant as the Amati Futura, but is immensely enjoyable.

This is a system that gets to the crux of the music instantly regardless of genre, recording quality or tempo. It then presents it with as little of itself in the way as is possible. It never forces slower pieces of music or hinders up-tempo material. I have rarely encountered anything so effortlessly adaptable. You could turn up for a demo as a committed fan of Gregorian chant or die-hard rocker and this system would deliver for you.

The more time spent in its company, the more the system draws you in. It handles vocals with incredible confidence and absolute realism. The soundstage rises and shrinks perfectly, depending on the scale of the piece being played. What is more, it does this so effortlessly. In many ways, it is tricky to appreciate what this collection of equipment brings to the music until you try and repeat the same performance on less supernaturally talented electronics. This is undoubtedly a very expensive system, but it delivers so comprehensively across every level of aesthetics, function and performance that it is unlikely you would walk away unconvinced.

- 1 METRONOME KALLISTA INTEGRATED CD PLAYER £38,000
 - 2 AUDIO RESEARCH REFERENCE 5SE PREAMPLIFIER £10,998
 - 3 DAN D'AGOSTINO MOMENTUM STEREO POWER AMPLIFIER £23,500
 - 4 SONUS FABER AMATI FUTURA LOUDSPEAKERS £20,998
- TOTAL SYSTEM PRICE:
£93,496



The extensive refit has left KJ West One with a truly impressive venue. This would be nothing without the systems to back it up and it is clear that Arif and the rest of the team have everything they need to achieve great results. In fact, across the three systems even

though I was treated to an amazing variety of equipment, I still barely scratched the surface of what the shop is capable of in terms of formats and brands. Perhaps the most impressive demonstration was the Steinway Lyngdorf system.

This is a compact, adaptable and beautifully thought out set up that has musicality that's so often missing in such sophisticated equipment. It is certainly one of the most convincing demonstrations of multichannel audio I've ever been treated to!

Minitest

Here are four ways to isolate your hi-fi kit from unwanted vibration, says **Richard Black**...

Audiophile Base 01 Platform

PRICE: £195 CONTACT: 0845 643 6299
WEBSITE: AUDIOPHILEBASE.COM

THE COMPANY'S NAME SAYS IT ALL really, and this is the base (sorry!) product along with various racks and the rather funkier StrataBase platform. From above, the charcoal silk finished surface doesn't give much away, but the underneath of the Base 01 Platform incorporates some clever thinking. A pair of metal beams run from front to back and are linked to the main platform by compliant but absorptive coupling. In turn, the beams rest on four hard rubber feet. The combination of metal, soft coupling and MDF platform material makes for what is effectively constrained layer damping, with enough decoupling to prevent higher-frequency vibrations from travelling up from feet to platform. The arrangement gives limited attenuation of very low frequencies, but good performance across midrange and treble, and the MDF part is relatively non-resonant.

This platform proved versatile in use, giving fine results with a range of equipment including both suspended and solid-chassis turntables. It was also very good with CD players, tightening up the sound and also adding bass extension. Amplifiers benefitted less obviously, but a valve preamp certainly gained something in the clarity department and a solid-state power amp seemed more detailed in the lower octaves. High treble seemed largely unaltered in most cases, though the turntables gained some slight extra high frequency precision.

VERDICT A VERY PRACTICAL SUPPORT which adds very little height and looks good, and contributes usefully to the performance of a wide range of kit.
★★★★★



Hi-Fi Racks Plinth

PRICE: £87 CONTACT: 01572 756447
WEBSITE: HIFIRACKS.CO.UK

THE KEY TO THIS PLATFORM IS MORE IN THE SPIKES that support it than in any intrinsic vibration-damping properties of the platform itself. That said, the construction of solid hardwood, but made up from glued-together sections, does in fact make for a fairly non-resonant structure which has a few low-midrange resonant modes, but is largely dead at higher frequencies. Two thicknesses are available, 22mm and 40mm, but beyond that platforms are made to order and priced accordingly. The price above represents the review sample size of 470x380mm, with standard spikes. Various spikes are also available—small and large, black or silver—and they screw into threads fitted to the underside of the platform. There are four spikes, so a little care in levelling is required, but on the other hand the result is more stable (in the sense of resistance to upsets) than the vibrationally ideal three-spike arrangement.

Having two thicknesses on hand to play with did complicate matters somewhat, but the thicker one seemed generally preferable and should probably be considered in any application where space isn't absolutely critical; comments refer to the 40mm version. In general, it's perhaps not the ultimate answer if detail and clarity are your main goal, but it does have a slight and very attractive effect on tonality, just subtly warming things up. And indeed, compared with components just plonked down on most surfaces it does improve detail, just not to the extent that some more sophisticated platforms do. Bass extension is slightly improved and treble, while not given any extra reach, is notably sweet.

VERDICT VISUALLY ATTRACTIVE, this platform brings benefits in tonality and detail, to a wide range of kit.
★★★★★



SRM Tech Silent Stage SSXi

PRICE: £200 CONTACT: 01767 313691
WEBSITE: SRM-TECH.CO.UK

NOT SURPRISINGLY, THE APPEARANCE OF THIS PLATFORM matches SRM's turntables, but a pair of nicely finished acrylic sheets (both 10mm thick) make a pleasant visual complement to just about any well-turned-out hi-fi. Besides its smart looks, acrylic has some useful acoustic properties, being quite 'dead'. Handling of vibration is enhanced by spikes on the underneath and sorbothane discs between the two layers of the assembly, and there's plenty of flexibility available. Ten sorbothane discs are supplied, enough to stack them two deep (SRM recommends one above each spike and one dead centre of the platform) or one deep plus one under each spike holder. There's nothing to stop you trying alternative arrangements too. The robust conical spikes are supplied with dampers which I couldn't convince myself do anything at all, but they certainly can't hurt! A small but accurate spirit level is incorporated in the top panel, a useful touch.

Not being concerned with spike holders, I used the discs doubled up and found this slightly preferable to single-disc usage, especially with a solid turntable, which clearly gained in clarity with the platform and even more so with two discs – indeed, stacking them three high (front left and right plus rear centre) was even better. Electronic components as usual benefitted less obviously but still managed to produce a more precise aural image. Stereo imaging seemed markedly improved, something that was less obvious with other platforms. Tonally, on the other hand,

there was little difference beyond a barely-detectable softening in the uppermidrange. Frequency extremes were barely changed, although bass did firm up a touch.

VERDICT ★★★★★ **AN VERSATILE PLATFORM** that's particularly useful with unsuspended turntables, bringing to them worthwhile gains in detail and precision. Imaging is also improved.



Russ Andrews Torlyte Platform

PRICE: £184 CONTACT: 01539 797300
WEBSITE: RUSSANDREWS.COM

TORLYTE SEEMS TO HAVE BEEN AROUND PRACTICALLY FOREVER. It's an ultra-lightweight panel material made up of some sort of honeycomb underneath a wood veneer trim. This gives it two rather useful properties in an audio-support role; first, it has very good internal self-damping, meaning that resonances never get to build up a head of steam before they are summarily extinguished. Second, it has very poor 'acoustic impedance matching' to typical surfaces underneath it and typical equipment on top, which means that vibrations are not readily passed upwards through it. At bass frequencies it won't do much, so don't look to it to sort turntables affected by footfall, for instance. For best results, RA recommends 'Oak Cone Feet' for the equipment on top of it; a trio of such feet are already fitted to the Platform itself.

Results from this platform were very encouraging across a range of situations. It may not do much for turntable bass problems, but with both solid and suspended designs it's very useful for bringing out detail and improving general clarity and sparkle. It has a subtle, and by no means unpleasant, effect on tonality, just slightly favouring the treble but not in a way that's likely to provoke fatigue. With electronic components including CD players it seems if anything even more adept, again improving the resolution of detail, but also quite markedly crystallising imaging and making individual lines within the music easier to follow. ●

VERDICT ★★★★★ **SEEMS TO BRING A TOUCH OF MAGIC** to anything placed on top of it, to the benefit of detail, imaging and general musical verve.



Being solid, these platforms are largely unable to address gross problems of support at low frequencies. This usually only applies to turntables, but in general it's worth making sure you have a solid and secure basis on which to put any hi-fi

assemblage. Stands spiked to the floor are often good, wall-mounted supports often even better, but troublesome installations may need the application of a floating isolation system like the Townshend 'Seismic Sink' to address LF

coupling. It's often worth experimenting with the interface between electronics and support platform, and various replacement feet are available for this purpose, in varieties from sharp spikes to soggy Sorbothane.

Hi-Fi Choice Reader Classified

Welcome to *Hi-Fi Choice* Reader Classified, a free private ads service for buying and selling second-hand hi-fi components.

These pages are a must-read if you're thinking about buying used kit, or if you have hi-fi you want to sell. It's free to place an advertisement – simply submit your ad of up to 30 words, remembering to include your email, phone number and county.

The simplest way to send your ad is via email to: letters@hi-fichoice.co.uk or mail: **Reader Classified, Hi-Fi Choice, My Hobby Store Ltd, Hadlow House, 9 High Street, Green Street Green, Orpington, Kent BR6 6BG.**

Please note that this service is open to private advertisers only.

FOR SALE

ATC SCM7 speakers, 6 months old, excellent condition, boxed, as new, fine sound (£610) £475. **07733 428736 (West Yorkshire).**

FOCAL Profile 908 standmount speakers (in Classic) with matching, dedicated S908 stands. Scratch on one side of speaker, but brand new grilles. Sonically perfect, Best Buy, *Hi-Fi Choice*, December 2005 (£1,600) £555. **01494521359 or 07772 711432 (Bucks).**

VPI M16.5 Record Cleaner, mint condition, unused £450 ono, Cables for sale: Audience AU 24 1.5m, RCA Interconnect £525, Audience AU 24 Powercord 3m £795. Nordost Heimdall Speaker Wire 2m bi-wire pair £550, RCA 0.6m X 2 £280 each, Isotek Power Cord Premium mains cable 1.5m X6 £50 each, XLO Type 1.1 Signature RCA £300, XLO HTP1 RCA 1m £35, XLO HT Pro Digital interconnect 1m £35, Furukawa FV video

RCA 1m £40, Furukawa FD audio RCA 1m £35, Kimber Powerkord mains x3 £40, Cyrus bi-wire speaker cable 2.5m £30, Tiffany CX-7B RCA 1m £30, Signal 7080 RCA interconnect 2 x 1m £30, Signal 7081 RCA interconnect 1x 1m RCA set £25, 1x 1m RCA single £15, 1x 2.1m RCA set £35. **01825 841104 or email: mark.hanna (London).**

TECHNICS SL1210 Mk2; Garrard 401 with plinth, no arm; Garrard power supply. All items in good condition, will accept sensible offers. **07910312910 (sat & sun only) (London).**

OPERA Super Pavarotti speakers, real wood mahogany, excellent condition £175, QED XT400 X tube speaker cable, 2x 5mtrs (as new) £75, Sumiko Blue Point No2, cartridge, 100 hours £45. **07800606892 or email: schandler@dopaq.co.uk (Worcestershire).**

WORLD AUDIO DESIGN K5881 valve power

amplifier, mint condition, can email photos £375. **01424 446282/07972 341692 (East Sussex).**

ROGERS MLS4a speakers, Black Serial no; 5777, Good condition £200, Pink Triangle Export Rega RB300 arm, owned since new, black, great condition, nearly new bearing £600. Dynavector 10x5 £150 2yr. **07547897476 or email: paulginestri@hotmail.co.uk (East Sussex).**

MICHELL GyroDec SE, OEM RB300 tonearm, excellent condition, beautiful sound. £800 ono. Protective cover and instructions included. Buyer collects. **07831 410479 or email: glenn.moore@mac.com (Kent).**

MONITOR AUDIO Gold GX 300 speakers (piano black lacquer), boxes, in pristine condition. Purchased just after their launch last year (£3,000), now £1,999. Buyer collects. **01249 892896 (Chippenham).**

OLIVE o3 music server, 18 months old, original



Olive o3 music server is an absolute bargain at half new price!

packaging, excellent £400. Located North Yorks. **01642 680122 or email: steverobin@mac.com (North Yorks).**

YAMAHA NS1000 Monitor Speakers. Only few hours use, pair in perfect condition, clamps replaced with new Gold Posts. Rare Edition £1,200. Nordost Flatline Blue Heaven speaker cables, banana plugs one end, other unterminated. Stereo pairs 1x 4.5m (£1,030) and 1x 2.5m (£630). Unused/new. Bargain at £550, ono the lot. **01945 463077 or email: deregle1@aol.com (London).**

SUGDEN Mystro integrated amp, lightly used, boxed. Can be posted. **£650: 01782 785734 (Staffordshire).**

VAN DEN HUL The Waterfall RCA interconnect 0.8m £60, Chord Company Carnival Silver Screen speaker cable, 2x 4m lengths, terminated £30, Chord Company Chorus 2 RCA 1m £50, Chameleon Silver plus 1m and 0.5m, all boxed £40 each: **0121602 8349 (W Midlands).**

REGA Couple and Linn Black high-quality interconnect cables, both as new £30: **0121 602 8349 (W Midlands).**

ARCAM RDACKw and wireless dongle, hardly used. Superb sound, either via USB, S/PDIF, optical or wirelessly, £380. Also battery PSU and charger £30: **07793749178 or email: david@veniceinfosite.com (London).**

KIMBER Select KS1030 1m pair £600, Kimber Monocle-xl 8ft pair speaker cable £500, original packaging: **01772 314151 or email: jamesmckendrick@btinternet.com (Preston).**

ACOUSTIC REALITY AR1001 Mono Blocks, Class D power amps, 1,000w. Silver, excellent condition £825 (pair), Cyrus Pre Vs2 preamp (brushed black), excellent condition, boxed and original accessories £350: **01223 890607 or email: m.overall@btinternet.com (Cambridge).**

TECHNICS SL7 parallel tracker classic turntable with sounds to shame many a modern deck. Pristine condition, hardly used and full working order £225: **07793749178 or email: david@veniceinfosite.com (London).**

MUSICAL FIDELITY AMS35i, pure Class A integrated amplifier (black), boxed and mint, only 18 months old with 5 year guarantee, reluctant sale (£6,000) £4,500: **01303 863424 (Kent).**

CYRUS 1m and 50cm interconnects, RCA, used but like new and boxed. £70 and £55 resp. delivered: **0115 9288006 or email: Rolfjordan@gmail.com (Notts).**

ORIGIN LIVE Conqueror Mk3c tonearm, one year old, latest version, boxed, immaculate, genuine reason for sale, might p/ex

BUYING TIPS BUYING SECOND-HAND can be a great way to pick up a bargain. A formerly expensive second-hand component might well prove a better long-term bet than a brand-new product if the price is right. **DO SOME RESEARCH** on which brands have a good service back-up, so if something does go wrong, you can get it fixed. Unless you purchase from a dealer, you're unlikely to get any warranty, so it's up to you to ensure the fitness of any gear that you buy. **USUALLY** speakers should be less prone to breakdown than amps, and amps should be more reliable than CD players. But any abused component could be trouble – have a proper demo and judge the seller as well as the goods!

for less expensive model, £2,000: **01323 728118** or email: **alanchamberlain1@hotmail.com (East Sussex)**.

JUNGSON JA 88D amplifier Class A, new, excellent condition £900, but any reasonable offer considered: **07986124147 (Suffolk)**.

MISSION Cyrus 2 amp (grey), Mission Cyrus PSX (black), Mission DAC 5 convertor. All in good condition, all leads and connections. Sensible offers please to: **01555 759124** or email: **embt80@gmail.com (South Lanarkshire)**.

ARCAM CD 36 boxed, immaculate, as new with unused remote, addition welcome, buyer collects £550: **01329 668149 (Hants)**.

MICHELL GyroDec SE, with RB300 arm in excellent condition, £800 ono. Might consider part exchange: **01482 651963** or email: **jazzevan@hotmail.com (Hull)**.

SONY Walkman Pro WM6DC, a real classic, VGC £200, Firestone Audio Fubar USB DAC, plus Power Supply as new £100, HRT Streamer II USB DAC 24-bit/96kHz, brand new £100: Email: **reivictor25@gmail.com (London)**.

PMC SCM 7 standmount speakers. 6 months old, excellent sound, little use, mint boxed (£610) £475: **07733428736** or email: **gill@gillbrears.plus.com (West Yorkshire)**.

TECHNICS SL1210 Mk2 £249, Garrard 401 plus power supply £1,200. Both in very good condition: **0207 499 8729 (London)**.

ARCAM system: A90 pre-power (2 x 90w); Pro 90 power, 192 CD player (all black), Chord Co. Chamelion silver interconnects, 3 pairs, Odyssey speaker cables for bi-amping, 4 pairs, Monitor Audio Gold GS20 speakers (walnut), new and boxed, (£5,000) £1,500: **0121 602 8349 (W Midlands)**.

AUDIO-TECHNICA AT-OC9 MK3 moving coil cartridge, less than 10 hours use. Bought in Japan. No mounting kit, just cartridge and box. £300 ono: **07517 147056** or email: **jameshollis@mac.com (London)**.

LYNGDORF Millennium Mk4 reference amplifier, Excellent condition £3,950: **01743 344 136** or email: **denis_james@yahoo.com (Shropshire)**.

SPENDOR SP2/3 speakers (rosewood), together with very heavy cast AE stands. Superb condition, all boxes included £650 ono: **0115 8755070** or email: **rolfjordan@gmail.com (Nottingham)**.

RUSS ANDREWS Super purifier filter with hubble port plug for use with power purifier, super ultra purifier blocks (£386) £195 (including p&p), Yellow 6-way extension lead (3m) superclamp £85, Kimber KGAG 14dB CD interconnect (£515) £385: **01902 884694 (W Midlands)**.

ARCAM Solo Neo amp/CD/FM/DAB (16 months guarantee) £775, Arcam Solo £450, Quad L-Series subwoofer £250.

023 8073 8935 or email: **gol3385@hotmail.co.uk (Southampton)**.

WANTED Maxell or TDK metal cassette tapes (new or little used): **01395 576644** or email: **jmichealbrittain@yahoo.com (Devon)**.

NAIM Uniti, 3 months old, can demo. Buyer collects £2,000: **07971 920 347 (Glasgow)**.

MONITOR AUDIO RS1 loudspeakers, hardly used, mint condition, boxed £160: **01943 467859 (W Yorkshire)**.

MUSICAL FIDELITY AI CD Pro, immaculate condition with original box, manual, receipt and remote (£1,500) £650: **07814468747 (London)**.

MERIDIAN 501 preamp (MC), 557 power amp, great condition. Will demo £1,000 the pair. Will split (501 - £225, 557 - £850). Buyer collects: **07868480165 (N. Somerset)**.

ESL 57 audio speakers with dedicated stands, excellent condition (£1,800) £1,050: **01453 544242 (Glos.)**.

KRELL FBi integrated amp, 2006, box, manual, remote (black) 300/600 watts (£15,000) £6,000. Buyer collects, Nordost Valhalla XLR interconnect 0.6m (£1,965) £650, Kimber Select 3038, silver speaker

cable 2.5, pair (£5,700) £1,700: **07411388152 (Herts)**.

JOHN SHEARNE Phase 6 reference preamp (with MM phono board), plus 2x Phase 3 reference stereo power amps, excellent condition with boxes £595: **01202 515474** or email: **johnlangley17@talktalk.net (Dorset)**.

NAIM NAP 500 power amp, Naim preamp NAC 552, Naim power supply NAPS 555, Naim CD X2, Stageline - SMC phono stage, plus 6-way distribution lead, 2 Naim Fraim shelf units (black), B&W speakers Nautilus 802D (Rosenut). (£40,000) £18,000. Pro-Ject turntable RPM10 with Ortofon Kontrapunkt B cartridge and Perspex turntable (£2,000) £750, Naim Audio amp NAP 110, Naim HiCap 110, NAC 42 (all £300): **07515 862222** or email: **edg@badedge.com (Sunbury on Thames)**.

CYRUS Pre VS2 preamp (brushed black), excellent condition, boxed. £350: **02476 440058 (Coventry)**.

TRICHORD Dino 2+ NCPSU + top Trichord power cord, pristine, £525. Abbingdon Music Research IC-777 high-quality interconnect, brand new, £130. Funk Achromat turntable mat, 5mm, unmarked, £35. Orbis Blues Collection, complete, including magazines and binders

£100. Negotiate on p+p. **01582867139** or email: **mikethompson48@hotmail.com (Bedfordshire)**. **NAIM** NAIT 5i integrated amp perfect sound and condition, plus remote with box £430. Collection preferred: **07792241875** or **0117 909 0033** or email: **yyy777yyb@hotmail.fr (Bristol)**.

ACOUSTIC ENERGY Linear One speakers (piano black), easy amp load, mint, boxed, manual, £75, Pure DAX-701 ES digital tuner (silver), mint, boxed, manual £50: **07941174804 (Slough, Berks)**.

PRO-JECT Debut 111 turntable (black) with Ortofon OM 5E cartridge, little used, very good condition, £120. Sony TC-K611S stereo cassette deck with 3 heads, Dolby S, excellent condition £50: **01303 863 424 (Kent)**.

NORDOST Blue Heaven interconnects, 1 metre, RCA connectors, 2 pairs, boxed (£125 per pair). £60 per pair or £100 for both. Chord Prodac Pro Digital, 1 metre, boxed (£85) £40. QED reference HDMI, 1 metre (£80) £40: **07870 159725** or email: **johnsidebottom@hotmail.co.uk (Somerset)**.

SOMETHING SOLID speaker stands. Fully welded construction (black). 63cm high, mass filled, spiked feet. VGC £50: **01582 423791 (Beds)**.

NAD C315BEE amplifier, 40W, 6 line inputs, plus matching C515BEE CD player, Titanium, remotes, boxed, £100 each. Both for £200 and free NAD 4225 tuner. Gale silver monitor bookshelf speakers, (black ash), boxed, mint £40: **01706 345418** or email: **hfc@rodtheobald.forceg.co.uk (London)**.

AUDIOLAB 8000P power amp (silver) and 8000C preamp (black), perfect sound and condition. £495 the pair: **07816 758688 (NE London)**.

MARANTZ PM6004 integrated amp, 2 months old, (£310) £175; Quad 11L (Birdseye maple), excellent condition £150: **07733428736** or email: **gill@gillbrears.plus.com (West Yorkshire)**.

NAD 5320 CD Players x2; NAD Amplifier 302; NAD tuner C422; Heco bookshelf speakers, £100 or will separate: **01491 628000** or email: **brian@bspmmedia.com (Oxon)**.

QED Signature Audio XT, 1 metre, new, boxed £95; Signature Silver Spiral 1metre £75: **01639774444** or email: **alwyn.mackie@ntlworld.com (London)**.

TIVOLI Model One radio, designed by Henry Kloss, (maple/Hunter Green), with original box and instructions, brand new £65: **07970142144** or **01745 833183 (Denbighshire)**.

HOW TO SUBMIT YOUR FREE AD

YOUR DETAILS

Name _____
 Address _____

 Email address _____
 Daytime telephone number _____
 Date _____

YOUR ADVERTISEMENT

SEND YOUR ADVERT TO

Hi-Fi Choice, My Hobby Store Ltd, Hadlow House, 9 High Street, Green Street Green, Orpington, Kent BR6 6BG

To submit your advert to us, please email **letters@hifichoice.co.uk** or alternatively, use the postal form below. Please limit ads to a maximum of 30 words, ensuring all details, model names, etc., are correctly stated. Kindly also include your email, telephone number and home county. We regret that we cannot take adverts over the telephone.

WELCOME TO THE NORTH EAST

ANATEK RESEARCH
 APOLLO
 ATACAMA
 AV INTERNATIONAL
 CHORD COMPANY
 CHORD ELECTRONICS
 CLEARAUDIO
 DYNAVECTOR
 EAR YOSHINO
 GOLDRING
 GRAHAM ENGINEERING
 GRAHAM SLEE
 G F HADCOCK
 ISOTEK
 KOETSU
 KUDOS AUDIO
 MARTIN LOGAN
 LYRA
 MAGNEPLANAR
 MELODY
 MICHELL ENGINEERING
 MONITOR AUDIO



NAD
 NAIM AUDIO
 NORDOST
 NOTTINGHAM ANALOGUE
 OPERA
 ORTOFON
 PATHOS ACOUSTICS
 PROJECT
 PS AUDIO
 PURESOUND
 REGA
 REVOLVER
 ROKSAN
 SME
 STAX
 SUGDEN AUDIO
 TEAC ESOTERIC
 TRANSFIGURATION
 TRICHORD RESEARCH
 UNISON RESEARCH
 USHER AUDIO
 VAN DEN HUL

HIFISOUND, Castlegate mill, Quayside, Stockton on Tees. 01642 267012

2NDHANDHIFI.CO.UK

Guaranteed used and ex-demo audio equipment from HiFiSound - the UK's premier source

Call: 0845 6019390 Email: choice@2ndhandhifi.co.uk

NEW STOCK IN THIS MONTH...

LINN Koelcor Preampifier, excellent condition	249	CHORD ELECTRONICS CPAS5000	excellent boxed	4599	AYRE ACOUSTICS AX7e Integrated amplifier, ex boxed	1299	ARCAM Alpha 10 Integrated Amplifier vgc	249
NORTH STAR DESIGN Model 3 DAC, excellent boxed	Due in	CYRUS CD8e	excellent boxed	699	AYRE ACOUSTICS CX7e CD Player, ex boxed	1499	CR DEVELOPMENTS Kalyso Integrated, ex boxed	649
ARCAM AVR600	excellent	CYRUS DAB8 Tuner	excellent	399	ARCAM Alpha 10P Power amplifier, excellent	249	CYRUS PSXR Brushed black, excellent	349
NAIM P100p 2 psu, excellent	299	ARCAM Solo Neo System, excellent boxed	799	REGA Planar 3 vgc boxed	249	NEAT Motive 2, excellent boxed	549	
PASS Labs X2 Phono preamp, excellent	899	SONUS FABER Cinema Auditor, 2w stands	1199	SUGDEN BLOU HEADMASTER	excellent boxed	CYRUS Hs2 Integrated amplifier excellent boxed	499	
LINN Genik CD Player, excellent	399	MUSICAL FIDELITY A3 5CD	399	DYNAUDIO AU emce 52 vgc	179	ARCAM CD73, excellent boxed	199	
NAIM NAT 5/2 Integrated excellent	549	SJ ANLING MC30	excellent	KEF X05 Floorstanders	excellent	ARCAM D33 DAC only weeks left	1499	
NAIM CD5	excellent remote	EXPOSURE XX Integrated amplifier boxed	Due in	MERIDIAN 551 Integrated vgc	399	QUAD ESL57s, later (sax grills boxed)	599	

Analogue

Ariston RD11 Superior/Logic arm, excellent	199
Audio Technica AT1100 tonearm, excellent	199
Boulder MS11MS01 Phono Stage vgc	1499
Ci-raudio Unify tonearm, brand new	999
Clearaudio Concept, mint boxed ex demo	875
EAR 834P Deluxe ex demo	1399
Garland 201, vgc	799
Grade Cartridges various ex display	Call
Haybrook 228 tonearm, excellent boxed	249
Haybrook 112 cw Linn Baski LVX and K9	399
Linn LP12 with Vahalla & Itok tonearm	799
Linn Itok LVII n rare back, excellent	799
Mancore Marita, Rega tonearm, excellent	299
Michael Focus Cine cw focus arm, excellent	299
Michael Hydraulic Reference, SME 3009	649
Michell Gym SE, RB250, Goldring cart excellent boxed	849
Michell Opte SE, AC motor version, excellent	1199
Onix Depth 1m2, excellent	599
Notis Analogue Spacodisk and Haa rock 228	949
Ototon TA1000 Tonearm brand new unused	499
Project Essential/Genie/Debut all ex demo	Call
PS Audio GCPH Phono Stage ex demo	599
Quad 24P phono stage, as new boxed, weeks old	899
Rega RP1 ex demo	179
Rega Planar 3 Green boxed	249
Rega P3 St Georges flag, excellent boxed	299
Rega Fono MM boxed as new	99
Roksan TMS1 & DSU, superb, boxed	1749
Roksan Xenus, Kuzma Stog, new PSU, boxed	749
Roksan Marauder 5 2 ex demo	899
SME Series V, vgc boxed	1249
SME 3009/2, excellent boxed	249
SME 3009/2, excellent	179
The Source, offboard ps vgc & new Ototon TA1000	899
Sumiko Cartridges various ex display	Call
Thorens ID309 ex display bargain	799
Thorens ID124/SME3009 excellent	999
Thorens ID124mk2, excellent	799
Townsend Rock 2 Rega tonearm vgc boxed	499
Townsend Rock 2 Mission 774L CD, excellent	399
Wilson Benesch Act 1 Tonnear, n mint superb	799

Amplifiers

AMR A77, excellent lightcase, REDUCED	2999
Arcam A90, excellent boxed with remote	399
Arcam Alpha BP, excellent boxed	199
Audio Research Ref 10 Monoblocks vgc boxed	17999
Audio Research Ref 210 Monoblocks, as new boxed	5910
Audio Research VS110 with KT120s vgc boxed	1749
Audio Research VS115, vgc boxed	2999
Audiolab 8000Q, excellent late UK model with remote	349
Beard P35mk2 vgc	799
Chord CPM3300 Integrated, excellent boxed	3499
Chord SPME50 Poweramp, excellent boxed	1749
Countpoint SA12, excellent	499
Creek CAS5050, excellent	129
Cyrus 8XP Integrated, excellent	599
Esoteric A110 with DAC excellent boxed	1199
Karan KAS180 Power, crated	1799
Krell FPB200 Power, excellent boxed	2499
Krell KSA200S Power vgc	1499
Krell KVA400, excellent boxed, ust serv end	1599
Leak TL12+ Monos, vgc for year	749
Linn Wakonda MM/Sleaky Tuner	349
Linn LK 100 vgc	299
Linn Kaim, excellent boxed	399
Linn Majik integrated with remote	299
Melody 101 Preampifier, world renowned ex demo	2499
Micromega IA60, near mint boxed	499
Musical Fidelity Typhoon Power amplifiers (pair)	199
Musical Fidelity 3a preamp & P150 Power amplifier	399
Musical Fidelity M3 Integrated with PSU Boxed	1799
Musical Fidelity ASCR Power, excellent boxed	299
NAD C32BEE, ex demo n mint	219
NAIM Superlap 2, ex demo n mint	Call
NAIM NAP200, excellent boxed	899
NAIM NAC2B2 with Nappsc, excellent boxed	1799
NAIM NAP250, ex demo 2009 model	1999
NAIM NAC122X/NAP150X excellent boxed	799
NAIM NAP135s pair, good condition boxed	1199
NVA P60MC/PS/A40, Pre-FSU/Power excellent boxed	599
Pi main i21 Integrated, mint boxed	599
Puresound 2A3, excellent boxed	899
Quad 33/44/303/405 all vgc	Call
Radford STA25mk3, vgc for year	1749
Rega Cursa/Maim, original cast case models boxed	399
Raini RC972 Preamp, remote	199
Sonus Faber Musica Integrated, ex mint	1199
TACT Audio o RCS 2 0 Room Correcting preampifier	799
Unison Research Uno, excellent boxed	499
Unison Research Aria S2, valve integrated	699
World Audio Design Kit 34, excellent	399

Digital

Acouphase DP800/DC801 Transport/DAC, WOW	11999
AMR CD777 ex demo	Call
Arcam CD72, remote	149
Arcam Alpha 7, excellent player	99
Arcam Alpha 9, excellent DCS RingDAC player	599
Audiolab 8000CDM Transport and 8000DAC	599
Cambridge Audio Dacmagic 2, excellent boxed	179
Chord ONE, Integrated Choral player, n mint boxed	1999
Chord Red Standard Mk 1, Integrated (DAC64) player	Call
Coxland CDA288, excellent	549
Cyrus CD65, excellent boxed REDUCED	279
EAR Acute, excellent boxed	2249
Electro-gram ECD1 DAC, vgc boxed	799
Esoteric DVXUS, excellent boxed	1499
Lector 01L, excellent boxed, due in	699
Linn Mirrik, excellent	249
Leema Stream 2, n mint boxed	399
Leema Stream 3, n mint boxed	799
Merrillaga CD30, n mint boxed, new model REDUCED	499
Mus cal Fidelity A32CD, excellent boxed	499
Musica Fide n CDT many CD player with valves vgc	299
NAD C545Bee, excellent boxed	179
NAIM CDX2, excellent boxed	1399
NAIM CDX2, excellent	1349
NAIM CD5x2, excellent with remote	549
Primare CD21, near mint boxed	549
QED Digit	49
Rega Planet 2000, excellent boxed	279
Roksan Karady K2, excellent boxed	549
Rolin RCD02, excellent remote	79
Slim Devices Transporter, excellent boxed	749
Sony SCD XB940, reasonable condition	119
TEAC P700/D700 Transport DAC combo, excellent	649
TEAC D1 DAC, excellent	249
Theta DS Pro Gen 5 DAC, excellent boxed	749
Unison Research Uno CD ex demo	899
Wadia iPod dock, n mint ex demo	249

Loudspeakers

AVI Neutro 5, ex demo mint	349
AVIADM9.1, ex demo n mint	849
Audiovector M3 Signature Actives, n mint boxed	1249
B&W DM70 Continental, fair cosmetics, fully working... Offers	
Castle Harlech, cherry finish, excellent	299
Castle Howard S2 Mahogany finish, excellent boxed	549
GRIFIN LOUDSPEAKERS WANTED	Call
Indigo Model One, with matching Sub1 units boxed	249
Kudos C1, excellent boxed in Walnut EX DEMO	799
Kudos C20, new style, excellent in Walnut	1999
Linn Ninka, boxed in Maple	599
Linn Keilidh, KuStone stands in cherry	299
Linn Lukan Rose finish	249
Magneplanar MG2.4, vgc for age	499
Magneplanar MG3.6, Ex demo, superb	2999
Magneplanar MG1.6, excellent boxed	1249
Martin Logan Odyssey, excellent boxed	249
Meridian M20 Active speakers	399
Meridian M3 Active speakers	399
Meridian M1 Active speakers, boxed due in	Call
Monitor Audio Radius HD, various ex display	Call
Monitor Audio Silver RSb, excellent boxed	399
Monitor Audio Silver RX, various ex display	399
Norh 7 0 Classic, excellent boxed	399
Q Acoustics 2000 series, various ex demo	Call
Quad ESL57s, good working order boxed	499
Rogers LS3a n rosewood, excellent boxed	399
Spinrad SA1 cw matching stands, due in	Call
Theil CS 2, vgc just refurbished	299
Townsend Gastonbury 2, good condition	749
Usher S520 and matching Subwoofers	799
Usher 718 Diamonds, excellent boxed, ex demo	1399
Wharfedale Diamond Home cinema pack, ex demo	Call
Wharfedale 101, ex demo, n mint boxed	149
Wharfedale 103, ex demo, excellent boxed	199
Wharfedale Active Diamond 71s, fair boxed	119
Wilson Benesch Curve, excellent boxed	2999
Wilson Watt/Puppy 3/2, vgc, crated due in	2249

Special System Deals

Audio Analogue Crescendo Amp & CD, ex demo	799
Micromega CD10 & IA60, both as new	899
Krell Showcase Cinema 71 system (HDMI), mint boxed	4499
NAIM UniQute & Kudos X2s, ex demo	1999
NAIM UniL ex demo - mint	1499
Onkyo TXNR609 & Wharfedale Speaker pack ex demo	Call
TEAC DISTINCTION SERIES - Special deals - ON DEMO	Call
TEAC CHS600 All in one network system ex demo	Call

Telephone 01642 267012, Tuesday to Saturday 10 'til 5 or email choice@2ndhandhifi.co.uk

T U R N T A B L E W O R L D

Special offers to celebrate our new website
www.turntableworld.co.uk - the analogue specialists - 01642 267012

Ed Selley brings you our pick of this month's top hi-fi websites...



MEDIAMONKEY

mediamonkey.com

If you are moving into streamed audio, be it via a computer and DAC or by a dedicated network streamer, the experience lives or dies on your metadata. What's metadata you might ask? Put simply it is everything in your online music file that isn't the music itself. Album artwork, track names, artist details and genre information are not only 'nice' things to have; they make the business of searching a large collection of music physically possible. All too often, as collections grow, the metadata can suffer. As a result, parts of the collection become 'off limits.'

Mediamonkey is first and foremost a media player and ripper and a very good one it is, too. Additionally it has a media library function that's designed to help you bring consistent metadata and artwork to an existing collection. Install it and it will study and collate your music collections and bring order to where there was previously chaos. This is far quicker than physically manipulating the data yourself. Obviously if you can keep tabs on albums as you rip them, you can ensure perfect results, but if you need to get the best out of your existing material, this is a very useful site indeed.



ALL CD COVERS

allcdcovers.com

Good though Mediamonkey is, like many of the metadata based 'tagging' programs it can often find album art that is either not correct for the country you find yourself in, or simply not of a quality suitable for use on a high-resolution screen. It is possible to upgrade the art that a program has found, if you wish, but this can often result in some fruitless hammering away at Google images trying to find the right cover at the right resolution and in a format that the software reading it will understand.

Happily, All CD Covers can make this tiresome business a great deal easier.

Enter the name of the album or artist you are looking for and more often than not, there is a suitably large and proportioned file available for free download. As well as front covers, All CD Covers is frequently able to supply the rear image and picture of the disc itself so if your display software is up to the task, you can really go to town. It was a little stumped by some of the more obscure requests I gave it, but for anything mainstream, this is a useful resource.



ONLINE ALIGNMENT PROTRACTORS

vinylengine.com

Confession time – I hate aligning phono cartridges! With a need to swap between cartridges on a fairly regular basis, it is a job that is absolutely vital but one that I dread. One of the biggest bugbears is that I can never retain an alignment protractor for more than a single alignment. One day I will discover what I did with the protractors, but for now their location is a mystery.

Happily this page allows me access to an unlimited supply of protractors to lose! The use of the site doesn't end there either, as there are several versions available to choose from. There are several 'universal use' protractors that will work on most turntables and allow you to experiment with different points of 'perfect' alignment to find what suits you best. There are additionally some arm and deck specific protractors that, if you are fortunate to own those specific decks, are capable of some great results. The protractors are free and printing them is a simple matter of making sure the print size is set to the requested percentage and you have ink in your printer.



SA-CD NET

sa-cd.net

SACD has never formed an especially important part of my listening. Part of the problem is that I never had a SACD player spend any length of time in my system, but more significantly the releases that I was generally aware of never blew my frock up overmuch. I always perceived that much of what was released were rehashed versions of existing albums and classical material. I generally already owned the former if it was any good, and while I am partial to classical music, I don't actually buy a huge amount of it.

SA-CD.net is a useful resource for showing what other material is available on SACD and that often manages to go somewhat unnoticed at the time of release. As well as acting as a search engine of titles, you can then be directed to various sites to buy the discs in question. At least some of the time you can. The site is unwittingly something of a demonstration that as a format SACD suffers from some curious decisions in terms of what is still in production and what isn't. Many discs seem to have had very short production runs and now seem to be very valuable indeed. Still, this being the case, the site can act as a useful valuation tool. ●





Our Four Cornerstones are: Quality – Performance – Value – Service You won't be disappointed!

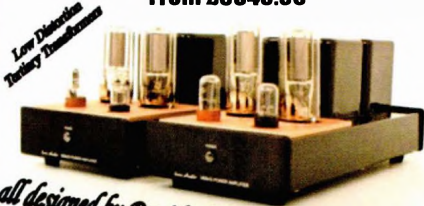
Feel free to ask which amplifier is right for your room and speakers?

Please visit us in "Magny Cours" at Whittlebury Hall Hi Fi Show

Designed in Leicester by David Shaw. Hand built in our factory in China. Finished and tested in Leicester. We design and wind our own transformers using the best 5N copper and LG iron. Using top worldwide parts from Rubicon, ALPS, Jensen, JJ, SCR, Full Music. Our commitment to quality and service means you are assured of advice, upgrades, and service for at least the 20 year expected life of our amplifiers. You're assured of good performance new or second hand!

MB845 i mono blocks

Fabulous huge 845 triode mono block amplifiers. NEW improved version of the original. Now with "Low Distortion Tertiary" transformers 90+90w **5 Globes Hi Fi World**
From **£3849.95**



all designed by David Shaw

ST20PP 15+15W Amp

Guaranteed to amaze and delight you Mullard's amazing EL84 makes this amplifier perform way beyond its modest size. Now with headphone socket. Not sure about valves? Try this with our money back guarantee.

Only **£549.95**



4+Globes Hi Fi World

NEW Stereo 60 MK IIIm 75+75w

Total redesign with new KT120s New Tertiary transformers New power supply, very low distortion. Huge power in 1 box! **"OUTSTANDING!" Hi Fi News group test April 2012**



From **£2199.95**

KingSound Electrostatics



Compact, Efficient & Beautiful. 3 way design, smaller than a full range panel needing only 40 Watts to fill the average room with sublime sounds. Stunningly transparent. Excellent deep bass from hybrid ABR Only 121Hx28Wx31D (cm) ~~£1099.95~~ Now Only **£1399.99** (Limited offer)

The Icon CDX1 CD Player

Several unique features 3 power supplies. Valve rectifier, valve & choke regulated. Hard wired analogue output stage. With a top quality 192kHz 24bit player. Upgradeable.

From **£1299.95 (upgradeable)**
"Great for any mood or style of music"
Awarded 5 Globes Hi Fi World



LA4 MK II Line Preamp

"...Majoring on musical flow and attention to detail, Distortion very low 0.0003% Enormous headroom, bandwidth very wide, very low noise..." NK Hi Fi World, awarded 5 Globes

From only **£999.95 (upgradeable)**



MB150 150w Mono Blocks

150+150w of pure UL valve power (or 100 + 100w of pure triode). Using 4 KT90, KT88 or KT120. Based on our award winning MB90s. Unlike transistors, these giants retain the Icon warmth and texture at volumes, giving massive headroom and very low distortion. Various upgrades available. Now available with the new KT120!

Only **£2999.00 Pair** 4+ Globes Hi Fi World



Our Best Ever Mid Range Amplifier!

Stereo 40 MK IIIIm our best ever value amplifier. It has everything! 40+40 watts, Triode mode, Valve rectifier. Remote control. Tape loop. Standby switch. KT66/KT88 EL34/6SL7 compatible. Two rave reviews in HFW and HFN.

From Only **£1,499** *New 2A3 Model Now In Stock!*



"...Bristling with musical energy, smooth & sweet..." P Rigby Hi Fi World Awarded 5 Globes

NEW ST40 III 6AS7 Pure Triode Amp

30+30w pure triode. No feedback. Created as an affordable alternative to the high cost of 300Bs All the attributes of vintage triodes only £60 for a new set of output valves. Warm creamy sound lots of detail. Astonishing sound stage. All the other features of our Stereo 40 III inc remote control

From only **£1,549.95** complete



NEW MB805 SE Mono blocks

45+45 Watts of Single Ended Heaven
From **£5499.95 (upgradable)**



Low Distortion Tertiary Transformers

Stereo 25 MK II

NEW high quality headphone socket for private listening. NEW 6SN7/6SL7 valves for better definition. Upgraded output transformers for better bandwidth. 35+35w. Alps pot, 4/8 Ω outputs, Supplied transparent cover

FREE EL34 UPGRADE WORTH £100 (Limited offer!)



Still Only **£849.95**

PS 3 All Valve Phono Stage

"Our Fave Affordable High End Phono Stage"

N.K. Hi Fi World. Awarded 5 "Globes"

"Outstanding Product" Hi Fi News

All triode. Passive RIAA. Custom British MC TX option. Very quiet, high output. With the best possible Power supply. Valve rectified & regulated for definition and smoothness, 14kg.

From only **£1759.95** complete (inc MC TX)



Common Features: Icon 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 PTFE audio cable. Steel & alloy plate construction. Soft start. Comprehensive manual inc DIY valve change info Plexiglas valve cover included. "Proper" valve amplifiers are heavy because good transformers need lots of iron!

See our other models at www.iconaudio.com Buy through your dealer or direct from us. Export no problem! (EU £30 per box) Want to know more?

.....Or ring us on +44 (0)116 2440593 email sales@iconaudio.com **icon Audio** 351 Aylestone Road Leicester LE2 8TA (U.K.)

*Whilst stocks last. Conditions apply ask for details Prices correct with 20% UK VAT at time of going to press but subject to change 09 2011. E & O E UK Visa, MasterCard AMEX and debit cards accepted

Please visit us in the
"Magny Cours" room
at Whittlebury Hall

icon Audio



The New Stereo 40 MK III KT88m Our best ever mid range amplifier!



designed by David Shaw

*Low Distortion Tertiary
wound transformers*

Shown with upgraded Treasure CV181s and Full Music TJ 6SL7, Jensen copper foil in paper and oil capacitors

Superbly engineered. Very versatile 40w+40w

Whilst our flagship models rightly get superb praise from reviewers worldwide for their performance and value, we never lose focus on our more affordable products and regularly update them when the opportunity arises. Such is the case with our Stereo 40. Our original brief over 10 years ago to make the best possible EL34/KT88 valve amplifier for a reasonable price still holds true. Our latest Stereo 40 MK IIIm incorporates several improvements. Now with a meter which allows a very simple way to check that the output valves are operating at their optimum value and best performance. This will also tell you when a valve is due for replacement or when it is failing. Something other designs don't do. The Stereo 40 is almost unique in its ability to use a very wide range of valves including 6L6, 5881, EL34, 6CA7, KT66, KT77, 6550, KT88. Now made very easy to change if you like "tube rolling".

In our quest to make the best amplifier in its class we also include all the features we think a good amplifier should have including Triode or Ultralinear operation, remote control, a record loop, a warm up/standby facility, valve rectifier, Low Distortion Tertiary output transformers and many more features.

There are also things we don't include like printed circuit boards and transistors both of which we feel degrade the performance of valve amplifiers.

Obviously the overriding priority is the sound quality which must come from good engineering which we believe to be far ahead of the Stereo 40's modest price.

We guarantee you will not be disappointed!

Our four cornerstones are **Quality Performance** and **Value**. And in the future, **Service** when you need it. In this age of "built in obsolescence" it may be unfashionable to talk about repairs and spares but our commitment to future service means you should be able to enjoy your amplifier for at least 20 years.

All of our amplifiers are designed and finished in Leicester they are commissioned and serviced by the people that designed them so you can be sure of our quality control and long term performance. Our new series of "Low Distortion Tertiary" output transformers are the best we have ever made, enabling us to reduce global feedback by about 40%. All our amplifiers are hand made using "point to point" soldering without using printed circuit boards. We are convinced this sounds better. It also allows for easy servicing, upgrades and modifications. Remote controlled volume is useful for fine tuning your listening level to match your taste. High quality components are used throughout including an "ALPS" volume control, silver plated PTFE audio cable SFR capacitors audiophile resistors. Power Amplifier operation is possible by selecting a lower "gain" on the rear of the amplifier (this is done without attenuation which would lose quality). Loudspeakers of nominal impedance between 3 ohms and 10 ohms may be used with virtually no reduction in power or quality. A valve rectifier with choke regulated power supply adds a richness to the sound quality that silicon devices alone are unable to do. Tape and other methods of recording and playback are catered for by the "Tape Monitor". Also useful for Home Cinema applications.

In short we have created an amplifier of excellent flexibility and quality which retains the qualities of traditional design and performance.

From £1,499.95 (complete including 20% VAT) Upgradeable See also our similar Stereo 40 2A3, Stereo 6AS7 and other award winning amplifiers on our website

www.iconaudio.com sales@iconaudio.com

icon Audio

Leicester UK



Performance Promotions



Exchange your old Arcam BDP100 &:

Save 50%

Trade-up to a New BDP300 for £499

Major benefits include: Faster load time, better 3D- video and audio performance, new five year warranty
Please contact us by phone, email or see our website for full details of this performance upgrade offer

Also Consider: Our Oppo BD93 promotion with FREE Chord Advance HDMI lead for £499 - See our website for details



Get 2 extra channels for FREE!

When you buy a **Majik** or **Akurate** power amplifier. If you own a Linn Power amp this is a fabulous deal. The improvement going from single to bi- amp is huge or you can go aktiv if you already have enough channels. Come and hear for yourself this must have upgrade. Contact us for more info or see website for full details

Refresh & Renew your **Akurate DS** to current spec for £1500
Use your old board in a Renew case to get an additional room



Please call or see website for details



naim Hi-line and Power-line Promotion

Trade in your old Naim for a new Naim Uniti or Classic model & claim a FREE Power-line or Hi-line worth up to £615 - get even better performance

The Hi-line or Power-line is a fantastic upgrade in its own right. Have a dem, hear for yourself and choose the right deal for you. Call us now.

www.billyvee.co.uk

See our website for promotion details, ex-demonstration and special offers



New RP 3
Turntable - £100 off Upgrade offer.

Rega - Promotion Offers

Outstanding performance and value



Brio-R
Amp - System/Cable offer



Rega
DAC - Cable offer

Billy Vee
SOUND • SYSTEMS

020 8318 5755

020 8852 1321

email enquiry: info@billyvee.co.uk

248 Lee High Road, Lewisham, London SE13 5PL (Mon - Sat 10am - 6.30pm Closed Thursday)

Mains Cables R Us Arcam rDAC power supply

Noise annoys, power corrupts. I could continue with the platitudes, but most audiophiles have already grasped the general concept that mains power – and the relative quality thereof – has a major influence on sound. For example, anyone who burns the midnight oil, likely listening to smoky jazz after dark, will find their system sounds better than when the rest of the world is boiling kettles and/or watching *Coronation Street* a few hours earlier. This is down to the usage that the mains power supply is getting – and therefore the amount of noise that's in it. At midnight, far fewer computers and fluorescent lights are on, and suddenly your hi-fi system starts to sing...

The same principle applies to this little device. It's been designed to give the Arcam rDAC a cleaner electrical feed than it would otherwise have – without of course having to wait till everyone's gone to bed! £195 buys you this two-box regulated linear power supply, designed to aspirate the aforementioned digital convertor with a better class of 12v DC power than it would otherwise get from its standard power supply.

Whereas the latter is nothing more than a tiny switched mode device set inside a plasticky plug-type thingie, the MCRU product comes in two cases. The smaller one sits next to the rDAC, while the larger one should be sited a good way away. Both contain voltage regulators, both are sited where the company says they'll do the best job. One faces the mains supply, dealing with its assorted noise, distortion and random variations, whilst the other points to the rDAC which is asking for constantly varying current. The job of both is to supply a rock-steady voltage that ignores the changing load.

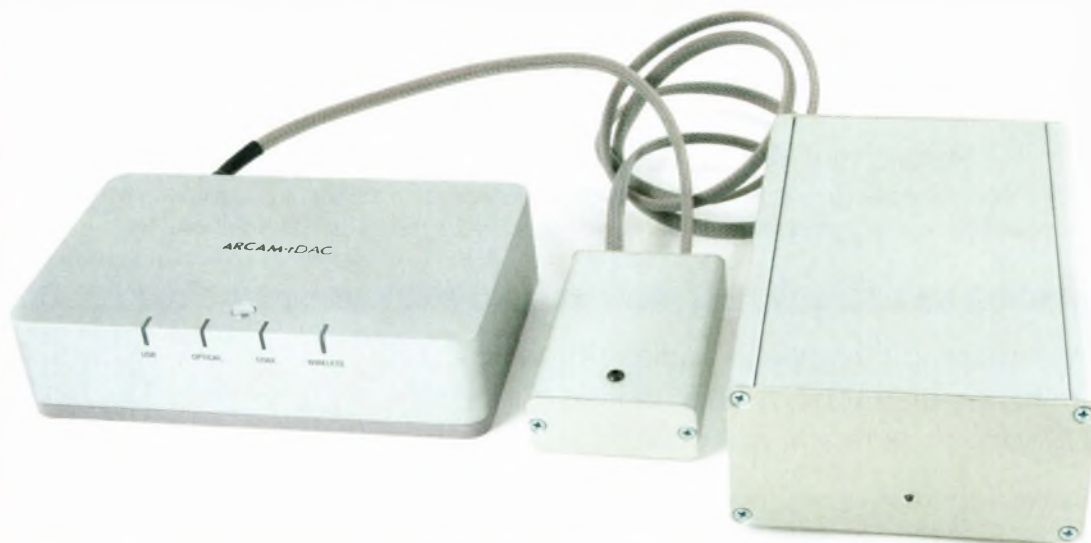
Specifically, the first regulator sits close to the mains supply which it converts to a low(ish) noise DC supply. The latter handles the changing demands of the load,

close to the main box – it's a bespoke design based on a low noise multi-stage filtered voltage reference, a low noise amplifier and a high current, low resistance MOSFET, the company says. All the remaining space in the second regulator box is filled with low impedance capacitors to act as a local energy source. Mains Cables R Us says that by using a two-stage regulator, a noise floor better than most battery supplies is achieved, along with a very low effective source resistance.

Sound quality

The stock Arcam rDAC is an excellent little product, coming second in a recent *Hi-Fi Choice* Blind-Listening Group Test. For £300 it offers a sound quality that few can match anywhere near the price; it's quite smooth and very musical, and even has a fair stab at conjuring up a decent soundstage. If there are criticisms to be made, it's the slightly forward upper midband, which tends to over-illuminate female vocals, and the bass is a little mechanical. It could be better in its stage depth too, as everything tends to cluster around the plane of the loudspeakers. So does this fancy power supply help?

I am happy to answer with a resounding "yes". It provides a whole new level of performance to the humble rDAC, stripping away its major weaknesses at a stroke, to expose the little digital convertor's innate strengths. It sounds more musical and less mechanical, it's a little more dynamic with less of a sense of there being a residual 'mush' at low levels. Bass gets slightly stronger, fuller and more articulate – it certainly sounds less wooden. Across the midband, there's better detail and a slightly more expansive soundstage, with useful improvements in depth perspective. Tonally, it's smoother too, with less sibilance and a darker, more velvety feel. Treble is cleaner and smoother too. Overall then, an excellent value for money upgrade. **ES**



► **DETAILS**
PRICE: £195
WEBSITE:
MAINCABLES
RUS.CO.UK

OUR VERDICT
★★★★★

TWIST

"One of the Best Hi-Fi Bargains Around" - Robert Hoyle, Audiovation



Different by Design

We have taken the design of our very best cable, the highly acclaimed Ninja DCT++, and cut out everything that costs.

What we have left is a simple, basic good design that takes you much closer to the musicians.

"Twist delivers voice and guitars in a fluid and effortless style... A well thought out cable that delivers a touch of class to budget systems at a very reasonable price."

HI-FI CHOICE
June 2012



"A classy, high quality cable, providing top quality sound reproduction over all formats and sources."

HI-FI WORLD
July 2012



Thoroughly Recommended

"I have been using twist speaker cable in my valve based system and it's a sonic bargain! Performance versus price is at either end of a very long scale, thoroughly recommended!"

David Brook, Mains Cables R Us - Huddersfield. www.mains-cables-r-us.co.uk

Incredible Balanced and Insightful Listen

"Twist: Again incredible balanced and insightful listen at and above it's price point, never bright and aggressive, always well timed and well spaced - able to allow the emotion and colours of the music through without having to break the bank..."

Sam Lowe, Phase 3 - Southampton. www.phase3southampton.co.uk

Very Popular with Customers

"We will now use this on our install and budget system as it is proving very popular with customers we have auditioned it to. An excellent cable at an affordable price."

Derek Rapkin, H.G. Rapkin - Northampton - www.hgrapkin.co.uk

Punches Well Above its Weight

"This is a good quality cable which punches well above its weight for its price and delivers a good quality sound. The high frequencies are crisp and the low level frequencies are delivered on a strong level."

Steve, Rayleigh Hi-Fi - Chelmsford. www.rayleighhifi.com

Find out more about Twist, read the reviews and testimonials in full and find out where to buy on our website, by calling our factory or by scanning the QR code on your smartphone.



Black Rhodium

www.blackrhodium.co.uk
sales@blackrhodium.co.uk
+44 (0)1332 342233

Analogue Innovation The Plattamat

Turntable mats come in various materials. Many are made from felt, and I have experienced several problems with these mats in the past. One issue is that the mats are often egg-shaped. This is caused by tension when the felt sheet is pulled through the punching press. Another worry, especially with acrylic, is that the mat can easily slip on the platter. This is easy to check by putting a tiny mark on the edge of a record, lining it up with a mark on the platter and then playing the record. It doesn't take long for the marks to become misaligned! So I was keen to try out this new Plattamat...

This mat is manufactured from a nitrile and cork mix, and is 2mm thick. This increase in the height of the record will change the VTA (Vertical Tracking Angle) of the stylus, so the height of the tonearm should be increased accordingly. The centre hole is a good tight fit on the spindle and, when fitted to my acrylic platter, there was no tendency to slip as can occur when using a felt mat.

Sound quality

With the Plattamat in place on my reference Rega turntable, I found there was a much tighter bass response and an unexpectedly large improvement in the overall focus of the soundstage and in particular the solidity of imaging. In rhythmic terms, the music seemed to flow more naturally, and there was also greater clarity between the notes. Of course, the performance gains that an aftermarket turntable mat confers depends to a large extent on the deck's existing platter and/or mat arrangements. But it's fair to say that this new mat represents super value and should confer significant audible improvements. **NR**



► DETAILS

PRICE: £19.50
(INCL P&P)
CONTACT:
01554 890414
WEBSITE:
ANALOGUE
INNOVATION.COM

OUR VERDICT



Wireworld Silver Starlight USB

When I did an interconnect round-up a couple of months back, Wireworld's Oasis made a pretty positive impression, so much so that I decided to see what the company could do in the digital domain.

The Silver Starlight is the penultimate model in the USB range, sitting just below Platinum Starlight which has solid silver conductors. The Silver on the other hand has six silver-plated copper conductors in the company's helical arrangement. It comes in a relatively wide, ribbon shaped PVC outer case which is shaped so as to leave a space between the voltage conductor and those carrying the signal and return. Wireworld fits nice aluminium plug cases with gold-plated connectors on this professionally built USB lead.

I tested a five metre sample, the longest available, but lengths are available from 30cm. I've found that some DACs won't work with some cables of this length, the Vertere D-Fi used as a reference falling foul of several examples. Silver Starlight has been almost universally successful, only the Furutech ADL Esprit rejecting it (in favour of Furutech cable)!

Sound quality

In other respects this sounds remarkably similar to D-Fi, delivering superb stereo imaging, loads of detail and tremendous realism with good recordings. Timing is also a strong point thanks to fine leading edge definition but without grain or any tendency to smear transients. It's a combination of qualities that makes for visceral audio entertainment, keeping you glued to the seat by the music. Pricey yes, but its combination of build, compatibility and sound quality make it good value. **JK**



► DETAILS

PRICE: £250 (1M)
CONTACT:
020 8991 9200
WEBSITE:
WIREWORLD
CABLE.CO.UK



OUR VERDICT





High End Cable

www.highendcable.co.uk

Call Dave Jackson on 01775 761880

Top Brands

Acoustic ART
 Acoustic Systems
 Analysis Plus
 Argento Audio
 Audience
 Bel Canto
 Chord Company
 Dynamique Audio
 Ecosse
 Furutech
 Leif Series
 Michael Green Audio
 Nordost Corporation
 Leif | Norse2 | Reference
 Olive HD Servers
 Quantum QRT
 Raidho Acoustics
 Revelation Audio Labs
 Purist Audio Design
 StereoLab
 Synergistic Research
 STAX
 Telos
 Townshend Audio
 van den Hul



olive.
SAVE THE SIGNAL



Room 153

High End Cable will be in Room 153 at the NAS. We hope to have two Bel Canto based set ups, with one using Olive 04HD server and the other the Bel Canto CD2 as front ends. We will introducing the new Bel Canto Reference DAC3.5vb Mk II DAC.



audience



We will use Power cords from the amazing Audience range and for the analogue side will use the new Audience entry level Conductor 'e' on one system, and on the other, the latest from the Nordost Norse2. Digital cables from Stereolab and Nordost.

The power base will be the Audience Teflon Power Conditioner supported by the QRT Qx4 purifier and Qv2 AC mains harmoniser.

NORDOST

MAKING THE CONNECTION



Speakers, as always, will be from Raidho Acoustics and we will have the new S2.0 down firing transmission line floor stander as well as possibly the best stand mount speaker system in the World today, the C1.1.

Please support your Hi-fi Shows and look forward to seeing you at the NAS in room 153 on the 22/23 Sept 2012.



Sonoro CuboDock

Sonoro is based in Cologne and its line-up of compact hi-fi products is newly arrived in the UK. The £250 CuboDock is an iPod-based compact audio system that features a dock for most iterations of iPod and iPhone, as well as a Bluetooth connection for iPad use. Additionally, a line in is fitted for less modern equipment.

While not strictly a cube, CuboDock is still an appropriate name for the Sonoro. The chassis is a rectangular unit with a slightly canted front panel. The dock mounting is on this front panel and an iDevice once connected, sits at the front of the CuboDock in front of the grille which is available in a variety of colours that in turn can be matched with different casing finishes. It isn't the most beautiful iPod system out there, but is extremely well thought out.

The driver complement comprises two fabric dome tweeters with neodymium woofers augmented by a hefty rear bass port. These are powered by an amplifier of unspecified power that makes use of a DSP to tweak the overall sonic balance in favour of the CuboDock's drivers.

Sound quality

The good news is that this works extremely well via both dock and Bluetooth. The Sonoro has plenty of power in reserve and can fill a decent sized room with a rich and very likeable sound. By far the most impressive aspect of the performance is the sense of a genuine soundstage, which given this is produced from a single point is no small feat. The relatively large enclosure and the rear port give the bass a surprising amount of low end heft as well. There is no shortage or competition and the lack of AirPlay might be a deciding feature for some, but the Sonoro is still a polished and engaging sounding unit. **ES**



DETAILS

PRICE: £250
CONTACT:
020 8200 8282
WEBSITE: DE-EN.
SONORO-AUDIO.
COM

OUR VERDICT



Furutech FP 1363D(G) wall socket

Furutech produces a huge variety of mains accessories in addition to its signal cable range, and the FP 1363D(G) is part of a range of new wall sockets. These are available in single and twin socket configurations and come with rhodium (R) and gold (G) pins. All models are CE certified and the correct UK three-pin configuration.

Attention to detail and the overall fit and finish is extremely impressive. Furutech's proprietary Alpha Line conductors are used throughout and the faceplate is an incredibly solid piece of ABS that makes for an exceptionally sturdy piece of equipment. The attention to detail even extends to a specially designed pressure plate to increase the area that the pins of a plug are in contact with the Alpha Line conductors. This is probably *not* the most visually dramatic item of hi-fi you could spend £138 on, but there's no doubting the quality of the components involved. Needless to say, you should have the sockets fitted by a qualified electrician. Mains voltages are dangerous and not to be messed with!

In use

I experimented with connecting hi-fi separates directly to the Furutech, and then connecting an in-line mains block to the sockets. Connecting the units direct had a more beneficial effect than the mains block, but there was still an improvement to be had with that as well. The effects were subtle, but centred around a slightly greater sense of space and depth to performances. I found the most effective results were obtained by giving the digital source the direct socket and connecting amplifiers and phono stages to the mains block. An interesting upgrade, the Furutech is definitely worth considering. **ES**



DETAILS

PRICE: £138
CONTACT:
01276 501392
WEBSITE:
FURUTECH.COM

OUR VERDICT



Mark Grant Cables

PROFESSIONAL AUDIO VIDEO CABLES



The audiophile linear
power supply solution



SBooster switch-mode PSU upgrade



The SBooster is an economical addition to your existing switch-mode power adapter (wall wart adapter).

The SBooster contains filter components designed to reduce noise on the DC output of your switch-mode power supply.

The SBooster is available in three versions to fit many devices.

The "Best of Two Worlds Solution" is available in five output voltages and is compatible with more than 50 audio devices

Now available for the new Beresford Bushmaster DAC

'Best of Two Worlds Solution' Linear Power Supply

The aim of "Best of Two Worlds Solution" is to improve the sound quality of your streaming audio player or DAC.

If your goal is to achieve the maximum achievable sound quality level that your Squeezebox Touch, Pro-ject Streambox, Cambridge Audio DacMagic PLUS, Beresford Caiman+ or for example M2TECH Young can reproduce, without internal modifications, then this is the power supply upgrade you are looking for.



SBooster, enjoy more music...

For more information about the SBooster or Best of Two Worlds Solution Linear PSU,
please visit www.markgrantcables.co.uk or www.squeeze-upgrade.com

For more information phone Mark - **01482 887717**

Reference Fidelity Components Venus RCA phono interconnect

One man and his shed cable makers are two a penny, anyone can buy a reel of wire and solder on some plugs and plenty of them do, but rarely do they do it well enough to make their mark. One man that looks like he has a better chance than most is Paul Coupe, an electrical engineer who has sat down with cables and plugs from some of the most respected brands in the business and cooked up combinations that are not available off the shelf. It's an expensive way to do things and I don't imagine that there's half as much margin in his Reference Fidelity cables as there is with established brands, but that's not an issue for the end user. Paul likes Cardas and Furutech products and his Reference Venus interconnect is made up with cable and plugs from the latter brand. Parts that Furutech itself does not combine in any of the interconnects that it sells, it uses μ OFC twin core conductor cable which is a multistrand design in polyethylene insulation, a cable that is not as far as Paul can tell used in current Furutech interconnects.

The RCA phono plugs on the other hand are the CF-102 type that are found on Furutech Lineflux interconnects whose prices start at just north of a thousand pounds. The best price I could find for these plugs on their own is an eye watering £99.95 a pair, which makes RFC's price for a pair of interconnects look very good indeed. They are damn fancy plugs made out of rhodium-plated stainless steel with carbon fibre covers. The final ingredient in this interconnect's mix is Cardas Quad Eutectic solder, which has a low melting point that minimises the risk of damage to the insulation and is said to offer superior conductivity. Venus is professionally put together and finished with a black external braided cover and discreet direction arrows on one set of plugs.

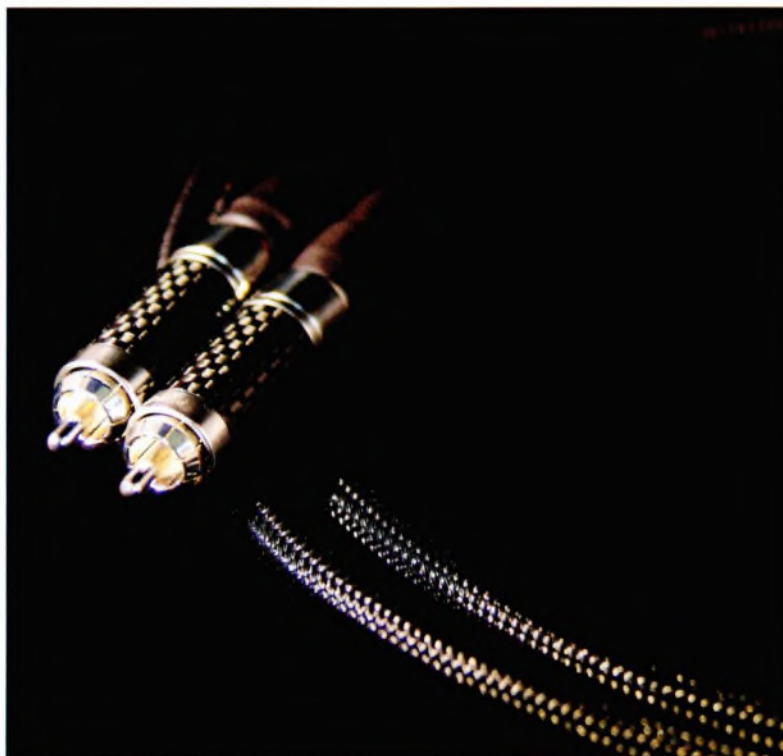
Sound quality

It would seem that Paul has done his homework because Venus is a phenomenally transparent interconnect, it scrubbed a veil off of the results I get with my preferred interconnect and exposed heaps of fine detail in the process. The excellent hi-res mastering of Muddy Waters' *Folk Singer* gives up tape hiss, the shape and character of the studio and more of the creek in the guitar neck than one suspects is in the mix.

It also has fabulously wide bandwidth, bass is very solid and the highs define the height and width of the acoustic that the recording was made in to tremendous effect. But it's the low level detail that makes this cable so impressive, it makes everything more real from the fingers on the fretboard to the massive dynamics of the uncompressed vocal.

What it doesn't do so well is cope with complex rhythmic material, here the Vertere Pulse C is significantly stronger. Conjure's *Jes Grew* track can sound amazingly articulate and funky, but Venus fails to deliver the message as coherently as it needs to be which detracts from its appeal, and as a result the music fails to engage in the way that it can. It doesn't have quite the three dimensional skills of the best in class either, Townshend DCT300 reveals greater depth and scale in the acoustic in the context of a smoother, or possibly less extended high frequency character.

But RFC's Venus is an impressive cable nonetheless and will suit many systems and music types very well indeed. I tried it in a number of systems and always got more transparency than usual. If anything it's more of an audiophile's cable than a music lovers', but the same can be said of some very high-end interconnects, top notch transparency is always very appealing. Combine this with RFC's very competitive pricing and it's impossible not to recommend the Venus interconnect. **JK**



► DETAILS

PRICE: £285
CONTACT:
07810 403841
WEBSITE:
REFERENCE
FIDELITY
COMPONENTS.
CO.UK

OUR VERDICT



Stop strangling your system!

For 25 years our customers have been fitting our PowerKords™ to their Hi-Fi components. With "musicality built in" we believe that they offer the best way to get even better performance from your CD or DVD player and amplifier.



The cable



The Classic PowerKord™ is made with eight separately insulated conductors, woven together. The conductors are Kimber's TCCS wire, which uses hyper-pure copper, and is finished with Teflon® insulation.

We believe that this woven cable geometry, coupled with the unique purity, stranding and insulation of the conductors combine to give the best-performing mains cables available and let you experience a new dimension in sound and pictures.

Cable shown has part of the covering removed for illustrative purposes only.

"we defy anyone not to notice the improvement in performance when you switch from a free cable to a PowerKord™."

What Hi-Fi? Sound & Vision magazine Awards 2004



All PowerKords™ are hand made, by us in the UK.

Connecting you to the mains

The mains plugs we use are carefully chosen to be the best performing and highest quality. Like everything we design, we fully test and listen to them before incorporating them into a product!

Even the fuses in our PowerKords™ are chosen for their performance! We fit our own RA 13A fuses into all our mains cables.



Buy the **Classic PowerKord™** before 13th Sep 2012 and get a box of 20 ReVeel® CD enhancing wipes (treats up to 100 discs) **worth £14.50 FREE**

Connecting you to your equipment



We firmly believe the Wattgate™ connectors that we fit to our PowerKords™ are the best equipment connectors available, anywhere! The secret to their performance is the way in which they securely clamp the cable to the plug, and the way the plug grips the IEC socket on your equipment, allowing your kit to perform more efficiently.

Protecting from spikes and surges

As an option we can fit our SuperClamp components to a Classic PowerKord™ that is fitted with Wattgate IEC connectors. They help to protect equipment from spikes and surges and improve sound quality, making it subjectively slightly more detailed and natural.

Tech Flex

This tough, flexible covering protects your investment from wear and potential damage.

EXCLUSIVE OFFER!

Order a Classic PowerKord™ before 13th September 2012 quoting code **13SEP** to receive your free box of ReVeel® wipes
UK Orderline 01539 797300
www.russandrews.com/classicoffer

Russ Andrews®
CLASSIC POWERKORD



Order code 1540

1m cable **£120.00**
 1m cable with SuperClamp **£130.50**

including FREE UK mainland delivery
 Other lengths available please enquire

Russ Andrews®

Atlas Equator III interconnect

It was about a year or so ago that certain UK cable specialists began to realise that conventional RCA phono plugs were doing little to help the sound of their wares, so they duly redesigned these ubiquitous connectors. Two such companies now use ABS outers instead of metallic sleeves on their plugs. The effects of this alteration are dramatic in my view, and the ABS outer gives a sound markedly superior to the same cable with no outer covering on the plug, so it's not merely a case of the metallic cover introducing negative effects. The first of these companies that came to my attention, Chord Company, named its connector VEE after its Vibration Eliminating Enclosure.

The Atlas Equator III interconnect uses a similar ABS outer, but over a non-magnetic low mass metal, solderless connector. This it calls the Integra plug. The Scottish manufacturer duly supplied me with a metre pair of the 'before' Equator analogue interconnect cables fitted with metallic plug covers, and a pair of metre-long 'after' cables, identical but using the aforementioned non-metallic Integra plugs. Any performance differences therefore could only be attributable to the plugs, as all else was the same...

So, to discover what differences were audible between the before and after versions, I inserted the cables in turn between my Well Tempered Amadeus turntable and Dynavector XX-2 moving coil, and my Naim SuperLine phono preamplifier. As well as being the only phono-equipped gear to hand in my DIN and BNC ruled environment, it's a mission-critical interface that really highlights what an interconnect is up to. Good for reviewing, then!

Sound quality

Tested running between my turntable and amplifiers, the newest Equator III cables sounded markedly more transparent, cleaner and faster than their predecessors with the old type of metal plug. Even at very low replay levels, the new Equator III scavenged greater information – especially subtle detail – from the John McLaughlin, Al Di Meola and Paco de Lucia album, *Friday Night in San Francisco*. The cable distinctly revealed the off-mic activities during the opening of *Mediterranean Sunrise*. The Integra-fitted cable was far better at revealing low-level information, and

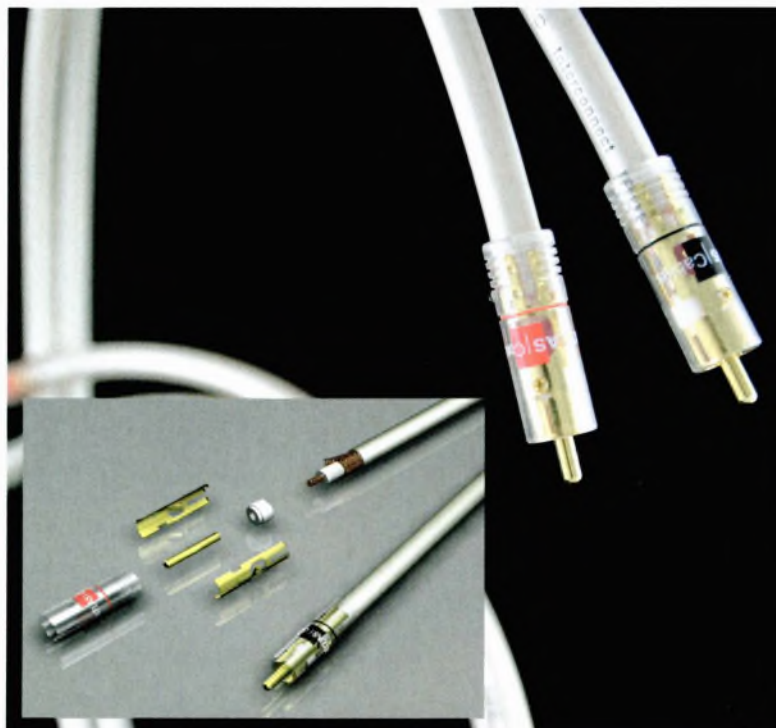
overall it excelled with dynamics. This gave the recording true chiaroscuro and contrast.

In presentational terms it also triumphed, vividly discriminating between the texture and harmonic character of each of the trio of acoustic guitars in the carefully delineated soundstage. Notes and flurries had greater individuality – they sounded comparatively blurred and smeared on the original cables with the metal plugs. By contrast, the new cables with their ABS connectors gave more clearly defined leading edges and a better sense of space between the notes.

The new cables made the music more exciting and the trio's playing more characterful and invigorating. The music exhibited greater rhythmic bounce and vitality than before. So, all round, it seemed to be a convincing win for the Integra-fitted Equator cables.

By way of explanation Atlas says that the Integra plug uses a non-magnetic ABS cover which may avoid a saturation in the return leg at an RCA plug's metal sheath if it's in the signal path. The Integra sheath facilitates a direct barrier free return signal path with less interference, the company claims.

That sounds entirely plausible given my experience of the crisp, open detailing and musicality provided by this cable alongside an earlier generation of the same. And in the great scheme of interconnect(ed) things, the Equator III is very fine indeed – you'll not find much at the price that comes close in terms of musicality. **MS**



DETAILS

PRICE: £75 (1M)

CONTACT:
01563 572666

WEBSITE:
ATLASCABLES.
COM

OUR VERDICT



Emporiumhifi

www.emporiumhifi.com

AUTHORISED DEALERS

A.M.R - AUDION - AUDIO NOTE - AIR TIGHT - CARDAS - CONRAD JOHNSON - BENZ - KUZMA - SUGDEN - PASS LABS - SME - FUNK FIRM - ORIGIN LIVE - LUXMAN - MICHELL - NIGHTINGALE - VIVA AUDIO - LECTOR - PURESOUND - LYRA - ORTOFON - USHER - STERLING BROADCAST - NVO - PROMITHEUS.
PLUS MANY MORE.

We are actively seeking to purchase all used quality HiFi NOW!
From complete systems to individual items.

WE BUY

AUDIO NOTE - AUDIO RESEARCH - KRELL - CONRAD JOHNSON - SONUS FABER - COPLAND - MARTIN LOGAN - APOGEE - MICHELL - SME - MERIDIAN - LINN - NAIM - AUDIO INNOVATIONS - AUDION - PINK TRIANGLE - PROAC - TUBE TECHNOLOGY - DIAPASON - UNISON RESEARCH - CHARIO - CLASSE - BRYSTON - REGA - LFD
& MANY OTHER BRANDS.

We offer a Part-Exchange facility on all stock items

CONTACT US NOW FOR INSTANT QUOTES

HEAD OFFICE

01986 895929 -

KENT

01304 239419 -

WALES

01554 750262 -

MIDLANDS

01213 466043

Tellurium Qtm

Audio designed to combat phase distortion

Find out why more and more people are talking about Tellurium Qtm products.

Don't just believe all the incredible reviews, test our products for yourself against anything else in the same price range.

Find out how your music can **really** sound and talk to your nearest

Tellurium Qtm dealer now.



Cables, amplifiers and the unexpected!

www.TelluriumQ.com



hi-fi+

Products of the Year 2010

Jan 2011



Hi Fi World

Cable of the Year 2010

01458 251997

Fidelity Art PAB Anti-Vibration Platform

This unique anti-vibration platform is one of a new range of accessories recently launched by Fidelity Art. The platform is made by a specialist manufacturer of dedicated audiophile-grade products that is based in Poland and called Pro Audio Bono.

The FAB range of anti-vibration platforms is designed to support audio and video equipment and to provide isolation from external vibrations, thereby minimising unwanted resonances. This is achieved by suspending the equipment on a shelf supported by four nylon cables that pass around pulleys housed inside pillars. This minimises physical contact with other items of equipment and the support unit itself. The cables that support the shelves are adjusted and levelled by using tension screws and this design is patent pending with the Polish Patent Office.

Sound quality

First impressions were of a very well-made unit, as you'd expect with its not inconsiderable pricing. The platform was tested with a range of equipment, including a turntable, CD player and an amplifier. I did get subtly noticeable results with amplifiers, but the effect on a turntable and CD player was huge. Even though my turntable has its own sub-plinth, the sound with the FAB improved significantly, especially in the midrange, which really blossomed and sounded more effortless. Bass response was tighter and better controlled, too. Overall, the sound felt more natural and realistic. Everything sounded cleaner as though the music had been lifted clear from the noise floor. These are well-made units that will enhance the appearance of any system and yield noticeable sonic improvements. **NR**



DETAILS

PRICE: £499
CONTACT:
07840 183485
WEBSITE:
FIDELITYART.
CO.UK

OUR VERDICT



Origin Live Linear Flow 2 interconnect

Although this interconnect cable from Origin Live is of a fully balanced design, it is suitable for both balanced and unbalanced systems. It consists of a twisted pair of leads to minimise inductance, made of high purity copper and fitted with classy Eichman Bullet phono plugs. The Linear Flow 2 comes in two forms, shielded and (in this review) unshielded.

The unique design of these interconnects employs a combination of four high-grade dielectric insulators to ensure an even response across the audible frequency range. Great care has been taken to optimise key electrical characteristics such as impedance, inductance and capacitance, the company says.

Consequently, as with all cables, they should be burned in, as this affects the crystalline structure of the metals and allows many of these variables to settle down. Generally speaking, it's good to burn in cables for at least fifty hours, but in my experience the first ten hours make the greatest difference to the sound, and then the cables continue to improve in a less dramatic fashion.

Sound quality

Unlike some price rivals, it doesn't have a contrived sound. Rather the interconnect seems to let the music get on with the job of entertaining you, rather than trying to stamp its own identity on the proceedings. Treble was open and smooth, the midband was clean and detailed, the bass taut and tight but not light. If your system is already well balanced, this is recommended. **NR**



DETAILS

PRICE: £286
(1M), £316
(1.5M), £346 (2M)
CONTACT:
02380 578877
WEBSITE:
ORIGINLIVE.COM

OUR VERDICT





LS50 | 50th Anniversary Model

THE ULTIMATE STUDIO EXPERIENCE



"This is a cracking little speaker of which KEF's design engineers must be most proud. Sweetly voiced yet highly revealing of source quality, it surprises and delights in equal measure. And boy does it sound big, defying its compact dimensions."

- Hi-Fi News July 2012

EXPERIENCE THE KEF LS50 AT LUXURIE TODAY



Specialists in luxurious lifestyle hifi products
25 Hartfield Road, Eastbourne, East Sussex, BN21 2AR
www.luxurie.me | service@luxurie.me
01323 731 421 | 07590 900 320

Songbird 2

Windows and OSX

Mozilla's Songbird's rather low profile, as the last bastion for iTunes refuseniks, has of late been boosted by its adoption in customised form as the packaged library solution supplied with Philips' line of Windows-centric digital portables. The Mac development branch is also still active, but the Linux variant is now a community-developed one.

Throughout its development, Songbird has basically changed very little, but as with Twonky 7, Songbird 2 brings with it a slight change of emphasis. The desktop version changes colour once again in its base form and the cute bird-with-cans-on icon is replaced by a drab Adobe-like capital 'SB', but the feel is still the same – essentially it is modelled on iTunes, but with the added bonus of FLAC support, and is bolstered by a range of handy and not-so-handy third party plugins – updated from within the app's control panels.

Standard support for core metadata field maintenance works smoothly, and in place of the iTunes Store is an embedded link to 7digital. Usefully the powerful equivalent of the original iConcertCal plugin for iTunes is the default addition of Songkick for spotting those rare and elusive gigs you always wanted to hear...

The major change is from the marketing angle – go to the website and the noise is about the new mobile version of the app and recommendations engine Songbird.me – with the inevitable move towards the social aspects. A free Android mobile client is now available and there is an option to supply your e-mail to be notified when the iDevice version drops. **PC**

▶ **DETAILS**
PRICE: £FREE
WEBSITE:
GETSONGBIRD.COM

OUR VERDICT



DOWNLOAD



TwonkyServer 7

Windows, OSX and Linux

Despite the Linn-crowd increasingly migrating to the wonderful audio-specialised Asset uPnP server from Illustrate (dBpoweramp), many started with NAS-embedded Twonky 5 or even earlier. Some even run it on their computers...

The big driver for staying up-to-date with Twonky is the rapid increase of DLNA 1.5 devices which can function as uPnP renderers and controllers and the need to maintain compatibility with them. In Twonky-world this often means piping video to the latest TVs, but even us humble audiophiles can benefit.

Twonky developer PacketVideo is also changing its emphasis – moving towards a 'myTwonky' cloud system with free mobile and desktop clients, the unavoidable social tie-ins, and a big push for the Airplay competitor 'TwonkyBeam' in a new embedded form. So where does that leave those of us who actually shelled out for a license for the boring old home server?

Thankfully a Twonky 6 license gets you the free rights to a Twonky 7 (termed 'special' version – essentially 'last') upgrade, and the vital port 9000 configuration page has gained a much-needed and attractive facelift. Performance with the more-truculent clients does seem smoother.

If you have a license and a second generation WD World Edition drive, a handy install guide is available on the web to replace your default embedded T5 with T7, and it goes like a dream – but just because you have a 'free' version of T5 you can't go to 6 or 7 without a license. Regrettably, QNAP has not moved to implement T7 yet, but Synology users will be happy. **PC**

▶ **DETAILS**
PRICE: €14.99
WEBSITE:
TWNKY.COM

OUR VERDICT



DOWNLOAD



Hi-Fi Choice

PASSION FOR SOUND

EDITORIAL TEAM

Editor David Price, david.price@hifichoice.co.uk
Art Editor Corin Skeggs, corin.skeggs@hifichoice.co.uk
Production Editor Richard Holliss, richard.holliss@hifichoice.co.uk

CONTRIBUTORS

Simon Berkovitch, Richard Black, Patrick Cleasby, James Michael Hughes, Tim Jarman, Jason Kennedy, Paul Miller, Dave Oliver, Neville Roberts, Ed Selley, Malcolm Steward, Channa Vithana, Nigel Williamson

ADVERTISING

Senior Advertising Executive Jack O'Sullivan
Tel: 0844 848 5245
Email: jack.o'sullivan@myhobbystore.com
Advertising Manager Sonia Lawrence
Tel: 01689 869 899
Email: sonia.lawrence@myhobbystore.com

SUBSCRIPTIONS

Subscriptions Manager Paul Molyneux
UK - New, Renewals & Enquiries
Tel: 08456 777 807 **Email:** hifichoice@subscription.co.uk
USA & CANADA - New, Renewals & Enquiries
Tel: (001) 877 363 1310 **Email:** expsmag@expressmag.com
REST OF WORLD - New, Renewals & Enquiries
Tel: +44 (0) 8456 777 807

BACK ISSUES

Tel: 0844 848 8822
From outside the UK: +44 (0) 1689 869896
Email: customer.services@myhobbystore.com

MANAGEMENT TEAM

Group Editor Paul Miller, paul.miller@avtechmedia.co.uk
Group Sales Manager Duncan Armstrong
Head of Design & Production Julie Miller
Ecommerce Manager Amanda Lee
Chief Executive Owen Davies
Chairman Peter Harkness

Published by MyHobbyStore Ltd.
Hadlow House, 9 High Street, Green Street Green, Orpington, Kent, BR6 6BG

Email: customer.services@myhobbystore.com

Tel: 0844 412 2262
From outside the UK: +44 (0)1689 869896
www.myhobbystore.com

Distributed in the UK by Seymour Distribution Ltd.



Published by MyHobbyStore Ltd. All rights reserved. ISSN 0953-1115. Periodicals paid at Green Book No. The Publisher's written consent must be obtained before any part of this publication may be reproduced in any form whatsoever, including photocopying, and information retrieval systems. All reasonable care is taken in the preparation of the magazine contents, but the publisher cannot be held legally responsible for errors in the contents of this magazine or for any loss however arising from such errors, including those resulting from negligence of our staff. Balance placed upon the contents of this magazine is the reader's own risk.

Hi-Fi Choice, ISSN 0953-1115, is published monthly 12 times per year by MyHobbyStore Ltd. c/o UKCAN Media Ltd, The Cop, 40 Ravenhill Way Suite 54-55, Plattsburgh, NY 12561. Periodicals postage paid at Plattsburgh, NY. POSTMASTER: send address changes to Hi-Fi Choice (US Dept), Mag. P.O. Box 2769, Plattsburgh, NY 12561-0279



When you have finished with this magazine please recycle it.

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



Please reserve/deliver my copy of on a regular basis, starting with issue

Title _____ First name _____

Surname _____

Address _____

Postcode _____

Telephone number _____

If you don't want to miss an issue

Next month

Q ACOUSTICS 2050i

A LARGE FLOORSTANDING SPEAKER with a fine pedigree at a surprisingly low price, but how does it sound?

BLIND-LISTENING GROUP TEST

THE LATEST AND GREATEST AFFORDABLE INTEGRATED AMPLIFIERS get the Hi-Fi Choice treatment...



YBA HERITAGE CD100

MORE THAN JUST ANOTHER SILVER DISC SPINNER, this striking looking new French design promises fine sound and great build



ALSO:

Raidho Acoustics C1.1 loudspeakers, Sonos Play/Bridge/Sub system, Renaissance RAP-02/RA-02 & Choice Extras accessories section

PLUS: your system buying and upgrading queries answered, all the latest hi-fi industry news, views and comment and the month's finest new audiophile music releases...

NOVEMBER ISSUE ON SALE THURSDAY 13 SEPTEMBER 2012

HIFI CHOICE ADVERTISERS INDEX

ATLAS CABLES	125
AUDIO EMOTION	131
AUDIOVECTOR	36
A.V DISTRIBUTION	78,79
AVID	10
BASICALLY SOUND & VISION	93
BILLY VEE	110
BLACK RHODIUM	112
BOWERS & WILKINS	77
CAMBRIDGE AUDIO	64
CHESTER GROUP EXHIBITIONS	62, 63
CLARO AUDIO	47
COHERENT SYSTEMS	20
CRYSTAL CABLE	70
EMPORIUM HIFI	120
EPIPHANY ACOUSTICS	93
FURUTECH	30
HART AUDIO	57
HI-FI SOUND	106
HIGH END CABLE	114
ICON AUDIO	108, 109
INSPIRE HI-FI	69
JORDAN ACOUSTICS	4,5
LUXURIE LIMITED	122
MAINS CABLES R US	128
MARK GRANT CABLES	116
MARTIN LOGAN	2
MISSION	132
NAIM	12
NUNU DISTRIBUTION LIMITED	20
OPPO	15
ORIGIN LIVE	28
OXFORD AUDIO CONSULTANTS	94
P.J HIFI	86
PRO-JECT AUDIO SYSTEMS	24, 34
RAYLEIGH HI-FI	58, 59
ROKSAN	26
RUSS ANDREWS	118
SEVENOAKS SOUND & VISION	51, 52, 53
SOUND GALLERY	84
SPENDOR	38
TANNOY	32
TELLURIUM Q	120
TRACK AUDIO	82
VICKERS HIFI	128
WIREWORLD	93

TO ADVERTISE PLEASE CALL
SONIA LAWRENCE
01689 869899
sonia.lawrence@myhobbystore.com

Q: Where can I discover the finest Audio products for the home? **A: At Audio Destination!**

Where Music Matters



Brand images shown:
1.Totem • 2.Lyngdorf • 3.Clearaudio

Run by husband and wife team: Mike & Caroline Rogers - Audio Destination is not your typical Hi-Fi Specialist.

Audio Destination brings together a range of only the finest audio products and places them in comfortable and relaxed surroundings, where you can take your time to audition and find the right product or systems to suit your exact requirements.

- Open Tuesday - Saturday (9am - 5pm)
- Two demonstration suites
- Large selection of famous brands
- Home demonstration
- Long-term customer support & care
- Easy Parking
- Free advice & consultation
- Out of office appointments
- Home installation

We look forward to seeing you

Stockists of:

Analysis Plus • Audio Analogue • Audioquest • Ayre • Bel Canto
Black Ravioli • Clearaudio • Electrocompaniet • Focal JM Lab
Grand Prix Audio • Heed • Isotek • Leema Acoustics • Lyngdorf
Moon • Plinius • Primare • Project • Tellurium Q
TEAC Esoteric • Totem Acoustics and many more...



Call +44 (0)1884 243 584 • www.audiodestination.co.uk
Audio Destination, Sura Ta Market Walk, Tiverton, Devon, EX16 5BL
Open Tue - Sat: 9am - 5pm • e-mail: info@audiodestination.co.uk

DRIVERS:

- ATC
- AUDAX
- ETON
- FOSTEX
- LPG ➤ MAX FIDELITY
- MOREL ➤ PEERLESS
- SCAN-SPEAK ➤ SEAS
- SILVER FLUTE
- VIFA ➤ VISATON
- VOLT



SOLEN CAPACITORS AND INDUCTORS - USED BY THE MOST DISCRIMINATING LOUDSPEAKER MANUFACTURERS.

HARDWARE

HOW TO BOOKS

Contact us for the free Solen CDROM Catalog.

FREE!



SOLEN

4470 Avenue Thibault
St-Hubert, QC, J3Y 7T9 Canada
Tel: 450.656.2759
Fax: 450.443.4949
Email: solen@solen.ca
Web: www.solen.ca

award-winning high performance analogue, digital & video cables

www.atlascables.com

ATLAS[®]

Element Integra



The Element Integra is our new audio interconnect for discerning music lovers. It offers the listener an open and involving sound with no artificial highs or lows, and most importantly it offers fantastic value for money. Pick up an Element Integra today and prepare to be amazed!

Need some advice on choosing the best cables?
Call us free on
0800 731 1140

ATLAS Cables

e: J.Carrick@atlascables.com

www.atlascables.com

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.

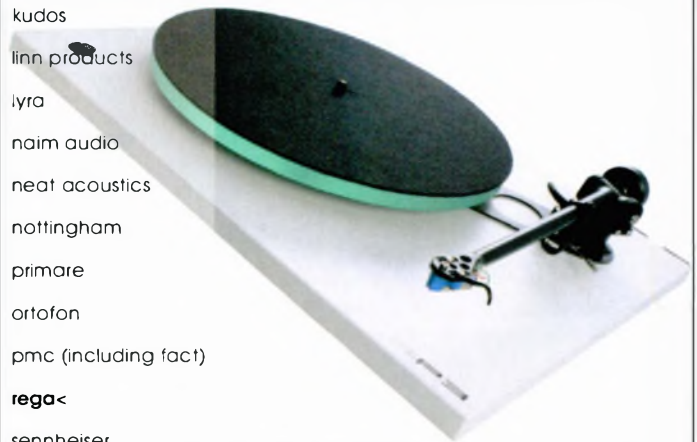
Please visit our website www.analogueseduction.net to browse or purchase products that are not easily available elsewhere.

New vinyl records now stocked

Tel: +44 (0)1733 344768

new toys for black stuff: rega RP3

- arcam
- dynavector
- epson
- focal
- grado
- isoblu
- hutter
- kudos
- linn products
- lyra
- naim audio
- neat acoustics
- nottingham
- primare
- ortofon
- pmc (including fact)
- rega**<
- sennheiser
- stax
- sumiko



signals

hi-fi for grown-ups

ipswich (01473) 655171
www.signals.uk.com



Outstanding music and video systems from a retail shop established for over 40 years.

Come and enjoy your favourite discs and a cup of coffee with our relaxed team.

Every brand we sell is chosen for its spectacular quality, performance and reliability.

O'Brien Hi-Fi

60 Durham Road - London - SW20 0TW
020 8946 1528 or shop@obrienhifi.com
Tuesday to Saturday from 9am until 6pm
www.obrienhifi.com



020 7226 5500
www.grahams.co.uk



“One of the five best hi-fi shops in the world”

ARENA Magazine

Grahams Hi-Fi
Canonbury Yard
190a New North Road
London N1 7BS

Is this your problem? Here's your answer



It's a common problem. The usable range on the volume control is all down at the bottom end and fine control at low listening levels is either difficult or impossible. The noise floor may be audible, too. There is a simple and effective solution - the **Rothwell In-Line Attenuators**. They can be used with pre/power or integrated amps to cure the problems of excess gain and bring sonic benefits with even the most expensive equipment.



“this accessory is heartily recommended”
Gramophone

£39/pair - post free

01204 366133 www.rothwellaudioproducts.co.uk

**REVOX
SERVICE**

**THE MANUFACTURERS'
APPOINTED SERVICE COMPANY**

**REVOX
SERVICE**

Correct Revox Spare Parts Pricing
24 Hour Estimation procedure
Manufacturer Upgrades and Advice
Delivery and Collection Service
Comprehensive Guarantees

Factory Trained Engineers
Rapid Response Turnaround
Full Revox range serviced
Written Technical Reports
Late Evening Opening

THE AR TECHNOLOGY LIMITED

TTL House, Sheeptick End, Near Lidlington, Bedfordshire, MK43 0SF
Telephone 01525 841999 Facsimile 01525 841009

- THE AUDIO BARN FROM ROCK SOLID SOUNDS -



VIVID AUDIO
ELECTROCOMPANET
AUDIO PHYSIC
BLADELIUS
AYON
CODA
MUSIC TOOLS
BOULDER

ASTINTREW
BLACK RHODIUM
BELLES
ORACLE
AURA
STELLO
HI FI RACKS
VITUS



Rock Solid Sound
Systems

The Old Barn, Rosier Business Park, Coneyhurst Road, Billingshurst
West Sussex, RH14 9DE. **tel. 01403 782221 or 07950 274224**
info@rocksolidsounds.co.uk - www.rocksolidsounds.co.uk

- Please telephone for an appointment -

**IAN HARRISON HIFI
SALE! UP TO 40% OFF!!**

TEL: 01283 702875 ian.harrison@mercian.myzen.co.uk

**SPECIALIST SUPPLIER OF
TURNTABLES, TONEARMS,
CARTRIDGES AND PHONO
STAGES**

INCLUDING: AMATEK, AUDIO TECHNICA,
BENZ MICRO, CARTRIDGE MAN,
CLEARAUDIO, DENON, GOLDRING, GRADO,
GRAHAM SLEE, HADCOCK, HEED, ICON,
KOETSU, LEHMANN AUDIO, MICHELL,
MOTH, ORTOFON, PRO-JEKT, REGA, SME,
SUMIKO, THORENS, TOM EVANS,
TRANSFIGURATION, TRICHORD, WHEST
AUDIO, ZYX,

SPECIAL OFFER!!

**SPEND £2,000 OR MORE
ON ANY TURNTABLE,
TONEARM OR TURNTABLE
AND ARM AND GET A
CARTRIDGE WORTH
£500 FREE!!**

PLEASE PHONE TO CONFIRM PRICE & AVAILABILITY PRIOR TO ORDERING. ALL GOODS ARE BRAND
NEW & BOXED WITH FULL UK GUARANTEES. NO EX-DEM OR EX-DISPLAY GOODS. NO GREY IMPORTS.
GOODS ARE NOT SUPPLIED ON APPROVAL. SORRY NO GENERAL CATALOGUES.
PLEASE PHONE OR WRITE FOR SPECIFIC REVIEWS, BROCHURES OR PRICES.

ESTABLISHED 1986.

MAIL ORDER ONLY FROM: IAN HARRISON, 7 MILL HILL, REPTON, DERBY, DE65 6GQ
TEL: 01283 702875 9am-9pm INCLUDING SUNDAYS.

Front End Problems?

contact:

The Cartridge Man

It doesn't have to cost an arm and leg to get the best
- listen to my Koetsu - and - Decca - eater.
Also agents for Croft, Moth, Hadcock & Mitchell & E.A.R. Graham Slee projects.
Valve equipment re-build service available.
- Plus cartridge re-tipping service

020 8688 6565

Website: www.thecartridgeman.com

Oranges & Lemons

www.orangesandlemons.info

Audio-Visual
Hi-Fi
Multi-Room

020 7924 2040

61-63 Webbs Road London SW11
shop@orangesandlemons.info



To advertise
call
**Sonia
Lawrence**
on
01689 869899



37 High Street, Aldridge
01922 457926

exposure
focal linn marantz michell
monitor audio okki nokki
onkyo optoma ortofon
project rel roksan trichord

Ample Parking Tue-Sat 10 - 5.30pm
www.soundcinergy.co.uk

VICKERS HI·FI



High Fidelity Specialists

Since 1967

8 Concorde Park, Clifton Moor, York. YO30 4WT. Tel: 01904-691600

Audiolab
Chord
Cyrus
Dali
Marantz
Michell
Monitor Audio
Mordaunt Short
Pathos
Pioneer
ProAc
ProJect
Q-Acoustics
Quad
Sonos
Sugden
TEAC
Wharfedale
& Many More...

- ▶ York HiFi Specialist for over 40 Years
- ▶ New Store with Free Customer Parking
- ▶ Qualified Staff - Independent Advice
- ▶ Quality HiFi Separates from £100 to £10,000
- ▶ Widest Choice in the Area - Most items from Stock
- ▶ Open 10:30am - 5:30pm Monday to Saturday
- ▶ Visit our Website or Call for latest offers & promotions

0%

Up To 36 Months
0% Finance
Available*

*Subject to status

www.Vickers-HiFi.co.uk

E-mail: VickersHiFi@Hotmail.com



MCRU
MAINS CABLES R US

www.mcru.co.uk

Tel: 07908 056978

MUCH MORE THAN JUST CABLES



THE MAINS CABLES R US & LONGDOG AUDIO
"HI-FI CHOICE" RECOMMENDED POWER SUPPLY FOR
THE ARCAM R-DAC

LDA

15 AUDIO

SE

Churchward Court, 15 Western Road,
Lewes BN7 1RL

☎ 08448 221115
🌐 www.15audio.co.uk

NOTTINGHAM HI-FI CENTRE

EM

120-122 Alfreton Road, Nottingham,
Nottinghamshire NG7 3NR

☎ 0115 9786919
🌐 www.nottinghamhifi.co.uk

AUDIO COUNSEL

NW

26 High Street, Cheadle, Cheshire
SK8 1AL

☎ 0161 491 6090
🌐 www.audio-counsel.co.uk

BADA

GRAHAMS HI-FI

GL

Canonbury Yard, 190a New North Road,
London N1

☎ 020 7226 5500
🌐 www.grahams.co.uk

STUDIO AV

WM

44 High Street, Eton, Berkshire,
SL4 6BL

☎ 01753 631000
🌐 www.studioav.co.uk

SYNERGY AV HI-FI

NW

12a West St, Congleton, Cheshire
CW12 3JB

☎ 01260 280017
🌐 www.synergyav.co.uk

INFIDELITY

GL

9 High Street, Hampton Wick
Surrey, KT1 4DA.

☎ 020 8943 3530
🌐 www.infidelity.co.uk

BADA

SOUND CINERGY

WM

37 High Street, Aldridge, Walsall, West
Midlands, WS9 8NL

☎ 01922 457 926
🌐 www.soundcinergy.co.uk

DOUG BRADY HIFI

NW

Kingsway North, Warrington,
Cheshire, WA1 3NU

☎ 01925 828009 (Mon-Sat 9am-5.30pm)
🌐 www.dougbradyhifi.com

AUDIOBOFFS

GL

338 Shenley Road, Borehamwood,
Herts WD 1TP

☎ 020 8177 4095
🌐 www.audioboffs.co.uk

VICKERS HIFI

NE

8 Concorde Park, Amy Johnson Way,
Clifton Moor, York YO30 4WT

☎ 01904 691600
🌐 www.vickers-hifi.co.uk

ACTON GATE AUDIO

W

4 Ruabon Rd, Wrexham,
Clwyd LL13 7PB

☎ 01978 364500
🌐 www.acton-gate-audio.co.uk

SONATA

GL

West Hampstead, London NW6
Appointment only

☎ 0330 111 5653
🌐 www.sonatahifi.com

ACOUSTICA

NW

17 Hoole Road, Chester, Cheshire
CH2 3NH

☎ 01244 344227
🌐 www.acoustica.co.uk

SE - South East,
GL - Greater London,
SW - South West,
E - East,
EM - East Midlands,
WM - West Midlands,
NE - North East,
NW - North West,
W - Wales.

TAVISTOCK AUDIO

SW

19 Market Street, Cornwall, PL19 0DE

☎ 01822 618940
🌐 www.tavistockaudio.co.uk

THE RIGHT NOTE

SW

56 High Street, Saltford, Bristol
BS31 3EJ

☎ 01225 874728
🌐 www.rightnote.co.uk

AUDIO IMAGES

E

128 London Road North, Lowestoft, Suffolk
NR32 1HB

☎ 01502 582853
🌐 www.audioimages-hifi.com

BASICALLY SOUND

E

Calveley Court, Southburgh Rd, Reymerston
Norfolk NR9 4QD

☎ 01362 820800
🌐 www.basicallysound.co.uk

HI-FI

To advertise in the dealer directory,
Please contact
Sonia Lawrence 01689 869 899
sonia.lawrence@myhobbystore.com



WE HEAR...

APPLE MAY BE ABOUT TO CHANGE ITS DOCKING CONNECTOR. Various media sources are reporting that the next generation of iPhone will have a new, smaller connector design using 19-pins, instead of the current 30-pin design. If true, then it's a controversial move, as it renders large parts of the current Apple 'ecosystem' obsolete – or at the very least requires the use of an adaptor, which most consumers will not want to use. All current iPod, iPhone and iPad accessories, speaker systems, docks, etc., could potentially become redundant for owners of the next generation of iDevices. Unsurprisingly, posters on various online forums have voiced their disapproval...

FANCY WINNING A £7,000 NAIM SYSTEM? Naim Audio has launched 'A Great British Naim' campaign to champion British manufacturing. There's a chance to win a £7,000 prize package comprising a SuperUniti all-in-one audio-player, a pair of Naim's Ovator S-400 loudspeakers and an iPad to control their SuperUniti, browse their music collection and build playlists through Naim's n-Stream app. To do this, people simply have to enter their details at www.naimaudio.com/a-great-british-naim.

NEWS COMES FROM CHORD ELECTRONICS of its new QBD76 HDSB DAC, which adds DSD coding over USB to one of the best digital convertors on the market. This now means that SACD's Direct Stream Digital coding is easily playable off computer hard drives; no longer do you need to buy expensive optical discs to experience its undoubted charms...

STOP PRESS: Naim to launch a £1,000 CD5si CD player and update its S-600 loudspeaker this autumn!

DESERT ISLAND DISCS

This month, **David Brook** from Mains Cables R Us chooses four of his favourite albums...



JENNIFER WARNES
THE WELL
Sound quality to die for, Jennifer has such a beautiful voice. *The Hunter* was an outstanding set, but this is even better; stand out track would be *Prairie Melancholy*.



HEAVEN 17
PENTHOUSE AND PAVEMENT
One of the best combinations of R&B/funk/electronic ever released. Featured in the book *1001 Albums You Must Hear Before You Die*, nuff said!



MICHAEL JACKSON
THRILLER
MJ's producers always used the best recording techniques, so sound quality is up there with the best. If you can sit still while *Thriller* is playing you must be dead!

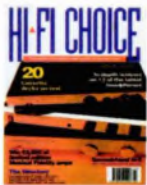


BOYZ II MEN
COOLEY HIGH HARMONY
There are so many outstanding songs on this CD I could listen to it for the rest of my life. Far underrated in the UK, which is a travesty.

THROUGH THE PAST, SMARTLY...



HI-FI CHOICE ISSUE 233
OCTOBER 2002
According to editor Tim Bowerm this early noughties issue hit the newsstands during a summer heatwave. Timely it seems, as there was certainly some sizzling hot hi-fi making its debut in this issue, including Naim's high-end hottie the £11,750 NAC 552 preamp with its revolutionary 'split-rail' power supplies. Jason Kennedy meanwhile, got very warm under the collar over a Marantz universal disc player at a more affordable price of £1,400. Things were similarly hotting up in the world of politics, with America getting heavy over Iraq, while here in the UK, the situation was in danger of heating up with a threatened firefighters strike!



HI-FI CHOICE ISSUE 111
OCTOBER 1992
Laserdisc players were the talk of the town twenty years ago. So much so that HFC's editor Andy Benham saw great potential for them in the world of hi-fi as well as movies. One advantage they had was the ability to play CDs, but whether the sound quality was comparable with the best hi-fi CD players was debatable. Cassette decks were still big business two decades back as a twenty-strong group test proved, with most receiving 'recommended badges'. Elsewhere in the world, the Catholic Church finally apologised for its persecution of 16th century philosopher/scientist Galileo, while in the UK, the coal mining industry saga raged on with the loss of 31,000 jobs.



HI-FI CHOICE ISSUE 63
OCTOBER 1988
State-of-the-art sound systems for Ferrari sports cars had everyone salivating with envy in HFC's lead feature; they cost between £3,500 and £3,880! Cassette decks were still 'the kit' on everyone's lips however, with another incredibly comprehensive group test of 30 tape-spooling delights! Choosing the right kind of headphone was also explored in detail, with top marks awarded to a slew of the head-hugging beauties from Aiwa to Sony. Mind you, the 'illegal' use of headphones to listen in on American intelligence prompted President Ronald Reagan to tear down the US embassy in Moscow, as the building was riddled with Soviet listening devices!

In this ephemeral world of YouTube and Twitter,

it's nice to hear about *Classic Album Sundays*. This project aims to get people back in touch with the pure and noble experience of simply listening to a fine piece of popular music from beginning to end.

The monthly London-based listening sessions have so far covered everything from The Beatles' *Abbey Road* to Kate Bush's *Hounds of Love*. Played on a high quality hi-fi system in friendly surroundings, it's perfect for taking in the vibe of the music...

Well, CAS have reached Edinburgh's Fringe festival! Pink Floyd's *Dark Side of the Moon* will be spun on Sunday, 19th August. For details, point your browser at <http://classicalbumsundays.com/category/events/>



BACKCHAT NEEDS YOU!
Got any hi-fi hearsay? Do your audiophile duty by emailing news@hifichoice.co.uk



audioemotion



www.audioemotion.co.uk

e info@audioemotion.co.uk

f facebook.com/audioemotion

t 01333 425 999

NEW
FOR
2012



AUDIANT DP 32-BIT DAC / PRE Only £1995

- ESS Technology's 32-bit Sabre¹² DAC
- Asynchronous 24-bit/192kHz USB input
- Fully balanced audio signal
- Two stages of jitter reduction
- Ultra-low distortion

AUDIANT 100P STEREO POWER AMP Only £1795

- High power MOSFET transistors
- Custom transformer and high-current power supply
- Triple filtered power supplies
- Audio-grade capacitors
- CNC machined aluminium monocoque

YOUR MUSIC

REINVENTED

SPECIAL OFFER

MINIMUM PART-EX

Up to £1000 on specific models.

Conditions apply, please ask for details.

£750
MIN
P/X



ELOQUENCE 150i INTEGRATED

Only £4595

"There is a sweetness, warmth, and sonic realism to this integrated amp. The 150i exudes class, has world class build quality, and more than enough power for any real world listening situation."

ANDRE MARC, AUDIO VIDEO REVOLUTION



PERREUX

EFFORTLESS, CAPTIVATING AMPLIFICATION

Immensely moving. Integrated amplifiers that include all the hallmarks of Perreux engineering design.

"I was taken aback by the Perreux's subtlety and finesse. It reminds me why MOSFETs have such devoted followers. Perreux throws down the gauntlet with the Eloquence 250i."

KEN KESSLER, HI-FI NEWS
AUG 2012 (P.52)

ELOQUENCE 250i INTEGRATED

Only £5897

£1000
MIN
P/X



Music is our **Passion**

SX

Series

Mission loudspeakers have always been known for their elegance and stunning performance, both in critical listening tests and for the Mission iconic style. Aiming for perfection in musical communication and in the design aesthetic, the new SX Series speakers achieve a level of sonic accuracy and realism that completely fulfills their Mission heritage.