

CD back-up for just £300

Radio bargain does FM proud





Electra S





When Focal wanted to follow the success of the Electra Be range with a speaker line with similar attributes but at a substantially lower price, the challenge seemed at first very difficult.

After all, the Be has proved to be the perfect speaker for many music lovers - and altering a classic recipe does not always guarantee savoury results.

In the end, the answer proved very simple. Change very little.

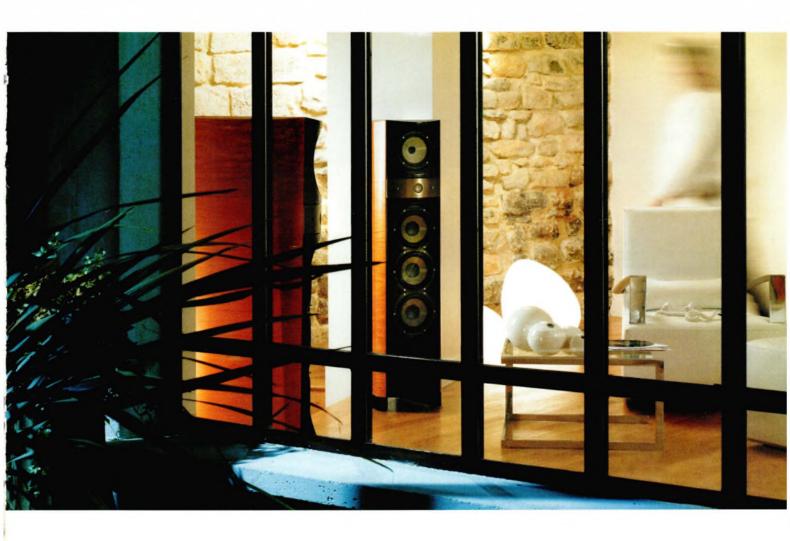
A new tweeter; an AL/Mg alloy unit in place of the exotic beryllium dome, and a simpler finish choice of Classic (left) or Macassar Ebony.

And that's about it - apart from the smaller price tag of course.

Simple.

Focal JMLab UK 0845 660 2680 info@focal-uk.com

Electra Be



Accept no compromise....

Electra 1037 Be

" A phenomenal balance of musical virtues".......

"Somewhere in the design process, someone wound the fun control round towards its end-stop"......

"The Focal Electra 1037Be offers superb measured performance.... That on-room response, one of the best I have encountered. Wow!"

"Transients were faster than sharp, approaching the ease, physicality and true speed that lets you know, even from down the block or round the corner, that you're hearing live music, not a recording".

Stereophile July 2007

Electra 1027 Be

- " A beautifully sweet and sparkling top end, suffused with the finest and most delicate detail".....
- "There's no shortage of deep bass weight or gravitas here"...

" It's a remarkable speaker for the money"...

Hi-Fi Choice Feb 2006 - Editor's choice award

Hi-Fi Choice July 2006 - Best buy

Hi-Fi Choice Sept 2006 – Component of the year < £5,000 HiFi Critic Dec 2006 – Speaker of choice < £6000



















"This is one of the most impressive hi-fi products I've heard this year"

KETAN BHARADIA, TECHNICAL EDITOR WHAT HI-FI? SOUND AND VISION, AWARDS 2007

THE ANTILA CD PLAYER WITH ITS UNIQUE MD² ACTIVE DIFFERENTIAL MULTI-DAC CONVERTER TECHNOLOGY PROVIDES BREATHTAKING REALISM AND A TACTILE PANORAMIC IMAGE.

LIPS ENSURES THE ULTIMATE SIMPLICITY IN USE AND FLEXIBILITY FOR THE FUTURE.

Only through hearing will you truly believe. To locate your nearest dealer call Leema Acoustics on 01938 811900 or log on to www.leema-acoustics.com



To locate your nearest dealer
Visit: www.leema-acoustics.com
Phone: +44 (0)1938 811900

Email: info@leema-acoustics.com

Welcome to the issue ..

HI-FI CHOICE JULY 2008 ISSUE 308

Future Publishing Ltd, 2 Balcombe Street, London NW1 6NW 2 +44 (0)20 7042 4000



Hi-Fi Choice has just got back from the Munich High End show and excitement in the office is still high. The sheer volume of new product on display was so invigorating, we almost don't know where to start! We were blown away by Naim's new HDX audiophilegrade 'hard-disk player' — with the audio quality, functionality and practicality it offers audiophiles,

it is destined to become one of the defining products of a generation.

Arcam surprised us, too, with a whole new range including three new stereo integrated amplifers and two new CD players, one of which also plays SACD. Munich's buoyant show provided the perfect backdrop for the launch, with enthusiam for stereo running high and the kind of roomy environment that a big new range deserves. See Malcolm Steward's show report on p26 for a full run-down on what's new in hi-fi.

You should have noticed our special Rough Trade promotion this month, too. We've teamed up with the cult record label to offer an exclusive deal for *HFC* readers: free membership to The Rough Trade Album Club (and a free CD) worth £12 when you join. Each month, members of The Album Club receive a new music CD, hand-picked by the experts at Rough Trade. Members also receive free listening notes, bonus material, member-only gigs and exclusive goodies, all from just £12 a month, and remember, *Hi-Fi Choice* readers will get their first month free!

If you'd like to spend more time enjoying music and less time finding it, Rough Trade's Music Club is just for you. And with a free CD and membership to start you off, it couldn't be a better time to join. We hope you enjoy everything that this month's *HFC* has to offer.

Dan

Dan George Editor

WHY WE'RE NO.1 FOR HI-FI...

- Since 1975, Hi-Fi Choice has delivered the world's most thorough, no-nonsense guide to buying high-performance hi-fi.
- We now publish 13 issues a year including a special edition, The Hi-Fi Awards – the most important annual awards in the hi-fi calendar. We also produce The Collection, a separate stand-alone special edition for the newsstand, dedicated to the finest hi-fi on the planet.
- Every issue contains a potent mix of the latest hi-fi news, views, music, interviews and in-depth tests, brought to you by a prestigious team of expert writers from the UK and around the world.
- We only review the most interesting and worthy new hi-fi components – high-performance audio products across a wide range of price points. We obtain more genuine hi-fi exclusives than any other magazine – if it's worthy of your attention, you'll read about it first in Hi-Fi Choice.
- Our tests are the most rigorous in the business, conducted by the UK's most experienced team of hi-fi reviewers.
- Alongside in-depth component reviews and accessory round-ups, every regular issue of Hi-Fi Choice features an Ultimate Group Test on a core hi-fi product category – from source components to amps and speakers.
- Each Ultimate Group Test is conducted using a uniquely thorough three-step test regime. This consists of carefully controlled 'blind' and sighted listening sessions, a full set of laboratory tests and extended 'hands on' testing by the primary reviewer. No other magazine goes to such lengths to ensure accurate comparative reviews.
- Components that best meet our exacting standards are listed in the Buyer's Bible section – the world's most reliable reference guide for the hi-fi buyer.
- That's why Hi-Fi Choice is...
 The Essential Guide To Audio Excellence In The Home

Beautiful in-house photography, so you see the product in all its glory

Cherry-picked kit – only the most worthy components make it into Hi-Fi Choice

Comprehensive in-depth reviews – we give you the full story





Annotated shots show you what's really going on inside

Interviews with designers give you extra background information

Carefully considered verdict scores, so you really know what we think of a product



THIS ISSUE'S EXPERT WRITERS AND REVIEWERS INCLUDE.



A former HFC editor, Paul has been writing about his beloved hi-fi hobby for nearly 30 years. In that time he has become one of the world's most respected scribes and probably the UK's foremost



With more than 40 years as an enthusiast under his belt, Immy is one of the country's best known hi-fi experts. His knowledge of system matching, hi-fi tweaking and record collecting is unmatched



Richard is a professional musician, recording engineer and a highly knowledgeable hi fi analyst to boot. He has a knack for writing about complicated subjects in a readable way – and he only



Former editor of Hi-Fi
Review magazine,
Malcolm was one of the
best known and most
outspoken reviewers of
the 1980s and 1990s.
He currently edits hi-fi
industry bible The
British Audio Journal



Alvin has been writing about his obsession for more than 20 years. In that time he has contributed his encyclopaedic knowledge to almost every hi-fi, periodical you can think of (and several more hessies).



Alan began his journalistic career in the early 1990s. Now a successful freelancer, you too can benefit from his extensive hi-fi knowledge, from purist two-channel stereo to the latest multichannel



Jason previously delted HFC, but can now be found in the wilds of Sussex indulging inmself with the very best hi-fi money can buy. His own system is simply sensational and his love of music knows



A highly experienced journalist, Dominic's sharp ears and retail experience are a valuable mix for HFC. Each month, Dom dispenses priceless second-hand buying advice that always





Contents

EWS AND FEATURES

ROUGH TRADE

Free membership to the The Music Club

PRODUCT NEWS

The juiciest new fruit from the hi-fi tree

16 HAPPENINGS

Hot stories from around Planet Hi-Fi

DISPATCHES

The hi-fi commentators with clout

25 COMPETITION

Win PMC GB1i speakers worth £1,275

26 SHOW REPORT

Munich's High End 2008

30 CHOICE CUTS

New music rated by our experts

32 UNDERSTANDING... HDMI

The interface format for the 21st century

36 CHOICE MAIL

A selection of your letters and emails

40 ASK ALAN

New! Your hi-fi questions answered

EQUIPMENT REVIEWS

IN-DEPTH PRODUCT TESTS

- Arcam FMJ A38 integrated amplifier
- Focal Chorus 816WSE floorstanding loudspeaker
- Ayon CD-1 CD player
- System Fidelity SA-300SE amplifier
- 57 Creek Evolution tuner
- Brennan JB7 music server system
- 61 IsoTek Sirius mains distribution block
- Mordaunt-Short Performance 6 loudspeaker

ROUND-UP

PORTABLE DIGITAL RECORDERS £160-£280

Edirol R-09HR 65 Tascam DR-1 Marantz PMD-620 65 Zoom H2

ULTIMATE GROUP TEST

PRE/ POWER AMPLIFIERS £2,000-£6,000

Arcam C31/P38 75 Chord CPA2500/SPM650 Cyrus DAC-XP/Mono X Audiolab 8000AP/8000X7 77 Bryston BP26/3B-SST Marantz SC-11S1/SM-11S1

BUYER'S BIBLE

Ultimate guide to high-performance hi-fi and AV equipment, gathering together all our favourite products for you Your shortlist starts here...

SOURCE COMPONENTS

92 CD players

98

DVD players

Vinyl Radio tuners

AMPLIFIERS

102 Stereo amps

104 AV amps

LOUDSPEAKERS

106 Stereo speakers

111 Subwoofers

ANCILLARIES

113 Headphones

114 Cables

115 Stands and supports

PRE-LOVED GEMS

Buy or sell your hi-fi in our special second-hand section...

128 FREE Readers classifieds

124 2nd-hand shootout - this issue. Valve amplifiers around £3,000

READER SERVICES

Our regular information service, including back issues, dealers guide, and the latest subscription offer

How to subscribe

Back issues

- 116 Dealer Guide
- 123 Dealer Directory
- 130 What's coming up in the August issue of Hi-Fi Choice on sale 26th June

exposure



New 3010S series:

Tighter bottom-end, livelier sound, more drive...same price

CD player £1200

- Brand-new "CD solution" custommade transport mechanism, servo units and control mechanisms
- Twin Burr-Brown PCM 1704 mono DACs and a discrete output stage
- Low jitter clock and a large toroidal transformer with separate windings for the transport mechanism and audio stages.

Integrated Amplifier £1000

- · Larger power supply
- 110 watts RMS (as compared to 100W for the previous model)
- 6 line inputs, bi-wiring and biamping compatible
- Option to fit a MC or MM phono cartridge
- · Remote control

Power Amplifier £800

- Larger power supply
- 110 watts RMS (as compared to 100W for the previous model)
- Capable of driving sophisticated speaker systems, in bi-amping mode or monoblock mode
- Clean and extended low frequency response

dinfile

HI-FI CHOICE PROMOTION

ROUGH TRADE



Hi-Fi Choice has teamed up with Rough Trade to bring you FREE membership to The Album Club

his month, Hi-Fi Choice has teamed up with our friends at Rough Trade to bring you exclusive free membership to The Album Club - Rough Trade's excellent new music club. Members of The Album Club receive a free CD each month containing the best new music, hand-selected by the experts at the award-winning shop and specially tailored to each member's taste. Along with exciting music, members also enjoy listening notes and exclusive goodies, such as rare bonus recordings and intimate member-only gigs.

Hi-Fi Choice readers can join The Music Club for free this month and also receive a free music CD. And here's the really good news: there's no miminum membership period! You can take monthly membership (from just £12 per month) and if you change your mind, you're free to cancel at any time. You can also buy a six- or twelve-month membership in advance, which makes for a great gift idea. Full details on how to take advantage of this superb free offer are printed on your Rough Trade album sleeve, bagged with this issue.

The first Rough Trade record store opened its doors in 1976 with the arrival of punk. Ever since, Rough Trade has become renowned for authoritative recommendations of the most exciting new music, maintaining a peerless reputation amongst artists, labels, media and of course, music lovers across the world. With two London stores, Rough Trade West (off Portobello Road) and the award-winning Rough Trade East (off Brick Lane), the latter of which is the largest music specialist store outside of the US, Rough Trade are widely regarded as the definitive music specialist retailer.

Rough Trade East only opened its doors last summer, but it has already established itself as the definitive music lover experience, attracting everyone from teenage punk students to 50-something businessmen. With its in-store Naim/PMC system and acoustically

AMERI

treated interior, Rough Trade East is an epicentre for music lovers to congregate, discover and generally hang-out



TERMS & CONDITIONS

1. This offer expires on July 4th 2008. 2. To register for your free month membership, a valid credit or debit card is required. 3. Your free membership expires 28 days after the dispatch of your free month delivery. 4. You can cancel your membership at any time 5. At the end of the free membership period you will automatically become a paying member unless you cancel your subscription 6. Terms and conditions apply Visit www.thealbumclub.com for further details.



MULTITASKER

TEAC's DR-H300 DAB.

DVD/DAB Receiver - HDMI output with upscaling to 1080i and a USB input for MP3.

This **little box of magic** is a real multi-tasker! HDMI interface delivers superb digital quality pictures to your TV with matching sound quality. It also delivers music from almost any source: CD, DVD, Hybrid CD or DiVX Disc, MP3 files on a USB memory stick plus crystal clear DAB radio. Another winner from TEAC, it's all you'll ever need to go beyond your audio **and** visual expectations.

Don't just take our word for it:



"...it sounds better than everything else. And we're not talking 'slightly' here: we're talking 'lots'." Sept 2007 ★★★★



"Involving, weighty and detailed sound with CDs and radio; comprehensive specification." May 2007 ★★★★★



"Unbeatable value for money. Quality."
Oct 2007 ★★★★





The leaders in digital music





NAIM HDX :::

High-tech high-end as Naim makes its first hard disk player

One of the most significant launches in Munich this year (see our Show Report on page 26) was the Naim HDX audiophile hard disk player. Having cut its digital teeth on the custom-install-based NaimNet server products, the HDX – which is expected to sell for £4,500 – brings the convenience of hard disk players to the regular hi-fi system.

Naim points out that the new HDX is not a server... it's a hard disk player, apparently. It has a built-in CD drawer that rips discs at bit-for-bit resolution (the CD drawer can also play CDs without ripping the discs, but does not include a CD-R burner). It also uses a 'secure' rip system, meaning the player will make at least two passes at every disc to eliminate all but the most tenacious errors. The bad news is, this means it takes longer to rip a CD than most hard disk products, the good news is that (unless the CD is brand new) it will likely sound better than the CD itself. The process will also rip most copy-protected CDs, Naim claims.

It comes with two built-in 400GB drives, one for the music, a second 'mirror' drive for back-up, and the HDX automatically copies the main drive to the mirror every night. This allows up to 600 discs to be stored at CD-quality, with the option of adding extra USB or NAS (network attached storage) devices. Naim has tested its database with up to 20,000 CDs without complaint.

The HDX is also compatible with high-quality downloaded music files, including non-DRM 24-bit/96kHz and 24-bit/88kHz files. The Naim

record label will also make the majority of its catalogue available in hi-res audio starting later this year. It can also be connected to a network, play music from shared drives on a network, look up album data and even obtain cover art, through the AMG database. Unlike Gracenote or CDDB, AMG supports very rich metadata, allowing searching by composer, conductor and more, as well as album and artist.

The HDX also supports the Naim Extended Music Database, designed for handling a large music collection. The player can also develop a similar metadata database with MP3 players through its front USB connector and CDs through the CD drawer, without transferring the music files; when the MP3 player is disconnected or the CD is taken out of the drawer. The player also depopulates its file structure, removing any records of the music played, thereby keeping within even the most draconian copyright laws.

Like most Naim products, the HDX features a large toroidal transformer in its internal power supply and is upgradeable, by using either the XPS or PS555 power supplies. Unlike most Naim hi-fi products, the HDX has a touchscreen front panel, which can be further enhanced by Naim's Desktop Client software, allowing PC users to dig deep into the HDX's menu structure and build playlists based on anything from a favourite drummer to the record producer of choice.



Pick the room. Pick the mood. Play the music.



Enjoy music in every room of your home. Wirelessly.

Before Sonos, if you wanted music in every room of your home you had to break through walls to hard-wire the house. With Sonos, you can play music throughout your home wirelessly, in as many different rooms as you like, controlling it all from the palm of your hand. No wonder Stuff.tv

calls Sonos "a delight to use."

Sonos is easy to install and even easier to enjoy.

Easy, intuitive setup makes Sonos ready to enjoy right out of the box. With a full-colour Sonos wireless controller

in hand, everyone in your family can have their music wherever and whenever they want.



Go far beyond your current music collection.

With Sonos, you have instant access to your personal music collection, and to all the music on Napster and select Internet radio stations.



Order Sonos today and enjoy a free 30-day trial of Napster.

Visit www.Sonos.com/demo10 for a demo. Then try Sonos at home to see why T3 describes it "as close to the perfect multi-room audio system as you can get."

> To see a demo, find a store or order, visit www.Sonos.com/demo10.



All the music you want. All over your house.

204-2008 by Sonos, Inc. All rights reserved. Sonos is a registered trademark of Sonos, Inc. in the United Stat Canada and Australia, and a trademark of Sonos, Inc. in other countries. All other products and services may trademarks or servicemarks of their respective owners. Courtes used by permission, Suttl. vt 1/107, 13.7K.



ARCAM FMJ RANGE

Arcam launches a barrage of new FMJ hi-fi products

Following the launch of the FMJ A38 integrated amplifier announced last month (see our exclusive review on p44), Arcam has announced four additional products from its FMJ range. The FMJ A28 is a 75-watt integrated that looks like a scaled-down A38. It too features an ultra-wide bandwidth amplifier and studio-grade powered volume control, as well as Arcam's interestingly named EMI damping technique and freedom from tone controls. It lacks the hermetically-sealed relays of its bigger brother and the phono stage is now an integrated MM-only version. It also shaves a lot from the price, with the A28 costing just £750.

This will soon be joined by the cheapest product yet in the Arcam FMJ range – the £450 A18 integrated amplifier. Information is not fully available on this product at the time the magazine went to press, but the A18 appears to be a 50 watt per channel stereo design.

The new £1,000 Arcam FMJ CD37 CD/SACD player is Arcam's new flagship music player. Building upon the technology developed in making its top DVD players, Arcam claim it to be the best in digital audio. The player replaces both the DiVA CD192 and the FMJ CD36.

The FMJ CD37 uses the latest Wolfson 8741 digital converters, which allow both high-quality CD conversion and native DSD conversion for SACD. This converter is coupled with top Burr Brown OPA2134 op-amps

and WIMA polypropylene capacitors in the output stage. If you add a dual toroidal transformer with high capacity, separate, star-earthed power supplies for analogue, digital and drive stages and a special switch-mode stage locked to the sample rate for the digital domain, then the electronics witin the CD37 look to be very state-of-the-art.

This is matched by the electromagnetic interference busting techniques used throughout the design. Reducing EMI is a watchword at Arcam, and the CD37 sports the proprietary 'Mask of Silence' and 'Stealth Mat' (a unique metal fibre matting) technologies. A new innovation for the CD37, is that the chassis itself features a damped 'Sound Dead Steel' construction, which is claimed to virtually eliminate mechanical influences on the electronics.

Word has also reached *HFC* Towers about a £500 FMJ CD17. This is a CD-only device, to replace the DiVA CD73, but – like the A18 – detailed information regarding this product is unavailable at this time.

These products mark Arcam "going back to its roots", according to brand manager Geoff Meads. The changes to the lines make the DiVA range concentrate on multichannel and home cinema market, while FMJ becomes a line for the dedicated audio enthusiast.

Price from £450 (A18) to £1,000 (CD37) **Due** now **2** 01223 203200 **3** www.arcam.co.uk



audiofile

NEWS

AMPHION XENON

The Xenon is the new flagship floorstander from Finnish loudspeaker experts Amphion. The company is already well-known for its elegant loudspeaker cabinets and this new top-of-the-range model is no exception.

It uses a unique 'hypercardioid' cabinet, which gives the loudspeaker a diffusion pattern favoured by many of the best microphones around. Used in loudspeaker technology however, a hypercardioid design allows the cabinet to be ported (for deeper bass response) and yet



work well in boundary (close to the rear/side wall) placement. This arrangement also makes the Amphion Xenon uniquely elegant; "the most beautiful loudspeaker in the Amphion range" is the bold claim.

The company has also developed its BAS, or Bass Adjustment System, to deliver perfect bass response irrespective of room dimensions or speaker placement. A simple rocker switch at the rear of the Amphion Xenon cabinet allows users to tailor the bass output to the environment. This three-way ported speaker is based around a trio of aluminium drive units; a 25mm tweeter, a 170mm mid/bass driver and a 215mm bass unit. Sensitivity is rated at 87dB and the 30kg speaker is said to extend down to 28Hz and up to 20kHz. The company claims the total bass output range offered by its Bass Adjustment System is around 3dB.

Price from £2,599 per pair Due now ≥ 01623 517000 @ www.amphion.fi

YAMAHA NEW RANGE

All-round music expert Yamaha has long been associated with home cinema, but last year saw the company's welcome return to two channel and the trend looks set to continue, thanks to a quartet of new stereo products. There are two CD/SACD players in the new line-up; the flagship £1,000 CD-S2000 features a fully-balanced signal transmission and fully independent power supplies for the digital and analogue stages. The £800 CD-S1000 is a more simple design, with single-ended outputs in place of balanced connection and a four-tap power supply from the same single transformer. Both players feature a heavyweight symmetrical internal architecture, all wrapped up in a distinctive silver-fronted, wooden-cheeked timeless decor.

The cool wooden and silver finish extends to the two amplifiers, too. This time, both the £1,500 A·S2000 and £900 A·S1000 integrated designs feature a fully floating balanced 90-watt power amplifier section and – in the A·S2000 – a matching fully balanced preamplifier stage (the A·S1000 does not accept balanced audio inputs). Both amplifiers also sport volume and tone controls in parallel to effectively by-pass these devices when not in use. The A·S2000 takes this a stage further by making this triple paralleled. The top amp also features a true MC step-up transformer for LP replay.



MARTINLOGAN SPIRE

MartinLogan's new Spire loudspeaker follows the hybrid line most recently popularised by the Source and Purity loudspeakers. This is a more high-end product, with deep, danceable bass and trade names to match. Featuring a 'CLS' (curvilinear line source) 'XStat' electrostatic panel, mounted in the rigid, extruded aluminium 'AirFrame' chassis, the tall, slim stator panel handles the treble and midrange. 'PoweredForce' backs this up; a 250mm aluminium bass driver coupled with a 200-watt amplifier to deliver bass down to a claimed 29Hz. This unit acts as the



literal and figurative base for the panels and takes up approximately the same space as a case of wine per channel. The 'Vojtko' crossover, derived from the Summit loudspeaker, includes a parametric EQ knob (centred around 35Hz) to optimise the interaction between loudspeaker and room. The cabinet part of the panel speaker is offered in a range of wood finishes as standard, in addition to special 'Custom Shop' options.

Price £7,300 per pair Due now № 020 8971 3909 • www.martinlogan.com

ADVANCE ACOUSTIC MPP-206 AND MAA-406

French hi-fi firm Advance Acoustic specialises in products designed to deliver good sound at very reasonable prices. The new MPP-206 preamp and matching MAA-406 stereo power amp show no signs of breaking with tradition. These two Advance Acoustic amps are designed to work as a team at a price normally associated with integrated amps. The preamp includes balanced and single-ended outputs, a switchable MM/MC phono input, dedicated subwoofer output (complete with switchable crossover and high/low pass filter) as a 12V trigger for multi-room systems. The matching power amplifier also sports a 12V trigger and both balanced and single-ended inputs. It's rated at a hefty 220 watts per channel, delivering the goods across a claimed frequency response of 10Hz-50kHz.



SONUS FABER TOY

Possibly the best named and the kinkiest product in audio is the new Toy loudspeaker from Sonus Faber, a small two-way design, with the usual swept back elegant lines we have come to expect from the Italian speaker maestro. However, where the rest of the Sonus Faber range has wooden side cheeks, this one's finished entirely in leather. The company has decided this particular leather Toy is geared for adult pleasures; it uses the same 25mm Vifa tweeter



ring radiator found in products like the Cremona Centa M and, as yet an undisclosed, cellulose cone mid/bass speaker. Considerably smaller than other standmounts in the Sonus Faber range, the Toy is designed to accompany anything from computer audio, to iPods to bedroom hi-fi.

Price £800 per pair Due summer 2020 8971 3909 ⊕ www.sonusfaber.com

TOTEM ACOUSTICS

THE ONE

Totem Acoustics is one of the most steadfast companies in hi-fi. In its 20 years, there have been only a handful of changes and new product launches.



The acme of this consistency is the Model One loudspeaker and, when it came to celebrate this model, Totem wisely decided to release a limited edition model called, simply 'The One'. Building upon the strengths of the Model One, the limited edition model features bi-wired WBT Platinum binding posts, improved internal bracing and upgrades to key components within the crossover to facilitate bi-wiring. The result is claimed to improve the midrange and make the high frequencies smoother. Although, according to the manufacturer, the speakers do require a 150-200 hour break-in.

The standard Model One loudspeaker remains unchanged... of course.

Price £2,299 per pair Due now

LINN MAJIK LP12

Linn Products evergreen Sondek LP12 turntable just turned 35. To celebrate, Linn has released an 'entry-level' version, called the 'Majik' in line with the company's similarly named electronics range. The Majik LP12 is a basic version of the popular deck, retaining the standard LP12 turntable, with a simple new internal power supply (33rpm only), a solid baseboard, Linn Adikt moving magnet cartridge and a Pro-Ject 9cc carbon tonearm. Naturally, the Majik LP12 is fully compatible with other Linn improvements to the Sondek and it's possible to upgrade the Majik to a full Sondek LP12 'SE' specification, by adding a Keel sub-chassis, Ekos SE arm, Lingo power supply, Trampolin baseboard and an Akiva MC cartridge... for an extra £8,000. **Price** £1,995 **Due** now **☎** 0141 307 7777

Price £1,995 **Due** now **☎** 0141 307 7777 **※** www.linn.co.uk



LINN SNEAKY MUSIC DS

As well as revitalising the grand ol' turntable, Linn's latest system is so new, it dispenses with having a disc at all. The new Sneaky Music DS (short for 'digital stream') follows the flagship Klimax DS and Akurate DS to provide music streamed from network storage devices. This allows users to rip their own discs and play that music alongside downloads at anything from MP3 to SACD quality. The new Sneaky Music DS combines network player with amplifier system and is fully UPnP AV 2.0 compliant; meaning all you have to do is hook the box to speakers at one end, to your Ethernet connection at the other and you are away. The Sneaky Music DS also includes a CD-ROM to turn a tablet PC into a Linn touchscreen remote control and supports all common music files, including FLAC and WAV.

Price F995 Due now @ 0141 307 7777 @ www.linn.co.uk



Soundbites

CLEARER AUDIO's new entry-level Silver Sky speaker cable combines a high-purity oxygenfree copper solid-core central structure with a multi-strand silver-plated, copper concentric conductor outer layout. With polyethylene insulation and a PVC outer layer, this is a high-end cable design for just £5 per metre.

☑ 01702 543981

DUALIT – best known for toasters – has popped up with a second DAB radio, styled in the company's distinctive pro-kitchen appeal. The new £85 DAB Light is a mono DAB/FM design with 20 presets, a clock and a kitchen timer. It runs off batteries or the mains and comes in four finishes to match your Dualit gear... but it won't warm your muffins.

KEF's egg-cellent KHF2005 5.1 channel speaker system has had a facelift. The £700 speaker package now comes in a high-gloss black optional finish and now include an improved multidirectional desktop mount. The biggest change is to the subwoofer; the new Kube-2 features a 250mm bass driver and 250-watt amplifier, sports a bass boost button and will be available separately.

INTEMPO has announced a Radio Centre Player digital radio portal. The Radeo-powered site is claimed to give the user immediate access to more than 10 access to the stations.

than 10,000 radio stations and has been designed to be both easy to navigate and highly user-customisable. www.intempodigital.com

☎ 01622 672261



dock, a pair of phono connectors a USB port and a front volume control. The remote can also drive second systems and there's even a subwoofer output.



PANASONIC has launched its first 'profile 2.0'
Blu-ray player, the DMP-BD50E. The new
player can support bitstream digital output
of HD audio sources, as well as BD-Live
downloads from the internet. The flagship
supports DVD-Video, as well as CD/CD-R/
RW and DiVX files. It can even play photos
from its SDHD card slot. The price for this
multimedia portal is
expected to be
around £500.

© 0844 844 3852

audiofile ...

HAPPENINGS

➢ Hi-Fi Diary

JUNE

24-26 CEDIA Expo 2008
ExCel London
www.cedia-expo.com
(trade only)

AUGUST

29-03 September
Internationale Funkaustellung
Messe, Berlin
www.ifa-berlin.com

SEPTEMBER

3-7 CEDIA Expo 2008
Colorado Convention Centre,
Denver CO, USA
www.cedia.net/expo
(trade only)

18-21 Top Audio Video Show Atahotel Quark, Milan, Italy www.topaudio.it

19-21 London Sound & Vision Show Park Inn, Heathrow www.chestergroup.org

24-27 Hi-Fi Show 2008 Hotel Holiday Inn, São Paulo, Brazil www.clubedoaudio.com.br

OCTOBER

3-5 High End 2008 Show
Iris Congress Hotel, Moscow, Russia
www.hifishow.ru

10-12 Rocky Mountain Audio Fest
Marriott Denver/Hyatt Regency Tech
Center, Denver CO, USA
www.audiofest.net

31-02 Stuff Live/What Hi-Fi Show ExCeL London www.bestofstuff.co.uk

NOVEMBER

20-02 DreamHouse Sound & Vision Show KyivExpoPlaza, Kiev, Ukraine www.dreamhouse.ua

The ultimate transport?

Audio Physic, the German speaker specialist, took an unusual source component to the Munich High End Show – a solid-state drive produced by a company called Individua, with 32GB of storage on it and

a built-in transport to add digital music to the flash drive. This is the first instance where SSD flash memory has been used as a digital source by a hi-fi company and initial results appear extremely impressive. Audio Physic's Manfred Diestertich said that it is the best-sounding digital source he has heard, "all the CD transports we tried had some degree of character, but this is totally neutral". He also said that it seems to be highly resistant to vibration and much less fussy about support than CD transports, presumably because there are no moving parts.

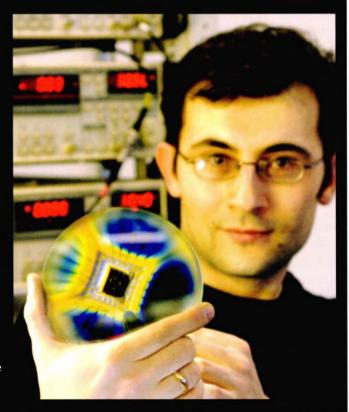


Metal daisy

DAISy is a French company that sells Philips CD transports to the hi-fi manufacturers of the world, which means it works with nearly all those brands that count to the hi-fi connoisseur. Its most popular product is the CD Pro 2 which is functionally very sound, but its plastic drawer/loader lets down the feel of many a great CD player. In response, DAISy has produced a metal loader version of the Pro 2 which has a slimline drawer tray that looks and feels significantly more attractive and substantial than the usual plastic loader. Dubbed the GyrFalcon Full Metal Loader, it can be used as a CD and SACD drive and will start appearing in finished players early next year.

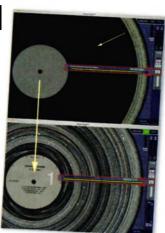
Nanotransistor

Soffins at Manchester University have been working on the world's smallest transistor, one that is no bigger than a molecule. A team which includes Dr Ponomarenko (pictured) has managed to make a transistor that's just 10 atoms across, which makes it the first true nanocomponent. This has been achieved by working with graphene, the world's thinnest material made of a single layer of carbon atoms. Graphene is unusual because it behaves as if electrical current is not carried by electrons, but by massless charged particles. In practice, this breakthrough could significantly increase the speed of computers, but how long it will be before it increases the speed of your amplifier remains to be seen



Computer vinyl

Pure vinyl 2.2 is a software package designed for the transcription of vinyl records onto PCs and Macs. It allows real-time monitoring and records at 24-bit/192kHz and 16-bit/44.1kHz (for CD) simultaneously. The user interface includes a "realistic-looking and spinning replica of the vinyl recording" (see picture) that is designed to assist in the editing process and provides a tonearm-style cueing controller. It also applies RIAA equalisation that is claimed to overcome the shortcomings of traditional analogue phono stages. Other features include peak detection, normalization and pop and click removal. Its makers claim that it has been "painstakingly designed to preserve warmth, clarity and dynamics"



High-res history

Historical classical music specialist Pristine Classical is offering high-resolution downloads of its catalogue. 16- and 24-bit FLAC files can be downloaded and burned onto DVD using Audio DVD Creator, a low cost application for PCs that

upsamples the sampling rate to 96kHz. The site's catalogue includes transcriptions of recordings only available on 78 rpm records by Andrew Rose who uses a remastering system called XR. This is said to use "selective predictive equalisation to lift previously unheard harmonic frequencies from within the grooves of the original recordings"



Monster pod

Scientists at Glasgow University have made a breakthrough in nanotechnology that could mean a 150,000 times increase in the capacity of an iPod. Nanotech researchers Lee Cronin (pictured) and Malcolm Kadodwala have developed a molecule-sized switch that "would see 500,000GB squeezed onto one square inch (the current limit for the space is around 3.3GB)". In practice, it means that you could store all the music and video you might ever want to hear or see on a pocket size device. Professor Cronin said "What we have done is find a way to potentially increase the data storage capabilities in a radical way... This is unprecedented and provides a route to produce new a molecule-based switch that can be easily manipulated

using an electric field."



The Insider

JAMES LUCE Job Title: Brand Manager Company: Acoustic-Energy



What is the future of hi-fi in the home?

Wireless streaming of music is the future. The next generation of wireless protocols offer much better quality of service and that makes lossless, high-fidelity, high-bitrate streaming a real possibility. In the mass market, at least, this will probably be via multi-purpose PC's rather than dedicated 'Media Servers', as people will always want more simplicity and less boxes. This sort of low-clutter 'hub' device, with content streamed wirelessly to any room in the house, has huge appeal in the modern home.

Can 'Generation iPod' be turned on to hi-fi?

Absolutely yes, and we have to adapt rather than resist. There will be people who still want a decent sound at home, regardless of its source and high-bitrate and lossless recordings don't sound as bad as some of the experts would have us believe. In terms of getting more people turned on to listening to more music, the iPod has been the biggest driver our industry has seen since the Beatles. As Sir Paul would put it; 'It's getting better all the time.

Are active speakers the future?

With better wireless streaming technology and the constant demand for less clutter in the home, I'd imagine streaming direct to active speakers will be the norm for the middle market hi-fi buyer within a few years. Active speakers make less economic sense at the budget end and aficionados will still want dedicated components, so 'active' is not for every market.

Do valve amps have a future?

I'd imagine this has been asked since the introduction of solid-state in the 1960s! Valves will always have fans, for both their sonic signature and nostalgic appeal, so glow-in-the-dark hi-fi will be with us for a while vet.

What's your all-time favourite record?
The Black Crowes' Southern Harmony and Musical Companion. Not a exactly

what you would call a hi-fi reference recording, but damn great rock and roll music.



all offe.

DISPATCHES





Off the back of a lorry

Beware of White Van Man

ay £20 for a Rolex on a Mediterranean beach and you know you're getting a fake. Likewise, a Louis Vuitton bag at a market stall for a tenner is a dead cert copy. The truth is, so long as we're in the know, we don't mind fakes. In fact, if unofficial studies are to be believed, we positively love them!

Fortunately, hi-fi hasn't suffered too much from the forgers' eye. I suppose packing a bag full of Mark Levinson power amps would be impractical for a quick get away. A line of Linn LP12's under a heavy overcoat would be rather unwieldy, too. Yet, just because fake hi-fi is rare, doesn't mean that it's unknown. Speakers are easy to copy and I've seen some fairly believable Musical Fidelity and Ruark knockoffs in my time. I say, "fairly believable" as it only takes a detailed inspection and a quick listen to realise that these aren't the real thing.

Once again, it's the advent of the internet that has exacerbated the problem. Let's get

"...because fake hi-fi is rare, doesn't mean that it's unknown and I've seen some fairly believable Musical Fidelity and Ruark knock-offs in my time. ."

this in proportion. There is no widespread fake Quad or Naim swindle out there. Although, for some reason, one of the favourite copies of late has been Sennheiser ear-phones. The CX300s, in particular, have always been a popular upgrade on standard MP3 player 'phones, and usually cost between £20-£30. With a myriad of fakes selling for between £10 and £15, on respectable retailer sites, you can see why this has become one of the greatest audio scams of the decade. Sadly, by the time you realise your 'phones are no better than the original 'throw-aways', it's either too late or, as in most cases, we're simply too embarrassed or too lazy to do anything about it.

Costing rather more than a tenner are the infamous "white van speakers". This scam is now so well known, that even Wikipedia has a full entry on the subject. Although most prevalent in the 1990s, the last year has seen a resurgence with the fake brands now being able to offer a suitable fake website to match. As ever, the scammers literally sell unbranded speakers from the back of a van under the pretence that they're a cancelled order. Around £250 usually passes hands, for which the unsuspecting punter gets a very cheap design worth about £50-£75 and, sometimes,

potentially dangerous to your matching amplifier. The upshot is, if something appears to be too good to be true, then it probably is. Buyer beware.

Dominic Todd began his hi-fi career in the retail business and has been a freelance hi-fi reviewer and columnist since 1993



Let the centre hold

Turntable technology revisited

hile talking to max Townshend about the Rock V turntable that I reviewed and, frankly, fell in love with last month, he reminded me about a turntable that Nakamichi had made in the 1980s. Nakamichi made its name with cassette decks, but in the era before CD became the dominant format, the company also built a turntable called the Dragon-CT. The suffix stood for 'centre tracking', because this turntable was designed to overcome the problems associated with eccentricities between the groove in the vinyl and the centre hole. As the majority of vinyl records suffer from this problem to this day, this is still one of the reasons why the format sounds the way it does.

Eccentricities of this sort cause the stylus to be deflected from side to side in the groove as the disc rotates which means that phase and separation vary, as does distortion. Strangely, it's probably where a good deal of the 'air' or spaciousness of vinyl comes from and one of the reasons why vinyl nuts like yours truly like it so much! It is nonetheless a source of distortion and one which the Dragon-CT counteracted by the clever application of analogue electronics. The turntable had a separate arm-like wand which would measure the degree of eccentricity in each record and then motors within the turntable would move the platter relative to the centre pin so that the groove became concentric to "within 20 microns", so says the spiel.

According to Max, who heard the turntable at the home of an American reviewer, this has a dramatic effect on the sound, because it removes any wow or speed variation and offers complete pitch stability.

Inevitably, Max would like to do something similar with his turntable, but the engineering involved is likely to keep the project on the back burner for sometime yet. He is, however, working on a system for moving the pivot point of his tonearm as it transcribes the record, so that the stylus traces the disc in a straight line like a parallel tracker.

The trough on the Rock turntable does a similar thing, it addresses the resonance that is an unavoidable product of putting a compliant (sprung) stylus at the end of a tube. In many ways, it's a pity that not more turntable makers have licensed the trough. If they did, more of us would have the sort of resolution available from this remarkably innovative technology.

What I want, however, is a Dragon-CT with a trough. Now that would be something!

over 15 years ago, eventually rising to the position of Editor. He's currently indulging in his passion as a freelance hi-fi writer



HI-FI REVISITED

NAIM NAP 250

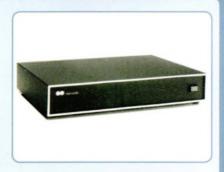
over the years, but few products define 'evergreen' as perfectly as the Naim Audio NAP 250 stereo power amplifier. The NAP 250 has been in continuous production from 1975, and rumour has it that some of those earliest amps have been used continually for 33 years without complaint.

It's had the odd nip and tuck

Naim's long-lived mainstay was a development of the previous NAP 200, which was primarily designed for professional use as a slave power amplifier in studios. The NAP 250 delivered superior reservoir capacitance and a large toroidal transformer, setting a standard for Naim amplification in the process. The NAP 250 was a key element in defining that distinctive Naim 'Pace, Rhythm and Timing' (PRaT) sound, which remains popular to this day.

Naim has never made a big issue of specifications, preferring to take the classic Rolls-Royce line of calling a product 'sufficient'. There is good reason for this; the amplifier's basic ratings - 70 watts per channel into eight ohms, 125 watts into four and 10 amp current delivery - don't really sum up the NAP 250's performance. These are 'continuous' ratings, and Naim really does mean 'continuous' - you can regularly drive a Naim NAP 250 at full tilt for hours on end without fuss. Much of this reliability comes down to Naim's enviable reputation for build quality, bettered by none and matched only by hi-fi legends like Quad and SME. It's that unburstable nature, together with the exciting, up-beat sound, that made the Naim NAP 250 popular with studios, broadcasters and domestic users alike.

The amplifier has gone through comparatively few changes in its long life. In 1980, the case was redesigned, so that the amplifier sat in chassis with integrated front and back plates that slotted into a thicker alloy 'chrome bumper' case. At the same time, the gain was slightly increased. Custom-made



"Much of this reliability comes down to Naim's enviable reputation for build quality..."

transistors were introduced in 1982 and a still larger 500VA transformer (taken from the NAP 135 monoblocks) was dropped in during 1984. Five years later, the case was changed again, this time with a black-edged case and an illuminated green-glowing logo. So few product revisions in the NAP 250's first 27 years suggest Naim got things right from the outset.

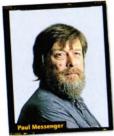
2002 saw the biggest change to the NAP 250 in its entire history, with a new circuit, improved earthing, a 1,020VA transformer, the output transistors from the NAP 500 and a new cast and extruded aluminium case with new resonance-controlling feet. This meant the NAP 250 is even more stable than its predecessor (it can now drive two-ohm loudspeakers) and now delivers 80 watts per channel. It also doesn't demand use of Naim's NAC A5 (or similar) speaker cable anymore, although the amplifier does still seem to sound best through relatively humble speaker wires.

The Naim NAP 250's star may have dimmed (the NAP 500 is the big daddy of the Naim line-up and the NAP 200 is the more prevalent product today), but it shows no signs of being extinguished; Naim fans would riot. HFC

Alan Sircom







Future Tense

The sound of things to come!

ust ten days after visiting a small specialist high end stereo hi-fi show at Heathrow, I headed for Cambridge to attend this year's Conference organised by the UK branch of the AES (Audio Engineering Society). Both are important elements in the overall audio scene, but the contrast couldn't have been greater. Heathrow was full of vinyl, valve amps and horn speakers; Cambridge was all about our digital futures.

Common ground might have been notably absent, so I'll put away any Luddite sympathies and take a peek at what the technological future might hold. The Conference combined the presentation of technical papers with several very impressive demonstrations,

"Although many of us might still like the idea of storing our music on physical discs, all the signs point towards a downloading future."

showing just how far, fast and effectively digital signal manipulation was progressing

Industry consultant John Bird, examined the overall patterns of change operating across the global audio scene and it was no surprise to find that traditional home audio has been losing ground to more recent developments. DVD players have encouraged AV convergence; portable/personal audio has grown dramatically via iPods, MP3 players and mobile phones, as well as the whole business of internet PC downloading and streaming.

Following the failure of the SACD and DVD-Audio, one discussion topic was whether high resolution (hi-res) audio discs would become available via options built into the newer Blu-ray format, or whether hi-res downloading is high quality audio's more likely future.

Although many of us might still like the idea of storing our music on physical discs, since internet access speeds are bound to rise, all the signs point towards a downloading future – even for hi-res music (and TV and movies).

From an audiophile perspective, Blu-ray seems to be hamstrung by highly-priced entry level hardware and software, as well as the political difficulties of dealing with various licensors.

To state that the hi-fi business has been hijacked by the computer people might sound contentious, but it's not far from the truth, and they're in the process of taking over the music and movie businesses too. The logic is, that once everything is converted to digits, those who control the digits also control the agenda, while the internet is the pipe that delivers not only media of all kinds, but also the updatable software that makes everything run.

Two brief dems by Nick Sharwood-Smith (of consultants Wave Science Technology) were telling, even via a relative crude PA system. A rather poor radio broadcast clearly sounded even worse via the internet. But then a short musical extract actually sounded better, probably because it was a hi-res snippet downloaded from the Linn website.

Britain's leading speaker designer Laurie Fincham, demonstrated how a line array speaker could be created using multiple drivers and slots, and then the resulting beam of sound could be steered and focused everywhichway using multiple amps and carefully calculated delays.

The most intriquing demo of all was a 'Virtual Surround' SVS processor from a Californian company called Smyth Research. This uses a binaural headphone approach to create an astonishingly effective illusion of any specific surround sound speaker system operating in any specific environment. First stage is to calibrate the SVS processor to one's own particular ears/head, the headphones used, and the sound system operating in the room, with the listener ideally seated. The magic is the uncanny precision with which the headphones then replicate the complete surround sound-in-the-room experience with extraordinary accuracy - as direct A/B comparison between speaker system and headphones was able to show. The icing on the cake is a proprietary head-tracking feature, which monitors any head movements so that the soundstage image always remains stable and locked to the speaker/room acoustic soundstage even when you move your head!

The implications are considerable, for domestic home cinema listening and professional surround sound mix monitoring alike, and Smyth has produced versions for both. For the movie sound engineer, it allows work that was started on a large dubbing stage to be continued in a smaller workstation rooms. For consumers it means that more than one listener can enjoy the listening 'sweet spot' with perfect surround imaging, and no need to disturb the rest of the household.

Perhaps the most obvious limitation is that headphone listening lacks visceral 'body feel' effects, though Smyth is working on techniques to counter this. We might talk of 'smoke and mirrors', but believe me this is the real thing and it's based on some very clever science.

By the end I had to admit my well loved two-channel home hi-fi might belong to an earlier age, even though it continues to provide plenty of pleasure. But all manner of clever digital techniques will ensure a fascinating future for audio engineering.

> Real Messenger is a former editor of Hi-Fi Choice and has been writing about his favourite hobby for nearly 30 years



CLASSIC ALBOMS

QUADROPHENIA THE WHO

A major feature film – the one that brought us Phil Daniels, Leslie Ash and Sting – two stage-plays and five albums are just some of the many spin-offs from The Who's fourth concept album *Quadrophenia*. It was issued in late 1973, after many months of work by 'the world's toughest rock band' and veteran engineer Ron Nevison.

But, despite a pasting from some critics — most of whom wanted another free-wheeling *Who's Next* — it sold enough to reach No 2 in the album charts, staying on the listings for almost three months. This comparative success was, perhaps, due to the double album's packaging — lush back then, a minor art-house miracle by today's cheapo standards (the gatefold sleeve contained a full-size photostory matt-printed on page after page of heavy quality paper).

The tale itself was fairly straightforward, Pete Townshend's lyrics telling the story of Jimmy, a combat mod who thinks he's the face of 1966, but whose world crumbles over one pill-soaked week which sees him being dumped by his girl and kicked out of his West London home. He gets, and promptly walks out of, a dead-end job and then discovers, in Brighton, that the scene he loves is either dead... or dying... Jimmy ends up stranded on a sandbank, scooter smashed, dosh gone and his even sanity in doubt...

Although superficially about one kid in a certain cult at a certain time, the theme was really about any young outsider clinging to an identity they weren't yet certain of, as narrated by cuts like the touching acousticled *I'm One* and the poignantly raucous *Dirty Jobs*. The Who's superb production job – which took everyone closer to their live wall-of-sound vibe – incorporated sea, thunder, trains, stereo effects and 3D mellotron sounds which are atmospherically beguiling even today.

There was tension, of course, in the arduous making of this 90 minutes of operatic rolling



"...the band had managed to provide their generation with an emotionally explosive epitaph."

thunder – guitarist Townshend and vocalist Roger Daltrey argued so much they came to blows and NME prematurely announced the group's death before labelling the LP 'bombastic' and 'backwards-looking'. And yet, for all the niggles, the band who had cut *My Generation* in '66 had somehow managed, eight years on, to provide their generation with a dynamic and emotionally explosive epitaph.

And *Quadrophenia* didn't just tell the story of the 1960s kids – it also, simultaneously, inspired those of the mid-1970s (it was, in fact, the only concept album most early punks would admit to listening to).

Daltrey's soaring strength on Love Reign O'er Me, Keith Moon's tumultuous drums on the urgent, yet wistful Bell Boy, John Entwhistle's voice-like bass on The Real Me (and the entire band's efforts on the hit 5.15) contribute to a work of the highest musical and audio quality.

Dismissed on release in many quarters, *Quadrophenia* has stood the test of the time and now sounds like a true epic; unquestionably the best Who album ever – and over the last 35 years it has also become, perhaps, one of the most important rock 'n' roll albums recorded in the 20th Century. **HFC**

Phil Strongman







Golden oldie

Who remembers DCC?

lenty of red faces surrounding the white flag at Toshiba, then. The early promise shown by its HD DVD came to precisely nought when the Warner Bros studio, initially an HD DVD backer, defected to Sony's rival Blu-ray hi-def technology. Such is the way with format wars in consumer electronics and, after all these years, the Betamax video cassette still remains Sony's most celebrated casualty. But as spectacular flops goes, nothing can hold a candle to DCC.

It was in Las Vegas on January 9, 1991, that Philips demonstrated Digital Compact Cassette for the first time to a group of sceptical audio hacks. This wasn't, as Philips' Managing Director Wim Wielens pointed out, a mere exercise in technical feasibility, but another confident step in a precisely choreographed launch that already had the backing of numerous music companies and record labels.

The agenda was set. An initial product range for domestic, portable and in-car use would be

"Moreover, the DCC players would play existing analogue musicasettes, allowing old cassette collections to be preserved."

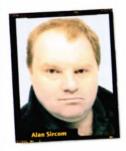
introduced in 1992, along with the blank and pre-recorded DCCs themselves. Moreover, the DCC players would play existing analogue musicasettes, allowing old cassette collections to be preserved. This, of course, was crucial as, according to Philips, the average household owned between 50 and 60 music cassettes.

Reinforcing links with a familiar and still vastly successful music carrier, the new 'digital' cassettes would be similar in size to the existing analogue variety, but with certain cosmetic and 'high-tech' user features. These 'breakthroughs' included album cover graphics topside of the cassette, which would be visible through the transparent lids of most portable players. This innovative design might even remove the need for cassette cases altogether. DCC was also designed to be a much tougher medium than compact cassette with the tape itself protected from damage, computer floppy style, by a spring-loaded metal sleeve. Additional advantages of DCC would be the CD-easy selection of tracks, autoreverse and 'a very respectable standard of digital sound'.

Wielens added that Philips intended to offer DCC manufacturing licenses to all interested hardware and software companies. In bullish mood, he added: "Just as we did with Compact Disc, we expect the DCC standard will become

the new worldwide standard for this medium."

David Vivian has been wallowing in gorgeous hi-fi and then describing its virtues and vices in Hi-Fi Choice since 1990



Full of sound and fury

Why CDs sound worse today

since the early 1990s, record companies have pushed for ever louder sounds from their CDs. Okay in theory, but by raising the output to the point where the quietest sounds on a recording approach peak level, what happens to the louder sounds in the mix? The answer is compression... not data compression but dynamic range compression, or 'DRC', DRC has been used for years to help improve the quality of music played through

lo-fi transmission systems like AM radio and telephones, but over the last 15 years or so, increasingly heavy-handed compression has also been applied to recordings at the mastering (or remastering) stage.

DRC works by squeezing the signal down to an equal level, so a powerful transient – the percussive bite of a snare drum, for example – is effectively reduced to the dynamic range of everything else in the mix. With the whole recording now happily squashed, so that only a handful of decibels separate the loudest and quietest sounds, it's easy to push this whole sound up to the limits of the digital audio output of a CD (commonly called digital full scale, or '0 dBfs'). When you play back tracks played at 0 dBfs, they sound excitingly 'loud', irrespective of volume level – and 'loud' helps improve sales, apparently.

A compressed sound may cut through the commuter background noise; it may also bring out the bass when played through the tiny speakers built into a laptop or a mobile phone. However, play this recording through a hi-fi system and the sound seems lacking. Because it is... it's lacking in dynamic range. Those original transients are lost forever and no amount of high-quality audiophile equipment can bring them back.

The 'loudness war' is starting to escalate, although new classical and jazz releases are yet to become casualties. It's creating a standoff in the music business; no-one's prepared to pull back from OdBfs recordings, because if the particular recording tanks, the talent and the record company have a ready-made scapegoat in the shape of the person who went for dynamics over sheer volume. So, nobody blinks.

There are those who rail against this 'everything louder than everything else' mindset, but they are in the minority. Bob Dylan and mastering legend Doug Sax are two of the more vociferous voices in this otherwise very loud, very undynamic wilderness. The 'Turn Me Up' organisation (www.turnmeup.org) is also trying to promote the idea of cutting quieter albums, with stickers on recordings with 'full dynamic range'.

From a hi-fi perspective, we have to champion a return to recordings – and especially remasters – because otherwise it's game over for the audiophile. After all, if recording quality is dragged down to the loudest, lowest common denominator at source, a mobile phone is 'hi-fi' enough.

Alon Sircom began his journalistic career in the early 1990s. He has since become one of the hi-fi and AV industry's most respected scribes



GETTING FLASH

As an adjunct to the round-up of solid-state memory recorders in this issue, I thought it might be timely to have a look at solid-state memory, what it is and what it can do for us in audio. Ten years ago it was hardly on the agenda: now every second person has a solid-state memory device of some sort, be it MP3 player or USB memory key. Is this the future or merely a fad? And is it actually any good?

Solid-state or 'flash' memory is a particular kind of integrated circuit which consists, like most digital chips, almost entirely of transistors. A special kind of transistor is used which can hold a charge, and therefore an on or off state, pretty much indefinitely, like a capacitor with no leakage. In general, one transistor stores one bit of data and the numbers are actually mind-boggling: for instance, I bought an 8GB card recently. That's eight gigabytes, or eight thousand million bytes, and one byte is eight bits. With the extra components needed for various kinds of 'housekeeping' in the memory chips, you actually need roughly 10 transistors for one byte, so the little memory card has something like 80,000,000,000 transistors within its 1.6 cubic cm volume. Just to put that in context, that's very roughly the number of grains of fine sand in one ton, so the transistors are SMALL!

You can put whatever you like in those 8GB, be it audio files, photos, word processor documents or financial data. If you use it for audio files they can be in any format you like, so for instance that could be 130 hours of MP3 files (128kbps), 13 hours of CD-format (linear PCM), or about an hour and a half of 5.1 channel 96kHz 24-bit uncompressed multichannel. The memory card doesn't know or care: the format is determined by the device it's plugged in to. To that extent, the question of whether flash memory is any good or not is irrelevant. Put 64kbps MP3 on it and the answer's 'no', but use it for uncompressed highres formats and things look very different.



"... 'flash' memory is a kind of integrated circuit which consists almost entirely of transistors."

With densities currently running at an astounding 32GB per gram, it beats CD weight-for-weight by a factor of over 500 to 1, volume-for-volume similarly. It is rewriteable up to one million times and can be erased in a couple of seconds.

But what about reliability? It's tempting to think that the chips will be forever fragile, but evidence seems to suggest otherwise.

Anecdotes tell of memory cards that have been dropped in hot coffee or put through a washing machine – and still work.

Manufacturers are confidently predicting data storage lifetimes of 10 years and more.

There are several different kinds of flash memory cards around but in fundamental terms there's not much to choose. So far, just about the only real drawback I've come across is of limited compatibility between devices using the cards. Although all four recorders in our round-up use the same type of card (SD) they won't play each other's recordings. However, recordings they've made can still be read as data in general-purpose SD card readers. With data capacities rising and costs falling all the time, this is a technology we're going to see a lot of. HFC

Richard Black





audiofile

COMPETITION

MINI



PMC GB1i speakers worth £1,275!

PMC's ever-popular GB1 floorstander has recently undergone an overhaul: the new GB1 is the result. It still uses the PMC trademark transmission line loading to help create deeper than imagined bass and improve the stiffness of the cabinet as a handy by-product. However, the 'i' series also features a new 27mm 'Solonex' soft dome tweeter (that's been developed in association with SEAS), a beefier and more shiny cabinet and a redesigned crossover network to help the tweeter integrate with the bass driver. With a 140mm cast frame mid/bass unit, the GB1i is narrower than most floorstanders which helps vocal articulation; "Speech sounds particularly realistic," our reviewer said, "helped as much by the narrow cabinet, which mimics the width of a human head, as by the driver". Despite its slim profile, the GB1 i still manages to deliver bass down to as low as 30Hz, but is taut and precise enough to ensure no bass boom in smaller rooms. In our Best Buy test in HFC 306, we thought the GB1i delivered, "an obviously smoother and more open sound than its predecessor, while retaining the fine imaging and freedom from boxiness." Best of all, though, is that you can win this prize-winning floorstander for the cost of a phone call.

HOW TO ENTER:

For your chance to win, either: (a) call 0906 5852161 and follow the instructions, leaving your selected answer (A, B or C) and your details where prompted or (b) send the letter of your selected answer (A, B or C) by email, including your name, address and a daytime telephone contact number to hificomp@futurenet.co.uk:

QUESTION:

What kind of loading is used in the GB1i

- A: Transmission Line
- B: Transvision Vamp
- C: Transistor Lent

TERMS AND CONDITIONS

Answers must be received between 29 May 2008 and 24 June 2008. The prize winner will be selected at random from all correct entries received between the relevant dates and will receive a pair of PMC GBT i loudspeakers free of charge. The winner will be notified within 28 days of the closing date and will be required to give details of a delivery address in the UK to which the headphones should be sent. Telephone calls will be charged at 60p per minute.

By taking part in a Competition, you agree to be bound by the Competition Rules, which are summarised below but can be keeved in full at wow futuremet come/futureonlines/competitionnules/asp, late or incomplete entres will be disqualated. Proof of posting (frelevant) shall not be deemed proof of delivery. Entres must be submitted by an individual (not via any agency or similar) and, unless otherwise stated, are limited to one per household. The Company reserves the right in its sole discretion to substitute any prize with cash or a prize of comparable value. Unless otherwise stated, the Competition or some to all CB residents of 18 years and over except employees of future. Rubishing and any party involved in the competition or their households. By entering a Competition you give permission to use your name, likeness and personal information in connection with the Competition and for promotional purposes. All entres will become the property of the Company upon receipt and will not be returned. You warrant that the Competition entry is entirely your own work and not copied or adapted from any other source if you are a winner, receipt by you of any prize is conditional upon you complying with famongst other things) the Competition Rules for us acknowledge and agree that reither the Company nor any associated third parties shall have any liability to you in connection with your use and/or possession of your orize.





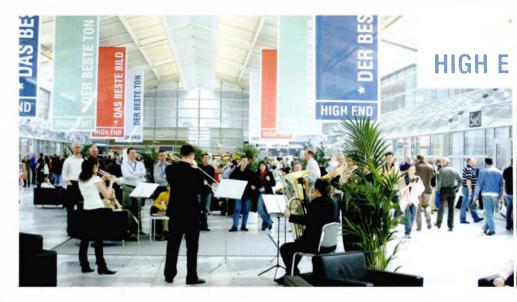
audiofile

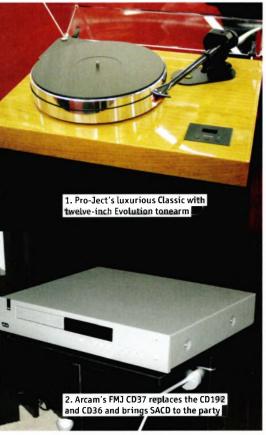


High End 2008

Every spring, Munich's MOC exhibition centre is home to High End, Europe's biggest and brightest audio event and if it's serious hi-fi you're after, then you won't find a better show.

he High End show is dedicated to the finest equipment available for reproducing music. There's barely a plasma screen in sight, just an increasing array of spectacular hi-fi components. This year's theme bordered on the exotic, with speakers clad in cowhide and turntables covered in virtually every material you could imagine, including bamboo! There were also more valve amplifiers than you could shake a stick at, alongside some genuine behemoths of the solid-state variety. Loudspeakers seem to get bigger when there's more space available, yet this is the only non-US show where KEF's twometre tall Muons didn't dwarf the competition or the surroundings. High End is now considered the hi-fi show to be seen at. Our report covers just some of the highlights Munich offered.





Pro-Ject showed two turntables that will stir up the market; at one end of the scale is an all-in-one turntable and amplifier that has been dubbed 'Jukebox'. No details were available, but it looks like a Debut with a volume control under the front, with speaker outputs and two pairs of phono sockets on the back - the latter presumably line inputs. Significantly more attractive to the vinyl nut will be the (name to be confirmed) Pro-Ject Classic, a large turntable with a heavy aluminium platter and a gorgeous veneered finish. The armboard can be switched around to accommodate nine or twelve-inch tonearms and both examples shown had the latter. One had an Ortofon and the other a very big Pro-Ject Evolution arm. Prices for this option will be around €2,800.

Arcam has been doing some radical revisions to the more affordable end of its range, the DiVA models have gone to be replaced with slimmed-down FMJ models. So the only Arcam separate now made is an FMJ. The amplifiers have had work done on the thermal lag of the transistors, which are a different variety to those in the DiVA and are said to offer a faster sound. The range starts with the FMJ A18 (£450), with 50 watts

courtesy of the power amp section from a Solo Next up is the 75-watt A28 (£750) which has full logic control and a phono stage (in fact, both amps have MM phono inputs). There are two new FMJ CD players, the CD17 which replaces the CD73 (£500) and has the latest Wolfson 8741 DAC, new output stage and power supply and the CD37 (£1,000) which is an SACD player with the same Wolfson DAC that decodes both PCM and DSD (unlike many systems which convert the bitstream from SACD to PCM prior to conversion).

Gamut's MD and speaker designer Lars Goller, unveiled the new Superior series of range-topping designs. These are built on a double layer stainless steel plinth in birch ply cabinets that are overlaid with 9mm hardwood. This same wood is also used in puck form over each bass cone's dust cap to aid mass damping. The Superior speakers are a luxury design with unusually solid cabinet construction and transducers that set new standards in terms of resolution. There are five S series models, starting with the S3 standmount and culminating in the mighty S9 - a 185kg behemoth that stands 1.7metres high and costs an eye-watering €95,000.



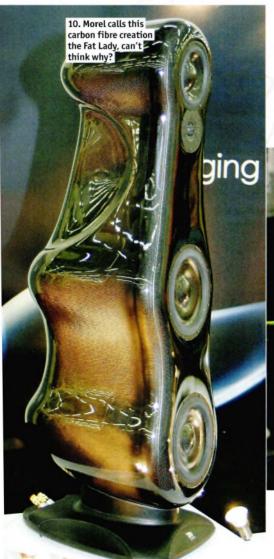
audiofile SHOW REPORT



9. Classe says its SSP-800 is as good at music as it is at movies

Classé has replaced its SSP-600 preamp/processor with the new SSP-800 (£5,500), a ten channel beast with the latest HDMI connections and an internal DAC, that is claimed to better the sound of the company's best two channel components when used with a CDT-300 transport. An ambitious claim, given that the pairing costs less than the CD-202/CP-700 that it's up against and offers a lot more features. Connections can be made in both single ended and balanced form and there are four HDMI 1.3a inputs.

Israeli loudspeaker drive unit specialist Morel, brought along a prototype of its
Fat Lady speaker (€20,000), a very curvy





carbon fibre and glass fibre monocoque cabinet housed with carbon fibre bass and midrange drivers that have oversized external voice coils. The drivers were designed specifically for the Fat Lady and have neodymium magnets and Hexatech aluminium voice coils. The cabinet is shaped for acoustic and aesthetic reasons and certainly looks striking next to your average wooden box.

Being German, Clearaudio had it's armoury on glistening display. In amongst the bling, we found the Solution Exclusive (€4,900, without arm), its first all-black turntable. It has a DC motor on board for compactness and offers 33.3, 45 and 78rpm. The new Performance Magnum includes a Satisfy arm and Maestro MM cartridge for its €2,990 price, along with a magnetically supported main bearing.

Cambridge Audio is getting decidedly ambitious with its latest Azur products. The 840E preamplifier (£750) features Terrapin amplifier modules, rather than regular op-amps, along with relay-controlled volume and input selection. The 840W power amplifier (£1,000) kicks up 250 watts aside using an evolution of the class XD circuitry found in the popular 840A. See next month's mag for a full review.

Munich also boasted some great-sounding rooms. For our money the results in the Audio Physic and Behold rooms were among the best, but the latter cheated by playing interesting music! Bowers & Wilkins put on an impressive show too, with a live musician amplified by a Classe/800 series system. But for sheer showstopping musicality, it had to be Ken Ishiwata's Marantz demo – the SA-11S2 SACD and SC-11S1/SM-11S2 amps truly stole the show. HFC





The CD8x. What Hi-Fi? Sound & Vision Award Winner 2007 Best CD Player £750 – £1500 Category



WHAT HI FI?
SOUND AND VISION
AWARDS 2007
SITERO AMPLIFIERS
BESISTERO AMPLIFIERS
CYRUS PRE V2/8 POWER/PSX-R

WHAT HIF?
SOUND AND VISION
AWARDS 2007
STEREO AMPLIFIERS
BESTSTEREO AMPLIFIER \$750-\$1500
CYAUS 8452



CECUTS :



This month's varied musical morsels

Reviews by Alvin Gold, Jason Kennedy, Dave Oliver, Mark Prendergast, Phil Strongman and Nigel Williamson

AUDIOPHILE VINYL



STEELY DAN

Music: For reasons completely beyond comprehension to the hi-fi nut Dan fan up the band's penultimate seventies album. Aja's seven tracks are all fine and honed every bar to the nth degree







THE DOOBIE BROTHERS

The Captain And Me

a diverse variety of flavours on this 1973 outing. It has everything from hard rock, *Without You*, to almost warrant this first-class re-issue. Sound: While not the best of its Warner Bros west coast sound. JK



COMPACT DISC & VINYL



STEVE WINWOOD

Nine Lives Columbia

Music: Like Van Morrison, former Spencer Davis/Traffic singer Steve Winwood is making some of the most solidly satisfying music of his career. Freed from the demand to deliver commercial hits his first album in five years is an unflashy but perfectly calibrated affair, ranging from the acoustic blues of I'm Not Drawing to the moody. Hammond-driven We're All Looking Eric Clapton adds some stinging quitar to which inevitably raises memories of their collaboration 40 years ago in Blind Faith. Sound: The voice is a little deeper, but he stills sounds like the most soulful white man in the world. NW







SAM BARSH

I Forgot What You Taught Me RazDaz

Music: Sam Barsh plays the kind of easily optimistic keyboards that wouldn't have sounded out of place on Hill Street Blues. He is fortunate in having an excellent rhythm section in Jaimeo Brown (drums) and Ari Folman-Cohen (bass), an ensemble that couches Barsh's fluent noodlings to great effect. A highlight track is Between Dead And Alive, but the full band composition George Dub, takes top marks in a very strong debut. Sound: A good fulsome sound brings out a generally live feel that's on the relaxed side without lacking contrast and dynamics. JK





THE FALL

Imperial Wax Solvent Castle CD Music: Mark E Smith's latest starts in stoned beatnik jazz jam mode and rapidly gets stranger (not what you'd normally expect with a title like Alton Towers). 50 Year Old Man sees him ranting about age - in a transatlantic accent - while on Strange Town he argues with the music as an endless indie riff grinds us into the floor. It's a mess - albeit a glorious one at times - and there's no denying that Wolf Kidult Man is the best track Iggy Pop never recorded.

Sound: Clear when it wants to be and dynamic enough when required - though the faster numbers tend to be served in guitar soup. PS







DUSTY SPRINGFIELD

Gold Mercury CD

Music: Dusty Springfield's voice always managed to combine a certain dry charm with genuine musical passion – no doubt the eason why the pop diva recorded several soul classics in America. They're all here; the joyous Only Wanna Be With You and the bluesy Son Of A Preacher Man. Sound: As was demonstrated by The Look of Love (also present here), Dusty worked with some great producers - something that comes through loud 'n' clear despite some of the era's limitations. PS







ERSI ARVIZU

Friends For Life Geffen

LA-based Arvizu has been recording for almost half a century. Yet it's taken Ry Cooder to persuade her to record her first solo album in the twilight of her career and thank the

musical gods that he did. Singing in Spanish and English in a deep, resonant voice, (imagine a Latino version of Ella Fitzgerald or Dinah Washington), her thrilling performance includes funk (Windows Of Dreams), dancefloor movers (El Arbol), cool salsa jazz (En El Tambo) and old-fashioned romantic ballads (Angel de Mil Voces). It's all about Cooder's production – panoramic soundscapes in which every instrument has its own space, but there's no ego and virtuoso; is subsumed to the needs of the ensemble. NW





JOHN MARTYN solid air

THIS MONTH'S CLASSIC HI-FI TEST DISC "...port of its appeal lies in the naturalness of its tone and solidity of its imagination..."

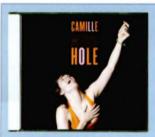
JOHN MARTYN Solid Air Island

Music: Solid Air was the breakthrough album for folkie John Martyn and deservedly so, as it's one of the finest albums of its era. The key to its appeal is the warmth of heart that Martyn reveals in the album's ten songs, some very chilled such as Go Down Easy and others rocking like I'd Rother Be The

Devil, but all let you know that here is a man who has soul. The musicianship is first-rate, Martyn could pick as well as the best of them and with bassist Danny Thompson he found a groove that is irresistible.

Sound: Spinning this on the Rock V turntable (HFC 307) made me realise that part of its appeal lies in the naturalness of its tone and solidity of its imagination, it makes most seventies recordings sound flat and processed. Muso (HFC 305) has the full story. JK

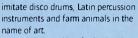




CAMILLE

Music Hole Charisma

French multi-instrumentalist Camille Dalmais' musical approach remains the same on her third solo album: she makes all the sounds with her voice and body, augmented by just a few smatterings or keyboards and electronics. She clearly knows her way round a catchy pop tune, as shown in the melody of single Gospel With No Lord, which floats over a backing of whispers, hummed bass and hand daps, while The Monk offers a sublime juxtaposition of footsteps and overlapping vocal harmonies. The effects don't always come off, but you have to respect someone prepared to



Close miking for both voice and effects contributes to an extremely intimate setting. DO









ROY HARPER

Stormcock Science Friction Music: One of English folk-rock's greatest assets, Harper's fame rests on two records, the 1970 Flat, Baroque & Berserk and this, Flushed with anti-establishment sentiment. this 1971 masterpiece has great strident vocals, wonderful six- and 12-string guitars and clever Moog synthesizer work. Of course, the stand-out track is Any Old Rock with Page, where both men reach a zenith of intertwining guitar cadences that you will want to hear again and again.

Sound: Originally recorded for vinyl, and now digitally remastered, the guitars just sing, booming wonderful bass sounds and silken top end. Superb. MP





CHRIS DIFFORD

The Last Temptation Of Chris Stiff Music Once half of the Squeeze songwriting team that created Cool For Cats and Up The Junction, Chris Difford's been a peripheral presence on the pop scene since the band broke up in 1982. In fact, he's been working steadily as a songwriter as well as touring and his first album since 2003 shows he's lost none of his skill with a well-turned tune and an insightful lyric like My Mother's Handbag and the laugh-out-loudobservations of encroaching age in Fat As A Fiddle. Oh yes.

Sound: Difford's acoustic guitar receives subtle backing from Melvin Duffy and Dorie Jackson on this series of bitter-sweet urban country vignettes. DO



HIGH-QUALITY AUDIO

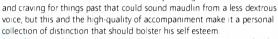
IAN SHAW

Lifeiacket

Linn

SACD (stereo/multichannel hybrid plus stereo CD)

Music: You don't come across great male jazz singers very often these days, especially British ones as contemporary as Ian Shaw. Having started out on the cabaret circuit Shaw has gone on to record nine albums and garner acclaim on both sides of the Atlantic. His first Linn recording contained the songs of Joni Mitchell. Lifejacket, conversely, is all his own work and reveals a rather different outlook. It has a melancholy nostalgia



Sound: Linn's DSD recordings rarely disappoint and this continues the theme, smooth, open, detailed and wide band it's a very classy-sounding disc. JK





RICKIE LEE JONES

It's Like This

Artemis

SACD (stereo/multichannel hybrid plus stereo CD) Music: RLL may not have fulfilled the sales promise of

her 1978 debut hit single Chuck E's In Love, but she's ploughed her own uniquely creative furrow ever since. Her songs are generally catchy, the arrangements often intriguing, but it's her voice which remains the most compelling element of her music and she wraps her impressively versatile instrument around a series of covers, including Steely Dan's Showbiz Kids, The Beatles'

For No One and On The Street Where You Live from

Lerner and Loewe's My Fair Lady. Whispering, imploring, violently punching when necessary, she has a knack for making each song her own Sound: The sparse arrangements lend themselves well to the SACD format, offering space and insight in spades. DO







Sir Charles Mackerras (cond), Scottish Chamber Orchestra Linn Records CKD308 two-disc set

SACD (stereo/multichannel hybrid plus stereo CD)

Music: Standout works on this two-disc set include a powerful account of No K508 (Prague), and a superb K551 (the Jupiter). The playing is always brisk and alive, though arguably a little too quick in some places – the Finale of K550 for example. Given that I was virtually weaned on these symphonies, I was startled by the freshness and spontaneity of these readings

Sound: The Scottish Chamber Orchestra is relatively small, but has plenty of weight, and although not played on period instruments, the lack of vibrato and the close (but not too close) miking makes this an exceptional and persuasive recording that has many of the attributes of

a good period ensemble, played in a warm, attractive yet intimate acoustic. AG







Understanding: HDM

The high-definition interface format that has its sights set on world domination

DMI stands for high definition multimedia interface and it's a format that aspires to being the dominant connection system in the world of consumer electronics (an ambitious challenge which is making good progress). Debuting in 2002, HDMI is now in the enviable position of being the only connection that is fully compatible with Blu-ray, the winner of the high definition video format war. This makes it compatible with both the 1080p (progressive) video format and the HD sound formats from Dolby and DTS.

HDMI can currently be used to connect DVD players, set top boxes, camcorders, cameras, computers, AV amplifiers and TV monitors/projectors. It's this breadth of connectivity that makes it appealing for anyone looking to integrate their consumer electronics components into one system, in other words, to achieve the holy grail of home entertainment: full convergence

It also keeps content providers happy by being DRM (digital rights management) compliant, which means that when two components are connected they need to electronically 'handshake' with each other in order to establish that neither is able to make an unauthorised copy of the media being played.

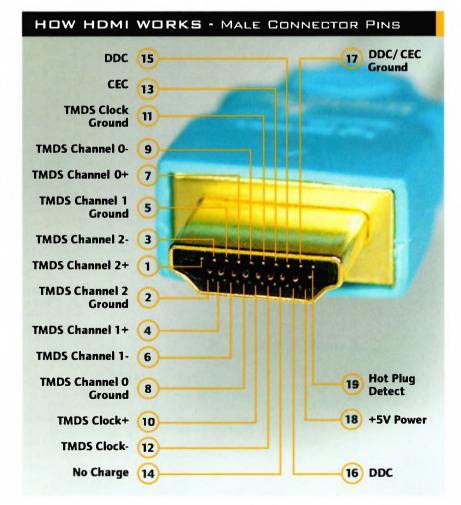
HDMI is backwards compatible with DVI (digital visual interface), which is currently the most common form of digital video output on PCs and computer monitors, but DVI does not support all of the features available on the latest version of HDMI – v1.3.

In video terms, v1.3 supports up to 16-bit per pixel at up to 1080p, which is the highest resolution available from the current HD video formats and monitors. At present the hardware that supports this is still quite thin on the ground, but it is scheduled to be standard issue before the year is out.

For the AV fraternity HDMI is, in effect, a digital version of SCART, a cable that carries both picture and sound from source to amplifiers, TVs and projectors. As a format it has not had to endure the ignominies of combat with an alternative pretender as per HD video, a state of affairs which has helped it gain acceptance across the board. Also, HDMi was developed by most of the big players in

the industry, including companies like Philips, Sony, Matsushita and Hitachi, so it was always going to have a serious chance of success. With so much going for it there has been a steamroller effect across the AV industry and beyond, to the extent that 750 manufacturers have been licensed to use the technology.

So far, there are only a handful of brands from the hi-fi sector, though, (what the



Above: IXOS XHT658 (cutaway)

CONNECTORS

Standard type A HDMI connectors have 19 pins and a bandwidth of 340 MHz allowing a data rate of up to 10.2Gbps. There is a higher resolution spec defined as Type B, with 29 pins for even higher resolution video, but as no consumer format produces such resolution this has not been adopted. Type C connectors are smaller and also have 19 pins and are designed for portable devices such as cameras and camcorders. Because of the often bulky nature of high-end cables there has been demand from some quarters for a connector standard that incorporates screws like DVI. Being small (4x14mm), the type A connector could easily be pulled out by heavier gauge cable.

Americans call 'speciality audio') such as Linn, NAD and Naim, although this will rise.

Whether it will ever become a must-have feature on audio-only components remains to be seen. One reason that it might become as common as an S/PDIF digital connector is

to eight uncompressed channels at 24-bit/192kHz, although there are, as yet, no content formats that can deliver this data rate. A losslessly compressed version of this spec is, however, available from Blu-ray in the form of Dolby TrueHD and DTS-HD MA, both of which can be used to deliver the highest bit rate digital sound of any consumer format.

The music industry has started to produce Blu-ray software already – music videos of David Gilmour and Bruce Springsteen exist and more recently, Neil Young has announced that his entire back catalogue will be made available.

VERSIONS

There have been three versions of the HDMI specification since the introduction of the interface in 2002. 1.1 and 1.2 had a bandwidth of 165MHz that equates to a maximum bit-rate of 4.95Gbps. The current 1.3 spec more than doubled this to 340MHz which allows a throughput up to 10.2Gbps. Also included in 1.3 is a spec for a mini connector – Deep Color – which supports up to 16-bit colour depths and automatic lip syncing, something necessitated by the relatively slow speed of image processing compared to sound.

That's the story according to the HDMI guys at least, in practice it is possible to transmit 1080p through a 1.2 interface, this is part of the "secondary video format timings section 6.3.2" of the HDMI 1.2a spec. Deep Color, as sexy as it sounds is not actually a part of

"...HDMI is a digital version of SCART, a cable that carries both picture and sound from source to amplifiers, TVs and projectors."

that it will transmit any of the formats that the audiophile wants to use in digital form — something that no other universal interface can compete with. Denon has its DenonLink system which supports high-resolution audio, but you won't find it on non-Denon product. Sony and Pioneer have both used Firewire-based systems for the same purpose in the past, but they have not been adopted elsewhere.

HDMI has the advantage of being able to transmit DSD streams and can, therefore, carry an SACD signal of two or more channels in its native digital format. It can also transmit up either the now obsolete HD-DVD spec nor of the current Blu-ray spec, neither is xvYCC, so unless these colour enhancing features are offered on download and you have a graphics card capable of transmitting them they are effectively only a proof against future formats. It would seem that the only real reason for having the latest 1.3 hard and software right through the chain is to get the lip sync facility, which anyone who has had to sit through a poorly sync'd transmission will know can be a major issue – and immensely frustrating.

Out in the field, end users have also found that not all HDMI connections are compatible

with each other as should be the case Jim Catcheside at Pioneer mentioned that there have been problems with Sky boxes which wouldn't handshake with his plasma screens, others have told us similar tales of compatibility woe that would suggest that HDMI licensing may not be as effective as it needs to be.

Another minefield for compatibility is CEC (consumer electronics control) which is something that is supposed to make HDMI-compliant products fully interoperable. If you turn on the source and press play it should automatically turn on the AV amp and screen. The problem here is that there is no standard for CEC and thus no guarantee that different manufacturers kit will be able to communicate correctly

REVISION HISTORY

HDMI 1.0: Single-cable digital audio/video connection with a maximum bitrate of 4.9Gbit per second (Gbit/s). Supports up to 165Mpixels/S-video (1080p, 60Hz or UXGA) and eight-channel 192 kHz/24-bit audio.

HDMI 1.1: Added support for the DVD-Audio format.

HDMI 1.2: Added support for One Bit Audio (DSD), used on Super Audio CDs with up to eight channels. Ability for PC sources to use native RGB color-space while retaining the option to support the YCbCr CE colour space.

HDMI 1.3: Increases single-link bandwidth to 340MHz (10.2 Gbit/s). Optionally supports 30-bit, 36-bit, and 48-bit xvYCC with Deep Color or over one billion colours, up from 24-bit/s RGB or YCbCr in previous versions. Incorporates automatic audio syncing (lip sync) capability. Supports output of Dolby TrueHD and DTS-HD Master Audio streams for external decoding.

[Feature] Understanding HDMI

CABLING

Because of the very high bandwidth required for 1080p video, cable quality is more than a question of taste with HDMI. For lengths over six metres, the design and construction of an HDMI cable has to be of a very high standard in order for the signal to get through the pipe in one piece and not all manufacturers will quarantee full functionality of lengths of 10m or more. The Chord company makes HDMI cables up to 40 metres in length but has to apply the highest cable engineering principles and what's known as a repeater to achieve this (an inline amplifier that runs off the voltage rail included in the HDMI spec: a feature cleverly incorporated in order to make long cable runs a possibility).

Nigel Finn at Chord, says that the techniques that make his hi-fi cables sound better, such as silver plated copper conductors and extensive shielding using Mylar foil, are just as relevant with HDMI. With longer lengths, commonly required for projection systems, low-quality cables are often incapable of transmitting the bandwidth required of HD video. Chord points out, therefore, that with any installation work it is essential to first test the connection before cables are routed into walls.

JITTER BUG

Roger Batchelor at Denon has done blind testing of HDMI versus alternative high-res digital audio connectors and he found that the jitter issues undermined sound quality.

"For lengths over six metres, the design and construction of an HDMI cable has to be of a very high standard..."

Picture: TCI Copperhead

Wireworld's
Reuben Klein is of
the opinion that jitter
problems were caused by
limitations in earlier hardware (Wireworld,
incidentally, was one of the first companies to
make high-end HDMI cables back in 2003,
when its Starlight cable was designed for use
with Pioneer's market-leading HDMI plasma).

The more you hear about HDMI, the more it seems to be a format that was rushed to market. Something that the appearance of four fundamental revisions since its introduction would back up. When the hard and software makers get to grips with it and things settle

should prove to be a very convenient way of transmitting high-resolution sound and video, but it's important to remember that it is only a transmission format – what it can

down a bit, it

a transmission format – what it can accommodate is beyond what current software formats can offer. Like every conduit it has to have potential for future formats, but don't think that you need all v1.3-compatible hardware to enjoy the great stuff out there in HD sound and video. **HFC**

Jason Kennedy



HDMI FOREVER!

Over 229 million devices with HDMI are expected to ship this year, according to market researcher In-Stat (who also project nearly 1.2 billion HDMI-enabled devices by 2010). "It continues to dominate the market," said Leslie Chard, president of HDMI Licensing. "The rapid increase of adoption of the HDMI specification, proliferation of HDMI-enabled devices in the marketplace and increasing consumer awareness at the retail level demonstrates that HDMI is the leader in digital connectivity."

E info@audioconsultants.co.uk www.audioconsultants.co.uk

FINE TWO CHANNEL AUDIO SYSTEMS





d Peak Consult Princess loudspeakers.

The Princess Floorstander is a slim design, occupying only 21 x 32cm on the floor. A two way design with an extremely linear response but with a wide frequency extension that you would normally expect from larger speakers. The extensively damped cabinets, each one weighing 42kg, come in 3 solid wood finishes, ash, rosewood or walnut, and are finished front and back with real leather trim. When partnered with ancillary equipment of commensurate quality, it is a revelation to experience such a large, transparent sound from a small cabinet. From £6600.



For further info about any of our products visit www.audioconsultants.co.uk



- a Spectral 15S pre-amplifier 100S power amp.
 The latest version of these products brings some of the technology associated with their reference products into a more affordable price point.
- products into a more affordable price point.

 Total cost £9600.

 b MIT Cables. We are delighted to represent
- this long standing US cable manufacturer.
 Extremely transparent, extended bandwidth, superb linearity and current delivery compared to many other cables. We also have a selection of their MA (Maximum Articulation) grades for home evaluation trials.
- c Accuphase C-2000 pre-amplifier A30 power amp. 30 watts of pure Class A power plus a superb pre-amp gives one of the most 3-dimensional soundstages. Total cost £7500.
- e Ayre K-5 pre-amplifier V-5 power amp.
 The classic Ayre sound in a very affordable package. Elegant, refined sound from a dual mono, fully balanced design. Total cost £4990.
- F System Audio The Ranger loudspeakers.
 The latest elegant, slim floorstander from this Danish manufacturer. A large sound stage from a speaker that is not room placement fussy. £1749.



Acustica Applicata > Accuphase > Aesthetix > Audio Physic > Ayre Acoustics > Benz-Micro > Cardas > DaVinciAudio Labs
Esoteric > Futureglass > Gamut > German Physiks > Grand Prix Audio > Harmonic Resolution Systems > Leben > Lyra
Mit Cables > MonoPulse > Nagra > Nordost > Nottingham Analogue > Opera > Pagode > Peak Consult > Quadraspire
Siltech > Sme Limited > Spectral Audio > Stax > System Audio > Thiel > Transfiguration > Velodyne > Whest Audio

How to find us

Located approximately 15 minutes drive from either M4/Junction 12 or M3/Junction 6 with free and easy parking outside the building.

We have a home evaluation scheme for those who might find this method more convenient.

7 Comet House Calleva Park Aldermaston Reading Berkshire RG7 8JA T 0118 981 9891

Demonstrations by appointment

Mondays to Saturdays 10:00 to 18:00. It is advisable to call us before visiting.

Part exchange welcome. Ex-demonstration and previously owned equipment listed on our website: www.audioconsultants.co.uk

BASS, BASS ALL OVER THE PLACE

We had a number of responses to our quest for deep bass recordings (*Understanding... Bass, HFC* 306). We seem to be compiling a cavernous collection, building the best bundle of bass, sorting a stentorian set, etc, etc. Excellent – keep 'em coming.

In the meantime, check out the following, from Mike Hanson: *Anamnesis*, from *Sacrament* by the Norwegian band White Willow. *Time and a Word*, from *Keys To Ascension 2* by Yes.

Or this quartet, by Linn Keltik-owning Nick Timson: Thanks to You, from Dig by Boz Scaggs. Precious Sight, from Late Night Final by Richard Hawley. Big Deal, from Walking Wounded by Everything but the Girl. Brandy Alexander, from The Reminder by Feist. Then, there's this diverse trio from Peter Dilworth: Curtain Call, from The Black Album by The Damned. The Secret Place, from Atmospheres & Soundtracks by Brian Eno, Daniel Lanois and Roger Eno. Art for Art's Sake, from How Dare You by 10CC.

Finally, a trio of trouser shaker albums from Richard Barton: *Brain Salad Surgery* (the 45rpm version) by Emerson Lake and Palmer. *Outlawed Bass* by The Outlaws and the Poulenc *Concerto for Organ, Strings and Tympani* (Telarc CD)

Richard Barton takes the whole bass issue very seriously. "I am currently designing a pair of home-build subwoofers" he says, "using four Acoupower 18-inch (460mm) drivers and I aim to have a flat response from 12Hz upwards."

Our Mr Barton is also unimpressed by our quick dismissal of deep bass warfare. He

"...the Nazi death ray stuff is pretty much urban legend..."

writes, "In final comment on your 'brown note' urban legend comments, I fear you have missed some interesting information and am surprised that you have relied on a US TV show as a final technical arbiter! While the Nazi death ray stuff is pretty much urban legend, there was indeed serious research especially from the 1950s onwards, when transducers of sufficient capability were coming online, to use sound as a weapon. The French and the US militaries did lots of work on various devices - for example, when first fired up, the scaledup 6' high French Police 'pea' whistle blown by a compressor killed two of the technicians from massive internal hemorrhaging. Much good work on the health (and otherwise) effects of longer-term subsonic exposure was also carried out by a French engineer (name forgotten).

"As for the 'brown note' story, the frequency required was not a subsonic, but was in the range 70-85 Hz from memory, depending on the individual and the resonant frequency of their sphincter — a rapid "frequency warble" tone sufficed to "cover" most test subjects present. Note that this was effective only



LETTER OF THE MONTH

OLD TEST DISCS

I've noticed a lot of hi-fi is played using old test discs. Many of *HFC*'s tests use Michael Jackson or Laurie Anderson discs that were recorded in the 1980s and some use recordings that are even older. Why is this? Don't you people enjoy more modern music? I'm particularly upset by the continued use of Miles Davis' *Kind of Blue*. Hasn't anyone noticed that this record is nearly 50 years old, the sax has terrible distortion and no one can decide on the right speed? And yet, it keeps being used as a demonstration track.

Ben Newman via email

HFC The iffy speed of Kind of Blue was corrected 20 years ago and any modern reissue takes this into account. Yes, Coltrane's sax has some distortion, especially in the opening track, but the big issue with the popular Miles Davis album is it is one that almost everyone knows, jazzer or not.

Recordings are measuring instruments for the subjective reviewer. Some reviewers prefer to change those measuring instruments regularly; others stick with what they know best, while still more use a combination of both old and new.



The author of our 'letter of the month' will receive a free copy of Russ Andrews' excellent hi-fi book, Sound Solutions.
This compact and invaluable tome is an excellent guide to getting the best out of the equipment you already own. So drop us a line, or email hifimail@futurenet.co.uk

Is this the best improvement you'll ever make to your system?



Unless you try, you'll never know. MAVROS CABLE STOCKISTS

Call these dealers for an obligation free demonstration or home trial.

- Aberdeen:
 Holburn Hi Fi,
 Tel: 01224 585713
 Note@holburnhifi.co.uk
- Kilmarnock:
 Kevin Galloway Audio,
 Tel: 01563 574185
 Info@kevingallowayaudio.co.uk
- Glasgow: Glasgow Audio, Tel: 0141 332 4707 matt@glasgowaudio.com
- Newcastle: Lintone Audio, Tel: 0191 477 4167 info@lintone.co.uk

- Wrexham: Acton Gate Audio, Tel: 01978 355522 sales@acton-gate.com
- **Sheffield**: Moorgate Acoustics, Tel: 0114 275 6048 sales@moorgate.demon.co.uk
- Market Harborough: Divine Audio, Tel: 01858 432999 tim@divineaudio.co.uk
- Solihull: Music Matters Tel: 0121 742 0254 sales@musicmatters.co.uk
- Banbury: Overture, Tel: 01295 272158 sales@overture.co.uk

- Aylesbury: Noteworthy Audio, Tel: 01296 422224 info@noteworthyaudio.co.uk
- Guildford: P.J. Hi Fi, Tel: 01483 504801 info@pjhifi.co.uk
- Ashford: Soundcraft Hi Fi, Tel: 01233 624441
 sales@soundcrafthifi.com
- Stratford: Music matters Tel 01789 414533
 Stratford@Musicmatters.co.uk

The new Atlas Mavros with deletion free copper conductors, copper plugs and entirely new microporous dielectrics is probably the best cable in the World.

AWARDS





INTERCONNECTS

Allas Equator • August 2002

Allas Explorer • July 2002

Atlas Voyager • April 2002

SPEAKER CABLE

Atlas Ascent • October 2003

Allas Namer 3 0 • July 2005



HI-FINEWS

Atlas Navigator All Cu

Best Audio Interconnect 200

Allas Elektra All Cu PTFE

Editor's Choice Jan 2005









[CHOICE MAIL] Readers' letters

at astonishing volume levels, probably 120dB, where no doubt other damage was also occurring... FYI."

...AND ALL THAT JAZZ!

After my trip to the Bristol Show I was struck, once again, by the obscure, often jazz-based, music played by the exhibitors and have been wondering about the reasons for this. Is it because the people running the stands don't want you to hear tracks you may recognise for fear that the acoustic of the room will ruin it and you may think it is due to inferior equipment? Or, is it because small ensembles are easier to follow and hence you assume more clarity and detail? Or, could it be that they really don't want you to sit there too long and stop the circulation of clientele and reduce potential listeners? The reason for this last comment is that the Spendor room was playing Dark Side Of The Moon and the place immediately filled up with happy, smiling hi-fi fans. I know that I, for one, did not want to leave. Surely, playing well-known music would encourage listening and I cannot believe that this would damage sales. I left, thinking, wow! Those speakers sounded great, because I had so enjoyed the experience. The other brands probably sounded just as good, but it was so much harder to tell with, dare I say it, tedious music? Remember, the Jazz DAB station failed through lack of interest.

Alan Gitsham via email

HFC It's odd that jazz represents a tiny fraction (less than three per cent) of the record-buying market, but has long been

"It's a design for a flat-panel speaker made from roadkill hedgehogs."

associated with the audiophile community. Odd, too, that the jazz typically played at such events is relatively mainstream, dated and 'safe' – no one played *Empirical* or *Loud Louder Stop*, for example.

There did seem a disproportional amount of jazz and jazz-tinged blues played at this year's Bristol Show, but these things are cyclic. Not so long ago, you'd have queued up to listen to some jazz, just to get away from room after room playing *Tin Pan Alley* by Stevie Ray Vaughn. There is also a headroom issue in hi-fi shows; if every room plays rock at decent levels, it soon descends into open noise warfare.

Whether playing Pink Floyd is a better option is doubtful though, as Planet Rock fared little better than theJazz (Planet Rock won 0.3 per cent of the market share compared to the 0.2 per cent of theJazz) and its future looks uncertain at the time of writing. Perhaps companies will fare better if they belted out The Raconteurs' tracks instead?

CAVEAT EMPTOR

Dominic Todd suggests that we should all be 'weary' of buying hi-fi over the internet (HFC 305). Eventually, perhaps; but I suspect he meant 'wary'. While I would agree that a certain caution is plain common sense, his piece suggests that the practice is sheer folly. I have spent a year or so buying very cheap hi-fi kit that I could not afford when it came out; mainly a string of Musical

Fidelity products. I could try them in my system, sell them on and buy another. In the past year, I have bought my Pathos Classic One MkIII, Martin Logan SL3s, Unico CD and Trichord Dino phono stage all on internet auctions (all right, eBay) and all at well under half the list price. I love the sound and look of this system and you would be welcome to feature it if you like! It is simplicity itself to check the credentials and location of the seller and all, but one item, was in perfect condition. The Unico CD player was so cheap, that even after Nick Green at Unison's UK importer UKD had fully restored it, it was still less than half price

So, wary? Yes. Fearful? No. Weary? Only time will tell.

Mikael Rust via email

HFC Yes, we think he meant be 'warv' of the internet too, although Dominic is more than a bit tired of Facebook. We've heard good stories and bad from internet trading: everything from buying a virtually new amplifier at less than the trade price to spending more than the list price for a utterly broken CD player that looked like it had fallen down a mineshaft. The timeworn phrase 'let the buyer beware' resonates loudly up and down internet auction sites and your point about checking credentials is extremely important. And always be wary of buying anything online from weary, wiry blokes with a wry sense of humour.

RAYLEE ROADKILL

I read with interest your report on the Raylee Redkite and Otter speakers, made from bat guano, in the form of various sci-fi robots.

I can't wait to read your review of these exciting new products. I wonder if you could pass on an idea of mine to Hughley Dudwood? It's a design for a flat-panel speaker made from roadkill hedgehogs.

Avril Premiere (Mr) via email

HFC Brilliant idea, Avril. Unfortunately, our Mr Dudwood has 'sold' the company to the Wiseguys consortium of Brooklyn, NYC. The company's chief designer – Paul 'Paulie' Cicero – is interested in your idea though and will "make you an offer you can't refuse" (Okay, that's from another Mob movie) soon, possibly sometime around April 1st next year.







SCRATCHY VOLUME

Dear Alan.

My Pioneer A-400 amplifier still sounds great, but the volume control is scratchy and crackly whenever I turn the dial. Is this the beginning of the end for the amp? If so, what replacements would you recommend? I have a Marantz CD-52SE CD player and a pair of KEF Q30 speakers.

Richard Lowe via email

HFC That crackling noise is the sound of a dirty potentiometer. This means the potentiometer is on its way out. The good news is this is a relatively easy repair for an electronics engineer to perform. The bad news is whether it is financially worth it, because the amp (in good condition) is worth less than £200 today. We think the repair (so long as it doesn't end up costing more than about £100) is worth it, because you'll struggle to find a replacement. However, unless the crackling sound gets really upsetting and loud, we'd suggest ignoring it until it gets really, really bad.

The extremely clean 'phase correct' Pioneer A-400 sound remains popular with the high end (especially with Tom Evans Audio Design), but many struggled to find compatible budget sources and speakers, especially in the line-ups of a decade and a half ago. If your A-400 is uneconomic for repair, your best bet is the Cambridge 840A.

ASKAN

Got a burning hi-fi question? Ask Alan...

Send your queries to:

Alan Sircom, Hi-Fi Choice, Future Publishing Ltd, 2 Balcombe Street, London NW1 6NW. Or email your queries to hifimail@futurenet.co.uk

SOLID OR STRANDS?

Hi Alan

I've got a Creek Evolution CD and amp, which I use with a pair of Epos M12.2 loudspeakers on the specially made open frame Epos ST12 stands. The dealer recommended I use DNM solid-core interconnects, mains leads and speaker cables. I recently heard a friend's system, which is almost identical to mine except it has thick multi-strand cables from Audioquest. I found his sound to be fuller, but muddier. Is there any way I can get some of the 'fuller' sound without the 'muddy' bit?

Gerry Richards via email

HFC That's fine listening there, Gerry. You've pretty much summed up the differences between solid-core and multistrand cables, picking out the good and bad points of both. Ever thought of taking up a job as a hi-fi reviewer?

There are ways of getting a more meaty sound from your system without changing anything. Begin by moving your speakers slightly closer to the wall; not close enough to require putting bungs in the ports, but close enough to get improved boundary performance. From experience, solid-core cables often mean you need to reposition your speakers away from the norm; try bringing the speakers closer to you and further apart than usual. This means moving them to being less than two metres from your chair and as much as four metres apart. Move them until you hear a noticeable 'hole' in the image between the speakers and then move them back a notch from there.

If none of this works, consider a change in cables – the vdH Hybrid designs should deliver the compromise you are looking for. However, you may find you have to change signal and speaker cables at the same time to get the balance right.

HOUSEBOAT HI-FI

Dear Alan.

My wife and I are about to retire and live in a houseboat. Trouble is, space is at a premium, which means my beloved LPs, CDs and my hifi system will have to go. I've donated all of it to a close friend, who will not only look after it for me, but will act as a free record library, whenever I need something. I've looked at micro systems to replace my hi-fi, but none of them sound any good. Is there anything that comes close to my old hi-fi system.

Charlie Ewing via email

HFC Well, that depends on your old hi-fi system and how much you want to spend on the new one. If you have a quarter of a million pounds worth of high-end luxury,



then no... no small integrated system is going to offer a fraction of what a true high-end hi-fi system can do. That said, unless it's the kind of 'houseboat' you find moored at the ultra-glamourous end of Monaco's harbour, a high-end system will only offer a fraction of what a true high-end system can do. However, the best of the small systems can offer a performance that comes surprisingly close to good separates, especially in the context of the small rooms found in a houseboat.

We've found the new Arcam Solo Mini (HFC307) to be a spectacular little CD/DAB and amplifier system, all squeezed into one box. The Muso speakers were not so well received, although their use in a small room – especially a small, wooden room – will be more appropriate. Depending on

NAIM-DROPPING

Please help!

I've been using Naim equipment for many years, but now I'm in a bit of a quandary. I have a CD5/NAC 112/Flat-Cap/NAP 150 with Naim Intros and the next step is to the CDX2 and either a Supernait or a NAC 202/NAP 200 and some better speakers. I was just wondering if I can find something that retains the energy of Naim, but with more soundstaging? A friend's kit (an all-Quad system ending in electrostatics) gives fantastic stereo, but I find it lacks the musical drive I get from my Naim rig. Is there something between these two poles? I have around £6,000 to spend.

Christian Davies via email

HFC Some of the imagery you crave can be found when you change the loudspeakers. Naim's reputation for poor imaging is part

historic and part based on Naim's traditional use of boundary (up against the wall) speakers. The Naim ethos does place less stress upon good soundstaging, concentrating instead on getting the musical performance right first. This does not exclude imagery, but does require careful speaker choice and positioning.

Check out the Audio Physic range, which work particularly well with Naim amps, retaining the vivacity and precise timing of the designs, but are designed to work in free space and deliver an excellent soundstage as well.

As to breaking out from the Naim sound, be wary of making changes for change's sake. Take a look at the pre/power *Ultimate Group Test* in this issue (starting on page 68). Limit the number of auditions, though; if you listen to more than half a dozen, you'll find your head spinning and may never make a decision.

your tastes and budget, you could comfortably partner this with the excellent Spendor S3/5R loudspeakers and get a sublime sound (the light bass of the S3/5R being a positive boon in a room where bass will likely always be a problem).

If the system needs to be smaller still, and separate speakers prove to be a problem, then the Meridian/Ferrari F80 all-in-one system is a perfect alternative. It can also double up as a DVD player.

BIGGER, SMALLER ROOM

Dear Alan,

I am about to move house and my new room is both larger and smaller than the one I am used to. I am moving from a 5x3.5m room to one that is 6.5x4m. However, the height of the ceiling is far lower; the original room had 6m high walls, where the new room will be around 3m high, which means I am moving from a 105cubic metre space to a 78cubic metre one. I have a pair of Sonus Faber Cremona speakers, driven by Electrocompaniet electronics. Will these still work in the new room? Is there anything I need to do acoustically to the new room?

Jens Ramsfjell Norway

HFC Your new room should sound better than your current one in many respects. That huge ceiling space is likely acting as a reverb unit. You will take a few days to acclimatise to the new sound, but after a week or so, you'll begin to hear those Cremonas in the way they should sound. As to room treatments, the best place to start is the sort of furniture you'd put in the average living room – comfy chairs, bookshelves strategically placed around the room, carpets and painting or posters on the wall. Try placing small bookshelves or CD racks at the first reflection points (get

someone to move a mirror along the side walls while you sit in the listening chair; the point where you can see the reflection of the tweeter is the first reflection point) and place a rug on the floor in front of the speakers in roughly the same plane.

NEW FLAT, NEW SPEAKERS

Dear Alan,

I am going to move to a new flat soon and I decided to upgrade my sound system, because I have extra money space. My current system comprises a Cambridge Audio 640C v2 CD player with matching 640A v1 amplifier, and Tannoy F1 Custom speakers. Initially, I was thinking about buying a stands for these speakers (around £75) and Tannoy TS8 subwoofer (around £200) to add some bass. But I now think that it might be better to sell my speakers for say around £50 (because they are

only two months old) and use this money and money that I might have spent (around £325 altogether) and buy a pair of decent floorstanders. What option is better?

Oleg Mukhanov via email

HFC We think selling the F1 and buying a better pair of speakers is a good idea. Changing these for a pair of KEF iQ5 or Mordaunt-Short Avant 906i floorstanders would make for an excellent sound and would neither undermine nor overawe the Cambridge Audio CD and amp combination.

ALAN'S TIPS

SPEAKER PLACEMENT

Loudspeakers fall broadly into two camps. Speakers designed for boundary use gain extra oomph, where free-space models generally sacrifice that reinforcement for better imaging properties.

If you don't know where to place your speakers, try them against the rear wall, then 33cm, 66cm and a metre away. Play the same passage each time – the best 'music', in fact, is solo male or female speech, because our hearing is so attuned to human voices. Listen for the point where the voice doesn't sound too 'thick' (think 'bronchitis') or too 'thin' (think 'above the knee injury').

Whatever the distance from the rear wall, the speakers themselves should be roughly two and a half metres apart. Generally, they should also be around 30cm from the side walls. Go closer - but no closer than about 20cm - from the side walls in a smaller room, and put the speakers further apart - but no further than about three metres - in a bigger room. The listener should be sitting at the apex of an equilateral triangle, with the two loudspeakers forming the bases. Although for many this is fantasy land, the listener should also be about three metres from the loudspeaker and be around a metre from the back wall.

Some speakers prefer 'firing down the room', so that the front or rear baffles of the speakers are parallel with the rear wall. Most prefer a 'toe-in'; moving the angle of the speakers so that the front baffles are increasingly turned in toward one another. How big a toe-in though does depend on the design – but many respond well to an imaginary line from the midpoint of the speaker crossing 10cm or so in front of the nose of the listener.

Loudspeakers also respond well to being at the right height, on the right stand if necessary, or on the right spikes if not.

As a rule of thumb, the tweeters of a loudspeaker should be roughly at the same height as your ears when sitting in front of said speaker. Experiment with high and low mass speaker stands.

The exception to these 'rules' is the Quad electrostatic. It traditionally prefers to be close to the side walls, roughly one-third the length of the room, in a very long and large room. There are always exceptions to these rules however, but if it feels good (or sounds good)... do it!





SERIES



DB1/

GB1/

TB2

"They sound vivid and dynamic and deliver a thumping bassline" - GBI

What HiFi? Sound & Vision





Ring your dealer

Brith

Sevenoaks S&V

01233 624441

Sevenoaks S&V 0131 229 7267

Kingston

Maidenhear

www.pmc-speakers.com











0113 217 7294

01792 474608

Welcome to the HFC hardware reviews section – the only place for definitive tests of the latest hi-fi components. Our unique combination of extensive listening, unsighted comparisons and scientific lab reports, conducted by the UK's most experienced set of reviewers, ensures you're holding the most comprehensive and reliable guide to high-performance hi-fi in the world.



EQUIPMENT REVIEWS

- 44 Arcam A38 integrated amplifier
- 48 Focal Chorus 816WSE loudspeaker
- **52** Ayon CD-1 CD player
- 54 System Fidelity SA-300SE integrated amplifier
- Creek Evolution tuner
- **58** Brennan JB7 music server system
- 61 IsoTek Sirius mains distribution board
- **62** Mordaunt-Short Performance 6 Limited Edition loudspeaker



PORTABLE DIGITAL RECORDERS £160-£280

- Edirol R-09HR
- Marantz PMD-620 64
- 65 Tascam DR-1
- 65 Zoom H2

ULTIMATE GROUP TEST

PRE/ POWER AMPLIFIERS £2,000-£6,000

- Arcam C31/P38
- Audiolab 8000AP/8000X7
- Bryston BP26/3B-SST
- Chord CPA2500/SPM650
- Cyrus DAC-XP/Mono X
- Marantz SC-1151/SM-1151



OUR RATINGS EXPLAINED

Star ratings for various different criteria, like sound quality and value p to the job of

, nor an r we liked

male nos with malantz's #800 player, the 17 MkII M, which has excellent build and e a very good impression in HFC 243. At same price there's also the Cyrus 7, a ng all-rounder in a compact case. 'ter trying the Heart with the standard s we switched over to the Siemens grade, a comparison somewhat muddled by e fact that it was a rold for hot swap - the and days with the after a livelier w tubes shone Our overall conclusion

brough. The Siemens equipped player has an in snappier sound with better timing that es with dense material with remarkable fidence and ease. It even seems to be

You can find ...orc civilised players for the money. But few combine dynamics with fine timing skills as effectively as this. HFC

VERDICT

The things we like most about the product

> The things we think could be better

The product's final score. All criteria are taken into account but the emphasis is on performance. Components scoring more than four stars may qualify for an HFC Award Badge

OUR AWARD BADGES EXPLAINED



A component receiving the coveted Hi-Fi Choice Best Buy Badge has been judged to deliver excellent performance at its price point, thereby offering outstanding value for money.



This Badge is awarded only to those components that are judged to deliver reference-standard performance, regardless of cost. These products may be considered among the very best of their kind

Turn the page for the most rigorous tests of serious hi-fi in the business...



Top Gear

Arcam's new top-of-the-range FMJ integrated is pure class

PRODUCT Arcam FMJ A38

TYPE Integrated amplifier

PRICE £1.200

KEY FEATURES Size (WxHxD): 43x11x37cm

- Weight: 9.5kg Rated power: 105 watts
- Inputs: 7x line-level. 1x phono input (optional) Outputs: 2x record, 1x preamp, 1x headphone

2x loudspeaker (switched)

CONTACT ☎ 01223 203200 # www.arcam.co.uk

rcam is undoubtedly one of the greatest British hi-fi companies of all time. With a commanding range of CD players, amps and AV equipment, we all know someone who has benefited from its expertise over the years. Part of its charm too, is its affordability. Take this new flagship FMJ A38, for example - it's £1,200 and will easily stand up to the big boys. It replaces the seven-year old A32 and although, we've no idea why the model number had to increment by precisely six, it's about the only difference between the models that you'll notice from the front panel.

The A38 is a vital part of the Arcam FMJ range which, in our opinion and from an ergonomic point of view, is still the tops when it comes to hi-fi choice! The informative display, traditionally straight-forward control of basic functions and general layout are excellent. If we wanted to be really fussy, we'd request slightly bigger text on the buttons in recognition of the more myopic user

But, it's what's under the hood that really interests us. Just to recap, an integrated amplifier is basically a power amp and a preamp in a single case (the preamp may, of course, be little more than a selector switch and volume control). The power section in the A38 is quite similar to that of the A32, while the pre is derived from Arcam's C31

standalone preamp (see box on page 46). As reviewed, the preamp section is line-only, though a phono stage is available as a welcome factory-fitted option.

Conceptually, the preamp section is little more than a selector and volume control, though it does have some gain and offers a few extra features. It doesn't have the tone controls of the old A32, but it does preserve balance control and input level trims. These are built in at no extra cost in terms of sound quality, since the volume control is an electronic attenuator and, thanks to the microprocessor that controls everything, balance and trim are achieved simply by

of the many vexed questions facing designers). But good-quality sealed reed relays, like those used here, are probably near ideal for their combination of good sound, high overload level, reliability and near-silent operation.

Before the signal even gets to those relays it's buffered by separate op-amps for each input, making the amp particularly easy for source components to drive - although not many these days are short of output 'oomph' Then, having been selected and boosted (attenuated) to the right level, it leaves the preamp board on short jumper wires that connect to the physically separate power amp section. A rear-panel switch selects integrated

"...performance seems to be consistent, whether it's just started playing music or well warmed-up by loud rock 'n' roll."

adjusting the settings. This is the kind of thing where electronic control adds undoubted benefits - three mechanical controls (input trim, volume, balance) in series is no-one's recipe for reliable high-quality sound!

We were intrigued to find a little piece of what looks like ferrite glued on to the volume control chip. Damping material on chips is common enough, but we haven't seen this one before; presumably it provides some degree of magnetic screening, while the resilient glue that's been used will also contribute to mechanical damping. There's more conventional squishy plastic stuck to the input selector relays which handle main source switching (the issue of which switching device to use - mechanical, relay or electronic - is one or power-amp mode (allowing for future upgrades with a separate preamp) and passes the signal to a discrete-transistor circuit that ends up with a pair per channel of Sanken output transistors, carefully configured to minimise thermal modulation effects

There's been a lot of discussion about thermal effects in amplifiers. On the whole, however, most amps are not affected by temperature change, but there are some whose performance varies quite noticeably as the output transistors heat up. This is inevitable, even when bolted to a substantial heatsink like the one in the A38. Sure enough, performance here seems to be consistent, whether it's just started playing music or well warmed-up by several minutes of loud rock'n'roll.

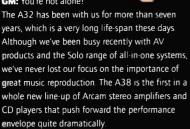




We recently spoke with Geoff Meads, Brand Manager at Arcam, about the new A38

HFC: We really liked the A32. Why

GM: You're not alone!



Just what are the benefits of the improvements to the thermal stability mentioned in the A38's publicity?

The aim here is to reduce thermal variation in the output devices. In most systems the output devices get hot quickly with large signal transients, then take a while to cool down after the transient has passed. Using the new thermal transfer arrangements used in the A38, the heat spikes from signal transients are transferred to the heatsink much more quickly reducing the temperature variation in the output device. Sonically, this makes the amplifier sound more dynamically nimble and rhythmically transparent.

If the A38 includes so much of the C31 and the P38, why should people spend the extra for the separate pair?

There are a number of reasons why a pre power like the C31 / P38 will sound better than an integrated. Probably the most influential is the fact that the power supplies are separate and dedicated to their relevant purposes. In the C31 there is a substantial toroid based power supply dedicated to the preamp stages with additional regulation. If you're a vinyl fan, the phono stage will also benefit since the phono preamp will be physically separated from the high-current circuits of a power amp, thus reducing the possibility of induced electromagnetic interference. Having said that, the sound of the A38 makes a very strong case for integrated amplifiers!

■ Throughout the A38, Arcam's construction and component selection steers a careful course between fussy and cost-effective.

Most components are surface-mounted and the circuit boards are quite complex multi-layer affairs, but connectors, for instance, are nothing fancy and there are no 'brand name' passive components. Despite that, the capacitors and, perhaps, the most important component in any amplifier – the mains transformer – is of a good quality.

Volume control steps can be set to 2dB, 1dB or 0.5dB, to suit your own tastes in precision versus convenience. Arcam also supplies the A38 with a new remote control (the CR90), which is a universal device capable of controlling practically everything – always assuming you can be bothered to follow the necessary steps to set it up. After all, anything that can reduce the proliferation of remotes in the average household is welcome!

SOUND QUALITY

One of the most common questions put to the *HFC* editorial team is: "how does my old high-end gear compare to mid-price up-to-date equipment"? It's not always straightforward to answer with audio technology's moderate progression, so it was, therefore, fascinating to be able to compare this amp with a well-regarded pre/power combination from the late 1980s that was on hand around after a recent service. Said combo cost considerably more than £1,200 in its day, never mind inflation.
But despite a lively and energetic sound it lost

Of course, what matters in the here and now is how the A38 stacks up against current competition, but that little experience did bolster our confidence in regarding the present suspect as a very fine amplifier in general terms. It has a highly neutral tonal character, clear and naturally presented detail, excellent manners and very little

out to the A38 on resolution, imaging, grip

and, in the end, general musicality.

FMJ RANGE

Arcam's 'Full Metal Jacket' range was intended from the outset to be the upmarket alternative to the cheaper DiVA (Digitally integrated Video and Audio) products which have, among other things, less sophisticated casework. Apart from the external differences, FMJ circuits are more highly specified with better quality parts, higher output power and various other refinements. As currently comprised, the range has one of pretty much everything: the A38 is the integrated amp, while the C31 and P38 (see page 70) are matching pre and power units and the P1, a 175-watt monoblock power amp. The new CD37 CD player and T31 tuner are the stereo sources. There are also a number of AV components, starting with the DV139 DVD player and moving on to the AV9 preamp processor and the P7 multichannel power amp. The range is rounded out with the MS250 hard disk music server (below), which we reviewed in HFC 306.

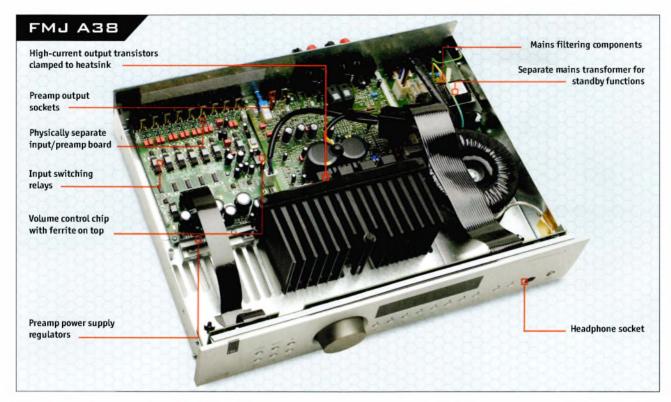


in the way of 'grain' or other unwanted artefacts that could cloud one's enjoyment of the music.

The £1,000-odd amplifier market is quite a hotbed of activity these days, with stalwarts like Arcam contending against various. Chinese imports, recent start-ups and even upmarket offerings from the big names of domestic audio and AV. We've come to expect good things from most of these amplifiers, but we found ourselves, over a particularly long review period, becoming unusually fond of the A38. It does all the basic hi-fi things it should, but what really hit home was the extent of the 'more!' factor it contributed to the various systems we assembled around it.

This must be, in a large part, due to the tight, but unfussy control the amp exerts over





A32 vs A38

The power amp circuit of the A32 and A38 is fundamentally much the same, but new output transistors have been added and additional measures have been taken to ensure thermal stability. The biggest change is the all-new preamp board. The A32 used solid-state switches and also offered tone controls, digitally selected, but analogue in operation. Those have gone from the A38, along with the seven-channel upgrade option and the phono stage (which is available for an extra £110). Finally, the mains transformer is a new type intended to reduce mechanical hum - according to our measurements it also seems to have reduced electrical hum to even more negligible levels.

"...what really hit home was the extent of the 'more!' factor it contributed to the various systems we assembled around it."

the speakers. Among the various models we had a chance to test it with were Bowers & Wilkins' superb 8035 speakers. While that might not seem the most obvious pairing, we felt the A38 was not out of its depth in such illustrious company. Not only is the bass taut and rhythmic, but the midrange and treble are very well controlled and highly detailed. Some may find it slightly too controlled, but experience suggests you can't satisfy all tastes in this area, however hard you try. And to be honest, we're highly enthusiastic about the precision and

resolution benefits that 'control' brings in its wake. Stereo imaging is excellent too, with very clear lateral placing and separation and some of the best depth portrayal you'll find on the sensible side of £3,000 or so.

All told, we're very impressed with this amplifier. It is both analytical and musical in an impressively large measure. Its output power is generous and willingly delivered, while the fine build quality, thoughtfully specified feature set and smart exterior only add to its already attractive value. HFC

Richard Black







Setting standards

Focal unveils a 'modded' version of its Chorus floorstander, for those who demand more

PRODUCT Focal Chorus 816WSE

TYPE Floorstanding loudspeaker

PRICE £1,399 per pair

KEY FEATURES Size (WxHxD): 99.8x28.2x37.5cm ○ Weight: 22.5kg ○ 25mm aluminium/magnesium inverted dome tweeter o 165mm polyglass bass/mid unit • 165mm polyglass bass unit • Sensitivity: 91.5dB Impedance: 8 ohms (nom) Finish: Moka or Ebony

CONTACT № 08456 602680 # www.focal-fr.com

hose of you familiar with German car margues will know the respectable, even sensible Audi A4 and you probably know about the wolf in sheep's clothing that is the Audi RS4, a car with similar

The Chorus V range normally sports polyglass driver cones, but the 165mm mid and bass drivers on the 816WSF have the same cone material as Focal's top-of-the-range Utopia models. The midrange cone is a single glass layer with a foam backing, while the bass unit is made up from multiple layers of glass either side of the foam to give it greater stiffness. The tweeter is made of aluminium and magnesium and takes the company's preferred inverted shape, one which it feels offers greater rigidity at the appropriate frequencies. The 816 cabinet is attractively proportioned

and very neatly finished. Honed from HDF and

"Focal's design department decided to incorporate the cone technology from its more upmarket ranges."

looks but a rather more powerful engine. Its this variation on a theme that seems to have inspired the WSE version of Focal's Chorus 816 V. Normally this is a very tidy-looking thousand pound floorstander which sits midway up the Chorus 800 V range and, thanks to its balance of style and sound, probably ticks over at a steady rate in sales terms. But this wasn't good enough for the UK trade, who demanded a 'go faster' version of this model. One that retained the domestically friendly size and styling, but which had something extra under the bonnet to whet the appetite of the sonically sensitive music lover.

So Focal's design department decided to incorporate the cone technology from its more upmarket ranges, specifically the Electra and Profile models. In fact, if you look at the drive unit complement, it is very close to that in the Profile 918 and the Electra 1027 Be, which sells for considerably more than the sum being asked here. The difference between an 816WSE and an 816 is hinted at in the suffix: SE stands for special edition, W stands for 'verre verre' or 'glass glass'. This is how Focal refers to its W cones, which combine layers of epoxy-impregnated glass fibre with a Rohacell foam backing designed to achieve low mass, high stiffness and high internal damping.

with its central portion covered in polished black acrylic, the flanks are vinyl wrapped in either 'Ebony' or 'Moka'. The box is bolted to a cast aluminium plinth which adds to the air of "affordable luxury" as Focal likes to call it, as well as creating a specific gap for the downward-firing reflex port to work with. There are two reflex ports, one being forwardfiring, while the other exits out of the base. Focal's reasoning is that power handling increases with port area. Doubling the port area like this also adds to the contribution that this part of the equation gives to the low frequency output of the speaker as a whole.

Focal also continues with the single pair of cable terminals approach, arguing the point that things remain more predictable with only a single wire connection (if you use different cables into bi-wire terminals you can subtly change the signal going to the two halves of the crossover). In this case, the terminals are rubber coated for easy clamping and extra tactile appeal. Spikes are included in the cast plinth and are very easy to adjust from above which makes a pleasant change.

SOUND QUALITY

Initially, we set these up at the more open-end of the listening room with a lot of space

behind and beside them resulting in a good open sound with fast, tight bass. The midrange, however, didn't seem to come through all that well, so we switched seating and speakers around to give the 816 WSE something to work against in the form of a relatively close rear wall. While the bass wasn't quite as clean, probably because our floor is suspended rather than solid, it did result in significantly improved imaging and all-round coherence.

Listening commenced with the Resolution Audio Opus 21 CD player and a visiting Leema Tucana integrated amplifier – a pairing that proves to be very much up the Focal's alley the speaker revelling in the great timing and immediacy on offer and revealing a good deal of the weight and dynamics coming off of the Avanim disc Third World Love. This contains a very realistic-sounding kick drum, which the speaker makes a fine job of reproducing, delivering a sense of slam that you don't often hear. It also does a good job with the trumpet at the other end of the scale, the inverted \square





POSITIONING

The 816WSE needs some rear wall reinforcement to keep the midrange in balance, but give it too much and the bass starts to lose definition. In the end, we found that a gap of 70cm behind the cabinet and around 60cm either side was enough to produce expansive and powerful bass. As for orientation, in our room toeing both speakers in to face the listener gave a well balanced result, the imaging is also at its strongest like this albeit trading a bit of image width for extra depth. As the 816WSE comes with its own cast plinth and spikes, set up is a simple matter of adjusting the spikes so that the speaker stands upright - a spirit level can be handy for this job. Focal doesn't state whether the spikes should be turned all the way down to increase height, but if your listening position is higher then it would make sense to raise the speaker up to match. The single wire terminals do not encourage the usual choices with bi-wiring and, in fact, make life easier and less expensive by only allowing one set of cables. We used Townshend DCT because that is our reference speaker cable and it seems to work well with most speakers including this. Its low-end control and imaging solidity were easily taken advantage of by the speaker.

SYSTEM MATCHING

This is a more than averagely efficient loudspeaker. We tried Sugden's 30-watt A21 SE to see if it's 'quality not quantity' approach would work. It does, even if the emphasis (under its auspices) is more on the mid than the frequency extremes. For those after a tight bottom end, 60 watts plus is recommended and if you want to play loud as well, better make it 100 watts.



■ tweeter making a great case for its approach by reproducing high-power, high frequencies without sounding strained.

Seeking out more bass adventure, we put on a bit of Grace Jones and were treated to Robbie Shakespear's very tuneful underpinnings on Warm Leatherette in full effect. It would seem that the combination of precise, clean highs with the impressive low frequency extension and control on offer makes the 816 WSE a highly capable loudspeaker when it comes to rhythmic definition. In fact, timing is pretty strong across the board thanks to the way the bass moves with the same speed as the midband. The latter invokes good imaging, allowing voices and instruments to project away from the cabinets with a good recording such as the Blind Boys of Alabama's Born in Bethlehem. There could be a little more sparkle in the midband, perhaps, (some tracks can seem a shade less colourful than they do on more expensive speakers), but it is always well articulated. Imaging is also very sensitive to the recording with the better ones throwing up a tall and wide soundstage with good, if not outstanding depth and others hanging low and not really escaping the cabinets. Differences like this reveal that the Focal is adding little of its own character to the result, which is a very good sign.

The nearest speaker we have on hand for reference purposes is ATC's SCM19, a £1,499 standmount which has a rather more dry sound that reveals more detail, but doesn't extend as well in the bass. The 816 WSE produces a bigger soundstage with more fulsome bass and a perceptibly 'louder'

character. It's a more forgiving speaker and probably has wider appeal than the relatively puritanical, but rock-solid ATC.

To see how forgiving the Focal is we partnered it with some more down-to-earth electronics in the form of Cambridge's well regarded Azur 840C CD player and 840A amplifier. The result, while more forward, is very coherent and detailed with a leaner bottom end and a cruder top.

Back with the high-end electronics, Rodrigo y Gabriela's *Live* disc provides the highest entertainment of the session. The live atmosphere being reproduced to gripping effect and the scorching playing being totally indulged by this speaker's superb dynamics and ability to project the twin guitars.

The WSE treatment makes this neatly finished design a highly entertaining speaker and one which will give alternatives from Focal's competitors a benchmark to beat. **HFC**

Jason Kennedy



IsØTek®

www.isoteksystems.com

"Excellent build quality, protection circuits, a fully adaptive filtration circuit and stunning performance make the Sigmas a true bargain." HI-FI NEWS, BEST ACCESSORY 2006



"IsoTek is the UK's biggest name in filtration...this year we hail a new product, the Sigmas." HI-FI CHOICE, BEST MAINS CONDITIONER 2006 & 2007















Only the finest quality components are used, and many of these are uniquely developed and built to 'Millitary Of Defence' specifications.







IsoTek has consistently established a class leading reputation, a fact that has been proved by numerous reviews throughout the world and over 21 industry awards.

For your free brochure, or to locate your nearest dealer please call Activ Distribution on 01635 291357.

Activ Distribution

Tel: 01635 291357 • Fax: 01635 291356 E-Mail: isotek@activdistribution.com • www.activdistribution.com www.isoteksystems.com



PRODUCT Ayon CD-1

TYPE CD player

PRICE £2,050

KEY FEATURES Size (WxHxD): 46x10x31cm

- Weight: 11 kg Digital outputs: 1x S/PDIF coaxial
- Analogue outputs: 1x balanced XLR, 1x RCA phono
 Top leading design Conversion sets: 10.2kHz (2.4kh)
- ◆ Top-loading design ◆ Conversion rate: 192kHz/24bit
- Upsampling DAC Hybrid design

CONTACT 201435 867438 # www.ayonaudio.com

ou can't fail to be impressed by the appearance of the Ayon CD-1 CD player, which is exactly what its Swiss designers clearly intended. But before we get hung up on the aesthetics of the design, let's consider the mechanical and electrical makeup of this distinctive player.

The CD-1 is a top-loader, with a Sony KSS-213Q transport centrally mounted in a well on its heavy-duty aluminium top plate. Discs are clamped onto the mechanism with a magnetic puck and then an acrylic cover is placed like a saucepan lid over the well covering the entire transport assembly. While the instructions are at pains to note that one should not attempt

to play a disc without the magnetic clamp in place – which is a fairly obvious consideration we would hope – they make no mention of the acrylic 'lid'. Indeed, discs will play regardless of whether it's in place, which suggests that some might treat it as a mere cosmetic appendage. Some companies spend inordinate amounts of money on anti-reflective paint to counter laser scatter in their players' transport accommodations. So, is the lid cosmetic or functional? Only the listening test would tell. Hazarding a guess, though, as the inside of the transport compartment is rather shiny, we can't imagine it having any dramatic effects.

The only practical problem, if one can call it that, with loading and playing discs on the CD-1 is that the lack of any automation means it's necessary to indulge in a little button pushing to get the player to initialise each disc. Forget to do this and you'll sit waiting for 'play' to begin, while the display reads 'Open'. The correct procedure, although a little counter-intuitive in involving the Stop button, quickly becomes second nature.

Inside the CD-1's sturdy aluminium casing there's an unnamed DAC, working at 24-bit/192kHz and feeding a valve output stage consisting of pairs of 6H30 EH and 6922 EH valves. While we always leave solid-state electronics permanently powered up during a review, we tend to power down valved components when they aren't being auditioned. This means that when the unit is switched on there is a brief pause indicated by 'warm up' showing in the display window. And warm up it does... in the literal sense, eventually giving off the kind of heat that would melt chocolate.

SOUND QUALITY

The CD-1 seems to have no problems with extracting detail from a disc and it renders vocal lines, in particular, with impressive precision. The individual who supplied the transcription of Cornershop's *Brimful of Asha* would certainly have benefited from using one. Reading what he thought Tjinder Singh was singing and then listening to the track on the

Ayon, it's difficult to believe that anyone could manage to make so many mistakes. For example, the clearly articulated "Ferguson Mono" in the chorus turns into some strange Anglo/Punjabi uttering on the transcription. Perhaps, more importantly, the player clearly delineates the bass, drum kit and percussion elements in the mix and renders the track's outwardly lazy rhythm at a decently brisk pace. The CD-1's vivid portrayal of instrumental character and colour bolsters the track's life and vibrancy

It becomes quickly apparent that the Ayon is very good at turning one's living room into an untidy mess: it positively encourages listeners to litter the floor with CDs while they search for a favourite 'test' album. We were fascinated to hear what it would do with the old Crowded House disc Woodenface and tracks such as Weather with You. As before, it clearly delineates each instrument in the song and portrays it distinctly, with delightful character and musical acuity. By far the most impressive element of its performance is its wonderfully lucid and convincing portrayal of the glorious vocal harmonies, which had the hairs on this listeners' neck standing to attention each time the chorus came around. All the songs on the album, especially There Goes God and Italian



hearted mien of the backing band. The CD-1 seems to be a first-rate emotional mirror.

All of which leaves us with just the lid-on/lid-off conundrum. While there might not be any night and day or significant musical differences evident between these options we prefer the lid down approach. Details in the

to the Southern English ear. The CD-1, however, unpicks the strands of his strongly accented vocal lines magnificently and delivers each syllable with barely credible grace and intelligibility, especially with tunes that demonstrate the gentler side of Gaughan's often abrasive, aggressive vocal nature. It treats his exquisite acoustic guitar playing with equal and thoroughly appropriate respect and delicacy, which just adds to the emotional impact his songs can evoke in the listener.

Surprisingly, while being almost fiercely detailed, the CD-1 still manages a sweet, typically valve-like delivery that can be rather beguiling; even on material where one would least anticipate it. For example, if you never expected to see the words sweet and Gaughan's voice in the same sentence, you might find this fascinating and highly individual hybrid CD player well worth a lengthy audition. **HFC**

Malcolm Steward

"while being almost fiercely detailed the CD-1 still manages a sweet, typically valve-like delivery that can be rather beguiling."

Plastic, demonstrate the CD-1's subtle, but assured handling of bass lines. Forced to choose just one element to enthuse about, though, we'd have to pick the emotionally influential way the CD-1 portrays vocals.

The next album we try is Mary Coughlan's After the Foll, which is guaranteed to test the player's ability to tug at the listener's emotions. This it does superbly by wringing every ounce of sadness out of the singer's voice and the listener. On tracks such as Sunburn, though, Coughlan's delightfully blackened humour emerges equally as powerfully, as does the rather more light-

back of mixes and subtle dynamic inflexions seem more clearly defined with the lid in place and some music has a more convincing, easygoing flow with it in situ. While it is difficult to specify which elements benefit by the lid being in place, our listeners felt that it made some music sound more realistic. And that is as good a reason as any to justify such a preference.

One disc that benefits perhaps more noticeably than others is the 1989 Dick Gaughan album *Handful of Earth.* We've used this for many long years as a reliable test of vocal articulation and dexterity: even otherwise accomplished CD players can render Gaughan's singing barely intelligible, especially







New kid on the block

Low-cost integrated amplifier from System Fidelity is no performance beater

PRODUCT System Fidelity SA-300SE

TYPE Integrated amplifier

PRICE £450

KEY FEATURES Size (WxHxD): 43 5x10x35 5cm

O Weight: 11kg

O Rated power. 35 watts

O Inputs: 5x line level

O Outputs: 2x loudspeakers (switched); 1x subwoofer

CONTACT № 01785 887824 # www.systemfidelity.com

ew to the UK, System Fidelity is itself a young company set up (so its website tells us) by a group of European hi-fi distributors, who found that none of the low-cost, high-value hi-fi (and home cinema) separates available to them quite met their requirements. So, enterprisingly, they decided to develop their own. Based in Denmark, but manufactured in China, the brand credits a designer from Slovenia, so this really does look like a trans-global set-up!

The SA-300SE integrated amplifier is currently the range-topper, beneath which are the 250-series amp, tuner and CD player, various loudspeakers (including subwoofers)

and a DVD receiver. Across the board, simple down-to-earth value is emphasised alongside a sound quality which clearly aspires to rival the best that established names in this country (like Cambridge Audio, Rotel, Marantz etc.) can offer.

External presentation is simple enough, as is the list of features. You get five line inputs and two switchable speaker outputs, plus an active subwoofer output. Some amps have an output marked 'sub' that is in effect a preamp output – a full-bandwidth signal from somewhere after the volume control. This one, however, is pre-mixed to mono and pre-filtered, the roll off presumably suiting SF's own speakers and subwoofers. That's fine if you're going to use their speakers, but the chance of it accurately matching any given setup from another speaker manufacturer is slim.

The weight of the amp encourages hopes of beefy build and output drive. Indeed, the build is very good, with a steel case and brushed aluminium front panel. Inside the case is a toroidal transformer which is definitely on the

generous side for the amp's rated output of 35 watts (8 ohms). There's also quite a lot of fresh air, but the heatsink is a decent size. Mounted on it are a couple of power integrated circuits, which have provided output drive in two or three models we've seen lately from various sources and, thanks to the employment of these devices, there's relatively little else on the main amplifier board.

Unusually, very unusually at this kind of price, System Fidelity has provided the amp with a regulated power supply. Also, small-signal stages often run off such a supply, so it's not often employed for power amps. That's because they are usually designed to have a high 'power supply rejection' (which should, in principle, mean they won't benefit from a regulated supply) and because such supplies inevitably waste power and limit maximum output delivery compared with the unregulated version. Nevertheless, that's what has been used here and the fairly modest output rating does at least keep the power wastage manageable.

Mounted against the back panel is the input selector board, which uses relays and passes the signal on to a motorised potentiometer volume control. That, at least, ensures that no real-world input signal will ever cause premature overload. But the volume control itself is a bit of a weakness: it's a cheap-grade part with rather poor mechanical tolerance. As a result, the tracking between channels isn't brilliant and there's noticeable backlash. In practice, this means that channel balance can vary by enough to skew images a little, depending on which direction one last turned the control and by how much.

Socketry is nothing special, but perfectly adequate. We actually quite liked the dual purpose spring-clip 4mm socket speaker terminals, which have meaty springs and seem to do their job well. As is common these days,



"Midrange and treble aren't bad, but they never quite seem to have the insight that we've heard from the best sub-£500 amps."

the mains switch is at the rear and the front panel control just switches to standby. This is, of course, to allow switching 'off' by remote control, something which brings us to the best bit: the all-metal remote control. It's pure class and a real touch of luxury.

SOUND QUALITY

Mind you, that luxury will be wasted if the sound isn't up to scratch and it's here that we have some reservations about the SA-300SE. Mind you, we were also very impressed with certain aspects of its performance. It may not be the Philosopher's Stone, but bare us out because its good points are interesting and could prove highly seductive for many.

What most excited us was the amp's bass. Its measured bass response is, like most respectable amps these days, ruler-flat to well below the 20Hz cut-off of hearing and, therefore, out of sight better than any loudspeaker its likely to be partnered with. Despite that similarity, amps often have widely differing subjective bass due to the way in which they control the loudspeaker. Not only the tightness and precision, but also the apparent extension (at low frequencies it can

vary significantly) and this is often one of those areas of performance where it does often seem that you get what you pay for.

The SA-300SE doesn't so much stretch that particular envelope as burst out of it. Bass is not just extended, it has a combination of grip, drive and tunefulness that we'd normally expect to see in an amp costing three times as much. Yes, there's a limit imposed by the fairly modest power rating (one side-effect of regulated power supplies is that there's effectively no dynamic headroom, so 35 watts is pretty much your lot, steady-state or transient), but current delivery is comfortable into four ohms and the amp seems unafraid of the majority of loudspeaker loads we found to test it with. Short of being asked to burst eardrums at ten paces, it really does give one of the best semblances of real high-end bass that we've come across in a budget amplifier.

You'll already be wondering where the 'but' comes in. Essentially, it's in anything that's not bass. Midrange and treble aren't bad, but they never quite seem to have the insight that we've heard from the best sub-£500 amplifiers. Recent models from Marantz and Creek spring to mind, not to mention the Cambridge Audio

Azur 640A. Each offers resolution details that have traditionally been the preserve of the finest kit, details which this amp really can't match. Although, it's quite hard to put the finger on exactly why, because ostensibly the sound is all there – the basic presentation is clean and tidy and one can easily be impressed. Stereo image depth is not quite all one might wish for, however. Confirming evidence that there's a strong correlation between this and the resolution of fine detail in the performance of audio electronics.

It's quite hard to sum this amplifier up succinctly, but it's clear that it is a frustratingly incomplete performer in sonic terms. It's certainly worth hearing, if only to discover just what really good bass can be. But its resolution is just not up to the standards we expect in order to give it a full-blooded recommendation. It's smart and practical, but it sits at a competitive price point and we feel it doesn't quite make as strong a case as some. **HFC**

Richard Black





Guildfordaudio.co.uk www.guildfordaudio.co.uk www.guildfordaudio.co.uk 01483 537 577

Run by professionals - for professionals





PRODUCT Creek Evolution Tuner

TYPE FM/AM tuner

PRICE £285

CONTACT

© 01442 260146

www.creekaudio.co.uk

t's been a while since we reviewed the matching amplifier and CD player (HFC 283 and 285 respectively) that accompanies the Creek Evolution tuner. But our enthusiasm hasn't waned one bit. On first glance, apart from the distinctively Creek layout of controls, it's pretty much what one expects from a modern analogue tuner. There are less buttons on the front than one might expect, so no single-button access to presets. But using the tuning knob to skip from preset to preset is hardly rocket science and direct access is possible from the remote control. Tuning the 'old-fashioned' way is particularly fast - a pleasure after some of the glacially slow tuners we've encountered - and is not accompanied by any unpleasant bursts of noise (the automatic muting being very efficient). RDS automatically displays the station name

Inside the unit there's little enough to see. The tuner head covers both FM and AM bands and is sourced from Kwang Sung, the Hong Kong based manufacturer that seems to be the most successful supplier of such devices at

present. A ribbon cable from that little module passes a signal to Creek's own audio, control and power supply board which performs final signal conditioning and buffering before feeding the high-quality output sockets. The power supply is well specified, with a toroidal transformer and plenty of capacitance. Build is good throughout, with a particularly impressive solid metal front panel.

SOUND QUALITY

Creek's new FM tuner completes the Evo range of high-performance kit

With so much of the reception and decoding work done in the tuner head, how much of the sound is down to the notional manufacturer is open to question. Testing it over a timespan that covered various atmospheric (and therefore reception) conditions, we continued to be impressed at its clean, unfussy and detailed reception of a wide range of stations.

Even with FM stations from quite distant transmitters, the sound managed to hang together fairly well. It's at its best, though, when fed a strong, clean signal from a roof-mounted aerial and, under such circumstances, proves conclusively that there is nothing wrong with FM sound. Speech is very lifelike, with no detectable roughness on sibilants, while music is treated in an admirably even-handed manner, neither bass-heavy nor lightweight. It's also well-balanced and with an open treble that displays excellent resistance to break up.

Listening to some choral music on Radio 3 (the one station that sometimes sounds better on DAB due to its wide dynamic range and higher DAB bitrate) was a good test. Because, even though it can sometimes sound quite edgy on FM, the Evolution managed this difficult repertoire with ease and confidence. On pop stations it was no less assured, perfectly happy with driving bass, ballads, even harmonic-rich jazz trumpet. This is a very capable FM tuner and makes a great case for sticking with this trusted old technology! **HFC**Richard Black





Newcomer Brennan's JB7 is a CD player, amp and 40GB server all for just £300!

PRODUCT Brennan JB7

TYPE Music server system

PRICE £300

KEY FEATURES Size (WxHxD): 22x5x16cm

- Weight: 2kg 40GB music server ∕ CD player
- Built-in amplifier Rated power: 20 watts
- Outputs: headphone, 1x line level (3 5mm stereo mini-jack) 2x loudspeaker (spring clips) Inputs: 1x USB 2.0 Full Speed, 1x line level (stereo jack)

CONTACT 2 01638 615117 # www.3ga.org.uk

ot on the heels of the Arcam Solo Mini (reviewed in last month's *HFC*) comes this sub-miniature system, about the size of longish hardback novel. It doesn't include a radio, but amazingly the tiny steel case contains a CD player, a 20-watt power amp and a 40GB hard disk, which can be upgraded to 80GB for £20 more This is made possible by using a slot-loading transport, a laptop-style hard disk and a switching power amp, with the case as a heatsink.

We were impressed from the start by the quality of build and presentation. The front panel is a very fetching blue-anodised aluminium affair, dominated by a graphics

display and a multi-function twist/push knob, while the rest of the case is solidly made from steel with no exposed screws on top or at the sides. The rear is a little less impressive, but does include spring-clip speaker cable terminals, as well as 3.5mm stereo mini-jack sockets for headphones and line out and line in (yes, it records too!).

Remove the top cover and, surprisingly enough, there's even some empty space inside, though not much. There's a slight cheat on the space front in that the power supply is external – a rather substantial 'lump in a lead' plastic box, but in the unit proper, Brennan has assembled everything neatly and with perfectly decent-quality parts too.

Most servers we've seen recently have been multi-output devices with Ethernet connectivity, to allow for the benefits Internet connection has to offer – online database access and internet radio. This one, by contrast, is a simple, single-output device that's intended to be completely self-contained in normal use. It doesn't overlook the possibilities

of database access, though, as it comes with a pre-loaded 'CDDB' database. All right, that's going to be out of date as soon as it's loaded but you can load a new one from time to time

The other thing many servers rely on is an attached video display. Again, there's no option for this with the JB7, but the display is perfectly adequate and is aided by some thoughtfully devised search features. The knob can be used to 'dial up' a few letters from the title of an album or track (like looking up a name in the directory of a mobile phone) and, as one adds more letters, the display even tells you how many items match the entered text. Recordings that have been loaded from a CD that's already in the database will have titles automatically loaded for them. Other discs such as our custom-made test discs, which are not in the database, can also be labelled easily enough

The drawback of a laptop-style hard drive like this is, of course, is limited capacity. It's been a few years since 40GB was eyebrow-raisingly huge and these days it's a lot less than most

full-size servers can offer. The simple fact is, that in full (wav) audio quality it's only about 50 hours of music when one takes into account overheads and the space used by the database. 80GB is a little over 100 hours. The default mode for the JB7 is 192kbps, though other bitrates are available and in a way, uncompressed mode may seem inappropriate for a device like this, but we're glad it's been included. FLAC or similar lossless encoding would have been a real bonus, mind you!

Audio can be (slowly) loaded to hard disk from CD (8x speed is claimed, but ours seemed a little slower) or from MP3 players, or external hard drives connected via the front-panel USB socket. In fact, an external hard drive could easily be the salvation of this device when the internal one fills up. You can also use an external drive for backup.

SOUND QUALITY

Let's start with the really good news If you've been following the recent reviews of music servers in *HFC*, you'll recall some heartfelt complaints about mechanical noise. And, while the JB7 is not strictly silent, it's pretty much inaudible if your ear isn't right up against the case. The hard drive makes very little noise and the unventilated case keeps most of it internal.



For the test, Brennan sent us a pair of its own bookshelf speakers (£60). We were rather impressed with these and if money's really tight you could do a lot worse. In the interests of finding out more about the JB7 itself, though, we tried various rather more upmarket speaker models, including the magnificent

"We can't think of a better all-round solution for an office or spare room system, unless it's a big space and you have cash to burn."

In terms of what comes out of the electrical outputs, we're happy to report on some very favourable impressions too. Let's not get carried away and pretend that the results will displace a couple of grands'-worth of hi-fi separates, but the sound is really not at all bad. Noise is low (though there is just a hint of audible warbling in the background, if one listens carefully in a very quiet room) and the bass and treble seem admirably extended. However, there's plenty of get-up-and-go to the sound and the dominant impression is of an altogether very enjoyable experience. Playback direct from CD is slightly marred by noise from the transport, but is otherwise is identical to hard disc playback.

Bowers and Wilkins 803S. Their slightly tricky low impedance proved a taxing test for the JB7 and led us to the discovery that overload is not lightly glossed over; when this amp clips, you'll know about it!

The amp-friendlier ATC SCM20, however, gave us some really rather impressive sounds. Yes, there's a lack of absolute clarity in the JB7's output, if one is to judge it against good standalone amplifiers, but the extent of the confusion and grain it adds is not enough to mask the basic character of the music. We tried some classical tracks, various pop recordings and a few familiar jazz excerpts and while we might not have learned anything new about them, we enjoyed them all.

If newcomer Brennan has set out to make a 21st-century all-round music system for people who hate hi-fi, they've probably succeeded. Operation is simple and the proliferation of gadgets, especially mobile phones, has made everyone familiar with the basic principle of control menus and database (index) searching.

For those of us, meanwhile, who do take their sound systems seriously, this dinky little product still has plenty to offer. Offhand, we can't think of a better all-round solution for an office or spare room system, for instance, unless, of course, your office or spare room is large and you've cash to burn. The JB7 takes up very little space and with its own or other decent mini speakers it can deliver a quality of sound which is good enough to be enjoyable even for those accustomed to fully-fledged hi-fi separates. For the price of a pair of mid-market speaker cables, you can't get much better value than this! HFC

Richard Black





Totem Arro

It's our slimmest floor standing speaker, with a 4.5" sandwich cone woofer with dual magnet, and a soft dome tweeter tuned for low resonant frequency. Although this design is very slim, it produces an amazing - never expected - deep bass. The Arro can perform comfortably even near walls. As with other Totem models, the Arro's small lateral dimensions are a virtue, not a compromise. Its very smallness allows it to project a completely believable stereo image most large speakers are unable to replicate.

The Arro brings Totem quality to smaller rooms and smaller budgets. Yet it performs like a champion, as its narrow cabinet has the rigidity of an expensive stand. It has the firm monocogue chassis you expect from Totem, with interlocked mitred joints, and unique borosilicate damping. It also has a hard-wired crossover network with bypassed oil capacitors, and it can be bi-wired.



Five different finishes available-four types of veneer: cherry, mahogany, maple and black ash and the fifth being a sublime white satin lacquer.

The standard added plinth with four spikes can be mounted by our specialists, although optional, usina the uniaue Totem "Claw" with ball bearing to floor system will give even better results.

The name is evocative of the arrow, which echoes the tribal theme suggested by our name, Totem.

The shape of this stand also mirrors an arrow, long and slim. Like a fine quality arrow, it is, at once, noticeably light and extremely rigid. And it reaches its target...the heart of the music. Listen to it, and vou'll conclude that Totem has hit another bullseye with the Arro.

London Area

South East

South South West

North

Scotland

Wales

Audio-T, READING, Berkshire Tel: 01189 585463 Rayleigh Hi Fi, RAYLEIGH, Essex, Tel: 01268 779762 Rayleigh Hi Fi, CHELMSFORD, Essex, Tel: 01245 265245 Audio-T, TUNBRIDGE WELLS, Kent, Tel: 01892 525666 Rayleigh Hi Fi, SOUTHEND, Essex, Tel: 01702 435255 Norman Hobbs, HAYWARDS HEATH, West Sussex, Tel: 01444 413353 Fusion Sound & Vision, Ipswich, SUFFOLK, Tel: 01728 748471 Audio-T, PORTSMOUTH, Hampshire, Tel 023 9266 3604 Audio Destination, TIVERTON, Devon, Tel 01884 24358 Movement Audio, POOLE, Dorset, Tel: 01202 730865/380018 Audio Excellence, BRISTOL, Tel: 0117 926 4975 Gloucester Hifi, GLOUCESTER, Tel: 01452 38 22 22 Leicester Hifi, LEICESTER, Tel: 01162 539753 Audio Counsel, CHEADLE, Cheshire, Tel: 01614 916090 The Sound Organisation, YORK, Yorkshire, Tel: 01904 627108 Moorgate Acoustic, SHEFFIELD, South Yorkshire, Tel: 0114 275 6048 Practical Hifi, WARRINGTON, Cheshire, Tel: 01925 632179 Practical Hifi, MANCHESTER, Greater Manchester, Tel: 0161 839 8869 Practical Hifi, PRESTON, Lancashire, Tel: 01772 883958 Practical Hifi, LANCASTER, Lancashire, Tel: 01524 39657 Practical Hifi, BLACKPOOL, Lancashire, Tel: 01253 300599 Practical Hifi, BOLTON, Lancashire, Tel: 01204 395789 Loud & Clear, EDINBURGH, Tel: 0131 5553963 Loud & Clear, GLASGOW, Tel: 0141 2210221 Audio Excellence, SWANSEA, Tel 01792 474608

Audio-T, CAMBERLEY, SurreyTel: 01 276 685597 Studio AV, ETON, Berkshire, 01753 631000

> To receive your free copy of our catalogue, please visit: totemacoustic.eu or call 003215 285585





IsoTek's new mains block offers tangible improvements

PRODUCT IsoTek Sirius

TYPE Mains conditioner

PRICE £250

CONTACT № 01635 291357 # www.isoteksystems.com

soTek certainly didn't invent the mains conditioner (people were selling them before the company started trading), but it has certainly made a big mark in aftermarket mains kit. This must be partly due to the sheer range of products available; at the time of writing, the company's website lists over a dozen models at a variety of prices.

But there are plenty more 100 - 240V in the pipeline, including the HIGH VOLTAGE latest model Sirius, which is part of the new 'EVO3' range. Set to replace the GII products, Sirius is a simple enough proposition, a six-way distribution board, good for ten amp output (2,300-watt) with filtering and protection built-in. Unlike the PS Audio Quintet (reviewed in HFC 307), it doesn't include any switching features, but then it is considerably cheaper. It does, however, come with handy wall-mounting brackets

£250 might still seem a lot of money to throw at a 'mere' mains accessory. But it's an expense that can easily be justified in the build quality of the Sirius, which is very high. The basic chassis is a substantial piece of aluminium extrusion, on which are mounted high-grade sockets. The mains inlet is a standard IEC type, which IsoTek naturally recommends should be fed via one of the company's own mains leads. The clever stuff is inside, on a modest-looking circuit board which carries all the filtering components.

Arguments rage in the nerdier corners of hi-fi-dom about how best to filter mains supplies. The Sirius adopts a relatively non-intrusive approach, with mostly shunt-connected components that are not 'in the way' of the mains voltage. There are also protection devices capable, apparently, of handling 22,500 amps, a claim we're happy to take on trust in the absence of a sudden lightning strike to use for testing. Rather ingeniously, IsoTek has also come up with a simple, but effective means to provide a degree of isolation from socket to socket, so that mains noise generated by one component does not significantly affect other components

HI-FICHOICE magazine

plugged into the same board. This is not always taken into account – certainly not in any of the cheaper mains boards we've seen.

SOUND QUALITY

It is only honest to add to any review of a mains filter or conditioner that your mileage may vary. Subjective results can, indeed will, vary significantly from system to system, location to location and even time to time (depending on just how much noise is on the mains and how sensitive the connected kit is to it). But we tried a variety of hi-fi components, in three locations, with the Sirius and were very favourably impressed.

Effects were most pronounced with source components, while power amplifiers – at least, the ones we tried – were less affected, showing just a small improvement in general subjective cleanliness of presentation and image. But we noted a similar improvement to four quite different CD players, each of which seemed to produce sounds from a quieter background when nourished via the Sirius. Small, subtle details were more in evidence and images both tightened up and extended a little further in all directions.

An elderly, but upmarket FM tuner benefited similarly and we were once again slightly perplexed to hear a subtle improvement also from an LP player – this is just the motor and control circuit we're talking about here, quite independent of the phono amplifier. The latter was also given a touch more detail and solidity in its sound, but that's a little easier to explain!

None of the improvements wrought was massive and yet when we fed an entire system through the Sirius, it was given a distinct lift in overall musical performance. We would not hesitate to suggest this as an effective upgrade for any system. It's effective, well priced and clearly makes the case for adding mains products to hi-fi systems. **HFC**

Richard Black



Performance boost

Elegant-looking Performance speakers take advantage of new technology from Mordaunt-Short

PRODUCT Mordaunt-Short Performance 6 Limited Edition

TYPE Floorstanding loudspeaker

PRICE £4,000 per pair

KEY FEATURES Size (WxHxD): 24x115x43cms **○** Weight: 33kg **○**25mm rear-aspirated, tube-loaded tweeter **○** 100mm third-generation midrange unit

- Twin 165mm bass unit Radical moulded enclosure
 Sensitivity: 89dB Impedance: 4-8ohms (nom)
- Finish: high-gloss piano black

CONTACT 2 0207 940 2200 # www.mordaunt-short.co.uk



ordaunt-Short has long been known, first and foremost, for its high-value budget loudspeakers, a tradition that current owners Audio Partnership has rigorously maintained. However, developing an upmarket 'flagship' range makes good sense, as it provides a technology test bed for new ideas that can subsequently 'trickle down' into more affordable models.

This £4,000 per pair Performance 6 Limited Edition is a subtly revised variation on the Performance 6 theme introduced in 2004. Although this LE version carries a £500 price premium, the two models look visually identical, apart from the colour, which is only available in high-gloss 'Midnight Black' (as distinct from 'Granite Grey' and 'Brilliant Silver').

The similarities might be obvious – the same elegantly shaped enclosure, the same metal diaphragm drivers operating in the same three-way, four-driver configuration.

The differences with this LE variation are exclusively under the skin, specifically in the crossover network and enclosure – two areas where increasing refinement has brought substantial gains for a number of brands in recent years.

Improved crossover network performance through careful selection of audiophile-oriented components, has been having a major influence on upgrading loudspeaker sound quality. Recognising this, the Performance 6 LE's network has been redesigned around a new printed circuit board, using Mordaunt-Short's established DVP (dual value parallel) capacitor technique with high-quality polypropylene types from noted specialist ClarityCap.

"Wood is not an engineering material", was a catch phrase used when Mordaunt-Short first launched the Performance 6, to stress the several advantages that accrue through moulding an enclosure from a polymer resin. It's a fair point, as wood – even when 'mashedup' into sawdust and then bonded together again with wax and resin as MDF – does have certain limitations, mostly because it's normally formed into flat sheets of constant thickness. And although it's true that MDF is much more machinable than chipboard or

plywood, there's no denying that a moulded monocoque type structure offers several potential advantages.

The most obvious of these is the irregular and exceptionally elegant shape. All surfaces are curved, and the whole thing is strongly tapered so that it's slim and very shallow at the top, but slightly wider and considerably deeper down at the base. Curved surfaces are much more rigid than flat ones and also ensure that internal reflections are well scattered. They also ensure that tightly focused standing waves aren't created.

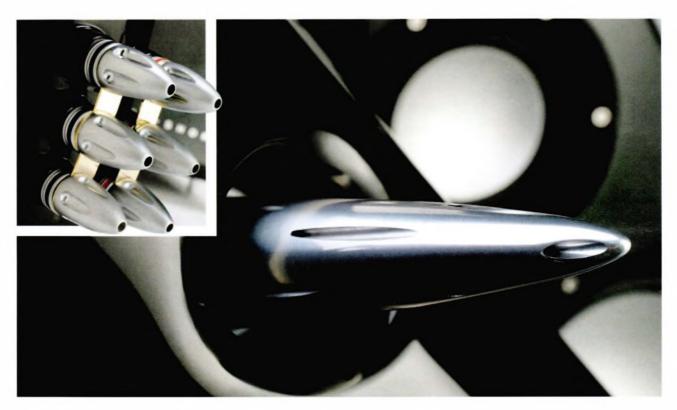
Moulding allows for much more complex shapes inside and Mordaunt-Short has taken full advantage. The drive units are actually bolted to rods that extend forwards from the thick rear spine of the enclosure, while strategic ribs reinforce the sides.

For this LE version, the polymer resin has been re-formulated to give better performance, and internal details refined to improve the bass. Grilles are supplied to cover each driver individually, but stickers suggest it's better if they're not used. Only the coarse mesh protecting the tweeter is a permanent fixture.

This a full three-way design, featuring four metal-diaphragm drive units arrayed up the front above a flared reflex port. The twin 165mm bass units have M-S's familiar silver dished metal diaphragms, 120mm in diameter with little radial stiffening ribs near the periphery. The midrange unit looks like a smaller version, though its 75mm diaphragm is rib-free and driven with help from compact neodymium magnets.

The tweeter is arguably the most interesting driver of all, the whole assembly is roughly more than 20cms deep, featuring a complex fat metal rod behind the diaphragm that's drilled by a logarithmic spiral of thin, differentially tuned pipes. The purpose is to create a flat acoustic impedance at the rear of the diaphragm, while also allowing through some non-coherent treble output to add extra air and spaciousness.

A hefty baseplate is invisibly incorporated in the base of the enclosure, ensuring fine physical stability and secure spike accommodation. However, the spikes themselves put form ahead of function – they



"This is a full three-way design, featuring four metal-diaphragm drive units arrayed up the front above a flared reflex port."

look stylish, but the lock-nuts can only be finger tightened. Three matching pairs of terminals are mounted low down at the rear.

SOUND QUALITY

The Performance 6 LE is clearly intended for free space siting, well clear of walls, as was amply confirmed in the far-field averaged inroom response traces. These showed an exceptionally good overall balance right across the audio band, from a -6dB point at 22Hz (under in-room conditions). The trend was unusually even throughout the bass region and also exceptionally smooth above 300Hz, though there's a touch of over-exuberance in the mid-treble, 5-7kHz

The measurements were very similar indeed to those made on the original Performance 6 under similar conditions some three years earlier, though there were a couple of minor differences. The impedance traces were very similar indeed, but the LE shows slightly more low bass damping. Sensitivity came out at 88dB on our tests, a decent enough figure (if a tad below the 89dB claimed), but the load the amplifier has to deal with is quite demanding through the bass region

The top end is arguably a shade hot, but it's also delightfully sweet, open, well integrated

and never sounds forced, while bass always sounds controlled, as well as satisfyingly deep and powerful.

Put on the Chemical Brothers, wind up the volume as high as you dare and then touch the sides of the enclosure. Hardly any vibration comes through, so it's obvious that the radical enclosure is doing a very fine job. That's further emphasised by the lack of boxy effects and the airy-but-precise stereo imaging. One simply isn't conscious that the sound is emanating from two reasonably large enclosures - you simply hear the music, and the stereo mix, with fine focus and freedom from boxiness.

Though most of the news is very positive, transparency and image depth did seem somewhat limited and dynamics sounded a little constrained. The bass end, in particular, sounds a trifle congested and lacking a little freedom of expression. Rather than underpinning things and taking the lead in driving the music along, it sort of hangs on in there, doing what's necessary and keeping good time, but not really taking over the control or the initiative.

Dynamic range, however, is thoroughly impressive, presumably thanks to the very low enclosure 'signature', so low level detail comes through well. Instrumental textures are well portrayed and with ensemble material it was quite easy to distinguish the number of brass or string instruments playing. Colorations are very low, too and speech sounds unusually clean of any undesirable cuppy or nasal effects.

On the end of a largely Naim-based system, the overall character might be a little cool and lean for some tastes, so we exchanged our regular speaker cables for the slightly richer and fuller sounding Chord Signature, to good effect. However, the biggest strength of the Performance 6 Limited Edition must be its ability to sound sweet, open, coherent and detailed even at very low listening levels. At the same time, this new LE version remains happy and free from aggression when being played seriously loud, too. HFC

Paul Messenger



Edirol R-09HR

TYPE Portable digital recorder

PRICE £259

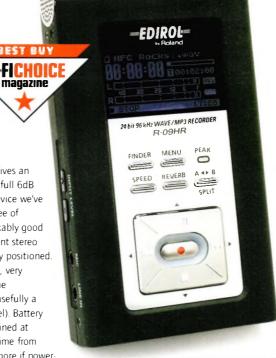
CONTACT 2 0870 3501515 # www.edirol.com

year or so ago, we reviewed Edirol's R-09, one of the first of these semi-pro, solid-state recorders. We liked it a lot, finding its combination of quality and convenience extremely handy: subsequently (having used one long term) we became aware that the built-in mic amps aren't the quietest, but it's done good service via line in, with external mics and amps.

Just recently, Edirol brought out the 'HR' version, which adds 96 and 88.2kHz sampling, a few minor changes and additions and the 'Isolated Adaptive Recording Circuit'. Oh, and an infra-red remote control! The overall size is similar, just a few millimetres longer.

Having been favourably impressed by the original '09, we were frankly stunned by the HR. It maintains the high performance via line in, with noise a trifle lower, but using the

internal mics or the mic input gives an astonishingly low noise floor; a full 6dB better than any other similar device we've tried. The mics aren't entirely free of coloration, but they give remarkably good sound even so, with pretty decent stereo imaging if the device is carefully positioned. Operation is similar to the R-09, very straightforward and aided by the intelligently designed display (usefully a little larger than the older model). Battery life is not the best, but we obtained at least seven hours of recording time from two 700mAh rechargeables - more if powersaving features are enabled. Up and download rates are decent, about 12x and 24x speed (for 16-bit/44kHz audio), build quality seems robust and the case has a useful antislip design. HFC



VERDICT
Foraudio quality, this dig

Foraudio quality, this digital recorder currently walks it on all counts. Nicely made, some clever features and easy to use to boot.



Marantz PMD-620

TYPE Portable digital recorder

PRICE £279

CONTACT № 01753 680023 ₩ www.d-mpro.eu.com

longside the familiar home electronics, Marantz does a nifty line of professional and semi-pro recording and replay kit, including several solid-state recorders, of which this is the smallest. It's a very smart unit and although the button layout may at first look a bit illogical, it has clearly been carefully thought, through, with a view to easy, regular use. The usual range of features is available, but we were a little taken aback by the way in which many of them are accessed and set up: it's necessary to use presets, which has some logic, but takes a bit of getting used to. The unit is supplied with a holder which has a screw thread for mounting to a tripod.

Although noise is not quite as low as with the Edirol R-09HR, this proved to be a device capable of producing high-quality recordings, and subjectively its built-in microphones

seem to us the most neutral. The mic and line in sockets both give excellent results in terms of distortion of all kinds and sound is correspondingly very clean and detailed. Marantz is to be congratulated on giving the PMD620 excellent overload headroom and 4.5V maximum input level, which is not bad from a 2.5V (two batteries) power supply. It drives headphones loudly and cleanly, maintaining distortion. analogue in to analogue out, below 0.01% even with low-impedance headphones attached. An fine device only let down, slightly, by odd ergonomics, slow USB up/download and noise performance a notch behind the current best. HFC



VERDICT
The high price is reflected in

its generally high performance, and the included holder/stand adaptor enhances value.



Tascam DR-1

TYPE Portable digital recorder

PRICE £209

CONTACT 20 0845 1302511 @ www.tascam.co.uk

ascam is a brand name exclusively associated with studio and pro equipment, though it's actually the same company as TEAC. It specialises in the value end of the recording market and has plenty of experience with recording devices including CDiR, MiniDisc (yes, still!) and solid-state. This new model is a little larger than the others in its class, but still fits most pockets and, at least, the additional space has allowed for a slightly larger display and more room for big fingers to operate controls. All the same, we found operation a little awkward at times, not least because the layout of buttons and the division of tasks between menus both seem illogical in places.

A neat feature is the ability to angle the microphones so that they face the sound source, whether the unit is standing or lying

down. Power is suppled by a Li-ion battery, which by default is charged from a USB outlet (the mains charger is an optional extra) and we'd be happier with AA cells like everyone else uses (in an emergency you can buy them from any corner store). A recording time of just under eight hours matches the others.

We felt sound quality overall to be good, but found the built-in microphones quite coloured. Noise from them or the mic input is a little high, but the biggest drawback is the ease with which inputs can be overloaded, without obvious warning signs. Distortion is excellent, both in and out, matching much full-size kit. This is a perfectly usable piece of equipment capable of good results, but we feel one should ideally be very familiar with its quirks before embarking on any important recordings. **HFC**



VERDICT

Sound is very good, especially via input sockets: the built-in mics are not entirely neutral. The display gives no warning of input overload.



Zoom H2

TYPE Portable digital recorder

PRICE £159

CONTACT № 01462 791100 @ www.zoom.co.jp

oom currently offers two products of this nature, the other being the H4 (£225) which has a different set of features. We picked the H2 to review for two reasons: first, it is the cheapest such product currently available, and second, it offers surround sound capability thanks to the inclusion of four internal microphones. Even if you don't want surround, the ability to choose between the front mics, angled 90 degrees apart, and the rear ones, angled 120 degrees, is useful.

It's hard to deny that the price shows in the build quality – it's a bit plasticky. Even worse is the display, which is tiny and slow to respond, while the operating buttons are also minute and have very little tactile feedback. Combine those features with the lack of a 'stop' button and you have the recipe for an occasionally

frustrating experience. It does all work, though, and is still a versatile little machine which can give satisfying results.

The microphones are a little coloured-sounding, but not really any more so than those of the Tascam. The mic amps are quiet, a little short of the Edirol's performance, but still good. Performance via the line input is on a par with the other units, but the headphone output is not keen on high playback levels and gets a bit harsh when listening loud. We probably wouldn't want to use this recorder very frequently – among other things its USB connection seems to be grindingly slow – but it is cheap, does the job, and is clearly fine for the very occasional recordist's adventures. **HFC**

Richard Black



Surround sound is a nifty feature, albeit one that's hard to use effectively. Stereo is good, but we found the machine rather a bind to use.





Please visit, monitoraudio.co.uk



WORKSHOP NOTES 2: VINYL VISION

When dividing up your budget for a vinyl front end, the temptation is to start with the cartridge (well, it is in the signal path), then the arm, then the phono stage. Then .. er ... buy a turntable with what's left!

So spending 80% on the turntable alone sounds perverse, but long term the turntable will define your achievable vinyl sound quality as arm and cartridge cannot do their best on a poor platform. Budget cartridges & arms are acceptable stopgaps, but a cheap turntable is simply a waste of money. Put your money into a quality turntable now, then when you upgrade you will realise all of your investment, not just part of it.

Oh, and good quality turntables look wonderful, you get so much more owner satisfaction right from the start!

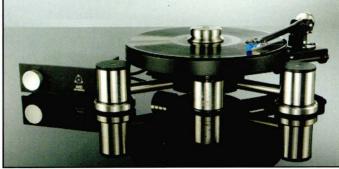






Avid Acutus (top), Avid Volvere and Thorens 160HD, all on demo at AW with other fine audio products

**** NEW IN STOCK ****



Avid's new Diva turntable, stunning looks and build, allied with great sound, and at less than £1000! Check our website for a fantastic Diva based package that plays beautiful music.

COME TO AUDIO WORKSHOP...we offer

- Purpose built sound proofed and room treated studio where you hear the equipment not the room.
- Home trial, exchange scheme, delivery and set-up.
- Competitive pricing, part exchange and free cabling means you can afford the equipment you want.
- Ex-dem and used equipment see our website for list.
- Free parking, two minutes walk from Norwich station, brilliant coffee & gossip what else do you need?
- · Call Julian Musgrave on 01603 618520 and let's talk.

31 PRINCE OF WALES ROAD. NORWICH. NR1 1BG. 01603 618520. www.audioworkshopnorwich.co.uk

ABBEY ROAD, ATC SPEAKERS, ATC ELECTRONICS, AVID TURNTABLES, AUDIO PHYSIC, AUDIO WORKSHOP, BEL CANTO, DYNAVECTOR, EARLYOSHINO,GOLDRING, GRADO, KRELL, MARTIN LOGAN, MISSING LINK, SIM AUDIO/MOON OPERA, NAD MASTERS, QED, SME, SONUS FABER, SOUND STYLE, THORENS, VELODYNE & MORE



After 5 years in production, the Dino is still one of the most popular phono stages around. Highly versatile with accessible switches on the baseplate to facilitate a wide range cartridges.

'Never Connected' power supply technology virtually removes all incoming mains noise allowing only the music to be heard. Visit our website to learn more about this exciting product and the high performance Diablo phono stage.

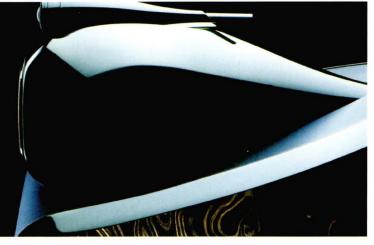
RICHORD RESEARCH



CHOICE

PASSION FOR SOUND

To advertise please contact the Sales Team on 0207 042 4255



GROUP TEST & LAB REPORTS: RICHARD BLACK

RE/POWER AMPLIFIERS

Six of the best two-box amp combos jostle for top position



ecause our Ultimate Group Tests at HFC tend to be products at relatively moderate prices, we don't very often explore the world of separate pre/power amplifiers in this way. Once in a while, though, it's well worth making a foray to see what kind of performance levels high-quality pre/power amps can deliver.

Our tempting selection covers a wide range of key hi-fi companies, with prices from £2,000 to over £5,000, and a very wide range of approaches - from the highly featured to the firmly traditional minimalist. We'll let the results speak for themselves, but just what are the advantages of a pre/power set-up over an integrated amplifier?

In the days before CD, when every amp of necessity included a phono stage, the most obvious answer to that was simple: having a high-power amplifier, with its associated large power supply in the same case as a sensitive phono stage is a recipe for hum and noise. Now that so many integrated amps, and indeed preamps, are line-only, that argument has perhaps declined in importance. Then again, although linelevel signals are certainly less prone to hum pickup than phono level, the practicalities of switching and routing them can easily make the problem resurface, if only to a minor extent.

There are other reasons, more or less directly connected to sound quality. For one thing, if you're trying to make absolutely the best amplifier you can, you need a certain amount of space. Having to squeeze a selector and line stage into the same box as the power amp may be just too tall an order. This is especially true if you decide – as many designers would - to keep pre and power amps' power supplies separate right back to the mains inlet.

There's no reason why a power amplifier should be on view, since its only control will be a mains switch and there are all sorts of ways of avoiding any need to touch that (remote control, switch off at the wall socket, etc.). It can be put out of sight, perhaps nearer the loudspeakers so as to minimise speaker cable length, with only the preamp readily accessible.

And finally, it's much easier to upgrade a pre/power set-up step-by-step, or indeed to fine-tune a system by mixing and matching from different manufacturers' ranges. As this group amply demonstrates, there's plenty of choice in all areas. HFC

EQUIPMENT USED

- Bowers and Wilkins 803S
- loudspeakers
- D Living Voice Auditorium loudspeakers
- Pioneer PDR-609 CD recorder
- (as CD transport)
- Cambridge Audio Azur 840C
- CD player dCS Elgar D/A converter Chord DAC64

- Chord DAC64
 Pink Triangle PT TOO/SME309/
 Highphonic MC-A3
 Supra, Wireworld, Kimber and
 Bespoke Audio cables

MUSIC USED

- Michael Jackson Thriller
 Miles Davis Kind of Blue
 Dick Hyman plays Fots Waller
 Shostakovich Symphony No. 7
- Guzmán *Ambr*ósi
- Stevenson String Quartet

EARS USED

As always, we are immensely grateful to those kind souls in the hi-fi business who give up their valuable time to come and listen to the amplifiers, giving us the benefit of their many years or accumulated listening expertise. On this occasion

David Denyer (David Denyer PR) Reuben Klein (Wireworld) Geoff Meads (Arcam)



LISTENING TESTS

In classic HFC fashion, the centrepiece of the listening was a 'blind' presentation of each amp to a panel of expert listeners, in an attempt to remain free of prejudices and preconceptions. Listening levels were accurately matched and the same programme of music was played through each amp with minimal distractions. In addition, each amp was auditioned on its own more informally, to get the fullest picture of the character of each.

PRE-AMPLIFIER

LUME

LAB TESTS

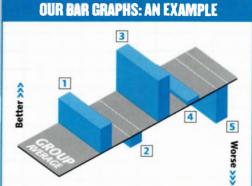
Each amplifier was measured with a variety of equipment, including a Hameg distortion measuring set and also items of audio equipment (ADCs and DACs) adapted to lab duty and reporting data for analysis to Cool Edit and Mathcad on a PC. This approach enabled us to build up a picture of the amps' performance under different conditions of frequency, level and load.

No other magazine offers an equivalent test and listening programme for comparative tests.

LAB REPORTS: THE BAR GRAPH

Our 3D bargraphs are a simple way of showing how the products compare across five technical parameters. In each case, a percentage is given that falls above or below the group average: higher percentage means better performance (e.g. lower distortion, lower noise, flatter response). In this case, the parameters are:

- 1) Dynamic power. This reflects an aggregate of continuous and peak (instantaneous) power, giving an indication of power available under realistic conditions.
- 2) Frequency response: This is a measure of precisely how smooth and linear the frequency response is within (and a little beyond) the audio band.
- 3) Dynamic range: An indication of the background hiss level of the amplifier, as compared to its maximum
- PRE-AMP 4) Distortion: An aggregate figure of measurements at different frequencies and levels.
- 5) Output impedance: A measurement of how tight a grip the amplifier has upon the loudspeaker cones.



marant



£2,050 (£1,250 + £800) 2 01223 203200 # www.arcam.co.uk

ARCAM C31/P38

Arcam combo divided the opinions of our listening panel

long with its new top-of-the-range integrated amp, the A38 (reviewed on page 44), Arcam has introduced a new stereo power amplifier to replace the P35 of yore. It's not a vast change and, indeed, from the outside you'd have trouble distinguishing a P38 from a P35, but there are a few nips and tucks under the hood. By and large, it's an A38 without the preamp stage, offering the same output power and the same two switched outputs.

The C31 is related to the preamp stage of the A38 (historically, the latter was influenced by the former), but isn't quite the same at its inputs and adds some quite sophisticated output circuitry. A balanced output is included, despite the fact that the P38 doesn't have a balanced input (the P1 monoblock does, however). It's all quite modern stuff, densely packed surface-mount circuit boards and so on, powered by a generous toroidal mains transformer. Op-amps are used extensively and are all good-quality types, while input selection is done with high-quality sealed reed relays, arguably pretty much the ultimate audio switch.

Volume control is electronic and this allows Arcam to incorporate input trim, which adjusts the gain of each input to suit sources which may vary in output level. Balance, simply addresses each channel of the volume control independently. This is all set up through a menu structure which is very simple to navigate via front panel or remote control and also allows the user to select the size of step in which the volume changes. There are plenty of inputs and two 'tape' outputs, though a phono stage is an optional extra.

Arcam has been quite cunning in facilitating upgrades through its range. You can add a P38 to an A38 for bi-amping, then switch to a C31 and go berserk with tri-amping.... which is all to the good if you're a hardened tweaker. Despite that, the basic C31/P38 combination is the epitome of low-fuss simplicity in everyday use.

SOUND QUALITY

As has happened in the past, the sound was felt a touch too controlled for some tastes, though no one suggested that anything was actually missing from the sound, unless it's just a touch of bass extension and warmth.

Actually the bass was a little perplexing, as two of our listeners made apparently contradictory comments. At one point finding it well extended and, at another, on the dry side. It's hard to see how it can be both at once, so the way it deals with different recordings must be the culprit. The Michael Jackson and solo piano tracks were the most successful, the more subtle bass extension of the opera excerpt seeming more troublesome. Listening sighted, we felt the latter may be the case, but either way we're talking subtleties.

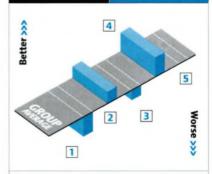
Midrange and treble are certainly clear enough, though again opinions varied between 'detailed, precise and civilised' (we're paraphrasing a little here) and 'emotionally dry'. It's interesting to realise how similar these findings are to ours with the A38. These amps are not inclined to gloss or embellish and while they don't have the panache or exciting grip of the best at two-and-a-half times their price, they make a good case for themselves. **HFC**



LAB REPORT

Arcam claims a rather precise 105W power output. but could have boasted more like 120W, which rises to over 140W when driving just one channel. Delivery into 4 ohms (just one channel again) is fearless at 215W - rather unusually, the P38 was quite happy slamming that sort of current around, but shut down when we asked it to drive no load in order to estimate its peak delivery. Something around 160W, anyway. Frequency response of both pre and power units is dead flat over the audio band, less than 0.1dB shy at 20kHz and about 0.1 dB at 20Hz, with plenty of extension beyond both. Output impedance of the P38 is sensibly low and distortion of both amps excellent, with barely measurable residuals for the C31 and less than 80dB from the P38. Be aware that the C31's gain is quite low and with some insensitive power amps the volume may end up at five-o'clock! Well done Arcam for a low standby power consumption.





- 1] Dynamic power >> -25%
- 2] Frequency response >> +10%
- 3] Dynamic range >> +5%
- 4] Distortion >> +20%
- 5] Output impedance >> 0%

SPECIFICATIONS		
Measurement	Rated	Actual
Power output (8 ohms)	100W	120W
Distriction (Tr.H.: 8 of ms)	0.005%	0 004°o
Frequency response (20Hz 20kHz)		+01dB





£2,500 (£1,000 + £1,500) @ 0845 458 0011 # www.audiolab.co.uk

AUDIOLAB 8000AP/8000X7

This musical system will ruffle some feathers

K, we admit it: this is the joker in the pack. Not, however, that either we or Audiolab are having a laugh. We just thought it would be interesting to find out whether an AV-oriented, multichannel, pre/power combination can cut it when playing music in the company of dedicated stereo-only kit. It's an issue which is often shied away from, but the fact remains that plenty of people would like to use one system for both music and movies (who wants another stack of metal boxes in their life?) but lack reliable information on whether a multichannel amp can be trusted with music.

The 8000AP has five line stereo inputs and one 5.1 channel input, all on phono sockets, plus a 7.1 channel analogue output. It also has seven digital inputs (three electrical, four optical) and two HDMI inputs, plus one optical digital output and one HDMI to feed a projector or plasma screen. Not surprisingly, all the signal switching and volume control stuff is done digitally, but Audiolab has gone one step further and digitised the analogue inputs, as is evident from their frequency response (see Lab Report).

The 8000X7 is a much less high-tech affair. Its story begins with a monstrous toroidal transformer, which is obviously going to be needed for seven channels of 100 watts, and ends with a pair per channel of bipolar power transistors mounted on the heatsinks which make up the sides of the unit. Eight of these (four channels'-worth) are on the left side, mounted so that they actually touch each other. Between the transformer and the output stages are seven channels of driver stages, implemented with a mixture of through-hole

and surface-mount parts, mostly discrete transistors and decent-quality passive parts. Audiolab has been careful with real estate planning and it's not a mad squeeze.

SOUND QUALITY

Returning to the issue we raised in the first paragraph, it seems that a multichannel system like this can indeed give musical satisfaction. Indeed – and this may ruffle some feathers – it was felt to be one of the most 'musical' systems in the test. Starting on the rock'n'roll, the bass was felt to be big, bold and clear, though just a little loose compared with some of the others. The same applied in the jazz track, where the bass seemed somehow slower than the melody. All the same, the higher frequencies in this track were clear and natural and the overall presentation encouraged musical, rather than technical thoughts in the listeners.

Classical music also showed off the Audiolabs to good advantage, with the relationship between instruments particularly admired. Against that, one listener pointed out that the clarity with which the individual voices in the opera chorus could be discerned was some way short of perfect and the depth of the stereo image fell short of that projected by the other amps.

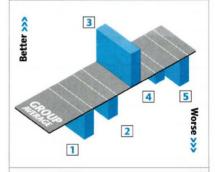
Such limitations as this duo has are to do with resolution and analysis and in these areas it is not a match for the Bryston. But the latter (see page 73) is twice the price and doesn't include seven channels! The DAC performance is impressive too, with notably fine high treble and very clear decay of notes into silence. **HFC**



LAB REPORT

The most unusual measurement from these units is the frequency response of the preamp, which is 0.2dB down at 2kHz, 3dB down at 23.5kHz and essentially nothing at all above 24.5kHz - the dead giveaway of internal analogue-to-digital conversion. Typical of CD, of course, but an interesting combination with high-sampling sources. However, if you use the internal DAC the response can be more extended when 96kHz or higher sampling rates are used. Beyond that the preamp's performance is typical, while the power amp has a more conventional frequency response, generously extended both upwards and down, and a comfortable 115W power delivery into a stereo pair of 8 ohm loads. The X7's output impedance is high by modern standards, equivalent to a damping factor of about 60, but this is still good enough to ensure decent control of drive units as long as low resistance cables are used.

HOW IT COMPARES



- **1]** Dynamic power >> -**30**%
- 2] Frequency response >> -20%
- **3]** Dynamic range >> +40%
- 41 Distortion >> -10%
- 5] Output impedance >> -30%

SPECIFICATIONS		
Measurement	Rated	Actual
Power autput (8 ohms)	100W	112W
Distortion (1kHz/8 ohms)		0.007%
Frequency response (20Hz-20kHz)		±0.4dB



SEVENOASS

Save £s on these packages at Sevenoaks

OUTSTANDING PRODUCTS • OUTSTANDING SERVICE • OUTSTANDING VALUE

















Need a flatscreen TV, DVD or Blu-Ray player? We have a comprehensive range available to partner these packages

STORES NATIONWIDE SALE STARTS SATURDAY 31ST MAY

MANY MORE HI-FI AND A/V COMBINATIONS AVAILABLE AT WWW.SSAV.com



















Ask about our range of FM/DAB tuners, turntables, stands and cables to complement these systems



£5,300 (£2,750 + £2,550) @ 0870 444 1044 @ www.bryston.ca

BRYSTON BP26/3B-SST

These amps exude class in both looks and performance

or a number of reasons, Bryston is one of those names that tends to be mentioned with a certain amount of awe. One of these is the sheer power of its amplifiers (this one's a bit of a baby, the 28B-SST being good for 1,000 watts). But the look of the products also has something to do with it. Bryston is one of relatively few makes to have cracked both pro and domestic markets in style and the amps fairly scream 'professional,' but somehow without a complete lack of domestically acceptable grace.

The BP26 (as supplied for this review) had a DAC module fitted internally, which adds £1,000 to the price quoted above. A phono stage is an alternative add-on. It comes with an MPS-2 power supply which lives in an identical-sized box and can power up to four Bryston components. That's practical if you've got other Bryston components, but even if you haven't it can, at least, remove the mains transformer from the vicinity of sensitive amplifying stages. Everything is traditional in the switching and volume control department, the remote control (solid metal – nice!) operating a motorised potentiometer, plus mute and polarity inversion.

Inside the 3B-SST is a very busy assembly of circuit boards, considerably more circuitry than most manufacturers seem to find necessary. Complexity in audio is not necessarily a bad thing, though, and since Bryston takes the unusual step of publishing circuit diagrams of its amps on the company website we were able to admire some of the very cunning tricks that have gone into the amp. We certainly can't fault the way the unit is assembled, which is both efficient

and robust. Both pre and power amps have balanced and unbalanced connections.

SOUND QUALITY

Although the odd word of caution was written about specific aspects of these amps, the overall picture of their performance is decidedly encouraging. In essence, they seem to be very good at combining musical virtues with technical ones, so that the music holds your attention instinctively.

One of the cautionary notes concerns the high treble, which seemed to our listeners to be a little too excitable. That looked like a rather odd comment, leading us to suspect that it may simply be a question of the treble being that little bit more detailed than most. It is, in any case, undeniable that detail is plentiful, with really excellent stereo imaging proving the point most gratifyingly. Lateral placement of performers is precise and highly stable and depth is also resistant to changes with the music's dynamic ebb and flow.

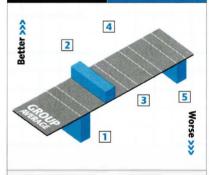
Ah, yes, dynamics: while the actual power on offer is par for the course, the feeling of unconstrained dynamics is one of the big attractions of these amps. They play quietly, but when something loud comes along there is absolutely no sense of restraint. Climaxes are full-blooded in a way that practically begs for extra-loud listening and it's particularly telling that vocals are effortless at high levels, not something one can always take for granted. Tonally, the bass is a shade less pronouned than some, though it is tuneful and well controlled and the midrange is beautifully uncoloured. These amps exude class in both looks and performance. **HFC**



LAB REPORT

Bryston takes pride in the high standard of technical performance of its amps, as well as a detailed measurement summary with each unit. Distortion is held to very low levels across the audio band, never exceeding -80dB and generally considerably better than that. Power output of 160W is delivered into one or two channels, thanks to full dual-mono construction of the 3B-SST (separate mains transformers for each channel). But we lacked the nerve to test Bryston's claim of a power bandwidth to 100kHz. Frequency response is about as flat as flat can be, less than 0.5dB down an octave beyond the audio band's extremes and the only slight surprise is noise performance which is a little behind the best. The BP26 operates from high internal supply voltages and can kick out substantial amounts of voltage, theoretically enough to blow up the input stages of some amplifiers - though you'd be deafened long before!

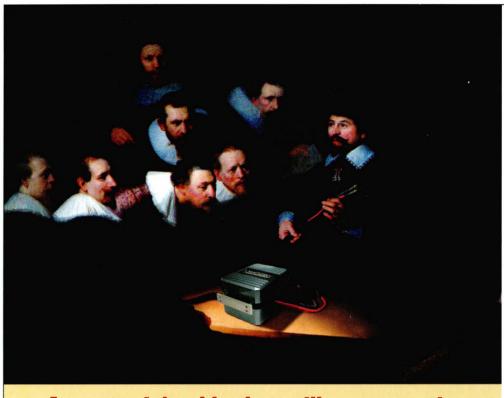
HOW IT COMPARES



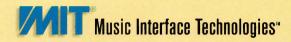
- 1] Dynamic power >> -35%
- 2] Frequency response >> +10%
- 3] Dynamic range >> 0%
- 4] Distortion >> 0%
- 5] Output impedance >> -20%

SPECIFICATIONS		
Measurement	Rated	Actual
Power output (8 ohms)	150W	162W
Distortion (1kHz/8 ohms)	0.005%	0.006%
Frequency response (20Hz-20kHz)		±0.1dB





A masterful cable that will cause a stir.





MIT Oracle MA loudspeaker cable: 2007 Golden Ear Award winner.

"Instrumental images within the soundstage were presented with more air and space around them...Had I not heard the Oracle MA. Magnum MA would be my reference."

Robert Harley—The Absolute Sound



P.O. Box 988, Cheltenham, Glos., GL50 9FJ www.audiobilitv.co.uk www.mitcables.co.uk Telephone: 0870 777 2991



B.K. Electronics have over the past 15 years designed and manufactured award winning subwoofers across 3 well known brands. So rest assured that when you buy a B.K.subwoofer direct from our factory you are not only purchasing a British product with outstanding performance and value for money, you'll also discover our hidden depths.



Monolith-DF

Sales:- 01702 527572 Web:- www.bkelec.com



The amazing Monolith-DF has the performance of other high end subwoofers but without the high end price tagThis is just a few things Adam Rayner had to say about the Monolith-DF in his Home Cinema Choice Review: -.

"This subwoofer can be considered an outstanding buy - maybe even the best value for money currently in domestic electronics. It comes recommended, "I found it hard to grasp the lack of difference between the sound output of the mighty Monolith, at some £407, and that of my resident £2,500 REL

"The sub's output is vast; deep, luscious and lovely. It has a superb melodic ability to follow a bassline in the soundtrack, and can do rapid stops and starts with nary a hangover at all, which at the levels this thing can play is remarkable.

Featuring



Real wood veneers



12" Ported reflex design

Dims: - 420D X 604H x 540W



2 Year warranty

Mainland Only

Powerful 300W RMS Mosfet amplifier

Recently Reviewed in H.CC. Magazine

Highs: Deep and extended output

Disproportionately powerful compact Given it's price, any complaints

would be churlish

XLS200-DF 275W 10 inch Drive Unit,

The XLS200-DF is an outstanding subwoofer considering it measures only 340Dx355Hx290W. It offers very low bass with extremely good timing and control. As with all our subwoofers the amplifier panel is designed with ease of set-up in mind but with enough flexibility to integrate seamlessly into most



£289.00 Carriage £9.80 UK Mainland Only

XLS300/PR

The XLS300/PR is the latest model from B.K.Electronics and is now in full production. The XLS300/PR is intended to fill the gap between the XLS200 and the Monolith and we feel we have achieved this with outstanding results. The XLS300/PR is a 30 litre passive radiator model designed to deliver the added

depth and massive SPL's that are required for today's demanding film content but it's all contained in a compact enclosure. As with all the B.K. products the XLS30/PR is designed and built in the UK and comes complete with a two year warranty.
Contains a 10 inch Peerless drive unit and a 10 inch

Peerless passive radiator, which combined, nearly totals the surface area of a 15 inch drive unit

A Choice of Real Wood Veneers

£389.00 Carriage £9.80 UK Mainland Only
Dims:- 380D x 400H x 350W







£5,990 (£2,995 + £2,995) 201622721444 # www.chordelectronics.co.uk

CHORD CPA2500/SPM650

A lively pairing that has its fair share of ups and downs

hord has made quite a splash about its arrival on the hi-fi scene, offering futuristic, high-power amplifiers with – wait for it – switch-mode power supplies!

The CPA2500 and SPM650 are the company's entry-level models. They're a largely conventional construction inside a square box, the various outrigger rods and pillars being entirely decorative (but then we're all in favour of a bit of visual extravagance now and then) What's really important is inside, of course, but the assembly is smart and rugged and the overall look very smart.

With an output rating of a mere 130 watts, the SPM650 is considerably less powerful than other Chord models and thanks to the switching supply, it is the lightest amp in the group. Switching supplies still have a mains transformer, but it operates at a much higher frequency than 50Hz and can hence be much smaller. The main potential problem is one of interference, but Chord deals with that by using suitable filtering, intelligent layout and screening (internally, the case is divided in two with the audio stages at the rear). The output stage uses MOSFETs and the circuitry is entirely discrete.

The preamp, with a much smaller power consumption, uses a conventional power supply and is generally quite a straightforward device. We were intrigued to find that, although the volume readout is digital, volume control is, in fact, handled by a good old ALPS potentiometer, a multi-gang device, of which one gang drives the display. The balance control lacks a centre detent, but is easy enough to centre up by eye or, indeed, by ear!

SOUND QUALITY

Although one listener found this combination a bit soft-sounding and never quite got on with it, the others thought it rythmic and involving, with an energetic presentation and a particularly natural balance. It has good bass, (extended, clear and well-defined in terms of both pitch and timing) and plenty of detail in the midband. The treble didn't seem quite as assured, though, lacking a little sparkle compared with some.

In fact, it does appear that these amps specialise in a bass-based performance. This has its ups and downs, depending on the music and your tastes, but does tend to make for good urgency and drive. One of the best illustrations of how this can work was provided by the piano track, a particularly catchy bit of boogie-woogie which has some exceptionally confusing syncopation. Heard through the Chord amps, this seemed almost possible to follow clearly (it's a very good recording, just deliberately misleading playing!), but the tonal character of the piano itself was not as clear and open as we'd heard.

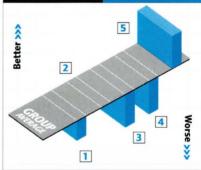
This suggests there's a bit of a compromise between medium and message, which isn't necessarily a problem. The sound of instruments and voices is not seriously disadvantaged and, in fact, massed voices seemed very well served, with excellent spatial definition. It's hardly surprising that anything of a rock'n'roll nature does very well, with a real temptation to turn up the volume. Indeed, the very slight treble helps at high levels, reducing any tendency for brightly mastered recordings to irritate the ear. A lively pair of amps with much to recommend them. **HFC**



LAB REPORT

Like Arcam, Chord has opted to give its preamp low gain, which means that there's not very much spare gain if you want to boost CDs recorded at a very low level. On the other hand, this does mean that one gets the use of rather more volume control. The SPM650 proved to be the only amp in this group not quite able to achieve its power rating before the onset of clipping (albeit by an inconsequential few watts) and it holds up into a 4 ohm load rather better than Chord predicts, with short term peaks of very nearly 200W into 8 ohms. Frequency response of both units is effectively dead flat and, in fact, the preamp has no appreciable rolloff up to 100kHz. Distortion is among the highest of the group, which means only around 0.01% (-80dB) under most conditions and just fractionally worse than that in the high treble. Noise is a little higher than most and there was a trace of hum from the power amp which may just be audible in some situations.





- 1] Dynamic power >> -20%
- 2] Frequency response >> 0%
- 3] Dynamic range >> -40%
- 4] Distortion >> -40%
 51 Output impedance >> +40%

SPECIFICATIONS		1817112
Measurement	Rated	Actual
Power output (8 ohms)	130W	124W
Distortion (1kHz/8 ohms)		0.012%
Empliano reconso (20Hz 20kHz)	±0.34b	±0.246



SERIOUS CYRUS SPECIAL OFFERSI Call today, whilst stock lasts.....

P.J.hi-fi

The only real hi-fi shop in Guilford

Guildford's only REAL Hifi and Home Cinema store
Open 9-6 Monday to Saturday (later by appointment)
3, Bridge Street, Guildford, Surrey GU1 4RY (opposite Wetherspoons)
01483 504801 and 01483 304756
www.pjhifi.co.uk email:info@pjhifi.co.uk.
"......it's hifi for fun's sake......"



£4,400 (£2,000 + £1,200x2) & 01480 410900 # www.cyrusaudio.com

CYRUS DAC-XP/MONO X

The build of both units is to Cyrus's usual high standard

his is another interesting take on the old pre/power concept, since apart from the obvious fact that the power amps are physically discrete monoblocks, the preamp is also a DAC. Where Bryston's pre/DAC is very much a preamp with a DAC board added, this one is historically a DAC (the DAC-X exists happily in its own right) with a preamp added, though the integration is such that the term 'digital preamp' would probably describe it better. Of eight total inputs, only two are analogue: there are two optical and four electrical digital inputs.

The layout of the rear panel is a little confusing at first, though everything is clearly labelled with the inputs simply numbered. By default they are numbered on the front-panel display, but they can be renamed from a pretty comprehensive list of typical sources. In terms of outputs, two each of balanced and unbalanced should cover any eventuality and there's a single digital output too, plus a fixed (recording) analogue output. The DAC-XP can also be upgraded by adding a PSX-R.

The Mono X is simpler, with balanced and unbalanced inputs and a 'chain' output for bi-amping etc. Twin unswitched speaker outputs are on BFA connectors, of which Cyrus currently seems to be the sole proponent. The build of both units is to Cyrus's usual high standard, with a very hefty toroidal mains transformer in the Mono X and plenty of goodquality parts throughout the circuits.

Although many Cyrus products will end up in all-Cyrus racks with corresponding visual unity, these components are entirely compatible with those from other manufacturers and, of course, as with any monoblock amps the option exists

to place them very close to the loudspeakers, potentially saving significantly on cabling.

SOUND QUALITY

Our listeners don't always agree on everything, but they all seemed to find these amps quick and agile and, perhaps, just a touch bass-light. Everyone also thought that there was something of a 'dark' quality to the sound (by which they evidently meant a subtle kind of coloration), very slightly favouring the upper bass.

In large doses, that could easily mean overblown bass, but that doesn't seem to be the case here. Indeed, low bass is not particularly prominent: it's well controlled and tuneful though, perhaps, not sufficiently prolific to excite headbangers. It's the region above that which is of interest, though, it does just slightly stand out in both quantity and quality. Indeed, the position of bass instruments seems to move away a little, an apparent paradox as one might expect that to make it weaker. Instead, it makes it more distinct from the rest of the sound.

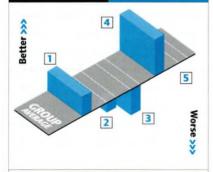
Ultimately, that doesn't seem to affect the enjoyment much, after one has become accustomed to it. The rhythmic drive of the amps is not in question and the midband and treble are very detailed – so much so, that one doesn't necessarily notice straight away. One does hear a nicely musical presentation with a high degree of sympathy with different instruments and musical styles, but there's plenty of analytical information on offer. Just occasionally the high treble can seem a little shut-in, but apart from that there's very little here to criticise. **HFC**



LAB REPORT

The surprise here was the relatively poor noise floor. rather higher than the other amps produced. It's still below the level of most CDs, but just high enough to add perceptibly to their inherent noise. Cyrus amps usually seem to score well in this regard. Also poorer than several in this group was frequency response, but this really is entirely academic - we're dealing in tenths of a dB difference at the frequency extremes and to all intents and purposes this combo too has a flat response across the range of hearing. The Mono X has plenty of power on offer and, of course, with monoblocks there's no question of one channel's output being any different from both together. Distortion slightly deteriorates at high frequencies with a trace of hum modulation. The power amp is a little more sensitive than most and could, as an economy measure, be partnered with a passive preamp quite acceptably

HOW IT COMPARES



- 1] Dynamic power >> +25%
- 2] Frequency response >> -10%
- 3] Dynamic range >> -30%
- 4] Distortion >> +50%
- 5] Output impedance >> 0%

SPECIFICATIONS		
Measurement	Rated	Actual
Power output (8 ohms)	150W	158W
Distortion (1kHz/8 ohms)	0 004%	0 0025%
Frequency response (20Hz-20kHz)		±0.3dB





inn Majik system offers

Please call for our latest prices on this superb system



EXTENSIVE EX DEM & USED LIST ALWAYS AVAILABLE PLEASE PHONE WITH YOUR REQUIREMENTS.



Just arrived. This fantastic new product from Arcam An evolution of the Solo range. Combing CD, DAB Tuner in an even more compact stylish box. This wonderful product also comes complete with an IPod interface.

Please call instore to hear this superb system.

VARIOUS SPEAKER PACKS AVAILABLE AT SPECIAL PRICES PLEASE CALL OR SEE OUR WEBSITE FOR DETAILS

ioneei

PDP-LX608D £4899 PDP-LX508D £3299 PDP-428XD £1399 PDP-4280XD £1399

Price includes free delivery in the UK. Please call for details.

Latest Award winning **Onkyo Receivers**



Award winning brands stocked Linn, Arcam, Marantz, B&O, Bose Chord Electronics, InFocus, JVC, Monitor Audio, Mordaunt Short, Pioneer, REL, Roksan, Sim2, Tannoy, Teac, Tivoli, Velodyne, Yamaha. Plus many more.

TRUENC Master Auto

Linn Ex Dem List

Source Linn CD12 CD Player Unidisk 1.1 Universal Player Unidisk 2.1 Universal Player Unidisk SC Karik CD Player Numerik DA Converter Control	£6000 £4500 £2500 £2250 £350 £400	Used Ex Dem Used Ex Dem Used Used	Colours available Silver Black & Silver Black & Silver Black & Silver Black Black
Kisto AV Processor Kinos AV Processor	£5000 £3750	Ex Dem	Black Black
Kairn Pre Amplifier	£400	Used	Black
Playback			
Klimax Solo Power Amplifiers	£4950	Ex Dem	Silver
Klimax Solo Power Amplifiers	£4000	Used	Silver
Chakra 5100 Power Amplifier	£1400	Ex Dem	Black & Silver
Chakra 2100 Power Amplifier	£1000	Ex Dem	Black
2250 Power Amplifier	£900	Used	Silver
LK140 Power Amplifier	£400	Used	Black
LK85 Power Amplifier	£400	Used	Black
Komri Loudspeakers	£14000	Used	Maple
Linn Keltik Loudspeakers	£1800	Used	Rosenut (Immaculate)

unn keltik Loudspeakers Artikulat 350A Loudspeakers Artikulat 350P Loudspeakers Artikulat 345 Subwoofer Artikulat 340A Loudspeaker Artikulat 320A Loudspeakers Akurate 242 Loudspeakers Akurate 212 Loudspeakers Akurate 221 Subwoofer Rosenut (Immaculate)
High gloss Black & Cherry
Rosenut
High gloss Cherry
High gloss Cherry
High gloss Cherry
Rosenut
Rosenut
Maple
Maple & Black
Issed Products available.



Now showing, the fantastic new C3X 1080 DLP 3 Chip Projector.



projector for sale normal RRP £12000 Available at £7000





6 Abbey Street, Carlisle, Cumbria. CA3 8TX Telephone 01228 546756 www.petertyson.co.uk Email sales@petertyson.co.uk Open Monday-Saturday 9am-5.30pm



153 Kenton Road, Gosforth, Newcastle. NE3 4NQ Telephone 0191 2857179. www.newcastlehifi.co.uk Email mark@newcastlehifi.co.uk Open Monday-Saturday 10am-5.30pm



£4,998 (£2,499 + £2,499) © 01753 680868 # www.marantz.co.uk MARANTZ SC-11S1/SM-11S1

A fun combo with a lively and energetic performance

ven our hardened delivery driver made comments about the weight of the SM-11S1 power amp and we rather cynically expected heavyweight casework to be the culprit. In fact, the main contributing factor is one of the biggest transformer enclosures we've seen - there's a screening can (with inaccessible fixing screws) over something that's probably big enough to weld with! Yes, the base of the amp has been beefed up so it doesn't warp due to the loading of that transformer, but the rest looks pretty sane. There's plenty of power supply capacitance in evidence and the heatsinks really mean business.

All the same, these are both very imposing bits of kit and we mean that in a positive way. The bulk is offset by subtle curves and recesses which break up the otherwise daunting frontal area. While each unit also has a little digital meter centre stage, reading gain in the case of the preamp and output power (for each channel) on the power amp. The latter is rather clever, actually, since it monitors both voltage and current to give a real reading which we found both accurate and quick to respond – this could settle some burning arguments in the hi-fi world!

Marantz is alone in this group in offering a phono stage and it's no afterthought. The relevant circuit board is quite large and densely packed and handles both flavours of cartridge. Apart from that, there are five unbalanced line inputs and two balanced, plus two recording outputs and balanced/unbalanced outputs. The power amp has inputs of both flavours and two switched sets of speaker terminals.

SOUND QUALITY

Such criticisms, as were made of these amps, seemed mostly in regard to the treble, which was felt as being a little closed-in and lacking air. There were also a couple of comments on restricted stereo image depth, but it's a fair bet that's a related issue. Bass, however, was felt to be very satisfying, with real extension and weight, but also plenty of control so that low instruments never seemed vague or woofy. Midrange is well integrated with the rest and shows no obvious signs of coloration.

The treble restriction gives the sound its own character, which is by no means unpleasant. Plenty of recent recordings have a very busy top end and a slightly mellower presentation is no bad thing. It's mostly with already mellow recordings, especially those made with natural miking techniques, that the sound may be found a little lacking. When treble energy is less overt, it needs very careful handling if it is not to lose its delicacy and those subtle cues that tell the listener so much about the recorded acoustic. With such recordings, the space seems to close in a touch and instruments lose a little of their own character.

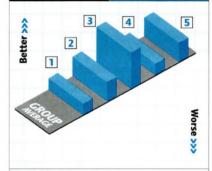
When music is lively and energetic, though, these amps are a lot of fun. Indeed, the timing in the bass was felt to be among the best and the 'party potential' is not in any doubt. Piano benefits from this with a particularly strong and fluid sound in the lower midrange, while the overall size of the instrument is made very clear. In terms of analytical listening, detail is good but not excellent. One can hear everything that's going on, but it does require a little explicit concentration, where some amps make it effortlessly obvious. **HFC**



LAB REPORT

As we've seen before from Marantz, noise is impeccable and significantly lower than any 16-bit source will ever achieve. There's very little one could reasonably criticise in the measured performance except, a little oddly, some hum modulation of highlevel signals at any frequency. This is a function of the power amp, which like most of its breed has unregulated power supply rails, but these days it's normal to find that residual hum in the supply is completely ignored. The level's not very high though, around the same as harmonic distortion and hardly likely to be strongly audible. Frequency response is within a quarter dB of flat, a full two octaves beyond the audio band in each direction. Marantz's quoted power of 100W is way too conservative and well over 250W is available into a 4 ohm load. The SC-11S1 has plenty of gain in hand for any source and is happy to accept high input levels too.

HOW IT COMPARES



- 1] Dynamic power >> +10%
- 2] Frequency response >> +20%
- 3] Dynamic range >> +50%
- 4] Distortion >> +10%
- 5] Output impedance >> +20%

SPECIFICATIONS		
Measurement	Rated	Actual
Power output (8 ohms)	100W	144W
Distortion (1kHz/8 ohms)	0.01%	0.004%
Frequency response (20Hz-20kHz)		±0.0dB



CONCLUSIONS

A fine range of contenders proves the continued worth of the two-box approach for the audiophile

he results of this *Ultimate Group Test* were by no means predictable, and fortunately for us, the surprises were mostly pleasant ones. It would have looked very odd had, for instance, the all-singing-all-dancing Audiolab system trounced the considerably more expensive Bryston on sound quality But in the event, it seems, the more upmarket manufacturers can continue to claim with hand on heart that they are indeed offering a step up in sound quality.

That said.... in hindsight it's impressive just how well the

Audiolab and Arcam systems fared against what might have seemed exceptionally tough competition. Yes, reservations were expressed about both systems, but they were, on the whole matters of taste rather than absolute right or wrong. And the Audiolab certainly proves that multichannel kit can stand proud in the company of dedicated stereo. The Arcam system can't offer seven channels or HDMI, but it is unthreatening hi-fi for the less technophiliac music enthusiast and, at its modest price, makes a very good case for a simple pre/power installation.

Cyrus has a unique selling proposition in present company, contriving to offer physically separate monoblocks at a competitive price and, indeed, a high-quality DAC built in Again, there's no need to feel any shame on grounds of sound quality achieved, which is good by any standards. A little individual, perhaps, but that's not without its attractions! Marantz's sound also has its own character and, overall, we did feel that the treble of the combination is not entirely to our liking. But the amps are lively and energetic and do seem to sound

particularly good with analogue sources, for which they are uniquely qualified.

Chord is very much an upmarket specialist and, even at a tenner under six grand, this is the company's starter system. We have some reservations, but the sound still has its strong attractions, notably the bass. The favourite out of this test seems to be the Bryston, however. Powerful, rhythmic and detailed, but also capable of great subtlety, this system seems to us to embody the virtues of high-quality sound reproduction equipment. **HFC**

TRY THEM WITH THESE

LOUDSPEAKERS

BOWERS & WILKINS 803S £3,800 Stunning levels of detail and naturalness from this powerful floorstander.

QUAD ESL-2905 £6,000

If you've got the space to accommodate panel speakers, these are the ones.

CD PLAYERS

CAMBRIDGE AUDIO 840C £750
One of the most technologically advanced players; detailed and musical.

MERIDIAN GO6 £1,695

Typical understated Meridian, a player that adapts with ease and conviction.

HINTS AND TIPS

- >> Long interconnects are often less sonically intrusive than longer speaker cables putting the power amp near the speakers can be a useful benefit.
- >> Both pre and power amps can benefit from acoustic isolation and proper support.
- >> As with any amp, it's worth allowing a few minutes' warm-up before listening for best performance. Switching off saves the planet and reduces wear.
- >> If balanced connection is available, try it but don't automatically assume it's better: it isn't always.

PRE/POWER AMPLIFIERS AT A GLANCE



DEFINITIVE AUDIO



Main image: KSL Kondo Gakuon Mono Valve Amplifiers



















Subscribe to HI-FICHOICE for just £3.74 a month and get a NORDOST ECO 3 anti-static kit worth £26! FREE!

"A static charge can interfere with the way a signal passes through a hi-fi system's power, interconnect and speaker cables. ECO 3 gives static the boot — it also improves your CDs,

too." Dan George, Editor, HFC

ECO 3:

ECO 3 treats a problem long ignored in the in-it industry
up of static charges. These surface charges can interfere with the
ignal and introduce background noise into a hi-fi system. After treatignal and introduce background noise into a hi-fi system. After treatignal and introduce background noise into a hi-fi system. After treatignal and introduce background noise into a hi-fi system. After treatignal and introduce background noise interesting counds more detailed and musical performance.













During: Wipe the treated cloth along a cable



After: No more static! Hear the difference

Order online at...

www.myfavouritemagazines.co.uk/hfc/p043

SUBSCRIBE TODAY!

WHY SUBSCRIBE TO HI-FICHOICE?

- Pay just £3.74 per issue
- 13 issues a year delivered direct to your door
- Save money compared to the shop price
- You'll never miss an issue
- Ordering is easy and only takes a minute
- > PLUS! Subscribe to *Hi-Fi Choice* this month and you'll also receive a free Nordost ECO 3 anti-static kit worth £26

HOW TO SUBSCRIBE

- > Call 0844 848 2852 (quote offer code p043)
- Or visit: www.myfavouritemagazines.co.uk/ hfc/p043

Or complete the priority order form (right) and pop it the post

OVERSEAS SUBSCRIPTIONS

NORDOST

If you live outside the UK, please call +44 1858 438794 for our latest prices

PRIORITY ORDER FORM

	UK PRICING
	on (13 issues) to HI-FI CHOICE for £44.96 – saving 11% hthly by Direct Debit and receive my free Nordost ECO 3 anti-static ki
To like to pay 25.74 month	
	PERSONAL DETAILS
tle	Forename
ddress	
ostcode elephone	
you'd like to receive emails and SMS from	om HI-FI CHOICE and Future Publishing and its group companies containing news, formation, please include your email and mobile no. below.
mail	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
lobile no.	
ease tick here if you are happy for us to pass oducts or services by email or SMS .	syour details to carefully selected companies so they can send you relevant information about the
	PAYMENT DETAILS
I would like to pay by monthl	ly Direct Debit (UK only) and receive my free Nordost Eco 3
nti-static kit (please complete t	the Direct Debit form below)
understand that £3.74 will be debited from r	my account every month)
	Originator's Identification
	Number
DIRECT Debit	768195 Future
Name(s) of account holde	Postcode er(s)
Branch sort code	
Bank/ Building Society account number	
Ref No (Office use only)	
Signature(s)	
D-4-	
Please pay Future Publishing Direct De	ebits from the account detailed on this Instruction subject to the safequards assured
by the Direct Debit Guarantee. I under be passed electronically to my bank or	restand that this instruction may remain with Future Publishing and if so, details will r building society.
I would like to pay by c	heque – saving 11%
	Ltd. Sterling cheques drawn on a UK account)
	lit/ Debit card – saving 11%
Visa ☐ Mastercard	d
SSUE NUMBER (SWITC	TCH/MAESTRO ONLY)
ARD NUMBER	
ALID FROM DATE	EXPIRY DATE
	(FOR ADDED SECURITY PLEASE FILL IN THE LAST THREE DIGITS
ECURITY CODE	FROM THE SIGNATURE STRIP ON THE REVERSE OF YOUR CARD)
gnature	Date
	POST YOUR ORDER
ALLES MARKET	POSI TOUR ORDER

RETURN THIS FORM FREEPOST TO:

HI-FI CHOICE subscriptions, freepost RLSC-SXSE-SKKT, Unit 4, Tower House, Sovereign Park, Market Harborough, Leicestershire, 1E16 9FF

OFFER CODE PO43

OFFER ENDS 25 JUNE 2008
Direct Debit and free gift offer only
available to UK subscribers

TERMS AND CONDITIONS: You will receive 13 issues per year. Minimum subscription term is 12 months, (Gifts are subject to availability. We reserve the right to send you an alternative gift if this gift runs out. Please allow 28 days for delivery of gifts). This is a UK only offer and the gift applies only to those paying val Direct Debit. Your subscription will start with the act available issue. If at any time during the first 60 days you are dissatisfied in any way, please notify us in writing and we will refund you for all unmailed issues. Please tok here if you do NOT wish to receive relevant information about products or services must run. Publishing or any of its group companies by post □ or telephone □ Please tick here if you do NOT wish us to pass your details to carefully selected companies to enable them to contact you about their products or services by post □ or telephone □ Please tick there if you do NOT wish us to pass your details to Details of Direct Debit guarantee available on request

chadow audio

T: 0844 800 0073 or 74 | www.shadowaudio.co.uk

"At Shadow we get to listen to a lot of speakers - but the speaker we listen to most - is you the customer."



For sonic fireworks you need the 'Big Guns'

McIntosh C2300

The C2300 Vacuum Tube Preamplifier combines a suite of potent engineering enhancements with smart. user-programmable features to deliver a truly extraordinary audio preamplifier. Each input may have the bass, treble, and mono/stereo mode adjusted and stored in memory. When individual inputs are selected, these settings will engage as preset by the listener. All adjustments may be made either from the frontpanel or remote control.

McIntosh MC501

The MC501, 500 watt mono block amplifier has a new and bold, yet unmistakably McIntosh look. It features 3-dimensional glass and new cool-running, ultra long life, fiber optic LED lighting. The chassis gleams in polished stainless steel. Upward facing connectors at the back make attaching cables easier. The extraordinary quad-differential amplifier design reduces noise and distortion to record low

66 The big Mac's mix of solidstate and tube technologies elicits the best of both worlds, delivering a potent, high-end performance blissfully free of hi-fi pretence. This is an amplifier about timing and tempo over analytical detail, and about making the best of your entire CD collection rather than simply a handful of audiophile CDs. A real-world winner. 99

> McIntosh C2300/MC501 Review Richard Stevenson, HFN, June 08



Deco 6, 8, 10 and 20

ART Loudspeakers have just launched their beautiful NEW DECO Range.

Each model is available in Standard and Signature versions. Again, you have the option to upgrade from Standard to Signature at a later date within that same model. For example: upgrade 6 Standard to 6 Signature, but not 6 Standard to 7 Signature.

How does each mode sound? One word - effortless! Oh and the finish is to die for. In fact, you can pretty much choose any colour finish you wish. Just in case you are wondering, we love the blue and red finishes. Deco 6 is shown (right) with that gorgeous red finish.





(NEW) Marantz **Premier Series Combo**

Models: SA-11S2 CD Player / SC-11S1 Pre-amplifier / SM-11S1 Power Amplifier

The Premier Series is based on the awesome Legendary Series, but costs incredibly, half the price!

Consisting of a Pre-amplifier, Power-amplifier and CD/ SACD Player, each is beautifully built and delivers a sonic performance that is simply astounding.

Marantz is really raising the performance bar with the Premier Series - competition take notel



Big Guns

Model: Supercharger 750 (NEW)

The original 550K Supercharger created a huge stir and got great reviews. Little wonder since the improvement it made to general sound quality and dynamic range was outstanding.

The 750K Supercharger is an even bigger version using exactly the same circuitry as the kW750 and it measures almost identically as well. The 750K has an extraordinary sound. It is sweet and light with very extended and tight bass. The soundstage is deep and wide. The dynamics are awe inspiring.

The 750K offers effortless performance. Driven by a super integrated such as an A1 the results are spectacular.

(NEW) Wadia iTransport

At just £350, can you afford not to have one The iTransport, which is certified Made for iPod®, turns The I fransport, which is certified Made for IPod", turns any currently available iPod player into a high-end media server by providing a bit-perfect digital audio output to an audio/video system, bypassing the player's internal D/A conversion and output stage. Subsequently, the audio signal remains clean and unadulterated throughout the path. The ITransport is compatible with all currently available (Q2 2008) iPod players, as well as iPhone* and iPot Touch* madels. Call for more details.



design: © audiography 2008. HFC0708

Specialist Brands include: Apollo, ART Loudspeakers, Audio Zone, Audio Physic, ATC, AVI, Bel Canto, Bryston, Chord Cables, Creek, EAR/Yoshino, Eastern Electric, Epos, GamuT, Hovland, Hyperion, IsoTek, JAS Audio, JungSon, Manley Labs, Marantz Legendary, McIntosh, Musical Fidelity, Musical First, Music Tools, Nordost, Opera, Origin Live, Pathos, PMC, Project, Resolution Audio, Shanling, SME, Tannoy Prestige, Unison Research, Vertex AQ, VPI, Wadia, Wilson Benesch and many more.

HI-FICHOICE BACK ISSUES



ISSUE 290



ISSUE 291



ISSUE 292



SSUE 293



ISSUE 294



ISSUE 201



ISSUE 296



ISSUE 297



ISSUE 298



SSIIF 299



SELIE 200



ISSUE 30



ISSUE 302



ISSUE 303



ISSUE 304



ISSUE 305



ISSUE 306



ISSUE 307

YOUR DETAILS

SEND YOUR ORDER TO

UK READERS: Hi-Fi Choice Back Issues Unit 4 Tower House Sovreign Park Market Harborough, Leics LE16 9EF OVERSEAS READERS: Hi-Fi Choice Back Issues, Cary Court, Somerton, Somerset, TA11 6TB UK

WHICH ISSUE(S) DO YOU REQUIRE?

MONTH & YEAR	ISSUE NUMBER	AMOUNT

HOW WILL YOU BE PAYING?

Make cheques/POs payable to Future Publishing Ltd.
(PLEASE TICK RELEVANT BOX)

MAESTR
WASTR

CHEQUE
MASTERCARD
MAESTRO
VISA
POSTAL ORDER

HOW MUCH WILL IT COST?

UK £5.90, EU £6.90, Outside EU £7.90 (per issue)

BACK ISSUES

Back issues are available by post and from www.myfavouritemagazines.co.uk, They cost £5.90 (UK), £6.90 (Europe) or £7.90 (rest of the world). All prices include p&p. You can also order by phone on 0844 848 2852 or +44 1858 438794 (overseas). We accept Mastercard and Visa credit cards, and Maestro debit cards. Alternatively, send a cheque or PO made payable to Future Publishing Ltd. Please use this form.

ORDER A REVIEW REPRINT

If you're interested in an *HFC* review of an older component and the back issue has sold out, we can usually send photocopies of individual reviews to any UK address for a flat fee (inc p&p) of £5 per review You must know in which issue the original review appeared; we are unable to search back issues for old reviews.

Please send a written request, enclosing a cheque for £5 made payable to Future Publishing Ltd, to: Hi-Fi Choice Reprint Service, Future Publishing, 2 Balcombe Street,

PLEASE NOTE: THIS SERVICE IS ONLY FOR OTHERWISE UNOBTAINABLE REVIEWS

London, NW1 6NW.



NEXT MONTH...

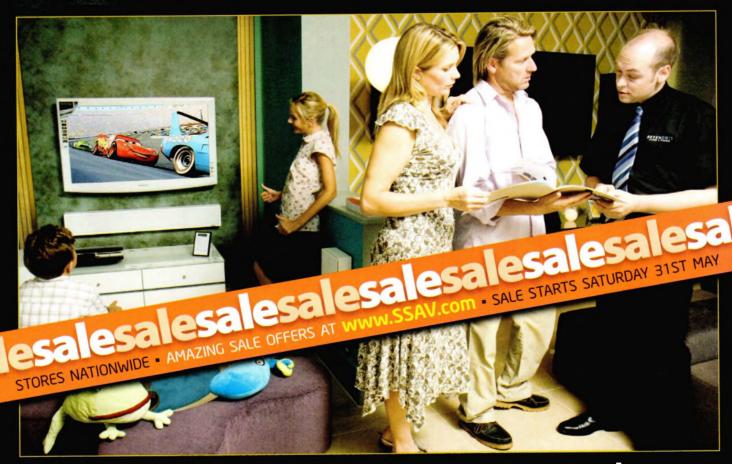
The world's first look at Yamaha's new range-topping CD-S2000 and A-S2000 amp

ON SALE 26/6/08



SEVENOASS

SOUND & VISION











the experts in home entertainment

Sevenoaks began life in 1972 as a small, specialist independent hi-fi retailer based in Sevenoaks, Kent.

Today, Sevenoaks has over 40 retail stores nationwide and has recently launched a new national network of Custom Installation Centres. Fuelled by the stratospheric rise of interest in flatscreen TVs, these CICs specialise in the creation and installation of bespoke home entertainment systems, across a wide range of budgets.

Ultimately, our stated aim is quite simple... to offer a total home entertainment solution, no matter what the customer's need.

The philosophy behind Sevenoaks Sound & Vision is simple, customer-focused and hasn't changed since the day the company started. When you shop at Sevenoaks we guarantee you:-

- Superb customer service, including after-sales care and attention to detail.
- An unrivalled product range, with every leading manufacturer in stock and impartial advice on offer.
- Knowledgeable staff that are highly trained, dedicated to customer service and have a genuine passion for home entertainment.
- Demonstration facilities in every store, offering pleasant and comfortable surroundings to test high performance products in a home-like environment.
- Competitive prices across the whole range of products stocked
- Leading edge expertise in Custom Installation via our associated network of nationwide Sevenoaks Custom Installation Centres.

Brands Stocked Include

Acoustic Energy	Da-Lite	Loewe	Optoma	Quadraspire	Sound Org
Arcam	Denon	Logitech	Panasonic	REL	Sound Style
Artcoustic	Draper	Marantz	Pioneer	Roksan	SpeakerCraft
Atacama	Escient	Meridian	Pixel Magic	Rotel	Spectral
Audiolab	Goldring	Michell	PMC _	Samsung	Spendor
B&W	Grado	Monitor Audio	Primare	Sennheiser	Stewart Screens
Beyer Dynamic	In Focus	Musical Fidelity	Project	Sharp	Teac
Chord Company	lxos	Nevo	Q Acoustics	Sim2	Toshiba
Chord Electronics	KEF	Onkyo	QED	Sonos	Van Den Hul
Cyrus	Linn	Optimum	Quad	Sony	Yamaha
				hefere travelling	

Find out more - visit www.SSAV.com today!



LCD & Plasma Screens



Pioneer KURO Plasma TV



Samsung TULIP LCD TV

32, 37, 40, 46 and 52° inch, full 1080p HD ready models.

Year Warranty included with all Plasma and LCD televisions purchased at our normal selling price'

ose models from Loewe, Panasonic, oneer, Samsung, Sharp and Sony oaks Retail Price (NICWAOO)



Panasonic VIERA Plasma & LCD TV II 1080p HD ready Plasma and LCD ran

DLP Projectors

For the ultimate home cinema experience, why not choose a full 1080p projector and screen?



Home Cinema Separates

is impressive range includes the award-winning TX-SR875 Coming soon -TX-SR606 and TX-SR506





includes the award-winning Denon DVD 1940 upscaling DVD player and higly acclaimed

Blu-Ray Disc Players

Pioneer BDP-LX70A

Get the best out of high definition media. This player delivers 'master quality' audio and video exactly as the film-makers intended, perfectly played back at 1080p and 24Hz. Come and see





Panasonic DMP-BD30

The UK's first profile 1.1 Blu-ray disc player delivers a fabulous HD picture performance

Essential Accessories

At Sevenoaks, accessories are not an afterthought accessories can make to your listening ACCESSORIES INCLUDE: SOUNDSTYLE O GRADO QED

Hi-Fi Separates



Pro-Ject Turntables

evive your records! Pro-ject's excellent range includes the multi award-winning Debut, versions include Debut USB - ideal for converting your favourite tracks to your iPod and Debut colour - available in finishes to suit



Roksan Kandy L.III

Sets a new standard for affordable hi-end amplifiers in



Rotel 06 Series

This highly acclaimed range includes integrated, pre and



Cyrus

senting a quality of sound that is rare at any price Come and hea new CD players - CD6 SE. CD8 SE & CDX t SE





Primare

With class-leading build quality, and a unique blend of sophisticated Scandinavian design, Primare build elegant, reliable, easy-to-use systems that promise years of high

Speakers





Yamaha YSP40D

Digital sound projector - surround sound from one speaker - ideal for 42° screens - just add a DVD player. speaker



Monitor Audio

With a choice of sizes and finishes, there's a Monitor Audio speaker to complement any system. Ranges include Bronze BR, Radius, Silver RS, Gold Signatue and the new flagship Platinum, the culmination of many years research and development by Monitor Audio's design team.









Spendor SA1 The most musical and revealing small loudspeaker ever created by Spendor. This tiny 2-way infinite baffle design presents sound in an uncluttered and ohesive manner that is incredibly listen to. Finished in gorgeous; Zebrano Piano Lacquer, Jet Black Piano Lacquei

and Satin Wenge



SEVENOAKS

All-in-One Systems

Both 2-channel hi-fi and full multi-channel home cinema systems are available. Our comprehensive range has models to suit

B&W Zeppelin

Hear just how good your iPod can sound.

This new iPod docking

and sounds amazing!

station ticks all the boxes.

it's beautiful, solid as a rock





New Solo Mini

Integrated CD Radio and Amplifier with integrated iPod control via optional rLead/rDock

Arcam Solo

Separates performance from these award-winning systems Available as Solo Music, Movie 5.1 or Movie 2.1 and new Mini

NEW

NEW

Aberdeen

Bedford

Brighton - Hove

Bristol

Bromley 020 8290 1988 Cambridge

Chelsea

Cheltenham

Ealing

Edinburgh Epsom

Exeter 01392 218895

Glasgow 0141 332 9655

Guildford

Holborn

Installation Centres also provide the ultimate bespoke design and installation service. These stores have unrivalled expertise in all areas of home automation and can demonstrate a wide range of installation options in-store

All Sevenoaks stores stock a wide range of products, have comfortable demonstration rooms and provide first-class customer service. Our Custom

> Hull (Closing at the end of June) Kingston

Leeds - Wetherby

Leicester Lincoln

Loughton Maidstone

Nationwide Stores

Manchester

Norwich

Nottingham - Sherwood

Oxford Peterborough

Plymouth

Preston

Reading

Sevenoaks Sheffield

Southampton

Southgate

Swindon

Swiss Cottage

Tunbridge Wells

Watford

Weybridge Witham - Essex

Wolverhampton

Yeovil

01935 700078

Bespoke design

Consultation

Custom Installation Centre

Cedia Member

Multi-Room Audio

Combines a CD player, FM/DAB radio and iPod dock. It

can even stream internet radio wirelessly and play back

Sonos

This multi-room digital music system lets v play your favourite tunes all over the house -- and control them from the palm of your hand. You can even play different sonas in different rooms

Denon S-52DAB

MP3 or WMA

files from CD,

or stored on

a USB device

plugged

directly into the unit



Logitech Squeezebox Duet

With Squeezebox™ Due you can listen to the music , you love in any room of your home. This smart, wireless player delivers your entire music collection to your stereo. The controller then makes it easy to browse, select and play from the palm of your hand

place to start if

a music system

great sound and

that delivers

for money.



Marantz CD6002 CD Player Marantz PM6002 Amplifier Monitor Audio Bronze BR5 Speakers

System Option

Got a collection of records? Why not add the award-winning Pro-Ject RPM1 Genie Turntable





Sevenoaks has put together this home cinema system for its outstanding surround sound and vision performance



Pioneer PDP-508XD 50" Plasma TV Pioneer BDP-LX70A Blu-ray Disc Player Onkyo TX-SR875 AV Receiver KEF KHT3005SE 5.1 Speaker Package



Custom Installation **Centres**









and installation service

Design and planning

Project management

For inspirational ideas visit www.sevenoaksci.co.uk

Competition Winner

The lucky winner of our March competition collecting her Arcam Solo Mini, rDock and Muso Speakers from the Nottingham store

Don't forget to enter this month's competition when you visit www.SSAV.com



Can't find what you're looking for?

Come and visit the new website and see the latest in sound and vision.

- The latest news and information
- Comprehensive product range
- Nationwide stores
- Outstanding website only offers
- Free monthly competition
- Amazing offers in the Sevenoaks Sale - Starts Saturday 31st May



visit www.SSAV.com today!



ON SALE NOW!



Welcome to the Hi-Fi Choice Buyer's Bible - the ultimate guide to the very best high performance hi-fi and multichannel gear you can buy. Here, you'll find our favourite current products listed under easy to use categories, plus useful information on what to look for and how to get the most from your components.

Reviews you can trust

Our test results are the most reliable in the business. We employ the most experienced reviewers and use the most stringent techniques to ensure our ratings are the ones you can trust. All the equipment we rate most highly is contained within these pages, from CD and vinyl to the latest multichannel disc players. Whether hi-fi stereo or high performance surround and vision, these components will take you a step closer to reality.

How to use this guide

The Hi-Fi Choice Buyer's Bible is the best way to make a shortlist of components for your system. Pick the ones that best suit your taste and budget, then use our Dealer Classified section to find specialist outlets where you can audition these components with your favourite discs.

Products that score more than four stars overall are automatically considered for inclusion in the Hi-Fi Choice Buyer's Bible. Any Best Buy or Editor's Choice Badges awarded are also displayed.

SOURCE COMPONER

- **CD PLAYERS** 92
- **DVD PLAYERS** 94
- VINYL 98
- **RADIO TUNERS** 101

AMPLIFIERS

- **STEREO AMPS** 102
- **MULTICHANNEL AV AMPS** 104

LOUDSPEAKERS

- **STEREO SPEAKERS** 106
- **SUBWOOFERS**

ANCILLARIES

- 113 **HEADPHONES**
- CABLES 114
- STANDS AND SUPPORTS 115

DEALER CLASSIFIED

- **DEALER GUIDE** 116
- 123 **DEALER DIRECTORY**

CD PLAYERS

Audio disc players for music only



Despite the emergence of new formats and the resurgence of an old one

(vinyl), CD is still the king of formats if you require breadth of choice. And despite the fact that other sources will play CDs, if you want to hear your discs at their best, there's little substitute for a dedicated CD player.

It's also the most enduring format on the market. Despite high-resolution contenders like SACD and DVD-Audio, nothing has been able to undermine this universally popular format.

CD players work by reading a stream of 1s and 0s off a disc that spins at a constantly changing speed (to counteract the increasing length of 'groove'). This bitstream is then digitally filtered before undergoing digital-to-analogue conversion in the DAC (D-to-A convertor). Thereafter, the signal is filtered



again before being amplified and sent to the output sockets.

The processes of reading the disc and converting the data are sometimes split between a CD transport and separate DAC in so-called two-box players. A popular approach with very high-end kit, this separates the electronically noisy elements from the sensitive analogue stages, but can introduce timing errors known as jitter, therefore one-box players usually offer best results where budget is a consideration.

0.8.4

WHAT'S A DAC?

A DAC or digital-to-analogue convertor is a fundamental part of any CD player and converts the digits read from the disc into an analogue music waveform which is amplified to line level.

WHY HAVE SEPARATE TRANSPORTS & DACS?

Discs are read by a transport or disc drive, which creates radio frequency 'noise'. Separating the DAC means the conversion can be done with less interference

CAN I USE AN OUTBOARD DAC WITH MY INTEGRATED CD PLAYER?

Yes, if it has a digital output - and most do.

DO I NEED DIGITAL CABLES FOR A CD PLAYER?

No. All analogue cables are suitable for connecting a CD player to an amp. Digital specific cables with 75ohms impedance are useful when connecting the player to a digital recorder or DAC.

WHAT IS OVERSAMPLING/UPSAMPLING?

Oversampling involves multiplying the sampling frequency by a whole number, usually between four and 32, but sometimes higher, and is designed let the DAC to work in a more linear fashion. Upsampling is where the data stream is stretched out by interpolation and is typically used to refer to large changes in sampling rate such as from 44.1 kHz to 192kHz.

CAN I PLAY SACDS ON A NORMAL CD PLAYER?

Yes. The vast majority of SACD discs are hybrids, with a CD layer that all CD players can read.

CAN I PLAY DVDS ON A CD PLAYER?

No, the same applies to DVD-As. But you can play CDs and DVD-As on normal DVD players.

SUPER AUDIO CD

SACD or Super Audio CD is a relatively new audio-only format introduced by Sony and Philips. It offers higher resolution than CD in the form of considerably greater bandwidth and improved dynamic range. It also has

the potential for uncompressed surround sound using up to six channels, and most new discs take advantage of this. SACD discs are usually hybrids and will play on normal CD players, but you won't be able to appreciate their highest quality or their multichannel capability without an SACD-compatible player. Some SACD players also play DVD and even DVD-Audio - these are listed in our DVD section.



Rega Apollo £498

Rega's latest entry-level player is a splendidly musical performer, given its modest price. Bass is good, midrange is great and high frequencies are truly exceptional.



Cambridge Audio Azur 840C £750

Sitting at the top of Cambridge Audio's Azur range, the 840C is a technically innovative player with a sound that belies its sub-£1,000 price - open, subtle and refined.

Our favourite BEST BUY E EDITOR'S CHOICE **CD PLAYERS** SSUE NUMBE Audio-only CD and SACD players BADGE? PRODUCT UP TO £1,000 Arcam DiVA CD73 Neatly built and well presented player that's especially good at bass and timing, with detail hardly less assured 301 Audio Analogue Rossin Valve-sporting player delivers a warm, engaging sound, but mediocre remote and no optical out may limit appeal 299 0 Cairn Tornado 850 The Tornado is a full-on experience that shuns compromise and delivers intensely real sound for its price 305 Cambridge Audio Azur 740C 500 Very flexible, this innovative upsampling player sounds exceptionally neutral and highly informative 0 293 Cambridge Audio Azur 840C Ultra-civilised sound is not to every taste: rhythm-lovers may find this player frustrating Creek Evo A minute treble lift: otherwise this is a very capable player that offers fine value 285 Denon DCD-500AE 160 Cheap, well built and good, if slightly soft-edged sound quality 295 Denon DCD-700AE Excellent entry level quality CD player lacks for nothing. Musicians please note: even has variable speed replay 284 Marantz CD6002 A hint of treble unevenness is the only specific flaw; performance is class-leading in most areas 301 280 Naim CD5/ 850 Its strikingly competent musical performance comfortably exceeds the expectations of an entry-level player 307 Quad 99CD-S Revels in big music thanks to fearless presentation: smaller-scale works can lack focus 291 Rega Apollo Unless you can't abide top-loaders, check this out: musically it's a highly praiseworthy performed 285 Sony SCD-XA3000ES A good, if not truly great, all-rounder with CD and fine multi-channel SACD performance 276 Vincent CD-S6 MkII 999 With its tube output stage, a beguiling midrange, sweet highs and attractively figured lows plus fine dynamics 287 F £1 000 Bryston BCD-1 2.050. Not as open as some but rather more timely than most, it sounds a lot more gripping than it looks 300 Cairn Fog 3 1,995 Ergonomically challenged, high energy player with Gallic charm and digital preamp on board 302 Chord Red Reference CD 13,345 The definitive statement in Red Book CD playing, this player's look and sound places it at the top of the tree 299 9 Classe CDP-102 3,000 Rich, dynamic CD/DVD player with a full bottom end, impressive dynamics and a luxurious yet revealing balanced 286 Classe CDP-202 4,750 CD/DVD-A player with brilliant sound, if sophistication is your bag. Includes S-video and composite outputs 284 Copland CDA823 1,750 Don't let the laid-back character fool you - this player has plenty of insight too 280 Ovrus CD8x/PSX-R 1,400 Lightness of touch is the key here, but there is also good bass and some very fine detail on offer too 295 EMM Labs CDSA 6,995 Classy, stripped down to basics SACD/CD player with some excellent engineering below decks 302 Esoteric X-03SE 4,995 Resolution and musicality close to the top of the game. For out and out transparency and build quality it's hard to beat 285 Gamut CD3 3,500 Superb resolve of fine detail combined with a perfectly judged balance and an ability to draw you into the music 289 LeemaAntila 291 2,495 Musically engaging player that will have you going through your CDs afresh. Balanced connection is best Leema Stream 1,095 The most timely disc player at its price point has tactile imaging and good dynamics, but unusual control system 306 Linn Maiik 1,950 Compact and capable of most CD formats, it's musically communicative with fine pace and enthusiasm 283 Marantz SA-7S1 297 5,000. Something of a bargain even at this price, the SA-7S1 sets the benchmark for CD/SACO players of its III-Marantz SA-11S2 2,500 Superb value for money, this well-balanced player features various filter settings to customise performance 304 Meridian G06 1,695 Highly refined player with a combination of analysis and self-effacing response to musical demands 295 1 Rega Saturn 1,298 Good detail, lively natural bass, and good integration of musical strands without losing their individual character 295 1,250 An exceptionally fine CD player that provides a high-end and musically rewarding performance Roksan Caspian M Series-1 307 Shanling CD-T1000SE 306 1,600 Commendably committed player which gets right to the heart of a wide variety of musical styles

SYLUSTIAN SACD COMPATIBLE Plays high-resolution SACD discs in multichannel and/or two channel mode ELEC DIGITAL OUTPUT Electrical coaxial output for digital connection to a DAC or digital recorder OPT DIGITAL OUTPUT Optical Toslink output for digital connection to a DAC or digital recorder. CD-RW (DMPATIBLE Will play CD-RW (rewritable) discs, most CD players can cope with CD-Rs CD TEXT Will display album and track titles from inserted disc. BAL ANALOGUE OUT Balanced XLR output connections for similarly equipped amplifiers HEADPHONE SOCKET Quarter inch (6.3mm) headphone lack fitted to the CD player, VARIABLE OUTPUT Player features both fixed level and variable, volume adjustable outbuts

1.495 Strong timing and rhythm, this player is well equipped for more melodic music, with good detail resolution



Unison Research Unico CD

This distinguished, yet minimalist Scandinavian CD player combines a real ear for detail with full-scale dynamics and an effortless musical style. A genuine hi-fi star.



Esoteric X-03SE £4,995

Esoteric's entry-level CD/SACD player delivers astonishing sonic detail and precision, coupled with a gorgeous sense of musical structure. Truly, it's brilliant.

DVD PLAYERS

Disc players for audio and video

Although players featuring both DVD-Audio and DVD-Video are thin on the ground, the universal disc player (that also supports SACD and CD alongside the DVD formats) continues to dominate the worlds of audio and video alike. In fact, it's rare to find a DVD player that doesn't support DVD-Audio and SACD these days.

So, what advantages do universal disc players hold over traditional CD players?

Put simply... choice. A DVD player or universal offer the listener the chance to use far more than just your CDs and build up a wider collection of music and video, all played through one device. The technology has matured now, and the performance of all formats played through these devices gets surprisingly close to dedicated players these days. The same cannot be said of Bluray or HD DVD players, many of which are

not yet good enough to play CD well. MP ION WATER

DVD-AUDIO, HD DVD AND BLU-RAY

DVD-Audio is a high-resolution music format that offers multichannel, stereo and Dolby Digital tracks on dedicated DVD-A discs. The discs can be played on any DVD player, but can only be appreciated at their best with a DVD-A or universal disc player. In fairness, the DVD-Audio format has not proved to be a resounding success, and SACD discs are more readily available.

The two new kids on the block are HD DVD and Blu-ray. Both the same physical size as the CD and DVD disc, these formats offer even more data storage capacity than DVD (up to 50GB instead of DVD's 8.5GB). However, these formats are the exclusive domain of home cinema and gaming fans. Sadly, the possibility of super-high-resolution music-only Blu-ray or HD DVD discs remains distant at best.

0&A

WHICH AUDIO OUTPUTS GIVE THE BEST QUALITY?

Use the analogue outputs for CD, DVD-A and SACD, and the coaxial digital output for DTS and Dolby Digital movie soundtracks

WHICH VIDEO OUTPUTS GIVE THE BEST QUALITY?

The best connection is HDML then component video, followed by RGB Scart. All these are clearly superior to S-video and the basic composite video option.

DO I NEED A MULT ICHANNEL AMP TO USE A DVD PLAYER?

Only if you want to hear music and movie soundtracks in multichannel surround. DVD players can be used with stereo amps and just two speakers to great effect, but you'll only get stereo, not surround sound.

WHAT IS 1080P?

HDTV is defined by the number of lines the picture creates and whether it's interlaced (like old TV) or progressive scan (like a PC monitor).





that carries digital audio and video, like a digital SCART lead. Arguably the best choice for HDTV pictures.

HDMI LINK: A flat, multi-pin socket VIDEO CONNECTIONS: Yellow socket is composite; red, green and blue sockets are for component; the small black multipin socket is S-Video; the big one is SCART.

DIGITAL OUTPUTS: For Dolby Digital, DTS and PCM audio bitstreams.

ANALOGUE AUDIO OUTPUTS: For stereo and multichannel connections, use these for best results with DVD-Audio, SACD and CD.

	ır favourit			SPECIFICATIONS							
	VD PL	A	YERS	DVD-A	SACO	ELEC	027	HEADPHIONE	88		
Aud	Audio/Video disc players		COMPATIBLE	COMPATIBLE	DIG OUT	IND SIG	NE SO	SSUE NUMBER			
BADGE	? PRODUCT	ξ	COMMENTS	E	E	OUTPUT	CUIPUT	SOCKET	8		
UP T	0 £1,000										
2)	Arcam DiVA DV135	900	Unchanged looks and stereo-only DVD-A/SACD, but the overall performance is great across all formats. Stunning picture, too	•	•	•	•		296		
[FK]	Denon DVD-1920	250	Respectable (if unexciting) and flexible audio player, but something of a star from its HDMI equipped upsampling video subsystem	0	•	•	•	•	276		
	Marantz DV7001	600	Enhanced model based on DV6001, but with various improvements, including superior CD replay capabilities		•	•	•		296		
	Marantz DV7600	600	A mid-market cracker, with sound and picture quality that generally exceeds expectation	•	•	•	•		274		
	NAD T585	800	Easy to live with universal player that shows clear signs of rejuvenation of the Classic range	•	•	•	•		294		
	Onkyo DV-SP503E	300	Budget Onkyo universal player is a straightforward Pioneer based implementation, which performs well with audio and video	-00	•	•	•		275		
	Pioneer DV-LX50	450	Nicely built universal player for those who value finesse over speed and energy. Decent picture too	0	0	•	•		306		
1	Yamaha DVD-S2500	700	Universal player, slightly stronger with video than audio, but well turned out with a wide range of analogue and digital in and outputs	0	•	•	0		280		
ABOV	E £1,000								700		
EC	Accustic Arts Surr Player 1	4,495	A very high-quality Pioneer-based machine, excellent sound from both hi-res and regular formats	0	•	•	()		299		
£.	Arcam DiVA DV137	1,250	Good overall audio performance and excellent upscaling HDMI DVD-Video player, but stereo-only SACD playback at time of writing	5	Э	30	95		285		
	Denon DVD-3930	1,100	Well engineered universal player, with useful bypass facilities for pure audio, and unusually powerful video image processing	0	0	•	0		287		
EC	Linn Akurate CD	3,985	This highly engaging multiformat non-video player doesn't have huge transparency or a fancy box, but is musically addictive	۰	0	45	0		299		
	Marantz DV9600	1,500	With excellent, next-generation picture and impressive sound quality on CD and SACD, this sets a very high standard to beat	3	0	•	0	0	280		
EC	Meridian G98AH	3,625	Meridian's most widely compatible G-Series DVD player – groundbreaking DVD-Audio replay and a fine CD player too	0		0	0		265		
EG	Naim DVD5	2,565	Naim's first DVD player is a real success, notable for its class-leading sound with CD and (optional) multichannel DVD-Audio	0					263		
90	T+A SACD 1245 R	2,000	Dedicated stereo only/SACD/CD player avoids the usual compromises. It does a limited job, but it does it with fine fidelity		0		0		279		
EC	Townshend TA 565 CD	3,000	A universal machine that excels with music and is quite exceptional with good of stereo CD		0	۰	0	0	270		

SPECS IN DVD-A COMPATIBLE Plays high-resolution DVD-A discs in two and multichannel modes. SACD COMPATIBLE Plays high-resolution SACD discs in two and multichannel modes. ELEC DIGITAL OUTPUT Electrical coaxial output for digital connection to a multichannel amplifier or receiver. OPT DIGITAL OUTPUT Optical Toslink output for digital connection to a multichannel amplifier or receiver. HEADPHONE SOCKET Quarter inch (6.3mm) headphone lack fitted to the DVD player









ONE CATALOGUE.

So how do you get your hands on this catalogue? Simply give us a call on 0870 241 2469, it's yours FREE!

What's more you'll join our database and get our free quarterly newsletters featuring product reviews, offers, group tests, etc... absolutely free. It is the best way to keep upto-date with the latest and greatest audiophile accessories and latest industry news.

Visit www.hififorsale.com to advertise online totally FREE of charge. After a few simple steps your advert will be posted online. Users can also change and update their listing in real time. Each month www.hififorsale.com has over 50,000 visitors, and to date over 100,000 adverts have been placed online!



1000s of answers!

Specialist items at great prices with

Audica



5.1 SYSTEM CX System 2

All the speakers in the CX Series are bass reflex; the satellites, towers, centre and LCR have 50mm pulp cone woofers, with 20mm flat-wire ribbon voice-coils and neodymium magnet assembly. The Audica signature low diffraction Avion enclosure design is finished in a tough Diamond Black high-gloss

M J Acoustics



5.1 SPEAKER SYSTEM

This amazing new XENO system features High Grade crossover, ability to be fed with a full range signal, Bass driver technology, Tweeter employing soft dome technology and Boundary effect rear ports to enhance the refraction effects from the lower frequencies.

Monitor Audio

£ CALL NOW



5.1 SPEAKER SYSTEM Bronze AV Package2

Nothing quite beats the sensory excitement generated when audio and video are expertly combined. A blend of matched high performance driver technology, exceptional build quality and gorgeous matching finishes is the recipe for surround sound magic from the five-channel Bronze Reference systems.



Products, technology and irresistable prices

FREE **DELIVERY**

HD 7.1 AV AMP

high-definition playback. You're looking at the first HDMI

TX-SB875 Onkyo

A FUSION OF ROCK-**SOLID POWER AND HI-DEF PRECISION**



CHECK ONLINE



AVR-1708

Denon

HDMI CABLE

AV STAND



Alphason

The Alphason ABR1100 is a beautiful accessory for anyone's home, it's spacious yet discreet design accommodates LCD and Plasma Screens up to 50 inch whilst providing ample space for most AV equipment, including setup box, DVD player, games consoles etc

SHELF HIFL



Atacama

Combining high performance with practicality and good looks, the Equinox Series offers a flexible approach to Hi-Fi equipment rack design. The Equinox has the unique ability to grow with your Hi-Fi system by allowing you to begin with a 2 shelf base module

SPEAKER CABLE Silver AnniversaryXT BiWire

F CALL FOR PRICE

copper covered in a white polythene jacket. This

cable manages to deliver the smallest of details combining this with smoothness and fine control.

Bass is substantial, mid range boasts bags of



CALL FOR PRICE

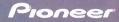


QED

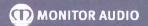
Constructed from silver plated, oxygen-free

The QED HDMi-SR Reference interconnect provides outstanding digital signal integrity for exceptional picture quality and sound. It is recommended for direct digital connections between the highest quality, suitably equipped components, including HD Ready products

CHECK ONLINE FOR MORE PRODUCTS & PRICES

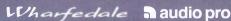








drive, a superb cable for the price





QED

free delivery



>Cutting-edge
HiFi Specialists
with thousands
of high-end
products available

With over 130 brands offering awe-inspiring products from hard-to-find to more popular items, few can match our experience, range and stockholding.

Free delivery, excellent after-sales support and tempting finance options ensure you will come back for more.

WWW.HiFiBitZ.CO.UK 08700 276 888

£ CALL FOR PRICE CHECK ONLINE

£ CALL FOR PRICE CHECK ONLINE



PUSH PULL AMP

The new Tube 252 is both stunning to behold and a throughbred performer featuring no less than 9 valves and three line input stages to offer 25 watts per channel of pure listening ningaga.



THNEE

The Yamaha TX 497 FM/AM Tuner gives you highly sensitive reception capability and upgraded tuning performance. Paired with a Yamaha amp, ort player an some good quality speakers this tuner will form an integral part of your hir separates system.



CD PLAYER

Continuing with Denon's multi-bit philosophy, the DCD-700AE features the latest version of its renowned LAMBDA converter which virtually eliminates zero cross distortion and incorporates the latest AL24 processing. This circuitry delivers a fast dynamic sound, with a very less appearance traveled to the latest latest AL24 processing.



OD PLAYER MKI

The Roksan Kandy Integrated CD Player MKIII employs state-of-the-art technology and precision engineering to exploit the full potential of Compact Discs.

ITUBE 252

Fatman

TX-497

Yamaha

DCD-700AE

Denon

Kandy

ROKSAN

Infocus





STATE-OF-THE-ART
HOME CINEMA

FOR MORE 5 STAR DEALS VISIT WWW.HiFiBitZ.CO.UK

DARKCHIP4 PROJECTOR IN83

The InFocus IN83 Full HD projector combines state-of-the art technology and ease-of-use to deliver a breathtraking HD video experience. From its full HD 1080p DLP panel Blu-ray, Sky HD and much more can all be viewed at their highest possible resolution.

Shure

CHECK

IN-EAR HEADPHONES SE420



INFORMATION

Shure's SE420 sound solating earphones feature Dual TruAcoustic MicroSpeakers and a sound isolating design They use dedicated tweeters and woofers to provide a detailed sound stage that's fire from outside noise. Lows, mids and highs are distinct and defined for accurate reproduction for all the details of your music. A Premium Fit Krit offers portability, connectivity and a comfortable customised fit.

UltimateEars

£ CALL FOR PRICE

EARPHONES SUPERFLAVI



INFORMATION

The ultra compact and lightweight housing makes for a comfortable fit and is perfect for the active, fashion minded consumer. The machined aluminium housing compliments the sophisticated look and feel of the iPhone. An inline control button allows you to answer/ end phone calls and control music / video nawhack functions.

Grado

HEADPHONES



INFORMATION

With a tremendous reputation for high performance and high value these headphones are very comfortable and use carefully matched Grado drivers and low-mass polymer daphragms offering a warm, natural sound

Infocus'

TEAC



Q ACOUSTICS





Finance options available through V12 Finance

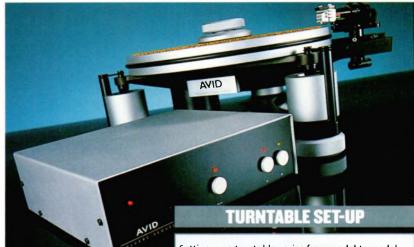
VINYL

Turntables, cartridges and phono stages

Record players or turntables offer the digital revolution serious competition when it comes to sound quality. Even a modest model can turn musical tricks that most CD players struggle with. Some call it vinyl warmth, but in reality it's a lack of digital hardness that makes the format so engaging. True, the software requires a bit more care, but even a knackered LP is more playable than a scratched CD.

Record players are made of three, perhaps four, fundamental parts. The turntable is the plinth and platter, usually also containing the motor and any suspension system. A tonearm sits on the plinth and allows the cartridge to trace the vinyl groove by pivoting or parallel tracking over the record. The cartridge contains the means of turning the mechanical movement of the groove wall into an electrical signal.

A fourth element is an amp dedicated to the delicate job of amplifying and equalising the cartridge's insubstantial output. This is called a phono stage and can be found in some integrated amplifiers and preamps, but is



increasingly purchased separately for use with line-only amps.

There are two types of phono cartridge: moving magnet (MM) and moving coil (MC), and with a few exceptions the latter outperforms the former. But MCs produce a lower output and require better-quality amplification to be heard at their best. As a general rule, MCs offer a broader bandwidth, greater dynamics and more detail, but the better moving magnets do most things well enough to distract you from your CD collection.

Setting up a turntable varies from model to model, but the general principle is to level the platter by adjusting the suspension or, as with solid platters, the surface it sits on. Sprung suspensions sometimes require a bit of fine-tuning to sound their best, but the principle is to achieve a smooth, pistonic bounce. Cartridge set-up is even more critical, as the angles at which the stylus traces the groove affects its tonal balance and levels of distortion. A good alignment protractor is essential if you are intending to set up your own cartridge, as is a degree of patience. In essence, there are two angles you need to get right: the tracing angle as the cartridge crosses the record if you are looking from above, and the vertical tracking angle (VTA), which is adjusted by raising or lowering the arm base to bring the arm parallel with the record surface.



Pro-Ject RPM 5 £400

Pro-Ject's entry-level RPM deck is a good-looking, great-sounding package that delivers terrific value for money. A class act and no mistake.



The Funk Firm Funk V £760

The more costly of two turntables from The Funk Firm, the Funk V builds on its sibling's virtues to deliver a sound of sheer class - dynamic, detailed and refined.



Clearaudio

Champion £1,475 Current king of acrylic, the Clearaudio deck, arm and cartridge combination turns in a beautifully well-balanced delivery, but choose your support wisely.



Avid

Volvere Sequel £3,500 Avid has been one of the most impressive exponents of the vinyl arts in recent years, and this mid-range deck is a stunning example of analogue engineering.

					SPE				
	URNT	AH	LES .		SISP SUBCHASSIS	SPEED CHANGE	SUPPLIED WITH ARM	SUPPLIED WITH CART	ISSUE NUMBER
	ord players			SPEELS	HAS	CHAR	TH AF	HOM	BWIT
	PRODUCT	£	COMMENTS		Sign		Š	R	
EC	Avid Volvere	2,750		33/45					298
EC	Avid Volvere Sequel	3,500	Heavyweight turntable that will deliver more of what's in a vinyl groove than most of the competition	33/45	0	0			229
	Clearaudio Champion	1,365	Smart, practical and good-sounding, with impressively 'dead' arm. Isolation recommended	33/45			0		268
	Clearaudio Performance	1,670	Ceramic-magnetic bearing spells a surprisingly uncolored performance. Good arm and cartridge	33/45			0	0	295
EC	Clearaudio Ambient	4,220	Innovative use of materials leads to a fast, precise and thrilling sound (tonearm extra)	33/45		0	0	0	271
EC	EAR Disc Master	7,695	Combines new 'no contact' drive technology and high quality materials to bring state of the art resolution	33/45/78	0	0	opt		276
	The Funk Firm Funk	450	You won't find another turntable at the price that can touch the Funk for dynamics, tone colour or detail	33/45			opt		279
	The Funk Firm Funk V	750	Vector drive brings a refinement to the standard Funk that increases resolution. For high-class analogue sound, it's a killer	33/45		0	opt	opt	284
	Goldring GR2	265	Nicely finished Rega-manufactured deck with RB250 arm and an open, engaging sound quality	33/45					266
	Michell Tecnodec	767	Simple and smartly understated, performs above expectations – full-bodied and highly detailed	33/45					268
EC	Michell Orbe SE	2,015	A superb turntable, able to mix it with the best at virtually any price. Now features new DC motor	33/45					235
	Pro-Ject Expression II	250	A smooth and engaging turntable with the ability to revel in the glory of vinyl, with upgradable arm cable	33/45					289
	Pro-Ject RPM 5	450	Great looks plus an on the ball, engaging sound that puts it in the serious league, needs good isolation for best results	33/45		0			279
	Pro-Ject RPM 6.1	600	With its minimal chassis and huge platter this is a steady design that's capable of fine results with a decent cartridge	33/45/78			0		294
41	Pro-Ject RPM 9 X	1,200	A gorgeous turntable that sounds as good as it looks – vital and transparent! Price includes carbon-fibre arm	33/45		0			268
100	Rega P3-24	398	Very competent, uncoloured and musical, much improved by £148 outboard electronic power supply	33/45		opt	0		298
	Rega P5/RB700	698	Combines a great sense of timing with market-leading resolution and a phenomenal tonearm – a hard act to beat	33/45		0	opt		257
	Rega P7/RB700	1,298	A highly capable player that could hold its own in the most exalted company – a vivid and natural performer	33/45		0	opt		257
EC	Rega P9/RB1000	2,498	Exceptionally elegant hi-tech player with complex outboard supply, ceramic platter and wonderful RB1000 tonearm	33/45		0	0.		228
	Roksan Radius 5/Nima	895	Sophisticated design with accomplished sound quality, excellent imagery and good isolation (acrylic version tested)	33/45					248
EC	SME Model 10A	3,411	Elegant and extremely capable design, tested here with Series W309 hybrid arm	33/45		0			195
£C 03	SME 20/12A	11,133	Brings a calmness and precision to vinyl replay that we have rarely encountered, build quality is second to none	33/45/78					293
EC	Townshend Rock V		If you want to hear everything that's on a record then there's no better machine for the job (includes Excalibur II)	33/45					307

Ou	r favourite	BEST	BUY ED EDITOR'S CHOICE				
					1920	E DO	ONS
P	HONO	C	ARTRIDGES			RISPLACEABLE STYLUS	ISSUE NUMBE
MM	and MC cartridges			MM	No.	TIE.	BER .
BADGE	PRODUCT	٤	COMMENTS				
	Denon DL-103R	200	Adds refinement to basic DL-103, at a price. One of the best rock'n'roll cartridges around				285
	Dynavector DV-10X5	250	A high- output MC with superb dynamics and fine timing that's difficult to mount, but well worth the effort				307
	Grado Prestige Gold	110	Produces rich, open and expansive music with the minimum of fuss			0	235
	Ortofon Rondo Red	300	Delivers detail, power and resolution and makes a good case for its price				307
25	Ortofon Salsa	200	Despite a touch of midrange coloration, this cartridge really involves the listener with good extension and a clean, agile sound				290
	Sumiko Blue Point Spec Evo III	239	High output MC with refinement at high frequencies and a nimble, articulate and revealing sound				270
	van den Hul MC One Special	699	A gorgeous cartridge that's worth the price every time you hear a familiar track in a whole new light				235
[EC]	van den Hul Condor XCM	2,400	A stunning cartridge with stereo imaging, dynamics and detail resolution to die for				265
EC	Wilson Benesch Naked Analog	1,450	With its smooth clean highs, transparent midband and nimble bass, this is a lot of performance for the money				253

Our favourite 🔲 BEST BLIV 😥 EDITOR'S CHOICE								
					SPE	CIFIC	ATION	S
r	HUNU	2	TAGES	MM PHON	MC PHON		ADJ. IM	ISSUE
Pho	Phono stages		IONO INPUTS	STUDIN ONO	ADJ. GAIN	MPEDAN	NJWBER	
BADGE?	PRODUCT	£	COMMENTS	23	23	N	R	99
	Cambridge Audio 640P	60	An outrageously good bargain that suits budget systems, but can confidently survive upgrades before and after in the chain					305
	Creek OBH15	220	Practical and highly compatible unit offering fine detail and pleasing, mellow balance		۰			305
	NAD PP2 phono stage	50	A fine buy for turntable users on a tight budget – open tonality and clarity is distinctly impressive for the money					245
	Tom Evans Microgroove	400	For dynamics and real bass extension with good tonal colour this is the one to beat. The Plus version (£700) is even better!					234
EC	Tom Evans The Groove	1,800	Plenty of detail, excellent imaging and almost flawlessly neutral: a good choice for maximum information retrieval off any LP					201
110	Trichord Dino/Dino+	498	Relaxed yet resolute with very good image depth and natural balance, not to mention great flexibility					234

TURNITABLE SPECS KEY SPEEDS Speeds offered in rpm. SUSP SUBCHASSIS Turntables with a sprung or suspended support for the platter and arm. SWITCHABLE SPEED CHANGE Some decks require manual lifting of the belt from one pulley to another to change speed, but not these ones. SUPPLIED WITH ARM Deck is supplied complete with tonearm – some require a separate purchase in this department, but the dealer will fit it for you. SUPPLIED WITH CARTRIDGE Some decks are supplied with a starter cartridge and this is included in the price shown.

EXTRIBUTES FOR MM Moving magnet cartridge – see amp and phono stage features to match this type. MC Moving coil cartridge – see amp and phono stage features to match this type. REPLACEABLE STYLUS Some cartridges have separate styli for ease of replacement, but it compromises sound quality.



FREE B&Q VOUCHERS

SPEND OVER £300 AND GET A £10 B&Q VOUCHER FOR EVERY £100 SPENT

Offer applies to in-store customers only. Minimum qualifying spend is £300. Offer starts Thursday 29th May, expires Thursday 26th June 2008. Not in conjunction with any other offer or promotion.

HI-FI AND HOME CINEMA SPECIALISTS

Mission, MI Acoustics, NAD, Onkyo, Panasonic, Pioneer, Pro-Ject, Pure, Q Acoustics, QED, Quad, Roksan, Rotel, Samsung, Sennheiser,

Topfield, Wharfedale, Yamaha and many more top brands. Not all products are available from all outlets: please call, or check online at www.superfi.co.uk

O ACOUSTICS 1010 5.1

"A TRULY OUTSTANDING FACKAGE"

Features 1010 front and rear

speakers, 1000C centre speaker and 1000S subwoofer



ARCAM DV135 ARCAM AVR280

Arcam AV separates deliver superior sound and vision. Their DiVA home cinema separates combine cutting edge technology with over 30 years of design excellence, delivering reference performance and top specifications.

WHAT HE FIT

JUNE 2007 ARCAM AVR280

ALSO AVAILABLE SEPARATELY

ARCAM DV135

- Plays DVD Video and Audio SACD, CD, HDCD, MP3, WMA, IPEG OGG and more
- JPEG, CAG and more
 HDMI out with high-grade
 upscaling to 720p, 768p and 1080i
 Audiophile Wolfson DACs
 (as used in reference FMJ CD36
 and AV9) and power supply, for outstanding CD replay Black or silver £449.95 (Was £899.95, Save £450)

LOGITECH SQUEEZEBOX

Stream music around your house Handset features large, colour

display, gyroscopic controls and docking station/charger

Remote control doubles as second network client for

portable streaming

SET YOUR MUSIC FREE

WAS: £2099.95 SAVE: £1100



ARCAM AVR280

- Dolby Digital EX, ProLogic II and DTS ES, Neo 6 and 96/24 decoding
 Configure for 7.1 or 5.1 with front channels bi- ampedor 5.1 and amplified 2nd zone
- 7 x 80 watts audiophile amplification
- Superior toroidal transformer HDMI switching

- Black or silver £599.95 (Was £1199.95, Save £600)

PURE EVOKE 1XT MARSHALL

DAB Radio with unique,

Marshall amp styling Built-in alarm timers

ALSO AVAILABLE.

■ XTI add-on speaker ■ £34.99

Also available separately **1000C Centre** £49.95 (Was £99.95, save £50) Black/Beech/Cherry





WAS: £499.95 SAVE: £200

2**99**.9

SPEAKERS QUAD 11L2 &12L2

- Reference stand-mountspeakers Woven Kevlar bassdriver for superior
- distortion-free bass performance Realcherrywood finish with gorgeous gloss lacquered finish

OUAD 11L2

WAS: £379.95 SAVE: £130 f749.9

QUAD 12L2

£349^{.9}



NAD C515BEE

- Budget, audiophile bargain CD/-R/-RW, MP3 and
- WMA playback Graphite or titanium finish



LAY YOUR HANS ON A SOLO

649.95



- CD/MP3 player DAB/FM
- tunerandampinone Fullalarm functions and
- custom install compatibility Front USB in and optional iPod control



FIVE EASONS TO CHOOSE SUPERFI

Quality turntables, CD players, hi-fi amplifiers and speakers always in stock and available to demonstrate

Latest technology

Hard disk, Blu-Ray, Freesat, MP3, DAB, PVR and multi-room products – all available to demonstrate

Official UK models

Fully-guaranteed, genuine UK products

0% credit available

Ask in-store for details and a quotation

See www.superfi.co.uk/ freeparking for details

- Multi-region DVD, SACD, DVD-Audio, MP3, WMA, JPEG, DivX playback, WMV, AAC playback HDMI out with
- 1080p upscaling Silverfinish



STORES - EACH BRANCH OFFERS EXPERT DEMONSTRATION AND INSTALLATION

Nottingham

15 Market Street 0115 941 2137

Stockport

68-70 Lower Hillgate 0161 429 9080

WWW.SUPERFI.CO.UK

Birmingham

67 Smallbrook, Queensway 0121 631 2675

Coventry

WAS: £99.95 SAVE: £20

2 Corporation St 02476223254

22 Sadler Gate 01332 360303

Lincoln

271a High Street 01522 520265

London

2-4 Camden High St 020 7388 1300

Manchester

54 Fringe Street 0161 835 1156

RADIO TUNERS

FM and DAB hi-fi separates



Radio is a fantastic musical resource that's in danger of being taken for granted, but whatever

your tastes there's someone out there catering for it. If you haven't got a decent tuner hooked up to your hi-fi already, you're missing out!

DAB or FM?

Digital Audio Broadcasting (DAB) is now said to be available to more than 80 per cent of the population and the long-term plan is to switch public broadcasting over to digital entirely, but hardware prices have yet to come down to a point where this would be acceptable. Its advantages over FM include hiss-free reception, the potential for a wider range of stations and the ability to display comprehensive programming information. FM's RDS system means that station name and occasionally track titles are displayed, but the range of information is fairly limited

Where FM scores over DAB is in the lower

cost of hardware and the greater reception area. It can also provide higher sound quality if reception conditions are favourable. Absolute sound quality judgements are muddied by the fact that you are listening to different forms of compression and processing at the studio for each station.

What is clear, however, is that there are more and more radio stations broadcasting on DAB that aren't available on FM. So if it's variety of programming you're after, they have a lot to offer.

RECEPTION

The quality of signal you feed a tuner will dictate its sound quality. So serious FM listeners should get a decent external aerial and connect it with as few junctions and splits as possible. Every time you split the cable (ie take a feed for another tuner) you halve signal strength! With DAB the same applies but get a DAB-specific aerial. See www.bbc.co.uk/digitalradio for details.



Denon TU-1800DAB £250

Combines DAB with FM/AM reception and good all-round design at a tempting price.



Creek T50 £550

A thoroughly accomplished AM/FM tuner with a substantial and detailed sound.



T+A T1210R £1,000

This EM tuner looks, feels and sounds top-notch - great detail and imaging.



Magnum Dynalab MD 90T £1,195

FM tuner with valves - 'affordable' for an MD, but still streets ahead of most radios.

Our favourite BEST BLY E EDITOR'S CHOICE

TUNERS FM & DAB HI-FI SEPARATES BADGE? PRODUCT Creek T50 FM M I Very fine results indeed with precision, polish and insight added to excellent basics 128 Cyrus FM-X FΜ A classic no-nonsense FM tuner that achieves gratifying sonic results. Upgradable with PSX-R power supply 283 -Denon TU-1500AE 130 Well attuned to the crowded modern FM band, this tuner produces clear, detailed sound with plenty of gusto FM,M,L 100 281 Denon TU-1800DAB There's a little grain on FM, but the decent performance on both bands makes this a great dual-band choice DAB.FM.M 200 283 Magnum Dynalab MD 90T 257 FM 1,195 No remote or presets as standard, manual everything and valves ... but its sound is simply sublime oot ont Marantz ST7001 FM reception could offer a little more detail and insight. DAB is fine, but near-identical Denon 1800 is cheaper! 200 283 141 NAD C422 Admirably free of roughness or other obvious nasties, with just a slight lack of clarity FM.M 250 Primare T21 600 A very fine tuner - bass and treble are both well extended and detail is excellent ΕM 30 230 Pure DRX-702ES 210 Apparently good value is restricted by persistent veiling on FM: 'PAC' on DAB mellows sound a little DAR EM M gg 283 Rega Radio 3 283 Strong bass, clear treble and a high enjoyment factor make this an appealing FM performe Rotel RT-02 A highly competent tuner which always sounds appealing and fuss-free FM M 30 242 T+A T1210F High-end looks are matched by the sound, which is detailed and sophisticated, with useful features too FM 100 283 Arcam DiVA DT91 Some grain at low levels, but sound is lively, large in scale and tonally very natural. Very smart! DAB.FM 16 299 Cambridge Audio DAB500 Very good sound, plus optional response tweaks, and slickest operation yet Denon TU-1800DAB Very good detail and a highly believable impression of real musicians playing. Imaging can be a little constricted DAB,FM,M 200 299 200 Marantz ST7001 Midband detailed and precise; treble can be thick but bass is extended, and sound generally energetic DAR FM M 200 299 NAD C445 DAB,FM FM is laid-back despite bright balance, but has good detail. DAB slightly livelier than most Onkyo T-4555DAR 350 Admirably free of grain or obvious tonal blemishes, this tuner achieves a high standard in all areas on DAB.FM 40 299

SPECS KEY WAVEBANDS Which bands are supported: FM, M - medium wave, L - long wave, DAB - digital audio broadcasting. PRESETS How many stations can be stored in memory. RDS Radio Data System - station names and program littles can be displayed among other facilities (FM only, DAB has more comprehensive display potential). REMOTE CONTROL For the couch potato, SIGNAL STRENGTH METER Useful for setting up an aerial ROTARY TUNING KNOB An ergonomic alternative to buttons

STEREO AMPLIFIERS

Integrated and pre/power amps

Amplifiers come in two basic forms: integrated and preamplifier (pre) plus power amp combinations. Integrated simply means that both pre and power sections are in one box. There are definite advantages to separating the low level, delicate signals in the preamp from the radiations of a power amp, so the more ambitious designs come in two or more cases. In some cases, each channel has its own power amp called a monoblock.

Amplifiers use two basic technologies: transistors or valves. Transistors are popular because of their practical and technical advantages, but valves – aka tubes – live on owing to aspects of sound quality that trannies can't replicate. If you want to play your music loud, use trannies; if you appreciate acoustic music, try valves.

The fundamental of amp/speaker interfacing is power rating and speaker sensitivity. You can drive a high-sensitivity speaker with a ten watt valve amp, but it takes a 200W behemoth to get the best out of speakers which present a difficult load. As a rule, you can't have too much power.

How to choose an amp

The main areas in which amps vary are: timing, dynamics, stereo imaging and transparency. Timing is the ability to present the attack and decay of each note precisely; amps with strong timing have a snap and coherence that is very appealing.



Dynamics is a general term for the ability to portray variations in level between individual notes and is different to dynamic range (the difference between the loudest and softest notes). Dynamically strong amps tend to have more life and energy.

Stereo imaging is how solid or three-dimensional an instrument or voice sounds. The point of having two rather than one speaker is to make it possible to recreate the soundstage of the original recording, thus amps that have strong imaging skills can create a sonic space that seems to extend the room.

Transparency of detail is the most obvious difference between amps. One amp will present more subtlety than another, but the drawback with using this as your main criterion is that a forward or 'bright' sounding amplifier will emphasise detail at the expense of overall musical coherence.

SHOULD I LEAVE MY AMP ON **ALL THE TIME FOR BEST RESULTS?**

All audio electronics perform better when they are warmed up, and this is particularly the case when it comes to amplifiers. If there's no way that you can leave it on all the time, make an effort to switch it on at least 20 minutes before listening.

WHAT IS BI-WIRING AND **BI-AMPING?**

Bi-wiring is when you run separate cables to the treble and bass/mid terminals on the speaker. In most instances, this improves sound quality so long as identical cables are used. Bi-amping is using two stereo amps to drive one pair of speakers, using one amp to drive the treble and the other for the bass/mid sections of the speakers.

WHY DO VALVE AMPS HAVE **SO LITTLE POWER?**

Valve amps are inherently low powered in absolute terms - at least when you compare them to their transistor-based cousins. But when partnered with high-sensitivity loudspeakers, they are quite capable of producing perfectly adequate head-banging levels.

Stereo amps can be used in home cinema set-ups as well. You don't get the surround and centre channels, but well set-up stereo speakers do a remarkably good job of creating atmosphere for movies. Stereo amps

tend to be better at reproducing music as they don't have the (electrical) noiseinducing digital processing of AV amps. AV amps cost three to four times as much as stereo models of a similar quality.



If you thought the PM7200 was a great budget amp, just wait until you hear this! Its sound is so detailed and involving, you'll think it costs twice the price.



Cyrus 6vs2 £600

The latest 'singing shoebox' from Cyrus is an absolute peach! Strong rhythmic flow, tunefully extended bass and excellent stereo imaging are among the highlights.



130 £1,500

Are you looking for an amp that combines weight and musical gravitas with rhythm, detail and subtlety, with gorgeous build quality to boot? In that case... here it is!



CTA405 £2,498 This amp's massively enjoyable musicality is hard to beat: all the effusiveness of a great valve amp and none of the

stereotypical softness. Brilliant!

STEREO AMPS BUYER'S BIBLE

Dur favourit				S	PECII	ICAT	IONS	
Tegrated amplifiers	J	AMPLIFIERS	LINE INPUTS	PHONO INPUT	REMOTE CONTROL	HEADPHONE SOCKET	POWER OUTPUT (W)	ISSUE NUMBER
ADGE? PRODUCT	£	COMMENTS	SING	VFUT	FO.	8	3	BER
UP TO £1,000	300							
Arcam DiVA A70	500	A smart and practical amp offering good snap and pace, with natural dynamics and good detail	6	MM	0		60	28
Adv. Acoustic MAP305DA	600	A lot of amplifier for the money and capable of revealing and exciting sound in the right company. Includes 4 digital inputs	5	B	0		100	30
Arcam DiVA A90	850	Practical, affordable and impressively flexible amp with a laid-back approach but plenty of insight too	7	opt	0	69	100	30
Cambridge Audio 640A v2	300	Slightly cheap-feeling controls are the only real downside to this powerful and lively little amp	6		6		75	27
Cambridge Audio Azur 740A	500	Ticks all the boxes for bass, clarity, imaging etc. and invites the listener into the music with uncommon grace	6		50		100	29
Cambridge Audio 840A v2	750	The biggest differences between this and most amps at twice its price are in looks and show-off factor. Powerful and detailed	8				120	29
Creek Evo	500	Not the most accurate, strictly, but it's lively, energetic musical presentation is entirely lovable	5	opt	•	•	85	28
Cyrus 6vs2	600	Spunky little amp that reproduces instrumental timbres and acoustic spaces well, with real musical involvement	7			0	40	29
Denon PMA-700AE	250	One of a growing number of new low cost amps, it offers good timing and analysis at up to moderately high volume levels	4	MM	0		50	28
Marantz PM7001KI	550	A self-effacing amplifier which serves the music admirably with fine bass, sweet treble and unforced detail	5	ММ	sys	*	70	28
Musical Fidelity X-T100	899	By separating amp and TRIPLE-X power supply, this deceptively powerful valve-sporting amplifier is both enticing and musical	3		sh		70	28
Naim Nait 5 <i>i</i>	725	More versatile than previous Nait's, the 5i is a great all-round amplifier that offers vivid insights into all manner of music	4		•		50	30
Onkyo A-933	500	Puts the music first, with sound that delivers the basics correctly but above all involves the listener	5	4	ø	43	80	2
Pioneer A-A9	600	Takes on the mantle of the legendary A400. Not as cuddly, but very resolute and revealing for the money. Has USB input	4	qi.	*	•	80	2
Unison Research Unico P	795	Sound belies indifferent measured performance with good detail, balance and flowing melodic quality	5	ММ	68		50	29
Vincent SV-236	999	Valve hybrid whose sound is as idiosyncratic as its styling, short on neutrality but high on sparkle	6		100		100	29
ABOVE £1,000								Е
C AMR AM-77	4,400	A thrilling amplifier that brings you the dynamics of valves with the power of transistors in a substantial but well featured design	6			0	180	29
- Ayon Spirit	1,745	Pentode or triode operation is available at the flick of a switch with this muscular integrated	4				50	30
Boulder 865	7,750	Extremely transparent to detail but less revealing of energy, high power, superb build but only balanced inputs	4		0		150	30
Copland CTA405	2,498	A musical and involving amplifier, which also has incredible insight and is user-friendly by valve amp standards	5	ММ	0		50	30
Creek Destiny	1,100	A highly assured performer that doesn't superimpose its personality on the music	6			0	100	28
Densen Beat B110	1,200	Great bass provides firm underpinning for involving and enjoyable listening - real 'smile factor'	6	opt	0		60	29
Leema Pulse	1,195	An organic and revealing sound alongside good power reserves and superb features, including a great MM/MC phono stage	5	*	0		80	30
Moon Evolution i-7	4,750	Sophisticated, with an elegant build and sound quality, very limited features, even by high-end standards	5		•		150	28
Musical Fidelity A1008	2,999	With DAC, phono stage and built-in valve buffer, this powerhouse amp can really grab hold of a loudspeaker	4	13	•		250	29
Mystere ia11	1,250	Small, deceptively powerful integrated valve amp with a crisp, pacy sound	4				40	30
NAD M3	1,899	Massive and flexible, it goes very loud with fine authority and dynamic range, but lacks some sparkle	7		•		180	2
Naim SuperNait	2,350	Serious communicative ability meets convenience in this sophisticated and powerful integrated design	6		•	48	80	29
Pathos Classic One MK3	1,535	An attractive amp offering a beautifull musical presentation with good tonality and detail	5		•		70	30
Primare I30	1,500	A smooth, sophisticated yet agile performer, and beautifully built too	6			9	100	26
Pure Sound A30	1,100	Valve integrated, with the accent on music rather than rhythm. Needs more inputs, though	3				30	29
Sugden A21aL Series 2	1,299	Lovely solid-state Class A amplifier, sweet as a nut and more powerful than its predecessor	5	opt	22		21	29
Unison Res. Unico Secondo	1,200	Very good detail and coherence. Tonality is natural, imaging precise and deep, and dynamics are wide and unforced	6	opt	0		110	29
Unison Res. Performance	5,500	Massive and bulky valve amp sounds brilliant, with good power for a single-ended design, wide bandwidth and fine neutrality	5		0		40	28
		· · · · · · · · · · · · · · · · · · ·						

	STEREO AMPLIFIERS Pre/power amplifiers ADGE? PRODUCT & COMMENTS						SPECIFICATIONS									
2	IEKEU	A	MPLIFIEKS	P	POWE		P	REMOTE	POWER OUTPUT	88						
Pre/	power amplifiers			PREAMPL	NER AMPLIFIER	LINE INPUTS	PHONO IN	E CONTROL	UNTU	UE NUN						
BADGE?	PRODUCT	3	COMMENTS	田田田田田田田田田田田田田田田田田田田田田田田田田田田田田田田田田田田田田田田	R	SE	NPUT	BOL	3	男						
UP TO	£2,000															
100	Arcam FMJ C31	1,200	Professionally presented, beautifully built and exceptionally revealing, this preamp achieves much by doing little	è		5	opt			273						
1.0	Croft Precession I/Polestar I	1,400	Compact pre/power combo with battery preamp and hybrid power, with freedom from timesmear, bass could be firmer	60	0	6			25	290						
: 0	Cyrus Pre Vs2/6 Power	1,000	Pre offers stunning resolution and feature count for the money and power is subtle, open and musical	9	0		101	9	50	290						
EC	Naim NAC 122x/NAP 150x	1,575	Musically rewarding with outstanding sophistication, grip and insight for such a modestly priced design	0		6	opt	(%)	50	287						
	Quad 99/909	1,650	Well thought out and well executed, with a strong, engaging sound and just a little veiling	Zb	0	5	0	3	136	256						
	Rotel RC-06/RB-06	598	A capable and surprisingly powerful-sounding combination which offers real value	ø	254	5	0	138	70	285						
***	Russ Andrews HP-1/PA-1	1198	Simply featured, but sounds appealingly realistic and solid. Highly capable in all areas design	- Gev		2		125	50	303						

Our favourite BEST BLY & EDITOR'S CHOICE

Border Patrol Control Unit

EFECS KEY LINE INPUTS input sockets for source components with a line level output: CD players, DVD players, tape decks, tuners, phono stages etc. PHONO INPUT input sockets and onboard phono stage for a cartridge Either MM (moving magnet) or MC (moving coil), occasionally both. REMOTE CONTROL A remote control is supplied with the amplifier. HEADPHONE SOCKET To drive your cans with. POWER OUTPUT Manufacturer's rated output in watts per channel.

2,995 Bluff looking valve preamp, with one of the most neutral yet dynamic sounds around

277

5 opt

0

BUYER'S BIBLE STEREO/AV AMPS

	ır favourite					CDE	PIEIC	ATIO	IIC	
S	TEREO	AMPLIFIER	Scontinued	PF						ISSUE
Pre	/power amplifiers			PREAMPLIFIER	POWER AMPLIFICE	TIME NATIS	PHOMO INPUT	REMOTE CONTRO	WITHLIND MEMOR	UE NUMBER
BADGE:	PRODUCT	£ COMMENTS		FIER	FIER	SIN	PUT	RO	3	BER
ŧΰ	Bryston BP26 DA/2B SST	5,550 Bryston's top preamp is now a serious comp	etitor. The power amp reveals a lot of signal and delivers serious grunt			6	opt		100	278
EC	Chapter Preface/II+	9,800 Among the finest amps available, the resolu	ution of this preamp and power amp challenges the best at any price			6			300	249
EC	Chord Prima/Mezzo 140	5,100 Small, muscular, beautifully made and style	ed and sounds like a dream			5			120	269
ET	Classe CP-700/CA-M400	3,350 Pre plus mono power combo with superb bi	uild, huge power and enormous flexibility. Sounds stunning, too			6	opt		400	293
EC	Cyrus DAC XP	2,200 A knockout DAC/pre with naturalness and r	esolution to die for and six digital inputs for signals up to 96kHz			2				266
17	Densen Beat B-200/B310	2,300 Lively, energetic combination that bring a gi	reat sense of scale to familiar recordings			8		opt	80	276
EC	Densen Beat B-250/B-350	3,200 Upgradeable to surround, with sweet prear	np and slightly coloured power amp, but sound is big and assured			6			125	270
EC	ECS EA-1	6,000 Understated monoblocks with real transpar	rency to the fine detail, passion and energy in your record collection						180	253
EC	Gamut D3	3,430 Creamy smooth, yet lets you hear all the fil	ne detail that goes to making a tonally rich, dynamically strong sound			5	opt			265
EC	Gamut D200 Mk3	3,950 A great power amp that's now even better	- one of the best regardless of price						200	247
EC]	Howand HP-100/RADIA	2,745 Uncommonly musical valve/transistor hybrid t	transcends stereotypes, one of the genuine high achievers			9	opt		125	250
EC	Krell FPB 700cx	4,998 Reference class amplifier may represent ove	rkill in many systems, but when no compromise is called for, this is it						700	234
EC	Linn Klimax Kontrol	6,000 Beautifully executed example of Scots audio	art, sounds as clean as it looks and is a lot more transparent than most			4				238
EC	Marantz SC11S1/SM-11S1	5,000 Preamp and power amp duo delivers high	resolution and is consistent with different loudspeaker loads			6			220	304
EC	Naim NAP 500	1,875 Wonderful neutrality, bandwidth and dynam	nic range, plus Naim's traditional leading-edge definition						140	208
EC	Naim NAC 552	2,100 Extremely expensive preamp, but still solid	value. Magnificent sound with fine flexibility and convenience			6				233
	Roksan Caspian M Series-1	2,245 A well-matched, powerful and enjoyable so	ounding amplifier combo that brings out the strengths of its CD player			5			B5	307

AV AMPLIFIERS

Surround sound amps for music and movies



The multichannel, surround sound or AV amplifier is a popular option, thanks to the success of

the DVD player and home cinema. Now you can buy five channels or more of amplification for the price of two. Now that multichannel music is also on the agenda, there's a lot to be said for a good AV amp or receiver (an amp with a radio tuner built in).

So if you fancy hearing what DVD-Audio, SACD or even music DVD-Video can do. then check out a multichannel amp and speaker set-up - they're stunning with movies and none too shabby with music

AV amps are usually designed primarily for movies and come with digital processing for the various soundtrack formats - Dolby Pro-Logic (analogue), Dolby Digital and DTS, which offer discrete surround sound in 5.1 and 7.1 channel formats. More ambitious designs also offer THX post processing, designed to emulate the sound of the mixing theatre at home

Processing in AV amps is needed because the surround formats on DVD-Vs are



compressed, limiting their high-fidelity potential. This is why new formats SACD and DVD-A. which don't use 'lossy' compression, were created for music

All this processing power can take its toll on analogue formats. The best multichannel amps for music are often the simplest, but any that offer a complete bypass option with six-channel input are suitable. It's also worth looking at real power – five or seven channels of amplification are not easy to produce with a feeble power supply, and the cheaper amps in particular often fail to live up to the claims

0.8.A

HOW MANY CHANNELS?

Depends on how many speakers you want. Multichannel music discs come with six or 5.1 channels, but for new movies, 7.1 is where it's at. 7.1 set-ups also mean you have speakers directly behind you - preferable for music discs.

WHAT'S THE DIFFERENCE **BETWEEN A PROCESSOR** AND AN AV AMP?

Processors don't have built-in amplification and you need separate power amps. AV amps and receivers have processing and amps in the same box.

WHAT DOES THE .1 IN 5.1 STAND FOR?

This is the LFE (low frequency effects) or bass channel that is reproduced by a subwoofer.

HI-FI MEETS SURROUND SOUND

With DVD-Audio and SACD offering highquality multichannel music, surround sound is no longer just a home cinema thing. An increasing number of people want to build a multichannel system that will do their music as well as their movie

DVDs justice, and the number of AV products delivering sufficient quality is on the increase. But most aren't cheap building a top-quality system with five or more channels is inevitably more expensive than sticking with stereo. There are some very decent integrated options below £1,000, though the best (and most costly) route is to buy a separate processor and power amp(s). Or you can add AV amplification to a stereo model you can't bear to part with.

AV AMPS BUYER'S BIBLE



DSP-AX759SE £550

If you're looking for an affordable multichannel amp that's good with music as well as home cinema, this is a top buy.



DiVA AVR350 £1,500

Arcam's latest receiver offers a good helping of processing and connection options, with exceptionally musical sound.



AVC-A11XVA £2,500

A splendid 7.1-channel amp that packs in the latest digital links and processing formats without sacrificing sound quality



SSP-600/CA-5200 £11,900

Anyone seeking a high-end multichanr el solution that's equally adept with music and movies should park their ears here.

5 9 120 238

	r favourite				SPE	CIFIC	CATION	IS
A	V AMP	L	IFIERS			7.10	5-CHANNEL POWER (W)	ISS
Mul	tichannel amplifiers			REC	LINE INPUTS	7.1 COMPATIBLE	POWE	ISSUE NUMBER
BADGE?	PRODUCT	£	COMMENTS	RECEIVER	PUTS	JIBLE	R (₩)	ABER
MULT	ICHANNEL INTEGRATED AMPS				THE S		100	
88	Arcam DiVA AVR350	1,500	Sets the standard for music and movie performance at the price, although features count low and HDMI limited	0	7		100	284
88	Cambridge Audio Azur 640R	600	Simple and elegant receiver. Attributes that reflect in good sound quality without the distracting toys you'll find elsewhere	0	7		100	292
EC	Denon AVC-A11XV	2,500	Sensible, real world derivative of AVC-A1XV, but still immensely flexible, and well endowed with digital i/o		11		140	273
EC	Denon AVC-A1XV	4,000	Inelegant, but powerful and effective tool with excellent auto set-up and capable of driving two 5.1 systems simultaneously			0	170	266
EC	Lexicon RV-8	5,000	Classy multi-zone receiver lacks high tech digital attributes (HDMI etc) but majors on very effective audio engineering	0	10		140	267
	Marantz SR-12S1	3,000	A multichannel amp that can be taken seriously in stereo too. Resources are in the engineering rather than the gimmickry		3		160	255
EC	Pathos Cinema-X	4,750	No processing, just sexy Italian style, a sextet of valves and the chance of 450 watts in stereo! Cultured sound, too		5		110	270
EC	Pioneer VSA-AX10Ai	3,000	State of the art one-box amplifier with enhanced sound quality, auto set-up and other enhancements		10	0	150	260
.98	Sony STR-DB798	250	Cheap but effective, and passably good with pure audio sources, but control system messy	0	7		100	273
88	Sony STR-DB795	300	A superb value little amplifier, well appointed technically and successfully tuned for UK ears	0	7	0	100	260
68	Yamaha DSP-AX759SE	500	More a stereo amp with basic multichannel thrown in, but a great performer with music at this price	0	6	0	100	287
MULT	CHANNEL PREAMPS/PROCESSORS	AND POWE	RAMPS			25		
88	Arcam A90+7.1 mod, P90/3	1,920	Add Arcam's multichannel module and a P90/3 power amp to the A90 stereo integrated and you've got got superb purist 5.1		8		90	250
	Arcam AVP700/P1000	3,000	Cutting-edge processor/tuner with HDMI sounds great, but the matching Class H power amp lacks finess to match its power	0	8		135	275
EC	Arcam FMJ AV8/P7	5,750	High-quality preamp/processor (£3,150) and seven-channel power amp (£2,600). An excellent fusion of stereo and surround sound		7		180	235
EC	Classé SSP-600/ CA-5200	11,900	Subtle, exacting sound, tremendous flexibility and high power audiophile standard amplifier - lacks hi-tech digital interfaces		11	8	200	278
EC	Copland CVA306/CVA535	3,748	Tube analogue six-channel pre transforms multichannel audio from a novelty into a genuine advance for the high fidelity art		5		125	236
	Linn Exotik	1,750	Is hi-fi ready to make the jump to multichannel music? Linn think so with this musical preamplifier		4			260
EC	Linn Exotik + DA	3,245	Good analogue preamplifier with multichannel in/out up to 7.1 and a home cinema processor of quality combine to make a tempting package		8			291
EC	Meridian 861	9,833	Powerful surround processor with flexible modular construction, marvellous versatility to drive any speaker configuration		6	0		230
	Naim AV2/NAPV175/NAP150	4,175	First truly credible multichannel system from Naim is idiosyncratic but offers excellent basic sound with modest spatial steering		5	0	50	238
EC	Parasound Halo C1/A51	7,500	Powerful and flexible processor/power amp combo with impressive sound. Excellent value – processor includes onboard screen		11		250	243

4,200 Great all-round system which brings the qualities of good stereo high fidelity to a multichannel world SPECS KEY RECEIVER Integrated multichannel amp with built-in radio tuner. LINE INPUTS input sockets for source components with a line level output: CD players, DVD players, tape decks, tuners, phono stages etc.

7.1 CHANNEL COMPATIBLE The amp either has seven-channel in and outputs or in some instances is equipped with seven channels of amplification.

5-CHANNEL POWER (W) Power output in watts per channel of all channels driven by the amp



Primare SP31.7/A30.5

98

NEW PRODUCTS FROM LINN & NAIM

CALL SALES: (020) 8318 5755 or 8852 1321 - 248 Lee High Road, London, SE13 5PL 0% APR Credit options are available for purchases of new products exceeding £900, please call for details. E&OE

New Linn - Sneaky Music DS Player £995



Also available for audition the Akurate DS and Klimax DS music players

The new Sneaky DS network music player joins the Linn Digital streaming line up and provides additional flexibility with on board pre and 20W power amplifiers. Can be used as a stand alone or as part of a multi room system solution. You can order Sneaky DS via our Mail Order service or better still visit for an audition if you can, see our website or call for more information on how we can help you integrate more music in your life

New Naim - Superline & NS01 Music Server

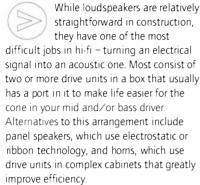


NaimNet NS01 server available now

Analogue - the fabulous new SuperLine, a high performance Moving Coil phono stage that has a brass suspended chassis and a class A amplifier feeding 25 regulated supplies. Digital - The New NS01 Music server offering 600 album WAV file capacity of quality music. Visit billyvee.co.uk for more info or come and listen.

STEREO SPEAKERS

Speaker pairs for stereo sound



Box speakers are either designed to stand on the floor (floorstanders) or on a stand (stand or shelfmounts). Floorstanders have greater internal volume which can translate into greater efficiency and/or bass extension, but less substantial designs also introduce cabinet resonance and thus distortion. But they don't need stands and therefore have the aesthetic edge Standmounts have less cabinet to vibrate and often score in terms of imaging and timing, but need good stands to work well.

Positioning

The closer the speaker is to a wall, the greater the reinforcement of bass. As all rooms differ. there's no simple formula for placement and experimentation will yield the best results. Altering the angle at which the speakers face the listener can also make a difference to balance and stereo image.

Going multichannel

Many stereo speakers can be augmented with centre and surround channels from the same brand to create a multichannel system. The most important element is a centre channel, which needs to match the stereo pair as closely as possible. For the best musical results, surrounds should be as per the front left and right channels, but if space or funds don't permit, smaller designs can be used quite effectively.

VE R

Though some speakers have a power rating, this isn't as informative as a rating for how difficult they are to drive, nor does it indicate wattage extremes for the partnering amp. In practice, an amplifier cannot be too powerful. Our listings quote ease of drive to indicate how much power

your amp needs to avoid a mismatch. An above-average (A+) speaker will work with amps rated at 25W plus, while an average (A) speaker will need 50W or more, and a below average (A-) speaker could require 100W plus to sound its best. These are guidelines rather than rules.



Choosing speakers

Because speakers and the rooms they are used in vary so much, choosing a pair tends to be quite subjective. To find some that will suit you, try to listen to a good variety to hear how they differ, and if possible, audition some at home. Tonal balance tends to vary the most, but is less important than more subtle factors such as timing and dynamics. Finally, listen with your ears not your eyes - great-looking speakers aren't necessarily great sounding.

Spikes

Floorstanding speakers and stands have threaded inserts for spikes that allow rigid coupling with the floor. These have the advantage of draining resonance from the speaker and giving tighter bass, but can result in more vibration getting back to the electronics and often cause the floor to resonate as well

0.8.4

IF SPEAKERS ARE RATED AT **75 WATTS, DOES THAT MEAN** I NEED A 75 WATT AMP?

No, see the box on power for the full story.

WHICH SPEAKERS ARE BEST FOR SMALL ROOMS?

Those designed to work close to the wall will be smoother in confined spaces. Speakers that have relatively dry, tight bass will also sound better.

WHICH SPEAKERS ARE BEST **FOR BIG ROOMS?**

Big, efficient, easy-to-drive designs are more likely to be able to fill a room better than compact models.

DO I NEED TO BUY CENTRE AND SURROUND CHANNELS FROM THE SAME BRAND AS **MY STEREO SPEAKERS?**

Yes, assuming that you're wanting to create a homogenous surround sound experience, where voices don't change when they move from one channel to another.

BUYER'S BIBLE

TOP BUYS



Mercury F4 £350

Tannoy's Mercury speakers have a long history of 'quality' sound at low prices, and the latest range is no exception – this floorstander is thoroughly engaging.



Ikon 6 £899

Complete with a ribbon super-tweeter, this is an exceptionally capable floorstander for the money, delivering a highly detailed and trulyengrossing sound.



805S £1,600

A superbly well-engineered standmount that's capable of delivering magnificent musical communication, alongside superior subtlety and delicacy.



Mordaunt-Short Performance 6 £3,500

This extraordinary speaker stands at the pinnacle of Mordaunt-Short's current range. State of the art resolution and imaging are among its many attributes.

Our favourite | HI-FI CHOICE EDITOR'S CHOICE

7	TEREO ORELVERO		ARFAUTRA		JI CON IDAMIONS						
	eo speakers	J	SPEAKERS	SIZE W.H.D.	FLOCKSTANDER	EASE OF DRIVE	BASS FROM (HZ)	HREE SPINCE	CLOSE TO WALL	ISSUE NUMBER	
DGE?	PRODUCT	3	COMMENTS	(M)	DER	RIVE	ZH	30MC	ALL	18ER	
P TO	£1,000										
	Advance Acoustic UM20	200	Classy styling and finish, with solid build and fine overall balance when sited close to a wall	18,30,21		А	43			30	
	Acoustic Energy Aegis Neo 3	370	Pretty, neutral floorstander sounds open with wide dynamic range and good bass weight	20,90.5,24		А	24			29	
	Acoustic Energy Aelite 3	750	Wood-veneered all-rounder has exceptional neutrality with deep smooth bass	20,103,39		А	22			29	
	Acoustic Energy AE1 Classic	845	Sharply priced classic replica has a beautifully balanced midband, wide dynamic range and little boxiness	18,29.5,25.5		A-	45			28	
	ALR Jordan Entry L	500	Not the most pretty speaker but a sonic triumph, with a beautifully judged balance and impressive transparency	20,86,29		А	23			27	
	ATC SCM11	849	A very fine little speaker that's at its best with good, natural recordings where it adds little and reveals much	21,38,25		A-	55			29	
	Aurousal A1	450	Single-driver system is coloured but wonderfully coherent and very effective at communicating emotions	20.5,36,27		А	40			29	
	AVI Neutron IV	499	A great example of what can be done with a genuinely small speaker, but the warts-and-all balance won't suit all	15,27,21		A-	65			26	
	B&W DM303	180	Chunky looking and liuvely sounding, with deep bass, a fine midband and a restrained top end	30,33,23		А	23			22	
	B&W CM1	500	Luxury miniature has neutral, laid back sound, with low coloration, fine imaging but weak dynamics	16.5,28,28		Α-	40			27	
	B&W 683	899	A fine all-round performer with high-class drivers at a very realistic price	20,99,34		Р	20			30	
	B&W 705	900	Deft, delicate and delightful, if a little bass light, with clever enclosure and driver engineering	22,42,29		А	35			25	
	DALI Ikon 6	899	Needs care with setup, but rewards you with impressively transparent and almost obsessively detailed sound	19,100,33		А	37			27	
	DALI Ikon 7	999	Bulky vinyl floorstander has high sensitivity and a bright sound with superior coherence, delicacy and transparency	20,114,34		Α+	22			27	
	DALI Monitor 1	1,000	Beautiful miniature with advanced drivers sounds marvellously coherent with fine vocal expression	16,32,24		А	40			29	
	Dynaucic DM 2/10	775	Unfashionably bulky standmount has fine dynamics, grip, bass and headroom and is delicate and well mannered	27.5,45,35		А	22			29	
	Epos ELS 303	399	Midband is impressively smooth, even and coherent, but the sound lacks some dynamic grip and top end detail	18,85,20		A-	28			27	
	Epos M5	349	Gorgeous miniature works well close to wall. Could be smoother but communicates with authority	18,33,21		A-	40			26	
	Epos M12.2	449	A true classic stand-mount with lovely presentation, fine sound balance, superior coherence and low coloration	20,37,25		A-	40			26	
	Focal Chorus 706V	369	Advanced drivers deliver a smooth, even, overall balance with healthy dynamic expression and tension	22,39,25		А	30			30	
	Focal Chorus 816 V	1,000	Fine, warm balance, superior dynamics, and a sweet top end, but could be smoother	28,100,37.5		A+	20			28	
	Heco Celan 300	595	Does tone colour, dynamics and detail with aplomb and communicates superbly in its +2dB mode. Sensitive, too	23,36,33		A+	40			30	
	JBL Studio L880	700	Good value floorstander with neutrality, massive headroom and plenty of punch. Could be more transparent	22,99,37		А	25			27	
]	KEF iQ3	280	Shapely, vinyl-covered stand mount has lively dynamics and fine imaging, but could be smoother and sweeter	22,37,33		A+	40			28	
	KEF iQ9	800	Shapely and solid floorstander has wide bandwidth and dynamic range with superior neutrality and sensitivity	22,94,33		А	25			27	
	Mission ēlan e34	400	A return to form for Mission with a pacey, vibrant sound matched to good looks	35,96,34		A+	48			29	
]	Monopulse 42A	995	Uniquely different in style and sound, midband time-coherence is magnificent but treble is too restrained	26,110,25		A+	28			27	
	Monitor Audio BR2	200	Good looking standmount has a muscular sound with superior coherence	18.5,35,25		A-	30			29	
]	Monitor Audio BR5	400	Not the best dressed in its class, but detailed, bold sounding, good value and an easy electrical load	17, 85,25		A-	36			29	
	Monitor Audio GS10	800	More neutral tonally than some recent MAs. Quality stereo design which take's up little room and is easy to drive	20, 36, 27		A-	40			28	
	Monitor Audio Silver RS8	800	Bold, dynamic sound marks it out from the crowd, and it's an easy load that works well in larger rooms	90, 18,27		А	33			27	
	Mordaunt-Short Avant 906i	350	The generous, well balanced sound shows good enclosure control, could do with more grip and better spikes!	16.5,85,29.5		A	40			28	

SPECS KEY SIZE WXHXD (CM) Width, height and depth of one cabinet in centimetres. FLOORSTANDER Speakers that don't require stands. EASE OF DRIVE How much power the amplifier needs (approximately) to drive the loudspeaker effectively. A+ 25 watts plus A- 50 watts plus A- 100 watts pl

richersounds

THE UK'S HI-FI. HOME CINEMA & FLAT PANEL TV SPECIALISTS!

BIGGEST BRANDS, BEST PRICES, EXPERT ADVICE & TAKE IT HOME TODAY!

AWARD-WINNING MARANTZ & MORDAUNT-SHORT SYSTEM



CD PLAYER

MARANTZ CD6002

"The finest all-rounder we've heard at this price level" - WHF? S&V magazine

This year's talk of the audio town is just how good the revised range of Marantz hi-fi

Richer Sounds Low Price £199.95 Were £269.95

AMPLIFIER

MARANTZ PM6002

With twin recording loops, three line level inputs and a MM phono stage aboard, the PM6002 will satisfy even the most demanding of needs. As you'd expect, a full remote control is included, as are tone controls, 2 pairs of speaker outlets and a separate recording selector.

Richer Sounds Low Price £199.95 Were £269.95

GET THESE MORDAUNT-SHORT 902i SPE KERS (WORTH £150) FOR ONLY £50 [PER PAIR] when you buy this

CD Player &

Amp together







SPEAKERS

opens music up

class leader

£549.85 WAS £659.95

Richer Sounds

Low Price £149.95

SYSTEM USUALLY

(Pair)

MORDAUNT-SHORT 902i

"They sound remarkable: their

Without a doubt the Mordaunt

Short Avant 902i is the new

clear and spacious sound

- WHF? S&V magazine.



SAVE £500 ON 'BEST BUY' **CAMBRIDGE/KEF SYSTEM**



CD PLAYER

Cambridge Audio Azur 740C

"Very flexible, this innovative unsampling player sounds exceptionally neutral and highly informative." - Hi-Fi Choice magazine

Usual Price £499.95

AMPLIFIER

Cambridge Audio Azur 740A

"Excellent treble, very good imaging and a real sense of musical involvement are all well above the class average." - Hi-Fi Choice magazine

Usual Price £499.95

FLOORSTANDERS

KEF iQ7 (Pair)

KEE speakers are world renowned for their quality and innovation and, with speakers like the IQ7, it's easy to see why.

Usual Price £499.95

SYSTEM USUALLY £1499.85



SEE WEBSITE OR ASK IN-STORE FOR DETAILS



CD Player &

Amp together

IF YOU WOULD LIKE TO BECOME A MEMBER OF OUR VIP CLUB FOR FREE AND TAKE ADVANTAGE OF OUR EXCLUSIVE MEGA-BARGAINS VISIT OUR WEBSITE AND REGISTER YOUR DETAILS WITH THE BRITISH SUMMER AS UNRELIABLE AS EVER IT'S GOOD TO KNOW THAT AT LEAST YOUR FRIENDS AT RICHER SOUNDS CAN BRIGHTEN UP YOUR DAY!

WE'VE BROUGHT TOGETHER A SELECTION OF OUR VERY BEST BARGAINS IN HI-FI AND AV EXCLUSIVELY FOR HI-FI CHOICE READERS.

With one of the widest selection of Best Buy products available at the very best prices, it's little wonder that Richer Sounds remains the first choice for beginners and audiophiles alike. Take, for example, the new Onkyo TXSR506 and TXSR606. These exciting new AV receivers are set to take the AV world by storm - just as their multi-award winning predecessors did. But that's not all. At Richer Sounds we offer expert advice on how to get the best from your system - whether stereo or multi-channel - and have a wealth of essential accessories that help make a good system sound great!

In addition to the most comprehensive range of products and expert advice we also offer our renowned Price Beat - guaranteeing you the best deal possible. Try getting that lot from an online - only store!

Whatever the weather, you're always guaranteed a warm welcome at Richer Sounds. We look forward to seeing you soon!









CAMBRIDGE AUDIO AMPLIFIERS









www.richersounds.com

VISIT OUR WEBSITE OR CALL FOR NATIONWIDE STORE DETAILS ON: **0845 900 1230**

WE ARE OPEN BANK HOLIDAYS 12-4PM

£10 OFF

WHEN YOU SPEND OVER £20 BRING THIS VOUCHER IN-STORE

TO CLAIM YOUR DISCOUNT

One voucher per customer. Cannot be exchanged for cash. Only redeemable in-store against products at in-store prices. Not to be used in conjunction with any other offer/promotion. Must be the original voucher.

HI-FI CHOICE. Valid until 01/07/08.

Receipt Number:

BUYER'S BIBLE STEREO SPEAKERS

_	r favourite	_			SPE	ECIFI	CATIO	NS		
	reo speakers	J ;	SPEAKERS continued	SZE WHD (CM)	FLOOKSTANDER	EASE OF DRIVE	BASS FROM (HZ)	FREE SPACE	CLOSE TO WALL	SSUE NUMBER
BADGE?	PRODUCT	£	COMMENTS		ER				F	-
	PMC TB2+	795	Classy transmission line stand-mount has superior midband, restrained presence and a bright clean top end	20,40,30		А	28	9		2
	ProAc Tablette Ref Eight	699	Stunning standmount with electrostatic-like imagery. Its Signature brother costs £200 more and is even better!	15,27,23		A+	40			2
	Q Acoustics 1010	99	Neatly styled miniature has limited bass and power handling but fine midband voicing at a very sharp price	15,21.5,19.5		А	48		0	2
	Q Acoustics 1050	330	Great value, the sound lacks smoothness but has fine dynamics and impressive transparency	19.5,97.5,30	3	A+	28			2
	Quadral Pico	849	Could be more muscular, but neutral and open with spacious imaging and little coloration	19,34,26		Α-	30	*		2
	Rega R1	298	Cute baby sounds busy, coherent and involving, if a touch thin. Sweet and delicate treble with even bass	15,32,24		Α	50			2
*	Revel Concerta F12	900	Massive multi-driver floorstander is not pretty, but has great headroom, bass weight and impressive neutrality	25,108,36		А	22			
63	Spendor S3/5R	725	Small, beautifully accurate monitors are excellent for speech, but not suitable for thrash metal in barns	17,31,19		Α	90			
1	Tannoy Mercury F4	350	Floorstander has an engrossing sound with good dynamics and a warm, restrained output	20.5,97,29		A+	24		0	1
0.3	Tannoy Revolution DC6	800	Pretty compact standmount likes wall loading, delivering a lively even bass and smooth coherent midband	23,36.5,23		А	40		ō	
	Totem Rainmaker	795	Standmount has a big sound, with a smooth midband and bright top. Could have more punch and warmth	17,35.5,23		А	25	0		
	Triangle Antal Esw	995	Smoother than its predecessors, with a beautifully balanced bass and midband, though the top end is uneven	20,108,34	0	Α	20	0		
	Wharfedale Diamond 9.1	180	Superior shape and finish at an exceptionally sharp price. Sound is laid back, but free from boxiness	19.5,30,28		A-	45			
	Wharfedale Opus2-M1	1,000	Elegant mid to compact three way, a new direction in recent years for Wharfedale	23,51,36		A-	42			
ABO	Æ £1,000			200						
	A2T Mezzo	2,000	$Seamless \ over all \ coherence, \ with \ persuasive \ monitoring \ capabilities. \ Sounds \ a \ little \ mid-forward. \ Top \ could \ be \ sweeter$	27.5,40,26		A+	40	0		
	Amphion Prio 520	1,600	Gorgeous styling and a lively sound with good voice band integrity and a sweet top end	16,104,22	0	А	40	0		
	ALR Jordan Classic 5	1,200	Slim, laid back floorstander has sweet sound with fine coherence, imaging and dynamic range	17,99,26	0	А	28	0		
	ALR Jordan Note 3	1,350	Costly but clever; adjustable ABR gives much of the weight of a floorstander with the agility of a standmount	245,37,31.5		А	26			
	ATC SCM16A	2,203	Makes a great case for the active speaker. Good value, including built-in amps, and fuss-free	27,45,33		ACT	42	0		
	ATC SCM19	1,499	Super linear motor system, heavy weight construction and fabulous veneer that makes the ATC a pro favourite	22,44,31.5		A-	54	٥		
	Audio Physic Spark 3	1,499	Classy and discreetly laid back floorstander has delightfully neutral balance and surprising bass weight	15,98,22		A+	27			
	AVI ADM9	1,000	Active mini-monitors that are exceptionally accurate and dynamic, and they give good iPod, too	20,30,26		ACT	60			
	AVI Duo	1,299	Sophisticated floorstander, a natural partner for AVI's electronics. Unusually clean and honest musical presentation	19,77,28	0	А	50			
E	B&W 802D	8,000	Great timing, superior dynamics and a sweet top end all enhance musical communication. Makes sweet music	37,115,56	0	Α	<20			
	B&W 805S	1,600	Classy standmount with excellent coherence and imaging. Can sound laid back but otherwise a real delight	24,39,33		Α	25			
	Dynaudio Focus 220	1,850	Cleverly tapered floorstander has a brilliantly smooth, neutral balance and very sweet trebie. Could be more dynamic	20.5,98,29.5	0	A-	<20			
EC	Eclipse TD510	1,200	Replacement for the TD512 does astonishing things with musical timing. £600 floor stands also recommended	24,36,26		А	45			
	Focal Chorus 826 V	1,250	Times nicely, goes loud with ease and will produce precise imaging if appropriately set up.	28,104,37.5	0	А	45			
	Focal Chorus 836V	1,549	Bulky, sharply priced three-way could be prettier. Has good bass with genuine grip, but top could be sweeter	28,115,38	0	А	28			
E.	Focal Electra 1027 Be	4,000	Outstanding mid and top with fine delicacy and low coloration, but lacks some bass grip and drive	26.5,111,35	0	Α-	25			
	Free FS1	3,000	An elegant active design for anyone after the minimum of wiring. Wireless with Sonos or Airport Express	16,87,27	0	ACT	35			
EC.	Gamut Phi5	2,550	Lovely and discreet floorstander has excellent sound and several very clever engineering touches	17,100,24	0	Р	20			
C	Jamo Reference R909	7,500	Top model (in a class of one) is open, full and easy on the ear, and surely a classic in the making	48,127,54			25			
C	KEF Reference Model 201/2	3,500	Very classy but costly three-way stand-mount with much improved Uni-Q; could be more transparent	25,42,41		А	30			
	Kudos Cardea C1	1,450	A very pretty compact standmount with a delightfully subtle and delicate sound quality	20,35,27		A	40			
	MartinLogan Source	1,599	Careful install needed, but capable of remarkable transparency at an extremely competitive price	24,120,37	0	A	42			
	Meridian M3100	1,850	Attractive and capable active (125w) with great imaging and strong bass. High neutrality and good power handling	19,39,25		ACT		ò	ont	
	Monopulse 42A	1,495	Oddball styling, fine bass-to-mid balance and dynamics, and superb voice coherence, but untidy treble	26,110,25					υμι	
	INIOTIUDUIGO TEM	1.730	- occount organity, and base to this balance and dynamics, and expert voice concretice, but uniting treble	40,110,40			60			

MidRange Audio 077515 18404

info@midrangeaudio.co.uk midrangeaudio.co.uk Used by leading broadcasting organisations such as the BBC, Carlton Television and artists such as Pink Floyd, Mark Knopfler and The Rolling Stones, ATC speakers come with a first user lifetime warranty for the Premium Range and a six year warranty for all other products.

If you want refined and enjoyable replay of music at home look no further than the award winning ATC range of speakers and amplifiers.

• SCM range • Tower range • Amplifiers •

Ex-Demo Offers - Prices include a 6 year warranty SCM11 - £675 | SCM19 - £1,275 | SCM40 - £1,700



BUYER'S BIBLE

01	FFDF				SP	ECIFI	CATIC	NS		
		J	SPEAKERS continued	SIZE W.H.D. (CM)	FLOORSTANDER	EASE OF DRIVE	BASS FROM (HZ)	FFE.	CLOSE TO WALL	SSUE NUMBER
	speakers			H.D (5)	TAND	PR FC	MO)	FREE SPACE	TO WA	NUMB
BADGE? PRO	ODUCT	3	COMMENTS	3	30	F	0	E	F	33
EC Mo	onitor Audio PL300	5,000	Completely new level of sophistication from a brand best known for mainstream, cost effective designs	41,111,47	Ģ	A-	28	Eg		30
EC Mo	ordaunt-Short Perf 6	3,500	Revolutionary enclosure design and aspirated tweeter make for a fast, hi-res ride	24,121,37	180	A-	35	38/		26
Nea	at Elite SE	1,499	Smooth and natural performer with notably expressive midband. Fine voice articulation and unusual sweetness	20,90,18	(9)	А	25	*		26
Nea	at Motive 1	1,200	Beautifully neutral balance sounds open without aggression. Fine midband but could be more authoritative	16,92.5,20	60	A-	20	63		27
- Ne	eat Momentum 3i	1,745	Sounds a lot bigger than it looks, with good coherence and an impressively wide dynamic range	22,38,27		A-	23	•		30:
Ope	era Seconda	1,295	Classy cabinetwork plus beautifully judged neutrality with crisp, clean and deep bass	24,1025,31.5	100	Α-	20	6		29
PM	1C Wafer 2	1,650	Clever 'hang-on-wall' speaker has minimal sonic compromises. Smooth midband delivers impressive stereo imaging	33.5,57.5,10		Α+	45		Ð	28
□ PM	1C FB1+	1,695	Nicely proportioned floorstander has a sweet top and a beautifully natural, open and restrained midband	20,100,30	%	А	20	589		26
EC PM	1C EB1	5,950	The best argument for large speakers that we've heard in a long time	29,120,46.5	18	A-	19	6		29
■ PW	MC GB1i	1,275	Pretty little floorstander has great class with fine delicacy and sweet detailing	15.5,87,23.4	(7)	Α	30	24		30
EC Qu	uad ESL 2805	4,500	Uniquely wonderful natural realism, exceptional imaging, coherence and low level detailing	70,107,38.5	0	A-	45			29
Reg	ga R7	1,498	Super-slim and super-smooth floorstander has fine agility with a slightly bright overall character	27,98,35	13:	А	25			27
Reg	ga R9	2,498	This subtle, laid back but very informative performer has a very superior dynamic range, especially in the bass	17,103,39	0	Α	25	0		27
E Rev	vel F32	3,200	Meticulously balanced, tonally neutral design makes for a taut, well disciplined sound	22,105,39	\$3	Α	20	0		25
EC Rev	vel M22	1,800	A remarkably clean and revealing speaker with superb tonal and microdynamic capabilities	22,37,30		A-	48	0	160	27
Rok	ksan Caspian FR-5	2,000	Sharp looking speaker sounds exceptionally open and lively without aggression. Could be warmer and richer	20,100,25	0	Α	22	0		29
Rua	ark Talisman III	1,499	No bass demon, but a sophisticated and agile speaker epitomising Ruark's design ideals	22,84,31	60	Α	22	55		25
Sor	nus Faber Cremona Audit.	2,690	Open, exciting and with surprisingly good bass this is 'The Little Speaker That Could' (stands £575 extra)	20,35,37		Α	50	186		30
Sor	nus Faber Grand Piano D.	2,498	The Grand Piano Domus has a fabulous physical appearance and delivers a clean, refined sound	21,106,31	325	A-	32	Œ:		283
EC Tar	nnoy Dimension TD8	4,000	This stylish speaker is a splendid all-rounder, with fine dynamics, precise imaging and minimal coloration	31,86,30	92	A-	25	0		24
Tar	nnoy Glenair 10	2,999	With a 250mm dual concentric driver this is a generously proportioned, highly engaging speaker for a good price	36,100,35	8	A+	38	150		29
Tote	em Model 1 Signature	1,595	Expensive, but very seductive miniature delivers a beautifully smooth and balanced midband	17,31,23		А	35	5 33		27
Tria	angle Genese Quartet	1,895	Great material value and a solid all round sonic performance with great loudness potential	23,117,37	æ	А	25	18		30:
Tria	angle Celius Esw	1,395	Not the smoothest sound around, but has great vigour and enthusiasm, plus good scale and weight	20,117,34	il.	А	22	43		27
EC Tria	angle Magellan Concerto	14,750	New 'sw2' version is less immediate than its predecessor, but it's easier to live with and remains highly enertaining	60,160,45	9	A-	32	•		290
Ush	ner Compass CP-6381	2,500	Lots of speaker for your money, with plenty of deep bass, unusual styling and massive build	35,127,65		А	20	€.		270
Uivi	id Audio B1	7,750	Impressive cabinet design combined with hi-tech drivers to make truly world class speaker	27,110,38	12	A-	40	عِل		26
€ Wil	Ison Benesch ACT	8,400	Superb enclosure gives uncanny freedom from 'boxiness'. Well balanced, but top end might be sweeter	23,108,36	0	А	20	20		25
EC Wil	Ison Benesch Curve	5,000	Much (but not all) of the ACT's performance in a much more compact and affordable package	23,91,37		А	28	40		25

_	r favourite	_		SPE	CIFICAT	TION	S
Bass	UBWO s speakers			SIZE W.H.D (CM	POWER (M)	BASS FROM (HZ)	SSUE NUMBER
BAUGE	B&W PV1	950	COMMENTS Gorgeously styled sub shakes the air but not the floor, delivering a very clean sound with negligible coloration	29,34,35	500	20	
EC	B&W ASW850	2,000	Does all the things subwoofers should do with music and movies alike, but transparently and seamlessly	53,56,52	1,000		
EC	Eclipse TD725sw	2,700	Delivers solid meaningful bass, but with unusual tunefulness, speed and articulation	52,47,50	500	40	287
	Monitor Audio ASW100	300	For the price, this compact subwoofer performs particularly well	32,32,34	120	27	225
EC	REL 305	795	Landmark mid-price sub, works particularly well with low crossover frequency, looks great too	32, 36, 34	300	25	284
63	REL Stampede	550	Few subs at this price match the Stampede's subtlety and ease of integration. Much more hi-fi than AV	28,40,29	100	18	257
	REL T1	595	Standard setter at the price: flexible, easily set up and packs quite a punch	36,40,420	300	25	291
	REL Strata 5	700	Highly musical sub that integrates well but the REL Stampede offers near-identical performance for less money	32,46,33	150	18	257
	REL Storm III	900	Excellent sub with powerful, detailed and deep bass. Comprehensive facilities, including flexible filter adjustment	42,62,33	150	18	225
	REL Storm 5	1,000	Well engineered, good bass depth, appropriate for mixed hi-fi & home cinema/multichannel systems	34,52,37	200	15	267
-	MartinLogan Dynamo	449	Refined, compact sub brings established MartinLogan virtues to a new price and size point	2935,32	200	25	301
	Velodyne SPL-800R	699	Powerful, highly configurable sub with auto setup feature and attractive, compact packaging	26,27,33	1,000	28	286
EC	Wilson Benesch Torus	5,200	Amp and sub package built like a sophisticated pile driver, with deep, state of the art performance	45,33,45	1,000	10	290

9,000 Expansive yet relaxed sounding, the Neo is a coloured but surprisingly musical and enjoyable speaker

1,200 Cunningly crafted stand-mount with a beautiful balance that always sounds lively, open and involving

SPEESILEY SIZE WXHXD (CM) Width, height and depth of one cabinet in centimetres POWER (W) How many watts the onboard amplifier of active models delivers. BASS FROM How low the sub-goes, the smaller the number the deeper the bass.

Wharfedale Airedale Neo

Yamaha Soavo 2

•

296

296

A 28

22,38,35

Award Winning Hi-Fi Cables



TO ORDER OR FOR ADVICE CALL 0208 905 1555 www.futureshop.co.uk

Future Shop Ltd Estree Business Centre Elstree Way, Borehamwood, Herts. WD6 1RX



50% OFF

iCube vinyl storage

Store your vinyl in style with the ultimate storage system. iCubes make it easy to stack, store and arrange your records in any way and come ready-made with hand-finished fully contoured edges.



24-hour orderline **01328 730405**

You can now buy online at www.i-cubes.co.uk

High End Cable www.highendcable.co.uk

For the best prices telephone Dave Jackson on 01775 761880 Free P&P worldwide on all interconnects

Audience Chord Company Ecosse Furutech Hovland Nordost MIT Oehlbach Purist Audio Design Stereovox Townshend True Colour Industries

Analysis Plus

van den Hul Wyrewizard IsoTek Cable Tower Oehlbach Accessories Acoustic Resonators Bel Canto Leema Acoustics
Project Turntables
Audio Physic Speakers
STAX headphones Echo Busters

Arye CD - IsoTek CD The Rock V Turntable Universal speaker cradles

Moving Coil Lyra - Ortofon - Sumiko

Component cables Digital Cables HDMI Optical Cables S video SCART Firewire XLR cables Sub woofer cables Chord iPod cables Nordost iPod cables Din cables
Chord cables for Naim
Mains & Power cables Jumpers ONLINE SHOP

Up to 25% Trade in



HEADPHONES

For your ears only



Headphones come in several varieties and some are designed for particular usage. The majority of 'cans' use dynamic cone and coil-type drive units and can be used with anything from a personal stereo to a dedicated amplifier. Other types also exist, most significantly electrostatics that use a charged panel membrane to produce a distinctly refined sound. These are supplied with their own dedicated amplifiers, which tends to increase the price.

Cans are split into several types. There are open and closed-back designs, the latter being

best for noisy (or noise sensitive) environments as they minimise leakage and intrusion. Open-back types tend to have a more open, less 'in-head' sound. There are also three variants of earpad design: circumaurals enclose the ear and press on your head, supra-aurals press on the ear and intra-aurals sit in the ear and are particularly popular with personal stereo users.

Getting the best from your cans

Getting a good result with headphones is not

quite as straightforward as it should be. Merely plugging them into the output on your CD player or amp will not give particularly engaging results unless you are very lucky. If you are planning on serious listening, invest in a dedicated amp - the increase in dynamics is not in the least bit subtle. A variety of models are made and prices start at around £80 for a QED, a little more for designs from, say, Creek or Musical Fidelity. And if you're really into cans, look up the valve-powered Earmax.

	r favourite					SF	ECIF	ICATI	ONS		
H	EADP		DNES	BLECT	SUPP	ORIO	9	CLO		3.5MM JACK	ILISZI
Ster	eo headphones			ELECTROSTATIO	SLIFRA-AURAI	CIRCUMAUHAI	OPEN BACK	CLOSED BACK	WEIGHT (g)	JACK ADAPTOR	SSUE NUMBER
BADGE?	PRODUCT	Ē	COMMENTS	100	A	A	Š	Ş	(0)	유	剪
-	AKG K270 Studio	129	Pro oriented design which is very transparent and great with acoustic material			0		3	270		230
EC	AKG K1000	650	Neutral, analytical and completely out of the head sound, suitable for connection to speaker outputs only				8		270		244
90	Audio Technica ATH-W1000	400	Superbly comfortable and very revealing. Long listening sessions are a pleasure with new musical insights					(4)	250		304
-	Beyerdynamic DT770	190	A touch coloured in the mid, but less than most closed cans; detailed and with excellent bass			0		29	290		287
19	Beyerdynamic DT880	200	Informative, neutral and surprisingly close to good loudspeakers. Good for occasional and long-term listening alike			0	0		205	0	300
10	Grado SR225	180	Tonally shows the way to Grado's amazing GS1000 flagship, but detail and soundstage are not truly class-leading				0		200		300
EC	Grado SR325i	310	Highly sophisticated and detailed sound with great extension: check for comfort		•		(%)		200	•	270
EC	Grado GS1000	995	One of the finest transducers on the planet, with detail to die for			•	0		250	•	288
30°)	Sennheiser HD485	65	A great all-round headphone for occasional or even heavy use, refined in sound and comfortable, too				684		220	0	296
	Sennheiser HD595	150	Technology from upmarket HD650 model makes this a very revealing headphone that's also extremely comfortable			2	*		270	0	266
EC	Sennheiser HD650	300	Astonishing resolution and hardly less impressive tonal balance make this a true hi-fi experience			*	季		260	0	252
[8]	Sennheiser PXC450	299	Noise-cancelling model: as good as it gets for making the most of listening in planes, trains and automobiles			99		0	240	0	302
	Shure SE420	240	Expensive and no replacement for top conventional 'phones, but streets ahead of most in-ears with real refinement					7%	15	@	295
	Shure E500PTH	420	Sophisticated in-ear design with three drivers, plus switchable 'voiceover' mic in the lead; high-quality stuff					20	20		285
	Stax SR-001 Mk II	239	Expensive and power hungry, but this electrostatic drags personal stereo into the world of high fidelity	0	0		*		280	0	268
€C	Stax SRS-2020 Basic Sys. II	349	Luxury option at its price, but the sound delivery is five-star quality all the way	0		0	de		205	9	295

SPECS KEY ELECTROSTATIC Uses electrostatic film instead of more common cone or dome dynamics. SUPRA-AURAL Earpads sit on ear rather than around it. CIRCUMAURAL Earpads rest on the head around the ears PEN BACK Vented capsules let sound in and out CLOSED BACK Sealed capsules. WEIGHT In grams 3.5MM JACK ADAPTOR Allows connection to personal stereos, computers etc



BUYER'S BIBLE STEREO SPEAKERS

CABLES



Wires to hook your system together

Hi-fi cables come in two varieties: interconnects and speaker cables. Analogue interconnects come in preset lengths, generally with RCA (phono) plugs attached, though some equipment uses XLR connectors for balanced connection – this can be sonically advantageous, especially over longer runs. Speaker cable is commonly sold by the metre and can be used without plugs or can

be fitted with screw or solder-on types.

Choosing cables is not quite as straightforward as it might seem. One problem is that components interact with the cables you use and this often results in audible effects, but there are few cables that are fundamentally incompatible with any components, and we recommend the advice of a good dealer. In any case, you should look to spend as much as you can afford.

Digital cables come in two flavours: electrical and optical. In most instances electrical varieties sound better than optical, given the choice, but optical cables may be a better bet over long runs (10m+). Optical inputs/outputs usually use Toslink connectors, while most electrical types use RCA plugs, but some opt for BNC connection instead – check your components before you buy.

	ır favourite			SPECIFICA			CIFICATIONS					
	CABLES erconnects and spea		cables	STRANDED	SOLID CORE	CÓPPER	SII	DIGITAL CABLE TYPE	ISSUE NUMBER			
	? PRODUCT	£	COMMENTS	B	SE.	9	SILVER	¥	男			
MAL	OGUE INTERCONNECTS											
100	Atlas Questor	70	Very open and informative at high and mid frequencies, with slightly dry bass. Imaging particularly fine	0					295			
	Audioquest Sidewinder	45	A lively and detailed cable, with fine tonality and excellent rhythm. Slight added upper-bass warmth does little to detract			9			29			
20	Black Rhodium Prelude	80	Practical and sensibly priced all-rounder that seems happily compatible with a wide range of kit						29			
	Black Rhodium Coda	150	Superb bass and excellently neutral and detailed midrange: treble generally sweet with occasional slight constriction						29			
EC	Black Rhodium Concert	255	This DCT cable from the Polar range gives a distinctively dark timbre, rich in detail, with low subjective noise						270			
	Cambridge Azur Reference	50	Performance wouldn't shame a cable at twice the price: especially adept in the treble with no trace of dryness						29			
	Clearer Audio Copper-Line Alpha	50	Sounding like something a good deal dearer, this cable offers near high-end detail and seems highly compatible too						29:			
	Clearer Audio Silver-line	244	Complex, well-screened cable which offers good sound all round with exceptional bass – at a price!						279			
€C,	CrystalCable Piccolo	260	$Thin \ cable, but tougher \ than \ it \ looks, \ Piccolo \ has \ some \ qualities \ of \ a \ solid \ core \ type \ generically \cdot notably \ resolution, focus \ and \ articulation$						29			
	ixos ixotica IX1	200	Notable for its relaxing sound, this cable still presents plenty of analytical detail						283			
	Monster M350i	45	Few cables at this price reveal so much about the recording space. Clear treble, too						28			
·	Monster M1000i	200	Very capable, with only a hint of bass dryness to set against excellent results elsewhere						284			
	Nordost Wyrewizard Dream	95	Slight lack of precision in extreme treble, otherwise detailed and neutral with authoritative bass		0				303			
	Oehlbach NF214	63	The bass is a matter of taste, but suits many smaller speakers. Very good mid and treble						28			
	Profigold PGA3000	60	Not the ultimate for lovers of clinical precision, its character is engaging and detail and extension are good						299			
· .	Supra EFF-1X	77	Lively-sounding cable which maintains a high level of detail and neutrality. Musically, a great all-rounder						306			
: 12.	Townshend Isolda DCT 100	99	Silky-smooth treble, with remarkably good detail too: midrange and bass also very fine						303			
	van den Hul Integration Hybrid	125	Bass is nothing remarkable, but mid and treble are outstandingly open and clear, very transparent						306			
le <u>.</u>	Wireworld Luna 5	30	Authoritative bass and clear treble outperform many cables at twice the price						273			
DICIT	AL INTERCONNECTS											
	Atlas Compass	50	Slight improvement in detail over giveaway cables, plus distinctly more tuneful bass and more open treble, make this fine value					E	289			
EC	Clearer Audio Silver-line	125	Very satisfying performance with finely-etched detail and sweet treble					E	278			
	Supra AnCo	80	This cable can give a useful fillip to a good transport/DAC combination, even in a high-end context					E	304			
EC	Wireworld Starlight 5	90	Clear gains in detail and imaging precision are this cable's main strengths, good value and near-high-end performance					Е	279			
SPEA	KER CABLES PRICE PER METRE					- 1						
	Atlas Hyper 1.5	10	Don't look to this cable to beef up the bass, but its performance at higher frequencies is revelatory at the price			0			299			
	Atlas Ascent 2.0	55	A highly analytical cable, with more bass extension than at first appears and very fine detail across the board			0			294			
-	Chord Epic Twin	40	Good all rounder, which generally sounds relaxed and musical, and a full bass that stops the right side of sounding blowsy	0		0			28			
EC	CrystalCable Piccolo	1,480	Tougher than it looks, Piccolo has some of the qualities of a solid core type generically – notably resolution, focus and articulation				0		302			
	Kimber 8PR	12	A cable that really enjoys the music, also admirable for the levels of analytical detail it allows through. Excellent value						299			
	Monster MCX-1s	8	Notable for its bass, which is perhaps a touch overdone at times but could be a good foil to small speakers. Good mid and treble	0		۰			280			
EC	Nordost Heimdall	162	Alternative to Valhalla, silver plated, micro-monofilament construction, low colouration, hi-res and suitable for exacting systems	0		0			278			
	QED Silver Anniversary XT	5.50	Full bass and nicely detailed treble combine with good imaging - a budget bargain	0		0			276			
	QED X-Tube XT300	10	A natural and well controlled sounding cable that's cost effective for mid-priced systems		0	0			234			
FC	Supra Sword	116	Zero inductance construction, medium resolution cable that has an excellent midband and is fundamentally musical	۰					28			
EC	Townshend Isolda DCT	50	Cryogenically treated 'impedance matched' cable with stabilising components added: great sound all-round			0			24			
	van den Hul The Bridge	6	Better bass than treble, with good detail though a touch of constriction at times	0		0			291			
-	Wireworld Luna 16/4	5	Budget biwire cable offering funeful and extended bass, good treble, and midrange with just a little lack of detail	0		0			292			

STRANDED Cable has a number of (usually) twisted strands to conduct the signal. SOLID CORE Cable has one or more individually insulated strands to conduct the signal. COPPER Material used to form the conducting element of the cable. SILVER Alternative material used to form the conducting element of the cable. DIGITAL CABLE TYPE E – electrical, O – optical Cables are one metre length unless otherwise stated.

STANDS AND SUPPORTS

Equipment racks and speaker stands

If you want to get the most from your source and amp components, it's important to consider good quality support. Dedicated equipment supports are racks and tables made specifically to hold hi-fi gear, and the best can have a profoundly positive effect on sound because, for example, they can help to isolate kit from ground-borne vibrations and mechanical or electrical interference. Equally, if you own a pair of small 'bookshelf' or 'standmount' speakers, it's important to place them on good quality, purpose-built speaker stands.

Our favourite BEST BUY 60 EDITOR'S CHOICE

				SPECIFICATIONS					
	QUIPS ipment supports		ENT SUPPORTS	HEIGHT CM	TOP PLATE SIZE	WE	NUMBER OF SH	SHELF TYPE	ISSUE NUMBER
	PRODUCT Supports	£	COMMENTS	T CM)	CM)	WELDED	SHELVES	JAKL	MBER
	Alphason A5-G	399	Nice looking, very solid and practical with a pretty well balanced sound, but lacks a little detail	80	66,46		5	Glass	24
	Atacama Equinox	280	Stable, modular design with style. Excellent bass transients and a fresh design concept	81	50,50	0	4	Glass	21
bë	Audiophile Base Std Supp't	900	Not cheap and quite bulky, but it's all worth it as sound is unusually detailed and resonance-free	57	46,35		3	MDF	30
	Custom Design Icon Signature	330	Gorgeous wood and glass looks: sound lacks a little detail but is nicely lively	75	56,37		4	Glass	28
	Custom Design XL4	380	Simple construction pays off in smart looks. Sound contribution is minimal and largely harmless	65	60,42		4	Glass	29
88	Custom Design Icon 400	600	Beautifully built, conveniently adjustable and with little sound of its own, a very classy rack	75	57, 41		5	Glass	26
ist .	Custom Design Concept 400	700	Slightly drab looks, but great sound and efficient use of space ('Acoustic' version tested – standard version £300)	74	48,40		4	Metal	24
	Custom Design Milan	449	Respect is due to any stand that looks this good with nothing more to complain of than slight muddying of detail	57	48,39		4	Glass	30
ar I	Custom Design Vantige	449	'Acoustic Aluminium' shelves plus steel supports equal practicality plus musical satisfaction: just a shade bright	62	49,44		4	Metal	27
	Partington Minim	420	Adds its own character to the benefit of rock most particularly, but slightly to the detriment of acoustic sounds	78	45,37	0	5	Glass	30
	Quadraspire Q4 Reference	480	Excellent performance from the school of wobbly racks. Natural sounding and plenty of detail	51.5	49,39.5		4	MDF	21
	Russ Andrews Torlyte Rack	988	Attractive modular system made of very light Torlyte: a touch of added warmth is its only vice	68	54,49		4	Torlyte	24
	RA Torlyte Platform	130	This unassuming platform can be a godsend, cleaning away mid/treble muddle from the sound	8	48,36		1	Torlyte	30
EC	Townshend VSSS	1,300	The Seismic Sink goes all glassy and attractive, yet retains the same excellent vibration-killing sound quality	76	35,50		4	Glass	273

Our favourite BEST BLY 60 EDITOR'S CHOICE

SPEAKER STA	AND:	5
-------------	------	---

				HEIGHT	ਜ			異	E SE
Spea	peaker stands				SIZE (CM)	FILLABLE	WELDED	OF LEGS	NUMBER
BADGE?	PRODUCT	Σ	COMMENTS	(CM)	3	E	8	SS	35
	Anvil Sound Display Stand	226	A variety of smart looks available - sound is clear and precise	50	20,17			1	293
88	Custom Design RS300	110	An attractive stand whose lack coloration and ringing makes suits it to high resolution systems, at a tempting price	56	16.5,18	9		1	281
	Custom Design SQ402	100	More a range than a model, capable of fine results especially with Acoustic Steel top plates	62	18,16.5			2	299
EC	Custom Design SQ404	200	Robust four-pillar design gives very low coloration and maximises performance of speakers great and small	61	18,16.3			4	283
88	Partington Ansa 60	99	Elegant flat-packer 'disappears' sonically, restrained but neutral and coherent	62	18,15	0		4	232
EC	Partington Dreadnought BS	249	The Dreadnought Broadside is a superb stand for high-class standmount speakers – and it looks great too!	61	17,15		0	5	261
EC	Partington Heavi II	399	Robust to the nth degree, this stand helps produce very taut, precise bass and detailed upper frequencies	53	31,22	0		6	287
EC	Russ Andrews Torlyte	299	Very relaxed sound from this metal-free design, with excellent imaging too	60,50	15,21			3	280

EQUIPMENT SUPPORTS SPECS KEY HEIGHT Of complete stand. TOP PLATE SIZE (CM) Width by depth of the supporting platform(s). Single figures indicate a square platform

WELDED As opposed to bolt-together construction. NUMBER OF SHELVES To put your kit on (different configurations are often available). SHELF TYPE Material that shelves are made of

SPEAKER STANDS SPECSICEY HEIGHT Of each stand, not including spikes TOP PLATE SIZE (CM) Width by depth of platform. Single figures indicate a square platform. Speakers generally overhang top plates. FILLABLE The stand can be mass-loaded with sand and/or lead to stop ringing. WELDED As opposed to bolt-together construction. NUMBER OF LEGS That support the stand.

Equipment Racks

Stand & Deliver

The UK's AV Furniture Superstore 24 Hour Despatch











Plasma Stands

LCD Stands TV Stands



www.standanddeliver.com

www.standanddeliver.com

Customer Helpline 0845 460 6006

Equipment Racks

Luxury Living Show Sensational System

Zingali - Pathos - MSB - Synergistic Research

Just a few of our listeners' comments...



"A Concert Hall performance!..."

"These speakers are beautiful!..."



"This is as good as it gets!..."

"The sound is sensational..."

"I've never heard such detail!..."



audioboffs

Home demonstrations by appointment



www.audioboffs.co.uk

info@audioboffs.co.uk

020 8177 4095

Check out our website for the full product range

Analysis Plus Astin Trew Audio Physic **Bel Canto** English Valve Amps Firestone Audio Graaf MSB Monopulse Onkvo Razor Shanling Silver Arrow Salid Tech Synergistic Research The Funk Firm Transcriptors Unison Research Zingali

and more

Dealers for:

Advanced Acoustics



ialists in high fidelity sound reproduction - since 1967



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

www.hifichoice.co.uk









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





- Specializing in bespoke solutions from the worlds leading manufacturers to suit your lifestyle and budget.
- Visit our new showroom to experience the ultimate in hi-fi, home cinema and multi room

Tel.01872 273 215 www.audio-cinema.co.uk 16-17 Lemon Street, Truro, TR1 2LS





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, Cambridgshire 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

Your Hi Fi Separates are redundant!

AVI's Active ADM9.1s are a complete Hi Fi system in two speakers. They comprise of a remote controlled, three input preamplifier (2 x 24/96 Optical digital and one analogue) 4th order electronic crossovers and two high speed, linear, bipolar amps (250 & 75 Watts) in a pair of 6.5" Two-Way Loudspeakers measuring 30 x 25 x 25 cms. And there is a professional quality 10" Sub that takes you below 30Hz if you need it.

ADM9s can be connected to any digital source (PS3 included) to produce a better sound than is possible from passive systems costing many times their price.

You save money and space and you get a better sound. ADM9.1s are the future and provide the most cost effective upgrade imaginable.



Price £1000 per pair. www.avihifi.com





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

HEAR ECHNOLOGY LIMITED

TTL House, Sheeptick End, Near Lidlington, Bedfordshire, MK43 0SF Telephone 01525 841999 Facsimile 01525 841009

IAN HARRISON HIFI SALE! Tel: 01283 702875

DENON DL 304	£175
CLEARAUDIO CONCERTO	0083
EAR PHONO STAGES	A093
AUDIO TECHNICA ATHW 1000	£320
AUDIO TECHNICA AT OC9ML2	
TRANSFIGURATION AXIA	
TRANSFIGURATION PHOENIX	£1100
TRICHORD DINO MIC2	
TRICHORD D300	A093
TOM EVANS GROOVE PLUS	£3060
WHEST AUDIO PS30R	SPOA
All goods are brand new and fully guarant supplied on approval. Free UK	teed. Goods are not

Details and prices from lan Harrison, 7 Mill Hill, Repton, Derby DE65 6GQ, UK. Tel: 01283 702875 Sam-Spm inc Sundays

To advertise here please call Ben Keightley on 020 7042 4252



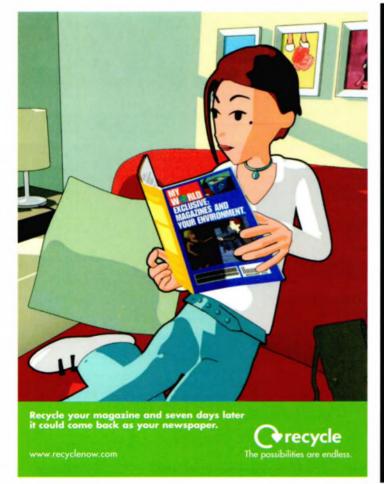
Hi-Fi, Home Cinema & Multi-Room Specialists

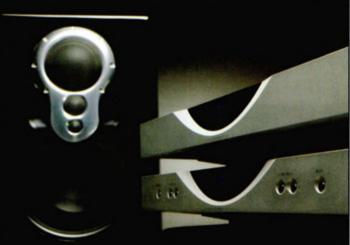
020 7924 2040

Email: oranges.lemons a virgin.net 61 Webbs Road, Battersea, SW11 6RX

www.oandlhifi.co.uk







THE DEATH OF THE CD PLAYER

HEAR THE FUTURE

The Sound Gallery invites you to experience Linn's new Klimax DS and Akurate DS Products that will not only enhance the performance of music, but will transform any digital audio system.

Even poorly recorded CD's sound delightful on a Linn DS player, and without a CD drawer and moving parts to wear out, we believe this is the perfect way to enjoy music. The sound just defeats every CD player we have listened to so fart... Yes, you did read this!

Bring along your CD's and/or CD player and discover the future today at.



www.soundgallery.co.uk 65 Castle Street, High Wycombe, Bucks O1494 531682

Rochester Hi-Fi

30 HIGH STREET, ROCHESTER, KENT, ME1 1LD - 01634 880037

ORAÇLE AUDIO



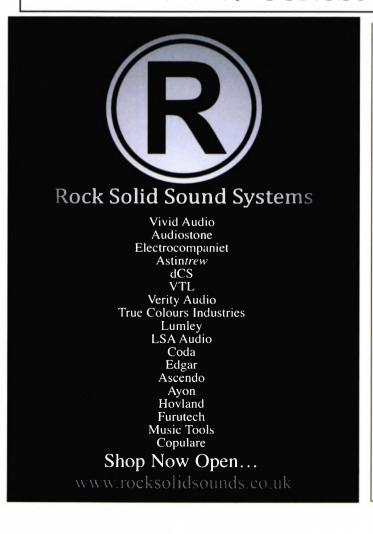
Raysonic*

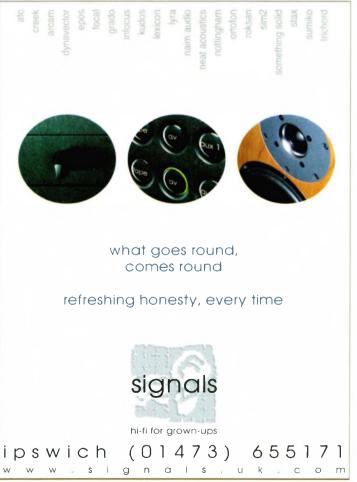


UK DISTRIBUTOR FOR ALL RAYSONIC & ORACLE PRODUCTS.

ANATEK, ARCAM, ATACAMA, AUDIOPHILE BASE, AVI, CHORD COMPANY, CHORD ELECTRONICS, CLEARAUDIO, CREEK, DALI, EDGAR, EPOS, EUPEN, EXPOSURE, FOCAL JMLAB, GAMUT, GRAHAM SLEE, LAT, LSA, METRONOME, NORTHSTAR, NOTTINGHAM ANALOGUE, NU FORCE, OPTIMUM, ORIGIN LIVE, ORACLE, PARTINGTON, PROJECT, QUAD, QUADRASPIRE, RAYSONIC, RESOLUTION AUDIO, RENAISSANCE, TANNOY PRESTIGE, USHER.

www.rochesterhi-fi.co.uk











Big Sound



Fidelity uncompromised.



www. coherent-systems.co.uk 01684 310849

Bringing it all together





The only Focal Utopia full surround system in the UK



Sensual immersion



GRENT

Naturally cinematic.

MUSIC MATTERS

HI-FI & HOME CINEMA

New Store Now Open

10a Chapel Street
Stratford-Upon-Avon
Warwickshire CV37 6EP
01789 414 533

We offer custom installation of complete systems integrating hi-fi, home cinema, multi-room and lighting.

Home trials are available for many products.

Our extensive range of products includes

- Arcam Apollo Anthony Gallo Atacama
- Atlas Base Bose available at
- SOLIHULL Bowers & Wilkins
- Rega and Nautilus Diamond available at
 EDGBASTON Chapter Audio Chord
- Company Chord Electronics Cyrus
- Denon Dream Vision Dynaudio
- Michell Mission MJ Acoustics Monitor
- Audio Musical Fidelity NAD Naim
- Nordost Ortofon Panasonic Pioneer
- PMC Project Pure QED Quad
- SME Sonus Faber Tascam Teac
- Wharfedale Wilson Benesch Yamaha
 OPEN TUES SAT 10:00 5:30
 LATE NIGHT AT BIRMINGHAM AND SOLIHULL WEDNESDAY TIL 6:30PM

Interest free credit on selected items • 0% APR
Written details on request • Licensed credit broker



www.musicmatters.co.uk

EDGBASTON 363 Hagley Road, Birmingham B17 8DL 0121 429 2811

- *SOLIHULL 93-95 Hobs Moat Road, West Midlands B92 &JL 0121 742 0254
- STOURBRIDGE 9 Market Street. West Midlands DY8 1AB 01384 444 184
- *SUTTON COLDFIELD 10 Boldmere Road. West Midlands B73 5TD 0121 354 2311
- "HATCH END 344 Uxbridge Road, Pinner, Middlesex HA5 4HR 020 8420 1925
- "DARLINGTON 17 Coniscliffe Road County Durham DL3 7EE 01325 481 418



marantz

PREMIUM

because music matters





USHER



Usher Class A

Avid & other turntables

Usher, Marantz, Avid Diva, Audio Technica OC9, Acoustic Solid, Black Rhodium, Townshend Rock V, Graham Slee, Hadcock, Clearaudio, 78rpm reproduction

Sound Hi Fi Dartmouth Devon 01803 833366 web www.SoundHiFi.com





PASSION FOR SOUND



For a more consultative approach to your advertising needs please contact me, Ben Keightley on 0207 042 4262 b.keightley@futurenet.co.uk

ASTLEY AUDIO LTD

3 Marketplace, Wallingford, Oxfordshire OX10 0EG

☎ 01491 839305

www.audioimages-hifi.com

GRAHAMS HI-FI

GL

SE

Canonbury Yard, 190a New North Road, London N1

2 020 7226 5500

mww.grahams.co.uk

BADA

INFIDELITY

GL

9 High Street, Kingston-upon-Thames, Surrey, KT1 4DA.

2 020 8943 3530

www.infidelity.co.uk

BADA

AUDIOBOFFS

GL

338 Shenley Road, Borehamwood, Herts WD 1TP

2 020 8177 4095

www.audioboffs.co.uk

AUDIO AND CINEMA

SW

SW

Norfolk House, 16-17 Lemon Street, Truro, Cornwall TR1 2LS

2 0870 458 4438

www.audio-cinema.co.uk

MIKE MANNING AUDIO

110 Middle Street, Yeovil, Somerset BA20 1NE

2 01935 479361

www.mikemanningaudio.com

MIKE MANNING AUDIO

SW

SW

Е

54 Bridge Street, Taunton, Somerset TA1 1UD

2 01823 326688

www.mikemanningaudio.com

THE RIGHT NOTE

56 High Street, Saltford, Bristol BS31 3EJ

2 01225 874728

AUDIO IMAGES

128 London Road North, Lowestoft, Suffolk NR32 1HB

2 01502 582853

www.audioimages-hifi.com

BASICALLY SOUND & VISION

Calveley Court, Southburgh Rd, Reymerston Norfolk NR9 4QD

2 01362 820800

www.basicallysound.co.uk

DIVINE AUDIO

EM

The Courtyard, Bennett's Place, High Street, Market Harborough, Leicestershire LE16 7NL

2 01858 432999

www.divineaudio.co.uk

NOTTINGHAM HI-FI CENTRE EM

120-122 Alfreton Road, Nottingham, Nottinghamshire NG7 3NR

2 0115 9786919

www.nottinghamhifi.co.uk

BADA

CREATIVE AUDIO

WM

9 Dogpole, Shrewsbury, Shropshire SY1 1EN

2 01743 236055

www.creative-audio.co.uk

SOUND CINERGY

WM

37 High Street Aldridge WS9 8NL

2 01922 457 926

ACOUSTICA LTD

NW

17 Hoole Road, Chester, Cheshire CH2 3NH

⊕ www.acoustica.co.uk

AUDIO COUNSEL

NW

26 High Street, Cheadle, Cheshire SK8 1AL

2 0161 491 6090

www.audio-counsel.co.uk

BADA

DOUG BRADY HI-FI

NW

Kingsway Studios, 15a Kingsway North, Warrington, Cheshire WA1 3NU

2 01925 828009

www.dougbradyhifi.com

SYNERGY AV HI-FI

NW

12a West St, Congleton, Cheshire CW12 3JB

2 01260 280017

www.synergyav.co.uk

ACTON GATE AUDIO

W

4 Ruabon Rd, Wrexham, Clwyd LL13 7PB

2 01978 364500

www.acton-gate-audio.co.uk

HI-FICHOICE

To advertise in the dealer directory,
Please contact
Ben Keightley +44 (0) 20 7042 4262
bkeightley@futurenet.co.uk



SE - South East, GL - Greater London, SW - South West, E - East, EM - East Midlands, WM - West Midlands, NW - North West, W - Wales.

2nd-hand shootout

Lots of high performance to be had from these £3,000 valve amplifiers.

n this month's second-hand hi-fi selection we're going to take a look at four £3,000 valve amplifiers, that are somewhat out of the ordinary.

Our first exotic bird is the Canary CA-303. In actual fact, the CA-303 is a 300B monoblock and would, therefore, come as a pair. Canary is an American company with no official UK representation. Having said that, we found Canary to be extremely helpful when compiling this feature and you'll also find a good deal of its equipment at UK specialists.

Launched in 1997, and costing around £7,000 new, the CA-303 has the characteristic punch and resolution of a decent 300B amp that can sometimes be lacking in other valve amps. Four years later, a Special Edition was launched and, despite upgraded transformers and modified circuitry, the sonic differences are slight. One important advantage, though, is that the SE has easily accessible bias adjustment pots at the rear. With the standard model the internal adjustment is more tricky and suitable only for a competent engineer. 300B valves usually last well, but they're not cheap – a pair of the Canary-favoured Western Electric valves come in at an eye-watering £800. Obviously, the age and condition of the valves is crucial, but make a good choice and you're £3,000 will reward you with an amplifier capable of great musical insight

Maker of some of the finest power supplies about, Border Patrol also has a pretty impressive reputation for its 300B amplifier. Although launched in 1995, it didn't hit the UK market until three years later; but it was worth the wait. Priced at £4,000 with Tesla valves or £500 more with Western Electrics, the Border Patrol SE300B quickly gained a reputation as one of the finest power amps

below £5,000. Like the others here it soon became clear that its nine watts power output was little indication as to its true speaker driving capability. The amp is still available today, but now costs closer to £6,000. Border Patrol offers a full range of service and upgrade options, meaning that most models can be brought up to today's spec - at a price. Our advice is to buy a model fitted with the WE valves and that's as recent as possible. If you already have a preamp, £3,000 should buy a model that's around a year or two old. If you need a preamp, too, then you'll need to seek out a three or four-year old model for around £2,250-£2,500. The remaining money will get a good quality pre from the likes of Rothwell or EAR. Border Patrol does make an excellent preamp, but as this was only introduced around 2005, it's very hard to find second-hand.

If you like the idea of a valve amp, but seek convenience, then the Graaf GM50 fits the bill perfectly. This integrated valve amp was launched in 2004 and, shock horror, came complete with a remote control. Although rated at 50 watts per channel, it sounds more



Above: Canary 300B monoblock power amps

as expensive as the others. It does, however, mean that our budget is enough for an exdemo model with a long life ahead of it. We saw one such example with a six month guarantee for £3,250. Although not as esoteric as the others here, the GM50 should not be dismissed; this is one of those amps that really punches above its weight.

Anyone with even a little knowledge of amp designers will have heard of Tim de Paravicini. Designer and/or consultant on some very fine amps (including the Musical Fidelity A1 and Quad II/80 power amp), Paravicini set up his own design company, Esoteric Audio Research (EAR). Still thriving today, it has a fine reputation for its valve amplification and, with our budget, the best choice would probably be

"If you already have a preamp, £3,000 should buy a model that's around a year or two old."

powerful and is better at dealing with tricky speaker loads than you might expect. Beautifully engineered to give a quiet background noise from day one, the GM50 has proved to be supremely reliable. With a set of four quality KT90 valves coming in at around £190, the GM50 is not as expensive to maintain as the 300Bs. At £4,000 new, it's not

an 864 preamp with 534 power amp. Launched around nine years ago, this pair is still available new for just under £5,000. For our budget, three to four year old units should easily be available.

One issue to be aware of, however, is that the circuitry was designed to extract five years usage from the valves. With four year old examples it's worth checking whether or not the valves have been changed. The 534 uses eight EL34s which, at around £10 to £15 each, are pretty cheap. The preamp is fitted with the long lasting ECC82 (1) and ECC83 (4) valves that cost about the same as the EL34s. So, although there're a lot of valves between them, even changing the whole lot shouldn't come to more than £200.

Choose any of these amplifiers and a return to transistors is unlikely! **HFC**

Dominic Todd
Next month £1,500 turntables



Above: Graaf GM 50B integrated valve amplifier



Looking for new? Trade in with us for big savings!

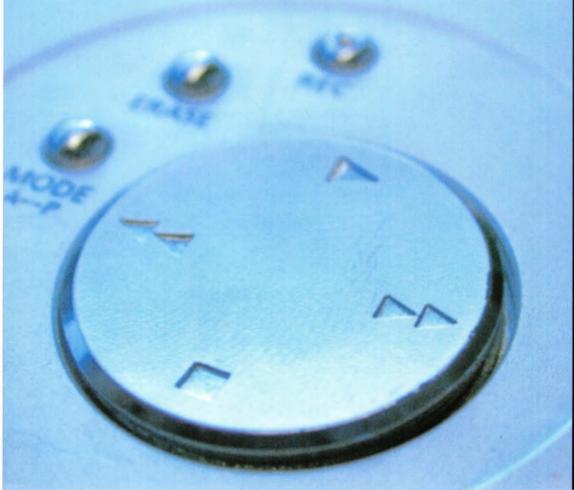
nalogue		Amplifiers
riston RD80, ex condition	99	Accuphase E212, mint boxe
cos Lustre	149	Accuphase P450, very large
lphason Opal arm, excellent	149	Arcam P75, great power ar
R Legend, Linn Basik LVX	149	ATC SIA150, excellent box
VID Acutus, ex demo as new in Chrome	Call	Audio Analogue Maestro R
learaudio Evolution with parallel tracking arm	999	Integrated Audio Analogue Primo, min
a rrard 301, SME3009, Behrens Plinth	799	Audio Analogue Maestro Si
eybrook TT2 c/w Linn Basik LVX	229	Audio Innovations Series 7
inn LP12, Ittok LV11 and Sumiko BPS really pre-	tty	boxed
xample	899	Audio Research SP16, inc
inn LP12, Lingo 2, Akito 2 in cherry, Cirkus etc	1599	Audio Research SP11, inc
inn LP12, Lingo, Ekos, reasonable	1499	Audio Research VS55, exc
inn Lingo, vgc	499	Audiolab 8000P, excellent of
inn Ekos, vgc	749	AVI Lab Series Integrated v
inn Ittok 12", VERY VERY RARE ITEM,	Offers	AVI S2000 Integrated
inn Ittok LV11, excellent	299	Bryston 4BST Power amp,
lichell Gyro SE, DC version RB300, excellent	699	Cyrus Pre/Monos, vgc all b
lichell Focus One, Focus arm, excellent	299	Cyrus Smartpower, excelle
lichell Iso c/w Hera p/s	249	Exposure 3010, as new bo
lission 774 original arm	149	stage
lusical Fidelity XLP ex	99	Krell KAV400xi, excellent b Krell KSA80, excellent
AD (Rega Planar 2), RB250	119	Linn Majik Integrated
otts Analogue Spacedeck, due in details toc	Call	Linn Kolector ex boxed
ega Planar 3, RB300, vgc	179	Linn LK100 ex boxed
oksan Xerxes 20/XPS7 as new	1899	Meridian 562V Digital Cont
oksan TMS1.5, DSU and SME V	2999	Musical Fidelity kW500, ex-
oksan TMS2, DSU and SME V	4499	Nad C325BEE, excellent be
ME 3009, excellent	149	NAIM NAP140, excellent be
ME V, excellent boxed	999	NAIM 92/90 pre/power, ex
TD 305, excellent in Silver	99	NAIM NAIT 5, ex boxed
ystemdek IIX900, offboard p/s, acrylic platter and	d	NAIM NAC82, ex boxed
B250	379	NAIM NAC112, current styl
ystemdek II (biscuit tin), ADC arm, vgc	249	Pathos Classic One Mk2, e
ownshend Elite Rock, Excalibur arm, Merlin p/s,	plinth &	Quad 77 Integrated with ful
t	749	Quad 44 Preamp, 405 Pow
richord Dino, excellent	229	Quad 33/303, vgc for year Quad 22 pre and II Monos,
ccessories/Cables		Radford STA25 Rennaissar
hord various AV cables, call for details	Call	excellent
yrus PSXR, Graphite Black and Silver available	from 249	Roksan Kandy Mk3 power
ecent Audio ODW, used	149	Sonic Frontiers Anthem Pre
inn Isobarik Active Xover box	Offers	TACT/Lyngdorf Audio SDA2

_			
	Amplifiers		Digital
99	Accuphase E212, mint boxed	1199	Accuph
149	Accuphase P450, very large power amp, ex boxed	1749	Arcam A
149	Arcam P75, great power amp	225	Audio A
149	ATC SIA150, excellent boxed	1199	AVI Lab
Call	Audio Analogue Maestro Reference 150w monster		Cairn F
999	Integrated	1199	ex dem
799	Audio Analogue Primo, mini size integrated	299	Chord E
229	Audio Analogue Maestro Settanta	899	Chord D
,	Audio Innovations Series 700 integrated, excellent	400	Conson
899	Audio Research SP16, inc phono stage ex boxed	499 1 2 99	Cyrus C
1599			Cyrus C
1499	Audio Research SP11, inc phono stage excellent Audio Research VS55, excellent	2249 1399	Esoterio
499	Audiolab 8000P, excellent original grey version boxed		Krell KA
749	AVI Lab Series Integrated with phono ex demo	1499	Linn Ka
Offers	AVI S2000 Integrated with phono ex denio	249	Linn Nu
	Bryston 4BST Power amp, excellent in black	1199	Linn Mu
299	Cyrus Pre/Monos, vqc all boxed	999	
699	Cyrus Smartpower, excellent boxed	349	Meridia
299	Exposure 3010, as new boxed with £200 mm phono	040	Meridia
249	stage	599	Meridia
149	Krell KAV400xi, excellent boxed	1749	Meridia
99	Krell KSA80, excellent	1199	Meridia
119	Linn Majik Integrated	299	Microme
Call	Linn Kolector ex boxed	329	Musical
179	Linn LK100 ex boxed	299	Musical
1899	Meridian 562V Digital Controller	349	boxed
2999	Musical Fidelity kW500, excellent	2499	Pathos
4499	Nad C325BEE, excellent boxed display	199	Roksan
149	NAIM NAP140, excellent boxed power	299	Shanlin
999	NAIM 92/90 pre/power, ex boxed, c/w phono boards	349	TEAC V
99	NAIM NAIT 5, ex boxed	399	Wadia 3
	NAIM NAC82, ex boxed	999	remote
379	NAIM NAC112, current style preamp	349	Radio/F
249	Pathos Classic One Mk2, ex boxed	749	Linn Ku
linth &	Quad 77 Integrated with full remote	279	Meridia
749	Quad 44 Preamp, 405 Power amps NOW from	99	Nakami
229	Quad 33/303, vgc for year fully serviced	199	Pure 70
LLO	Quad 22 pre and II Monos, full working order	799	Quad F
Call	Radford STA25 Rennaissance and SC25 Pre/Power,	999	Quad F
om 249	excellent Roksan Kandy Mk3 power	379	Rega R
149	Sonic Frontiers Anthem Pre IL & Power 1.	749	SONY
Offers	TACT/Lyngdorf Audio SDA2175, great press, as new	699	TEAC T
Oners	TAC I/Lynguon Audio SDAZT75, great press, as new	099	ILACI

	Digital		-
1	Accuphase DP75V, excellent boxed	2999	Α
1	Arcam Alpha 5+, excellent	149	A
	Audio Analogue Maestro 192/24 ex dem	899	Α
1	AVI Lab Series, mint boxed used bargain	799	a A
	Cairn Fog v2, in Silver absolute steal, was £1250		A
	ex demo	499	in
	Chord Blu Dual Data, ex demo	3999	Α
	Chord DAC64, ex demo	1999	C
	Consonance Droplet, ex dem bargain - WOW!	1499	D
	Cyrus Quattra, c/w tuner, UNDER HALF PRICE!	499	J
1	Cyrus CD8, boxed ex c/w remote	499	Κ
1	Esoteric UX1, brand new sealed box save £4000+	4975	L
1	Krell KAV300CD, excellent boxed	899	L
1	Linn Karik, v late version ex boxed	499	Ν
1	Linn Numerik, v late version	499	N
1	Linn Mimik, ex c/w remote	399	Si N
1	Meridian 500 Transport, excellent remote	279	N
1	Meridian 563 DAC	349	N
	Meridian 200 Transport, excellent boxed	199	Ν
	Meridian 203 DAC, excellent	199	Ρ
	Meridian G91DAB, good order c/w remote, boxed	2749	Ρ
	Micromega Stage 1, excellent	99	C
	Musical Fidelity A308CR CD, excellent, remote, box	799	C
	Musical Fidelity Nu Vista CR CD player, excellent,		F
,	boxed	999	R
1	Pathos Endorphin, crated ex demo unit	2999	T
1	Roksan Atessa transport	399	Ť
1	Shanling, CD3000, ex display	799	Ú
1	TEAC VRDS10, good condition, boxed remote	399	В
1	Wadia 302, as new, ex demo, warranty, boxed,		U
1	remote etc	2499	S
1	Radio/Recorders		Α
	Linn Kudos, excellent	299	Р
	Meridian 204, excellent	249	A
	Nakamich: DR2 ex toxed	149	С
	Pure 702ES, excellent multiband tuner	149	L
	Quad FM3, excellent	99	C
	Quad FM4, excellent	199	Р
1	Rega Radio	99	C
ı	SONY JA20es minidisc, superb	349	R
1	TEAC TR610 FM tuner	49	Т

	Loudspeakers	
2999	Acoustic Energy Aelite 3, sealed boxes	399
149	ATC SCM7, nr mint boxed in cherry	399
899	Audiovector M3 Sig, active crossovers, new £4k+,	
799		Offers
,,,,	Audio Pro Bravo FX04 in piano black, bargain	Offers
499	AVI Neutron IV, excellent ex demo units boxed	
	in cherry	399
3999	AVI ADM9, excellent ex demo units boxed	849
1999	Castle Harlech, excellent boxed in yew	399
1499	Dynaudio 52SE ex boxed	499
499	JR149, lovely little LS3/5 derivatives	249
499	Kef 104AB, no grills, T27, B139s etc	149
4975	Linn Sara, excellent boxed with Sara stands	299
899		Offers
499	Magneplanar 2.5R	599
499	Martin Logan Summit, ex demo slight mark	
399	save over £1000	Call
279	Meridian DSP5000, excellent	1199
349	Monitor Audio Radius - various new/demo units	Call
	Neat Acoustics Petite 3 SE c/w Ultimatum bass drive	
199	NOW	399
199	Peak Consult Princess & Stands, ex boxed	2499
2749	PMC FB1+ in cherry	699
99	Quad ESL989, excellent boxed BARGAIN!	1999
799	Quad ESL63, excellent boxed	699
	Revolver RW16, brand new last pr	249
999	Revolver Music 5, brand new cancelled order	Call
2999	Tannoy DC2000, vgc	299
399	Triangle Comete ES, ex demo nr mint boxed	329
799	Triangle Antal ES, nr mint boxed	329
399	Usher Audio S525 centre (matches S520s), new, ont	•
399	Birch	99
	Usher Audio 8571, just stunning	Call
2499	Special System Deals	
	AVI Lab Series Amp c/w phono, CD Player and	0-1
299	pair Neutron IV	Call
249	Audio Analogue Maestro Settanta Amp and CD Playe	
149	Carn Fog v2 CD player and 4808 Amplifier	Call Call
149	Linn Classik K inc tuner, speakers available	Call
99	Marantz Layla CD/Receiver and cassette in Chelsea blue!	Call
199		Call
99	Primare I21 and CD21, excellent boxed	
349	Quad 99 Pre and 909 Power c/w 989 ESL speakers	Call
49	Roksan Caspian Full system	Call
49	TEAC 257i One box system with matching speakers	Call
2	handhifi co uk	

Mon to Sat 10 til 5, tel 0845 6019390 or email choice@2ndhandhifi.co.uk



which

way

to

hifisound?

0845 6019390

to find out

Heatherdale audio limited

202 Findon Road Worthing, West Sussex BN14 0EJ
Web: www.hifi-stereo.com
E-mail: heatherdale@hifi-stereo.com

Telephone: 01903 872288

Mobile: 07860 660001 Fax: 01903 872234

•		n		
•	•		-	rs

opcurcis -	
Acoustic Zen surround system, new (£7845) only	£5875
B&W ASW 4000 sub woofer	£995
B&W DM1800 speakers with stands	£159
B&W DM640 floor standers	£295
Quad 21L speakers, floor standers	£350
New Acoustic Zen Adajio speakers	£2695
New Alamarro M3 speakers	£2695
Hales Transcendence 5 speakers	£2895
Mordaunt Short MS5-40 speakers	£99
Acoustic Zen Adagio Junior speakers + stands, new	£3400
Acoustic Zen Adagio center speaker + stand	£1625
Mission 753 speakers	£349
Apogee Diva speakers, superb	£3995

Pre-Amps

Audio Research LS 2 balanced pre-amp	£895
Audio Note M8 pre-amp with phono/remote	£7995
Wavac PR-T1 3 box pre amp as new (£23500)	£10750
Proceed PAV pre-amp	£695
Mark Levinson ML 380S pre-amp (£6500)	only £2495

Amplifiers

Wavac MD- 805M monos (£16500) AS NEW only	£7950
Goldmund SRM-250 mono's (£6590) new	£4995
John Shearne Phase 2 integrated amp	£395
ASR Emitter 1 Exclusive amplifier (new)	£5995
Kora triode 100SB mono power amps (pair)	£3495
Krell KSA 80 power amp	£1295
Nakamichi amp 1 cass'deck 2 with CD 3	£795
Audio Note OTO integrated amp	£695
Bel Canto EVO 2 power amp	£1295
Musical Fidelity A308 integrated amp	£895

CD Players & DACs

Weiss Jason transport with Media DAC (£20,000) NEW	£8995
Audio Note DAC 4 Signature	£2995
Goldmund Eidos 18 CD/SACD player (£3195) NEW	£2495
Marantz CD-873 CD player	£65
Sony CDP M41 CD player	£60
Esoteric X-03 CD/SACD player (ex demo full warranty) Plea	se phone
Audio Note DAC 5 Signature as new, latest spec? (£39500)	
Musical Fidelity Nuvista 3D CD player, superb/boxed	£1595

Miscellaneous

Zen Acoustics Ref 3mtr' pair speaker cable	£795
Isoclean Power 50A 111 US power block/filter, new	£850
Sony FM/AM ST-SE370 tuner £75Aiwa AD-F450 cassette deck	£45
Technics ST-610L tuner	£65
Sony ST-SE570 tuner	£60
Winds electronic stylus gauge	£425
Musical Fidelity X10-V3	£150

Turntables and associated agar

Dynavector 507 Mk. 2 arm (new)	£1995
JVC QL-Y3F Direct drive turntable	£125
Hitachi PS-12 turntable	£95

Main Dealer for:

Mark Levinson, Ayre Acoustic, Tannoy Prestige speakers, Thiel speakers, Audionote, Esoteric, SME, Stax, Cello, Lyra, My-Sonic, Revel, Audio Tekne, Michell, Goldmund.

DEFINITIVE AUDIO

Sale of part exchanged and ex-dem items

ITEM DESCRIPTION	SALE	NEW
Hovland Pincus 1m interconnect	£450	
Hovland G.8 2m interconnect	£700	
XLO/PRO 100 Low impedance 1 m interconnect	£250	
Siltech MXT professional 1m interconnect	£250	
Finite Elemente Pagode wall shelf. Black/high polish. Boxed.	£550	
Transparent MusicWave Ultra XL speaker cable, 8ft.		
Terminated with spade connectors. Boxed.	£750	£2300
Living Voice Auditorium II Maple.		
New but slight cosmetic imperfection.	£1500	£2100
Tannoy Kensington. Mahogany. 2 yrs old, perfect cond, as new.	£4000	£6500
AN UK DAC 4.1 balanced. 4 yrs old	£3500	
Mactone XMII - Exotic Japanese 6550 Integrated amplifier	£4000	
Magnum Dynalab MD101 Tuner	0063	
Magnum Dynalab MD10 Surround Decoder	£200	
Bryston SP1.7 Surround processor/preamp with remote	£2000	
Canary 309 Monos 50w parallel push/pull 300B's - Boxed	£4000	£10K+
Audio innovations L2 preamp - standard unit - serviced	£450	
Audion Sterling KT88 S.E - boxed - VGC. Bargain	£450	
Border Patrol 300B SE with Western Electrics - 4 weeks use	£3750	£5750
Canary 608 integrated amp with comprehensive Living Voice upgrade	£2500	£4000
Cairn 4808 integrated amp with remote control boxed as new	£550	£1200
P.S. Audio power supply	£400	
Monopulse 42A Floorstanding loudspeakers - Caramel. Boxed - VGC	0063	£1495
Stax headphones	£200	
Quadraspire 4 level equipment table - cherry	£180	
JPS Superconductor 1m set	£500	
JPS Superconductor Petite 2m set	£200	
VDH Various MC cartridges -		
Frogs, Grasshoppers, Colibris. 10 - 150 hrs use	please o	all
Hovland HP100 pre-amplifier - factory updated - loved and spotless	£2700	
Kuzma Airline tonearm - Kondo silver internal and external lead - ouch	£3500	£7500
Canary 303 monos 22 watts 300B with Living Voice upgrade	£3500	£7500
Lavardin PE Reference line pre-amplifier - 1 lady driver - perfect	£1500	£2400
Audionet Art V2 CD player - perfect, as new - 6 months old	£1500	£2500
Audionet SAM integrated amplifier - perfect, as new - 6 months old	£1500	£2500
Sugden A21 Poweramplifier - class A - solid state	£500	£950
EAR 534 50W EL34 / EAR 864	£2750	£4800

T. +44 (0) 115 973 3222 E. shout@definitiveaudio.co.uk

www.definitiveaudio.co.uk



PLAY GUITAR? PLAY BETTER.



GUITAT ON SALE WEDNESDAY 21 MAY

READER CLASSIFIED

Welcome to *Hi-Fi Choice Reader Classified*, the UK's first and best <u>free</u> private ads service for second hand hi-fi. These pages a must-read if you're thinking about buying used kit, and if you want to sell something it's definitely the place to be. It's <u>free</u> to place an advertisement – simply submit your ad of up to 30 words,

remembering to include your phone number and county. The simplest way to send your ad is via email to: hificlassifieds@futurenet.co.uk.

Or mail to: Reader Classified, Hi-Fi Choice, Future Publishing,

2 Balcombe Street, London NW1 6NW. Please note that this service is open to private advertisers only.

FOR SALE

ALCHEMIST KRAKEN 50 watt Class A amplifier. Nexus CD player, perfect, one owner, (£650) offers. Marantz CD-63SE CD player. One owner, perfect, bargain £100. 07860 539705 or digicolin@aol.com (London).



Above: DALI Ikon 6 floorstanding loudspeaker

ARCAM ALPHA 9 CD Player, including box, instructions, and remote. £450.01246 261699 (N. Derbys).

ARCAM A65+ DiVA integrated amp in mint condition, only two years old, original box, manual, and remote, £200. 07986 353546 (Bolton)

ARCAM A70 amplifier, hardly used, boxed, mint, £350. Chord Rumour 2 speaker cable, eight

metre pair, £39. Chord Crimson interconnects, boxed, £19. 01903 243806 (W. Sussex)

AUDIOLAB 8000C/ P amps (UK made), Audiolab 8000DAC, Russ Andrews/Campaign Audio Design mains cables, Chord Company interconnect and speaker cables, Marantz CD50SE and Aiwa ADF880 cassette deck. Offers. 07973 767212 (Birmingham).

B&W DM601 S3 speakers and Apollo stands. £100. 07917 058915 (Oxon).

B&W LCR60 S3 centre speaker in Sorrento, £150. Castle Compact Cube active subwoofer in maple, £200. M&K K7 surround speaker in black, £150. All excellent condition in box. 07891 783747 (Lancs).

CASTLE HARLECH S2 speakers, immaculate in maple, boxed. (£1,000) £550 01525 861014 (Worcs).

CHAPTER TWO PLUS power amp – world's best! (£5,500) £2,295. Boxed, manuals. Densen B100, integrated amp, £350. Densen B300 power amp, £550. Atlas Elektra interconnects. 07973 189538 (London)

CLASSIC HI-FI Meridian MCD player, A&R A60 amp, Mission 720 speakers with stands, all good condition. Pure Sub1 woofer brand new, offers 07766 586388 (norfolk)

CONSONANCE 2.2 Reference CD Player, RCA Valve and direct balance outputs. Cherry wood and chrome finish. Philips pro transport. Boxed, instructions. (£1,295) £675 01634 842874 (Kent).

CYRUS CD8X/ PSX-R, both units as new, few months old, quartz silver, remote, boxes etc.

CD8X, £595, PSX-R £295, together, £795. 01462 680262 (Herts).

DYNAUDIO CENTAUR 1.3 Mk2 speakers and Chord Rumour 2 speaker cable, 5 metres, £350. 07521 750445 (Birmingham).

DENON PMA-700AE

integrated amp, £120. Denon DCD-700AE CD player, £120. Both boxed, manuals (mint). Castle Richmond 3i standmount speakers, (£320) £150. Boxed, oak, excellent condition, will post. 01772 468116 (Lancs). **DALI IKON 6** loudspeakers, new and unused, £375. 01634

233137 after 7pm (Kent). **ELITE ROCK** turntable, c/w Excalibur arm and damping trough. Unused since Audio Origami rewire and bearing check. New belt. No cartridge. Excellent condition. Offers around £500. 01483 747881 (Surrey).

EXPOSURE 2010S integrated amp, four months old, five hours of use only, as new. £300. 01226 211234 (S Yorks).

EXPOSURE XVII preamp and XVIII mono amps, recently overhauled and updated by Exposure, £600. Bryston BP20 preamp with MM/MC phono,

£600. All boxed and in very good condition. 0151 334 1964 (Merseyside).

ICON STEREO 35 watts per channel. 300B power amp, used one week. Doesn't suit speakers, £900. 01803 523552 (Devon).

KEF IQ9 floorstanders, maple. boxed, unused, still under warranty, (£800) £480. 020 8529 6764 or 07920 124288 (London)

KEF Q7 floorstander speakers, black, mint, boxed, (£800) £250ono. Pioneer DV-668AV DVD/SACD player, all regions, vgc, boxed, (£550) £175, 01926 402824 or

pcs9@hotmail.co.uk (Warwick). **KRELL KAV400XI** Integrated amplifier, silver, UK model, box, manual, remote. (£2,800) £1,575. 01462 680262 (Herts).

KUDOS S50 loudspeaker stands, 24-inch-high singlecolumn design with triangular base plate, black finish, £40. 0161 432 3852 (Cheshire).

LINN LP12 Valhala, Nîrvana, Akito, Ortofon FL25. 48k serial number, serviced Nov 2006, £550 0797 204 8050 (Berks).

MANA SOUND BASES for Naim SBLs or similar size, £100 Musicworks six-way mains

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!

ISSUE 309 S AUGUST 2008 ON SALE 26 JUNE

In-depth reviews of the most vital new kit, including...

- Denon AH-D2000 headphone
- ▶ Fatman iTube 452 integrated amp
- **▶** Epos M16i loudspeaker
- Pro-Ject Genie 2 turntable
- Yamaha CDS-2000



Plus...

Our regular round-ups of accessories and music, not to mention the latest hi-fi news, views and features ... And much, much more!

BE SURE NOT TO MISS BRITAIN'S MOST RELIABLE GUIDE TO REAL HI-FI

ULTIMATE GROUP TEST >> TURNTABLES

The latest turntables are taken for a spin in our Ultimate Group Test, including...

- Clearaudio Emotion
- Funk Firm Funk Vector
- Mitchell Tecnodec
- Pro-Ject Xpack Xperience
- ▶ Rega P3-24
- Roksan Radius 5





NORDOST ECO 3



Give this form (or a photocopy) to your local newsagent to guarantee your own copy of Hi-Fi Choice reaches you every month

PLEASE RESERVE ME A COPY OF HI-FI CHOICE EVERY MONTH

......Postcode...... Contact telephone no

contact your magazine wholesaler to order Hi-Fi Choice

Future Publishing Ltd, 2 Balcombe Street, London NW1 6NW • 444 (0)20 7042 4000 Fax +44 (0)20 7042 4529

Editor Dan George, dgeorge@futurenet.co.uk Art Editor Conn Skeggs, cskeggs@futurenet.co.uk voduction Editor Richard Holliss, rholliss@futurenet co.uk Operations Editor Alan Sircom, hifisub@futurenet co.uk

CONTRIBUTORS
Richard Black, Alvin Gold, Stuart Hamison, Jimmy Hughes, Jason Kennedy, Paul Messenger, Dave Oliver, Mark Prendergast, Malcolm Steward, Phil Strongman, Dominic Todd, Nigel Williamson

Photography Adnan Lyon oup Senior Editor Nick Memitt Group Art Editor Ian Miller Creative Director Robin Abbott Design Director Matthew Williams

Ad Director Matthew Tasker,

020 7042 4253 abrown@futurenet.c Account Manager Brad Francis 020 7042 4255 brad francis@futurenet.co.uk

Classified Sales Executive Ben Keightley 020 7042 4262 bkeightley@futurenet.co.uk

Inserts and Direct Marketing Manager Nick Weatherall London Sales Director Malcolm Stoodley mstoodley@futurenet.co.uk

Marketing Manager Libby Latter, llatter@futurenet.co.uk Brand Marketing Director Matt Woods, mwoods@futurenet.co.uk

Circulation Manager John Beeson, jbeeson@futurenet.co.uk Circulation & Trade Marketing Director Rachael Cock,

oduction Manager Ralph Stringer, rstringer@futurenet.co.uk uction Coordinator Roberta Sanders, rsanders@futurenet.co.uk Senior Ad Production Coordinator Cemma O'Riordan Head of Production Richard Mason, rmason@futurenet.co.uk

LICENSING

Head of International Licensing Tim Hudson +44(0)1225 442244 t hudson@futurenet.co.uk

FUTURE PUBLISHING LIMITED

Publisher Andy Ford, andy ford@futurer Chief Operating Officer Simon Wear Chief Executive Robert Price

SUBSCRIPTIONS

Subscripe online at www.myfavouritemagazines.co.uk

rest of the world £7.95 per issue

Distributed in the UK by Seymour Distribution Ltd, 2 East Poultry Avenue, London EC1A 9PT Tel: 020 7429 4000

(symbol:FLITR) (a) www.futureoir.com

Chief Executive Stevie Spring Non-executive Chairman Roger Parry Group Finance Director John Bowman







FOR SALE

megablock and 3 IEC equipment leads, 1.5m each, £200. All boxed. 01722 334694 (Wilts). **MARANTZ CD80** disc player (new laser). Linx Nebula amp. Aiwa ADF810 tape deck and Wharfedale speakers and stands, £500ono. 02476 849270

MARANTZ DV6001 upscaling DVD player 1080p, boxed, unopened, (£350) £250. 01323 461432 (East Sussex).

(Coventry).

MARANTZ SIGNATURE CD player CD17, PM17 amp, ST17 tuner, Tannoy R3 speakers, five-tier Sound Organisation stand, van de Hul interconnects, Quad Profile speaker wire, £1,000. evening only 07872 334814 (W. Yorkshire)

MERIDIAN 507 CD player in mint condition, MSR remote, original packaging. £600 delivered or £570 local pick-up +33 607 270 871, jonathan. kenyon@free.fr (France).

McINTOSH MCD201 CD/ SACD player, excellent condition with manufacturer's warranty, £2,400. Shunyata Hydra-2, £240. Shunyata power cables, £120 each. 07810 434589 (Glasgow).

MERIDIAN DIGITAL THEATRE comprising 506, 565, 562, DSP5000 (24/96), 5000C, D1500 (sub), Cyrus rear amp, Mission rear speakers. All excellent condition, all books, some boxes. (£13,000), £5,500. 07771 508444 day, 01205 722000 eves/weekend (Lincs).

MICHELL ORBE SE (DC version), Origin Live Encounter

MkII. Ortofon Rohman cartridge. All mint, boxed, £2,400. Buyer collects. 01384 394441 (W. Mids).

MUSICAL FIDELITY A3 CD player, £300. Plus CD Enhancer, £150. 011438 221477 (Herts)

MUSICAL FIDELITY KWDM25

CD player, mint, £2,500ono. Cyrus DAC XP, £1,200ono. 01744 782173 (Merseyside).

MUSICAL FIDELITY NU-VISTA

3D CD player, mint condition, boxed with manuals, £1,500. 01303 863424 (Kent).

MUSICAL FIDELITY NU-VISTA

M3 Super Integrated Amplifier. Original valves, certificate of authenticity, manual and boxes. Can demonstrate, £1,450 plus postage. 0790 607 1024 (Cardiff)

MYRYAD MP100 preamp and MA240 poweramps (x3). All boxed and mint condition. Preamp £250, power amps £450 each or near offers. Will split. 07736 280018 (N Yorks).

NORDOST BLUE HEAVEN interconnect for sale, £60.

01454 427426 (W. Yorks)

NORDOST SPM REFERENCE

interconnects, XLR, boxed and unused, £450. Linn Karin preamp, remote, mint, £375. KEF Kube 200 mint, instructions etc, £75. 003531 2954076 (Dublin)

PMC FB1+ speakers, superb sound. Natural Ash finish. Mint condition and original packaging, £750. 029 2031 6934 (Cardiff),

PURE SOUND A30 valve amplifier, as new, boxed, (£1,195) £760. Weight 20kg, so buyer collects. 01491 614325 (Oxon).

PRIMARE 30.1 amplifier, excellent cond. boxed with instructions, £450. KEF 104/2 Reference Loudspeakers with Kube and instructions, £100. 01255 675115 (Fssex)

QUAD ESL 63 electrostatic loudspeakers for sale, tub radiators gone in each, £200 for pair, buyer collects. 01634 631322 (Devon).

REGA APOLLO CD player, silver, mint condition, £375ono. ATC SCM10 excellent mini-monitor loudspeakers, walnut, vgc, £225. Both products well reviewed. 01480 860075 (Cambs)

ROGERS LS3/ 5A loudspeakers with matching stereo AB1 subwoofer/stands (£1,200), £600. Vintage AKG C12A nuvistor microphone, variable polar diagram, perfect working order, offers. 0131 551 6123 (Edinburgh).

ROKSAN KANDY MKIII silver, £350. B&W 804S, new in box, still under warranty, £1,900ono. Marantz CD-63 KI Sig, £250. Marantz CD-17 KI Sig, silver, latest spec, £400. 0208 684 1274 (Surrey).

ROTEL RCD-06 CD player. Latest model, boxed, (£350) £150. lee-t@lycos.co.uk 01384 412234 (W. Mids)

RUARK SABRE III speakers. Rich walnut veneer, £900 new in 2006. *HFC* Best Buy. Lively and detailed, can demonstrate. Mint and boxed, £500. 01970 615386 (Wales)

SOUNDCARE captive spikes. Suit floorstanders. Fantastic upgrade, all the benefits of spikes without the damage! Ideal for wooden floors/carpets. (£70), £40. 01235 762171(0xon)

SPENDOR BC1 speakers, teak with matching trolleys. Tops need repolishing and one grille slightly damaged at edge. Only £100 the pair. Buyer collects. 01892 528699 (Kent).

SPENDOR BC1 (1978) with Spendor stands (2006) Faulty bass unit in one speaker. As replacement unobtainable, they are offered for spares. Buyer collects, offers. 01234 712988 (Beds).

TOTEM ARRO floorstanders. Totem Dreamcatcher centre, Totem Lynx dipole rears, all maple, boxed, mint (£2,400), £1,450. 07891 533084 (W. Glams)

USHER BE 7185 four months old, piano black, pristine condition, awesome sound and build quality, (£1,600) £1,275. 01822 860174, 07771 701082 or email brockhillpayne@aol.com (Devon).

VAN DEN HUL CS122 speaker cable with Airloc banana plug connectors both ends, 2x8m lengths, (£10/m) £75. Spare Quad 99 remote control, £25. Spare Primare CDI10 remote control, £25. 023 8073 8935 (Hants).

WANTED Cambridge P40 amp (black) 1987, Dual System 2 (Separates from 1982), Marantz HD445 speakers. 01554 752275, between 12-1 pm (Dyfed).

wanted Chord Odyssey 2 speaker cable, single-wired, 2x3m with silicon outer jacket. Also wanted Chord Chameleon Silver Pluse interconnects, RCA, 1m. Finally, PMC DB1 speaker wall brackets wanted. 01234 302769 (Beds).

wanted Top quality hi-fi seperates and complete systems, Naim, Linn, Cyrus, Meridian, Arcam etc. Fast, friendly response and willing to travel/pay cash. 0781 589 2458 (Essex).

YAMAHA RXV630 RDS A/V amp, excellent, boxed, £100. 01323 461432 (East Sussex).

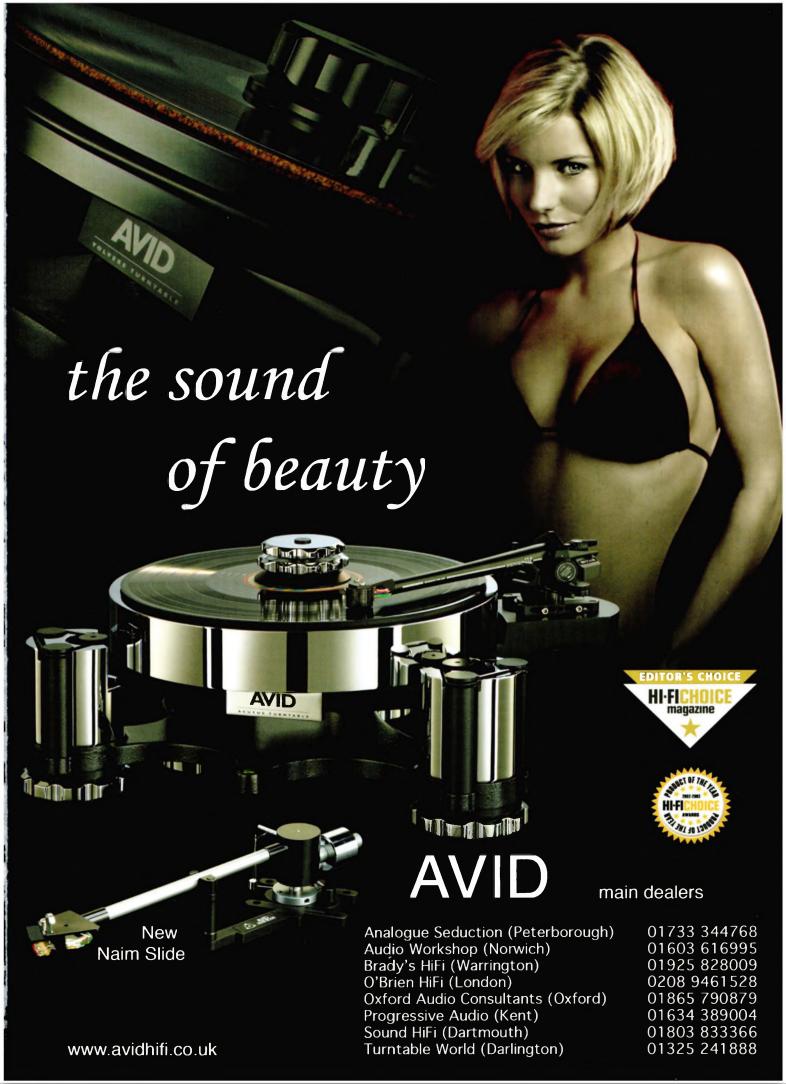
HOW TO SUBMIT YOUR FREE ADVERTISEMENT

To submit your advert to us, please email hificlassifieds@futurenet.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 telephone number and home county. We regret that we cannot take adverts over the phone.

NameAddress	Advertisement
Daytime telephone	

PLEASE SEND YOUR ADVERTISEMENT TO:

Reader Classified, Hi-Fi Choice, Future Publishing, 2 Balcombe Street, London NW1 6NW.





We're not trying to give the most. We're trying to lose the least. That was John Bowers' philosophy 40 years ago, and it lives on in our new 600 Series. Speakers that neither add to, nor take away from, the original sound. That requires world-class science – and extremely experienced ears. Because once we've selected exactly the right components, we begin the long, careful process of tuning. Listening and refining, over and over. Until the frequencies combine to conjure a sound so true, so alive, you want to reach out and touch it. *Dr John Dibb, Senior Development Engineer and Fellow of the Society of Sound, on the new 600 Series*.

Visit the Society of Sound at www.bowers-wilkins.com

B&W Bowers & Wilkins

Listen and you'll see