

HI-FI CHOICE

THE FINEST HI-FI MAGAZINE IN THE WORLD | www.hifichoice.co.uk | october 2002



LITTLE BEAUTIES

GROUP TEST Serious standmount speakers



WORLD'S BEST PREAMP

Naim's brilliant NAC 552 rated



COPY CATS

CD, MD and hard disc recorders

PLUS! Digital Audio Recording - all you need to know



EXCLUSIVE!

DIGITAL DEMON

DVD-Audio SACD/CD DVD-Video

Do-it-all Marantz is a sonic superstar



BUYER'S BIBLE

THE ULTIMATE GUIDE TO HIGH PERFORMANCE HI-FI AND AV

OCTOBER 2002 £3.50

11

future (passion)

Media with passion

9 770955 111045

marantz®



Experience the emotion - Total Eclipse!

The new Marantz Eclipse range is a stylish and versatile hi-fi system encompassing elegant, refined design and up-to-the-minute technology. The latest musical innovations, such as MP3 playback and rewritable CD, can be mixed and matched to form a sleek yet dynamic sound system. Proof indeed that you really can have beauty and intelligence.

Eclipse - get a glimpse at your local Marantz dealer.



Tel. 01753 680868 Internet: www.marantz.com

HI-FI CHOICE

OCTOBER 2002 ISSUE 233

Future Publishing Ltd, 99 Baker Street, London W1U 6PP
Tel: +44 020 7317 2600 Fax: +44 020 7317 2686

EDITORIAL

Tim Bownen **editor** tim.bownen@futurenet.co.uk
Dan George **reviews editor** dan.george@futurenet.co.uk
Del Gentleman **art editor** del.gentleman@futurenet.co.uk

CONTRIBUTORS

Richard Black, Faz Choudhury, Alvin Gold, Jason Kennedy, Paul Messenger, Paul Miller, Russell Moorcroft, Dave Oliver, Alan Sircom, David Vivian

PHOTOGRAPHY

Chris Foster

ADVERTISING

Debbie Maclaren **senior advertising manager**
020 7317 0246 debbie.maclaren@futurenet.co.uk
Emma Lewis **key accounts manager**
020 7317 0202 emma.lewis@futurenet.co.uk
Richard Bennett **senior sales exec**
020 7317 4268 richard.bennett@futurenet.co.uk
Matt Dalton **senior sales exec**
020 7317 2622 matt.dalton@futurenet.co.uk
Richard Dappiano **sales exec**
020 7317 0278 richard.dappiano@futurenet.co.uk
Tom Denning **sales exec**
020 7317 2683 tom.denning@futurenet.co.uk
Ben Shoesmith **classified sales exec**
020 7317 4629 ben.shoesmith@futurenet.co.uk

HFC ONLINE

www.hifichoice.co.uk
Lucy Price-Lewis **online editor**
lucy.price-lewis@futurenet.co.uk
Mark Phillips **online advertising manager**
020 7317 0230 mark.phillips@futurenet.co.uk

SUBSCRIPTIONS

+44 0870 444 8650 www.futurenet.com/subscribe/89
Prices (13 issues): UK £29.97, Europe £43,
North America £49.99, rest of the world £62

BACK ISSUES

+44 01458 271147 entertainment.subs@futurenet.co.uk
Prices: UK £4 per issue, Overseas £6.95 per issue

LICENSING

Simon Wear **licensing manager**
simon.wear@futurenet.co.uk

PUBLISHING

Andy Sutcliffe **group publisher**
Rob Price **publishing director**
Colin Morrison **chief operating officer
and managing director, UK**
John Bowman **group finance director**
Philippa Montgomery **marketing manager**
Paul Kurzeja **group art director**

PRODUCTION & DISTRIBUTION

Matt Gregory **production manager**
Craig Broadbridge **senior production controller**
Rob Brock **circulation manager**

All contents © Future Publishing Ltd 2002. No part of this publication may be reproduced in any form without the express permission of the publisher. While we make every effort to ensure that everything we print in *Hi-Fi Choice* is factually correct, we cannot be held responsible if factual errors occur. Advertisements are accepted by us in good faith as correct at the time of going to press.



Future Publishing is part of The Future Network plc. The Future Network produces carefully targeted specialist magazines and websites for groups of people who share a passion. We aim to satisfy their passion by creating titles that offer superb value for money, trustworthy information, multiple ways to save time and money, and are a pleasure to read or visit. Today we publish more than 80 magazines and over 30 magazine websites and networks from offices in five countries. The company also licenses 32 of its titles resulting in over 150 local editions in 23 other countries. The Future Network plc is a public company quoted on the London Stock Exchange (symbol: FNET)
Tel: +44 1225 442244 www.thefuturenetworkplc.uk
Bath | London | Milan | New York | Paris | San Francisco | Wrocław

CONTRIBUTORS

To make sure you get the best advice, *Hi-Fi Choice* employs the most talented and experienced writers in the business.



JASON KENNEDY

Jason previously edited *Hi-Fi Choice*, but can now be found swanning about the wilds of Sussex indulging himself with the very best hi-fi money can buy. His own system is simply sensational (trust us) and his love of music knows no bounds.



PAUL MESSENGER

A former editor of *Hi-Fi Choice*, Paul has been writing about his beloved hi-fi hobby for some 26 years. In that time he has become one of the world's most respected sonic scribes and probably the UK's foremost loudspeaker reviewer. He also writes for respected US hi-fi journal *Stereophile*.



PAUL MILLER

Science Officer Miller is hi-fi's undisputed king of lab testing. He employs his own specially designed equipment to pull apart every measurable parameter and explain its effect on a product's performance.



ALVIN GOLD

Alvin cut his hi-fi teeth in the retail trade, and has now been writing about his obsession for more than 20 years. In that time he has contributed to almost every hi-fi periodical you can think of (and several more besides). Few can match his encyclopedic knowledge of all things audio.



RICHARD BLACK

Richard is one talented guy: a professional musician, experienced recording engineer and a highly knowledgeable hi-fi enthusiast to boot. He's particularly nerdy about cables. It's probably Freudian.

Summer in the city. Great for barbecues, not so hot if your music tastes stretch beyond Balearic bilge for the Ibifa crowd. It's mid-August at the time of writing, a heat wave has hit and inspirational new music releases are thin on the ground. It's just as well there's plenty of sizzling hot hi-fi hitting the streets to keep audio acolytes like us glued to our speakers.

A perfect example: Marantz's DV8300, a universal disc player given its first and definitive review this very issue. It plays SACD and DVD-Audio, and is only the second such player to emerge (following Pioneer's DV-747A and Max Townshend's modified version of the same, reviewed last month). The jury's still out on which – if either – high-resolution multichannel format is the future for recorded music, so a player like this is the perfect way to hedge your bets. Especially as it sounds so juicy, with CD and DVD-Video to boot.

If, like me, you're struggling to find much new music to make you salivate, you could pass the time by making compilations from your existing collection – a real art form, as any music zealot will confirm. Our digital recorders group test and subsequent features will help, especially if you're unsure of which recording format is right for you. Turn to page 44 – we trust you'll be enlightened.



Tim Bownen **editor**

Star products in this issue



50 **PHILIPS CDR802**
Feature-packed CD recorder



73 **INFINITY INTERMEZZO 2.6**
Hi-tech standmount speakers



40 **NAIM NAC 552**
Preamp *par excellence*



34 **MARANTZ DV8300**
Universal disc player

HI-FI CHOICE**40****DENSEN BEAT B-400XS CD PLAYER****06 SYSTEM ADDICT**

Heatherdale Audio of Worthing hitches its colours to the Mark Levinson mast.

08 AUDIO FILE

Our experts scour the world for the latest, breaking news stories from hi-fi's front line.

14 INCOMING

The hottest new products including Cambridge Audio's bargain £120 A5i integrated amp and KEF's stylish Q5 stereo speakers.

18 INSTANT UPGRADES

Cables, wires, dampers and polishers for the curious tweeker.

21 CHOICE CUTSWhat the *Hi-Fi Choice* writers have been treating their ears to this month.**22 INDUSTRY PROFILE**

The 'Naim sound' laid bare.

26 STATEMENTS: NAIM NAC 552 PREAMPLIFIER

Probably the best solid-state preamp in the world.

28 STATEMENTS: MARANTZ DV8300 UNIVERSAL DISC PLAYER

Do-it-all DVD-Audio/SACD spinner.

32 STATEMENTS: MUSICAL FIDELITY A308^{CR} CD PLAYER

MF's new choke-regulated CD machine.

34 STATEMENTS: AUDIO RESEARCH VS110 AMPLIFIER

Valve-driven powerhouse.

38 STATEMENTS: DENON DVD-3800 DVD-A/ V PLAYER

Low-cost, high-spec movie 'n' music machine.

40 STATEMENTS: DENSEN BEAT B-400XS CD PLAYER

The search for the 17th bit.

44 GROUP TEST: DIGITAL AUDIO RECORDERS

CD, MiniDisc and hard disc copiers.

56 ROUND-UP: BLANK CDS

They might look the same, but there's a world of difference in them thar pits.

59 FEATURE: COPY PROTECTION

How the record companies plan to make you pay.

60 FEATURE: DVD RECORDING

They may be the future of video recording, but will DVD recorders tackle your music too?

14**INCOMING**

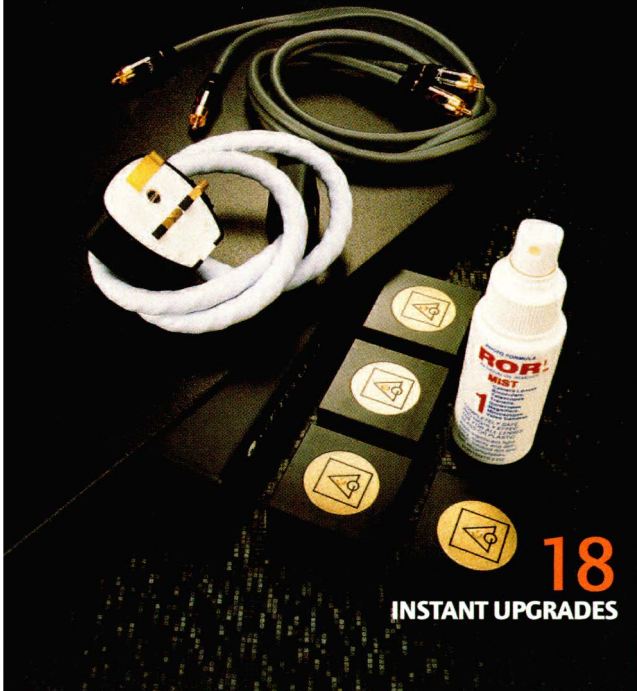
KEF Q5 floorstanding speakers and REL Quake active subwoofer

32**MUSICAL FIDELITY A308^{CR} CD PLAYER****8****PRODUCT NEWS**

Including JBL's K2 S9800 loudspeakers

22**INDUSTRY PROFILE: NAIM AUDIO**

COVER HIGHLIGHTS



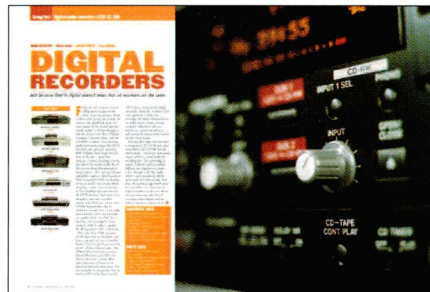
18
INSTANT UPGRADES

- 63 **HOW TO SUBSCRIBE**
Save time and money by getting the best UK hi-fi magazine delivered to your door.
- 64 **GROUP TEST: STANDMOUNT SPEAKERS**
Serious standmounts £800-£1,700.
- 75 **BUYER'S BIBLE**
Our revamped directory is now the only guide you need to the very best in hi-fi.
- 109 **GLOSSARY**
What does it all mean?
- 121 **BACK ISSUES**
Missed an issue? Here's how to get hold of a past review or order a reprint.
- 122 **OUTRO**
David Vivian discovers that the hi-fi lunatics could be right.

28 STATEMENTS: MARANTZ DV8300 NEW UNIVERSAL DISC PLAYER



44 TEST: DIGITAL RECORDERS CD-R, MINIDISC AND HARD DISC SOLUTIONS



56 ROUND-UP: BLANK CDS CD-R/RW DISCS RATED



26 STATEMENTS: NAIM NAC 552 SENSATIONAL STEREO PREAMP



STAR RATINGS

- ★★★★★ EXCEPTIONAL
- ★★★★ VERY GOOD
- ★★★ AVERAGE
- ★★ SOMETHING LACKING
- ★ RUBBISH

AWARD BADGES



Best Buy

The *Hi-Fi Choice* Best Buy badge is only awarded to products found to offer exceptional performance and value for money in an *HFC Group Test*. Buy this kit with absolute confidence.



Recommended

Awarded to outstanding products in our *Group Tests* that may not offer such exceptional value-for-money as a Best Buy, or may not be suitable for everyone, but still turn in a convincing performance.



Editor's Choice

Products in the *Statements* section that really blow us away are eligible for a special *HFC* Award badge. The coveted Editor's Choice recommendation is reserved for high-end products of exceptional quality.

For 27 years, our unique tests have brought you the most accurate guide to buying hi-fi. Our mix of thorough *Group Tests* and in-depth solo reviews ensures *HFC* is the magazine to trust.



64 GROUP TEST: SERIOUS STANDMOUNTS



THE COMPONENTS



**Mark Levinson No.390S
£6,495**
Extremely well made 24-bit CD player with a strong sense of authority and control over all parameters of disc replay. Balanced inputs and PHAST data links mean the player connects to the outside world with equal authority.



**Mark Levinson No.383
£5,995**
Mark Levinson's first integrated is essentially a pre and power amplifier in one big box. It bristles with single-ended and balanced connections and the PHAST data link, making this an ideal integrated amp for multiroom and stereo settings.



Revel F50 £6,495
Tall, elegant floorstanding loudspeaker, designed for inclusion in both stereo and multichannel systems (all five drive units in each cabinet are fully shielded). Efficient and capable of reaching down to earth-shaking bass levels, the tapered cabinet stands over a metre tall and weighs a hefty 45kg.

MARK LEVINSON NO.390S | NO.383 | REVEL F50 | £18,985

SYSTEM ADDICT

In hi-fi, clarity is a good thing, but is this system too good for your CDs?

A CD player, integrated amp and pair of speakers – a classic hi-fi configuration found in systems from £300 to £30,000. So, why bother with separate DACs or power amps? The Mark Levinson No.390S CD Processor, allied to a No.383 integrated amp and a pair of Revel F50 floorstanding speakers costs a smooth £18,985, but will challenge any similarly priced bunch of boxes.

The No.390S is derived from Levinson's first integrated CD player, the popular No.39. It incorporates a raft of temperature-controlled components designed to eliminate jitter and improve clock accuracy. Like many new upmarket CD players, the 390S also includes balanced and single-ended connections, HDCD decoding and sports 24-bit DACs and an upsampled digital signal.

The No.383 integrated amp is a first for ML. The 100 watt line-level amp was designed as a separate pre/power system, intended to be integrated in the same case using large power supplies. It has five analogue inputs (three single-ended, two balanced) and features a high quality stepped attenuator volume control, which is supposed to be more accurate, particularly at lower listening levels. Both CD and amplifier have a PHAST (Practical Home Automation Systems Technology) data link that means the two share information such as display and control data. PHAST also makes the pair of components smoothly integrate into a high-end multiroom system.


The F50 loudspeaker is the flagship of Revel's Performa range. It's quite a beast, with 25mm titanium dome tweeter, 133mm ceramic composite midrange cone and a trio of 165mm ceramic composite bass cones, with a large rear port. This makes for a reasonable load (quoted at 88dB sensitivity and nominal five ohm impedance) and has a claimed in-room response from 31Hz to 20kHz.

Normally, the limitations of musical reproduction in the home are properties of the hi-fi system. The kit can sound too bassy, too bright, too flat, too anything. Ten seconds of listening to the Levinson/Revel system and it's clear that any limitations are properties of the discs, not the gear. You begin to learn a new vocabulary of sonic criticism; a language of microphone techniques, compression applied to vocals and the performance of a mixing desk (or the chimp driving it).

This is at once awesome and thoroughly depressing. Awesome because you hear absolutely everything on your disc; depressing because you quickly realise what's on the disc isn't as fantastic as you once believed; hi-fi as a reality check. It is surprising how many discs (from all musical genres) rely upon the typical characteristics of a hi-fi system to

help improve the sound.

Play a well-recorded track and the sound fills the room with music, with excellent dynamics, perfect imagery and stunning articulation. There are other surprises, such as the huge bass power of Spacemonkeyz vs Gorillaz, which is stunning and almost causes involuntary bowel evacuation as the sub bass kicks in. Others, however, fare less well. It's too easy to determine the compression on Robert Plant's voice with the Led Zep BBC sessions and Eminem's latest sounds extremely shut in.

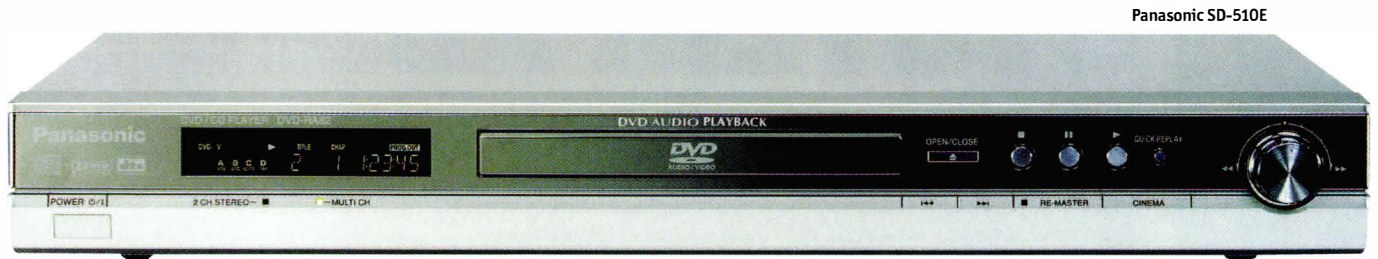
More than most hi-fi, this system gets close to having no intrinsic sound of its own. That makes for an extremely cerebral performance, with technically precise sounds rising out of a black silence. It can stir the blood, too, but only if the blood-stirring component is on the CD you are playing. 



"More than most hi-fi, this system gets close to having no intrinsic sound of its own."

CONTACTS

This system was recommended by Heatherdale Audio, 202 Findon Road, Worthing, West Sussex, BN14 0EJ
 ☎ 01903 872288
 🌐 www.hifi-stereo.com



PRICE BREAKTHROUGH DVD-A

PANASONIC'S £250 DVD-AUDIO/VIDEO PLAYER IS A STEAL

▶ High resolution multichannel DVD-Audio can now be enjoyed for as little as £250 thanks to Panasonic's new DVD-RA82. The new player breaks the price barrier for the format previously set by Toshiba's excellent £320 SD-510E and paves the way for more competitively priced hi-res multichannel players. The RA82 boasts an audio-only mode

to isolate the audio circuitry from the video boards and a technology called Virtual Battery Operation is employed to banish mains-borne noise. CD playback is said to be enhanced by the player's Re-Master processing that uses DSP technology to create a "natural sounding high frequency harmonic structure from the original CD audio signal".

On the video side, double-speed ten-bit digital DACs run at 54MHz to maximise detail and a host of video outputs include S-video, composite and RGB Scart. It's also one of the first DVD players to play back the DVD-RAM recordable DVD format.
 ☎ Panasonic UK 08705 357 357
 🌐 www.panasonic.co.uk

DAB'S ENTERTAINMENT

NEW SUPER-BUDGET DAB TUNER

▶ DAB tuners continue to approach mainstream price levels with the release of little known budget brand Acoustic Solutions' full-width DAB tuner. The £130 SP110 is currently the most affordable full size unit on the market, though other similarly priced models are due shortly from other sources.

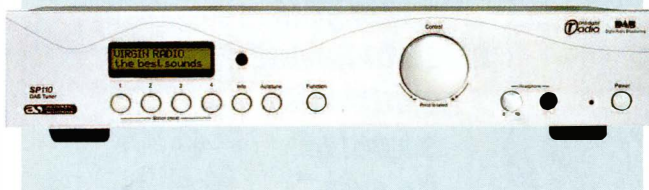
The SP110 will at first be sold through Argos and Richer Sounds stores nationwide and boasts auto scan, four station presets and a rotary dial to manually select stations. An LCD display offers station text and data display and the unit also

boasts a headphone output as well as digital optical and analogue outputs.

Acoustic Solutions is also launching a matching CD player, the SP120, and an amp called the SP100, both of which will retail for around £100.

The SP110 follows hot on the heels of the £100 portable-style Pure Evoke-1 (see page 15). Sources at PURE claim that the first batch of several hundred tuners released into shops on 31 July sold out that day.

☎ Acoustic Solutions 01327 340601
 🌐 www.acousticsolutions.co.uk

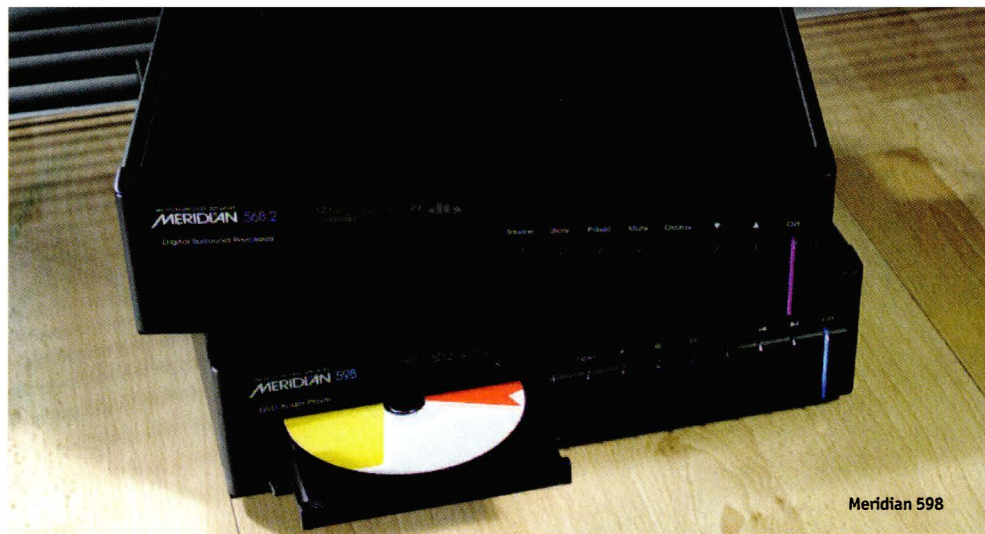


JBL PEAKS

JBL LAUNCHES FLAGSHIP SPEAKER IN UK

▶ A "mountain" of a speaker has been launched by JBL, the K2 S9800. Described as "ultra high-end", this beastly 50x129x38cm model has a skyward price tag of £20,000 per pair and is a truly wide bandwidth design. It boasts a 75mm super-tweeter that extends above 50kHz, a 25mm bi-radial horn unit and a massive 380mm (15") bass driver capable of extending down to 35Hz – enough to win it a coveted Golden Ear award in Japan. Each speaker weighs in at 92Kg and packs an efficiency of 94dB. It's a design claimed to be without compromise, but does it live up to JBL's confident assertions? Find out when we test the K2 S9800 soon.

☎ Harman Consumer UK 020 8731 4670 🌐 www.harmanuk.com



Meridian 598

Soundbites

PHILIPS has launched two sub-£200 DVD-Video players. The £150 DVD623 is DVD+R/RW compatible and has dual lasers to optimise playback across a range of formats. The player also offers RGB on Scart, 4x digital zoom and a one-touch picture optimisation function. The £180 DVD723 boasts further features including MP3 compatibility and upsampling video circuitry for a more stable image.
☎ 0870 900 9070



DENON has a new style system in the shops priced at just **£350**. The base **D-F101** system comprises **CD** and receiver and is expandable with a range of components including a MiniDisc recorder, cassette deck and also the **SC-M101** loudspeakers made from a Denon/Mission collaboration. The speakers are priced at **£100** taking the basic package to **£450**. Styled for contemporary appeal, the little Denon has an alloy finish with speakers dressed in a beech veneer.
☎ 01234 741 200

TDK MEDIACTIVE is to expand its collection of music DVDs across a variety of genres. New pop and rock titles will join the classical and dance-oriented DVD-Video discs already available.
☎ 01737 773773

ERRATUM: In last month's review of the Arcam A65 Plus we reported that it had an optional phono stage. The amp actually has a built-in MM phono stage included in the price of **£370**.

WINNERS! We are pleased to announce the winners of the Cyrus design a speaker competition featured in *HFC* 230. The top three are: 1. Jason Damon from Osterley, 2. Henk Vos from Glasgow, 3. R Heyward from Letchworth. The designers of the top 12 speakers will be invited to visit the Cyrus factory.

KEY FEATURES

- ⊕ Integrated software-based movie format decoding
- ⊕ Encrypted digital audio output via MHR Smart Link (optional)
- ⊕ Composite, S and Component/RGB video outputs
- ⊕ Optional DCDi progressive video
- ⊕ High-quality six-channel analogue version with 192kHz/24-bit DACs
- ⊕ Software updateable

MERIDIAN LINE

MERIDIAN LAUNCHES NEW DVD-AUDIO/VIDEO PLAYER

⊕ Digital expert Meridian brings its take on high-end multichannel audio to a wider audience this month with the realistically priced (from £2,875) 598 DVD-Audio/Video player. The new machine follows in the footsteps of the brand's £10,800 flagship 800 V3 player, with the ability to distribute up to eight channels of audio at 24-bit/96kHz resolution.

Six different audio and video configurations are available according to the user's needs. Meridian's pioneering MHR Smart Link is an

option for those with complete Meridian systems – a connection that allows the transfer of high bandwidth multichannel audio in the digital domain, direct to a processor or Meridian's DSP loudspeakers. Alternatively you can choose for conventional six-channel analogue audio outputs, and on the video side you can add Progressive Scan if you own a compatible monitor or display. Expect a comprehensive *HFC* review soon.

☎ Meridian Audio 01480 445678
🌐 www.meridian-audio.com

BURN WITH SONY

SONY'S FIRST CD-R/RW RECORDER

⊕ Sony Europe has unveiled its first home CD-R/RW recorder, the £300 twin-deck RCD-W3, despite apparent conflicts of interest with MiniDisc and Sony Music. As with other Sony recordable devices, the new deck employs the Serial Copyright Management system (SCMS) to prevent mass distribution of illegal music – most other CD-R decks also comply with this system.

It features 4x high-speed recording, which Sony claims makes it the fastest recorder in Europe – a 74 minute disc can be ripped in under 20 minutes.

☎ Sony 08705 111999
🌐 www.sony-europe.com



KEY FEATURES

- ⊕ 45W x 5 into 4/8 ohms / 60W x 2 in stereo mode
- ⊕ Dolby Digital, DTS, ProLogic II, decoding
- ⊕ Enhanced surround modes
- ⊕ Plays DVD-Video, CD, CD-R, CD-RW, VCD
- ⊕ 2 digital inputs: 1 coaxial, 1 optical
- ⊕ 2 S-video inputs and 1 S-video output
- ⊕ PAL/NTSC compatible
- ⊕ RDS tuner with 30 presets for AM and FM component video output
- ⊕ SCART with RGB and composite video output HTR-2 learning system remote with illuminated keys

NADS ALL ROUND

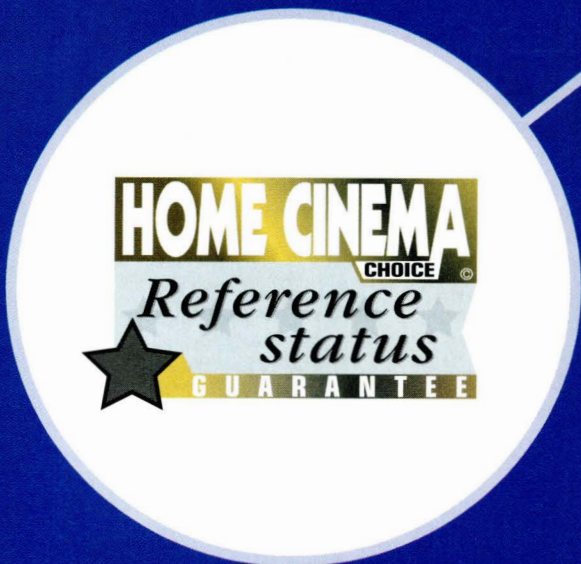
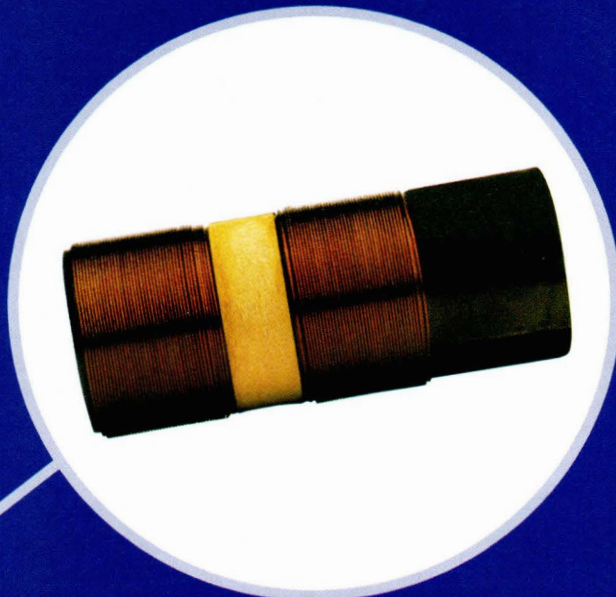
SMALL NAD DVD RECEIVER

⊕ NAD claims its new L70 DVD receiver delivers the performance of its full-sized separates in a compact, one-box solution. Following the trend for more aesthetically pleasing home cinema, the new L70 combines a DVD player and 5.1 channel receiver in one titanium-finished package.

Priced at £700, the combo is compatible with a wide range of disc formats including CD-R/RW and VCD along with DVD-Video and plain CD, and boasts on-board decoding for Dolby Digital, DTS and ProLogic II formats. "Audiophile quality" Crystal A-to-D and D-to-A converters are used, with 24-bit/96kHz capability (note: this doesn't mean DVD-Audio playback). The L70 should hit the shops by November.

☎ Lenbrook UK 01908 319360
🌐 www.nadelectronics.com

It's the
innovation
of this >



< That leads
to this

Veritas[®] premium series

Premium Products for Premium Dealers

The new Veritas series represents the pinnacle of Energy's continuing research and innovation programme, firmly established for over twenty years.

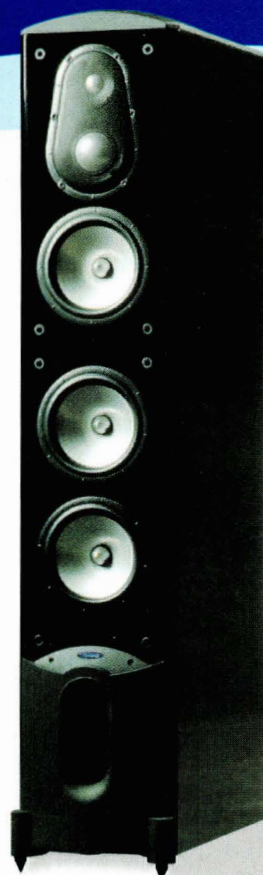
The Dual Voice Coil is at the heart of every Veritas system, a brilliant



innovation that significantly reduces bass distortion by up to 66%!

Combined with complementary design advances, the result is a clarity of reproduction that has established Veritas[®] as a class leader, the latest accolade follows many others.

Class-leading product requires class-leading dealers - that is our aim.



Soundbites

IF is a new Yorkshire based hi-fi furniture company featuring a full range of top and base plates along with a choice of column heights for modular assembly. Bigger plates can be bought later to accommodate larger equipment.
☎ 0870 744 1382

THIEVES broke into high-end London retailer KJ West One and stole £250,000 of kit. Many of the items were new and boxed and include distinctive brands such as Krell, McIntosh and Sonus Faber. If you're offered similar equipment at suspiciously generous prices contact Marylebone Police on 020 7321 9322, crime ref: 6312681/02.

BLACK RHODIUM, formerly known as Sonic Link, has a new speaker cable in the shops called the AST100x3. Priced at £7.50 per metre, the new cable consists of six individually insulated cores made with tinned high-purity copper conductors and low-loss silicone rubber insulation.
☎ 01332 361390

READER CLASSIFIEDS ARE BACK!

Due to popular demand we will be reinstating the Classifieds section in *Hi-Fi Choice* from next issue. Not only that, but all ads will be FREE! If you have any hi-fi kit to sell, submit your advert of up to twenty words remembering to include your name and phone number. Where possible, please email ads to: dan.george@futurenet.co.uk Alternatively, mail to: Reader Classifieds, Hi-Fi Choice, 99 Baker Street, London, W1U 6FP.

Hi-Fi diary

- SEPTEMBER**
13-15 The Hi-Fi Show and AV Expo
London, 020 8774 0847
- OCTOBER**
3-6 Stuff Live 2002, London
020 8307 2300
12-13 The Practical Hi-Fi Show
Manchester, 01524 36991
19-21 The VAD Hi-Fi Show
Netherlands a.neve@planet.nl
- NOVEMBER**
9-10 Dublin Hi-Fi & Home
Cinema show
Dublin, 00 353 1 288 9449
- JANUARY 2003**
9-12 CES, Las Vegas, USA
001 703 907 7041



Musical Fidelity Tri-Vista 300

TRI ME

MUSICAL FIDELITY'S NEW TRIVISTOR INTEGRATED

The long awaited Tri-Vista series has just been launched to celebrate Musical Fidelity's 20th anniversary. The first product in the range is a new two-channel amp, the Tri-Vista 300 'super integrated' amplifier. According to its maker, it's the first integrated amp in the world to use trivistor tubes – a super-tough tube designed for military use with characteristically long life, and a high technical performance. Designed to have "no sonic fingerprint", huge power and low

distortion, the Tri-Vista 300's dual-mono internals have dedicated PCBs, choke regulators and mains transformers for each channel. With a claimed output of over 340 watts per channel, the amplifier is said to drive any load without difficulty and no clipping. Musical Fidelity claims it's one of the best amps ever – if you fancy a go you'll need a spare £4,000.

☎ Musical Fidelity 020 8900 2999
www.musical-fidelity.co.uk

MADE TO MEASURE

NEW HIGH-END AMPS FROM ECS

Bespoke London-based company ECS has launched two new hand-assembled high-end amplifiers. The new EA Series comprises two designs aimed at both the stereo and multichannel markets. The stereo EA-2 is a two-channel 180 watt amplifier priced at

£4,000 featuring balanced XLR inputs and a hand-made audiophile-grade mains cable. A monoblock design, the EA-1 offers 200 watts of power with a price tag of £6,000 for a stereo pair. Both amplifiers come complete with a three year warranty.
☎ ECS 020 8932 7995



ECS's EA-2



HEAR IN MY CAR

500 CDS IN ONE BOX

TerraTec's C.A.R. 4000 is a 40GB hard disc audio recorder for the home featuring Gracenote CDDB – an extensive internet-based CD database that recognises artist, album and track titles from an audio CD and catalogues the data in the recorder's memory, so no manual text input is required. It can store up to 500 CDs in data-reduced MP3 or WAV formats and also sports timer record and an upgradable operating system. It costs around £800.

☎ TerraTec 0118 982 1612
www.terratec.co.uk

The Quad L Series

Since 1936, every Quad product has followed an underlying philosophy – to bring you ‘the closest approach to the original sound’. This philosophy has earned Quad the respect of acoustic engineers, musicians, recording artists and music-lovers the world over and remains undiluted today.

“The scale and authority of their performance is breathtaking”

– Quad 11L – *What Hi-Fi?* (Aug 2002)

Our all new ‘L’ Series is an accurate reflection of this philosophy. An even and extended frequency response, which is capable of incredible detail and resolution, creates a real ‘window’ on the recording. The sound stage is so vivid and expansive, you can virtually see the musicians in front of you.

The ‘L’ series are all finished in high gloss piano lacquers, either in pure black, maple, bird’s eye maple or rosewood veneer. Prices start from just £380.

0845 458 0011
www.quad-hifi.co.uk



QUAD

...the closest approach to the original sound

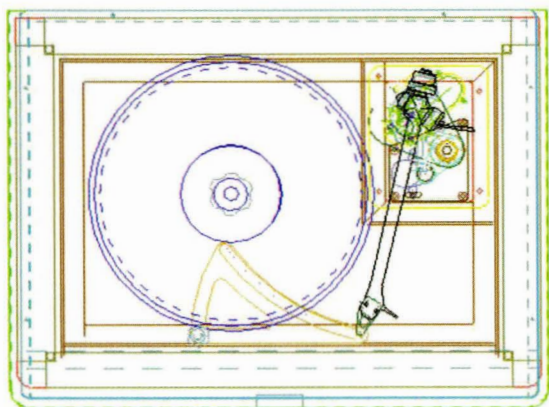


Purple: deeper than ever

TURNTABLE TECHNOLOGY

Townshend Audio is putting the finishing touches to its most ambitious turntable to date. The Rock Reference Master incorporates remote SRA/VTA adjustment via a motorised arm base with high resolution digital readout. This means that you can adjust the angle at which the stylus traces a groove as it plays. The deck features twin motors driven by a 12 volt battery and a built in electric pump to keep the pneumatic suspension at precisely the right pressure.

Speed range adds 78rpm to the usual 33 and 45 and offers adjustable 60-100rpm to match the shellac format. Even automatic overhang will be offered as an option – this is a means of negating the tracking errors inherent in pivoting tonearms and should drastically reduce distortion. Automatic disc centring for eliminating pitch variations due to 'swingers' will be available later as an option. The deck is expected to retail for £11,000 and is due to be launched this autumn.



DAB CHECK

Commercial digital radio operator Digital One has created an updated postcode coverage search facility on its website that includes 66 transmitters on its network. To check to see if you're covered look up www.ukdigitalradio.com/coverage/search/default.asp and type in your postcode. It doesn't yet extend to the entire network so don't be dismayed if you're not on there yet.

DEEP PURPLE MULTI-FORMAT

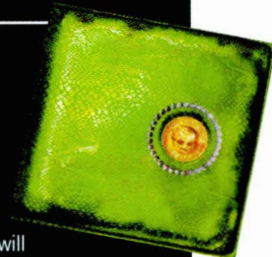
Deep Purple's 1969 meeting with the Royal Philharmonic Orchestra under Malcolm Arnold is to make history for a second time by being one of the first recordings released on DVD-A, DVD-V, CD and SACD simultaneously. *Deep Purple: Concerto For Group And Orchestra* is to be released by EMI with pricing that heavily favours one high resolution format over the other. According to amazon.co.uk the DVD-A retails at £15.99 while the (double) SACD is up for grabs at £23.99. The double CD is yours for £14.99 which makes the DVD-A look like even better value, so let's rock (in a classical way, natch).

THE ULTIMATE HYBRID?

Audio designer Tom Evans and valve specialist Tony Matthews have built an amplifier based around a 15 watt mono PCB with surface mount solid state electronics providing "the perfect environment" for an output valve. The 10x12.5cm board has seven independent circuits providing regulation biasing for a class A configuration. The figures this design produces are very unusual for any amp let alone one with tube power. Bandwidth is flat from 7Hz to 300kHz and phase is linear up to 60kHz. They have chosen the KT88 output tube for the forthcoming M-Series which will sell under the Tom Evans Audio Design brand and be available in various forms: 15, 30 and 60 watt stereo alongside monoblocks up to 120 watts. Prices start at £7,000.

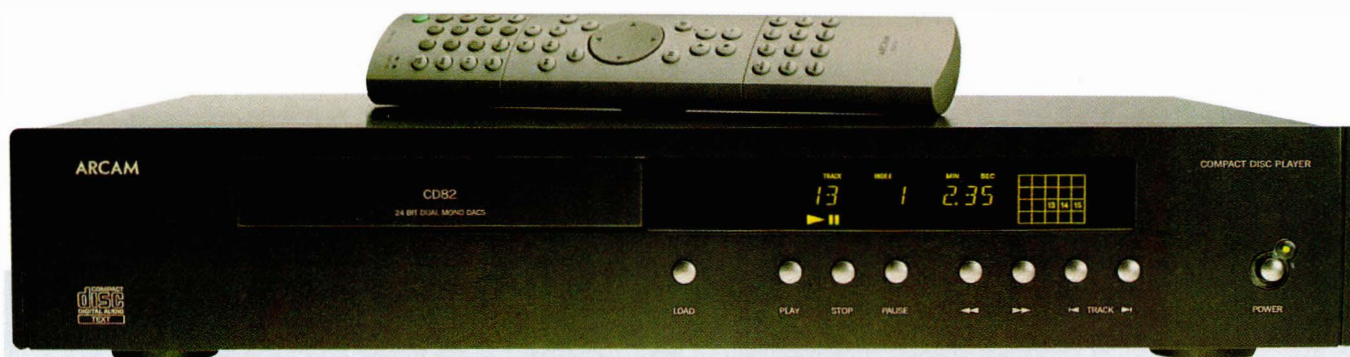
WARNER DROPS DVD-A PRICES

Warner Music International has added 20 new titles to its catalogue and dropped the trade price to match that of premium CDs. Which should mean that DVD-A discs will retail for the same price as new releases from major artists. New titles include the long awaited *Miss E... So Addictive* by Missy Elliott and the new Eric Clapton/BB King collaboration *Riding With The King*. Classic titles that have been remastered for DVD-A include Billy Cobham's *Spectrum*, Fleetwood Mac's *Rumours* and the Grateful Dead's *American Beauty*. There are also new classical titles including four from Nicholas Harnoncourt and Aimard's interpretation of Messiaen's *Vingt Regards*.



Incoming

First tests of essential new kit from hi-fi's front line



★★★★★

Arcam DiVA CD82 CD player £600

With more than a few tricks up its sleeve, Arcam's new CD player is based around the Wolfson 8740 24-bit/192kHz DACs that feature in the brand's high-end multichannel products, including the forthcoming FMJ AV8 processor. The new boards operate in dual differential mode, with both left and right channels having their own integrated circuit boards – a technique aimed at lowering noise and distortion. Other trickery lying under the lid includes 'instrument grade' output op-amps and a new clock circuit that is said to offer very low jitter.

The spec sheet reads just like a new player should – this CD player is bang up to date, so much so that the DAC board can be retrofitted to any CD72 player and any Alpha machine from the '7' model upwards. The now familiar DiVA casework does a good job of housing the electronics and has both coaxial and optical digital outputs and twin analogue outputs. The front panel

KEY FEATURES

- ▶ Sony transport mechanism
- ▶ CD-R/RW compatible
- ▶ CD text support
- ▶ Wolfson 8740 24-bit/192kHz DACs and digital filters
- ▶ DACs deployed in dual differential mode
- ▶ Instrument grade output op-amps
- ▶ DC coupled output stage
- ▶ Ultra-high Q clock circuit
- ▶ Upgradeable from CD72T and to CD92T spec
- ▶ Coaxial and optical digital outputs

displays a 'calendar' style layout, courtesy of the Sony transport and the display can be switched off altogether using the familiar and very comprehensive remote control. This can be used to control a variety of other components in the Arcam fold and usefully, if you experiment, other UK pieces of hi-fi.

Hit load and the drawer opens smoothly, giving a feeling of quality for your 600 notes. It comes dressed in either black or silver, very smart and understated – the same could perhaps be said of its sound.

In a way it harks back to products from the old Alpha product range, like the Alpha 6 player – generously rich and full-bodied Bass is weighty and well defined, and there's no obvious shortage of detail, but played through transparent amplification one can't help feeling it lacks a certain bite and urgency. Radiohead's *Knives Out* seemed slightly muted, the ride cymbal sounding a little like the drummer was

striking it in a foam-lined box.

There were times when the CD82 left us wanting for transparency, rhythm and downright sparkle, something to really set the toes tapping. There's no argument about the solidity, weight and dynamic ability this player brings to the party however, and across a wide range of music it's never less than substantial sounding and easy to listen to.

A full complement of cutting edge CD technology is housed within this new Arcam. But competition from the likes of Marantz and Exposure is strong – if you've an ear for excitement you might find they deliver even more.

☎ Arcam 01223 203200

🌐 www.arcam.co.uk

DUAL MONO DACS

The CD82 uses Dual Mono WM8740 Wolfson DACs. In this mode, one DAC chip is used for the left channel and one for the right. Both outputs in each stereo DAC are used to create one channel. This reduces the noise floor of the DAC, improves the separation between channels and reduces any digital noise from one channel interfering with the other. This should result in a smoother, more detailed sound and a more accurate stereo image. The DAC board also includes a high stability, Class 1 crystal oscillator, claimed to ensure very low jitter (a form of digital distortion).

"There's no argument about the solidity, weight and dynamic ability this player brings to the party."



EXCLUSIVE

★★★★☆

Linn Adikt phono cartridge £195

➤ Featuring an attractive rounded body and removable stylus, the moving magnet Adikt is unusual in that it has a pair of horns sticking out of its top behind the mounting holes. These are designed to make the tricky job of cartridge alignment rather less difficult when using tonearms with slotted headshells. Not all arms have holes for these horns, but removal is a simple procedure involving a small sharp saw.

The cartridge comes with mounting hardware, allen key and tags alongside good instructions on installation. An alignment gauge is not supplied however, and this is pretty much essential if you want best results.

Installed on a very un-Linn SME turntable and arm the Adikt was civilised, smooth and relaxed – possibly too much so as it gave the impression of slowing the music down. It's a

character that suits lighter, brighter decks like Regas and Linns better than the SME, but it's better to be too relaxed than too aggressive.

Detail resolution is good and it images well too, responding to variations in atmosphere and reverb on LPs with sensitivity. On Lambchop's *Is A Woman* especially, the vocal sounded rich and full, the instruments spreading out to fill the room around it. But Aphex Twin's lively *Windowlicker* didn't have its usual bite and if you're into upbeat, there are better options. If you want a classically warm vinyl sound however, this is one of the best we've heard. But look out for a forthcoming cartridge group test for the final word.

📞 Linn Products 0141 307 7777

🌐 www.linn.co.uk



KEY FEATURES

- ▶ Moving magnet phono cartridge
- ▶ Frequency response: 20Hz - 20kHz +/- 2dB
- ▶ Load resistance: 47kohms
- ▶ Load capacitance: 150 - 200pF
- ▶ Output voltage: 6.5mV
- ▶ Stylus type: Replaceable
- ▶ Tracking weight range: 1.5g - 2.5g

★★★★☆

Pure Evoke-1 'Portable' digital radio £100

➤ Until recently, buying into digital radio, or DAB, meant spending hundreds. The £99.99 Pure Evoke-1 changes all that.

It's almost portable, but is only powered by a plug-top 12 volt power supply. Finished in a wood sleeve, the Evoke-1 has a 75mm coaxial speaker with a downward firing port. It also sports a two-row LCD display, tuning and volume dials, nine touch buttons and a blue push-power button. At the rear there are mini-jacks for an extra speaker, a line-out and a headphone socket. It's very easy to operate – the controls allow the user to set, store, adjust, view and fully reset the Evoke-1 in seconds and make the thorough manual almost superfluous.

A lot of the recent compression criticisms aimed at Digital Radio are not an issue here, thanks to its single small speaker – the signal compression and



occasionally spitty vocals are still noticeable but far less so than if they were played through a stereo hi-fi system (the Evoke-1 has the option of an additional speaker for stereo). Strangely, although the sound is noise and hiss-free, sounds seem to rise out of a digital hash and it lacks the rich tonality of good analogue mono radio.

But this is not necessarily a fault of the Evoke-1 – it comes from trying to squeeze too many channels into a Digital Radio multiplex. When you find a good channel (LBC is a fine example), the sound is crystal clear and is almost as lovely as a Tivoli Model One.

📞 Pure 01923 277488

🌐 www.videologic.com/pure

KEY FEATURES

- ▶ DAB radio
- ▶ Mono as standard; stereo with optional auxiliary speaker
- ▶ Full Band III reception
- ▶ One 75mm coaxial speaker
- ▶ Six presets
- ▶ 16x2 character LCD screen



★★★★★

Cambridge Audio A5i stereo amp £120

➤ A hundred and twenty quid normally doesn't buy much of a hi-fi amplifier, unless it's from Cambridge Audio. The new A5i is a 50-watts-per-channel integrated design, with no headphone socket, phono stage or second set of speaker terminals. All you get are tone controls (with a source-direct button), a balance control, source selection with a tape monitor button and a dirty great central volume control. Cheap does not mean tacky though – it has some neat touches, like the rear panel connections

KEY FEATURES

- Integrated stereo amplifier
- 50 watts per channel
- Five line inputs
- One tape monitor
- One speaker output (bi-wirable)
- Bass, treble, tone defeat (direct) controls
- No headphone socket
- Optional PM-01 phono socket

written upside down as well as right way up for someone wiring the amplifier from above. It may be basic, but it's well made, too.

The sound is as good as the build quality. It gives the listener a real taste of 'proper' hi-fi, with striking detail and exceptionally good bass for the money. It is quite impressively neutral, with only a slight hint of sharpness that makes the variable quality of the live *Bill Hicks Philosophy* recordings seem too bright at times. But, for most recordings, this just serves to make it

sound 'lively'. The neo-Velvets sound of *Is This It* by The Strokes keeps the bass line primacy well and has excellent stereo separation and good clarity. This CD also shows off the lively sense of rhythm and decent dynamic range that this amp is capable of.

This giant-killer won't undermine serious high-end kit, but if you want a good basic amp – even one at twice the asking price – the Cambridge A5i should be high on the list.

☎ Hi-Fi Direct 020 7940 2200
 🌐 www.cambridgeaudio.com

★★★★★

REL Quake active subwoofer £425 Cherry £350 Grittex black

➤ At less than 300mm square, the diminutive REL Quake takes 'bijou' to new levels. It's a sealed box design, featuring one downward-firing long throw 200mm bass unit and a 100 watt MOSFET power amp. It has both a Neutrik connection to wire directly to speaker terminals and a phono socket for line outputs. The speaker connection cable isn't supplied, though – it costs an extra £20 for a five metre cable or £25 for a 10 metre lead.

Subs, usually designed for making home cinema more exciting, can sound ponderous when used in stereo. Fortunately, this is where the Quake shines – it can do all the rumbly bits that home cinema types love, but correctly set up in a hi-fi system it gives a palpable sense of solidity that makes the stereo image of the main speakers

seem wider and deeper. And it upgrades the midrange clarity of the speakers in the process. Bass is deep but not cavernous – hi-fi users will gladly trade that last octave for the Quake's temporal integrity, though.

Also, adding a second Quake seems to bring out the best of both worlds – you get the precise timing and airy soundstaging qualities of a solo Quake, allied to a deep, extended bass. And, the Quake's dimensions mean they are easy to hide away, too.

It may be a subwoofer, but bass is not the only issue. If you have the self-restraint to set up a Quake (or better still, Quakes) carefully, this tiny sub might be the answer to your soundstaging needs.

☎ REL Acoustics 01656 768777
 🌐 www.rel.net

KEY FEATURES

- Active subwoofer
- Single 200mm long throw driver with ventilated pole piece
- 100 watt MOSFET power amplifier
- Neutrik high level input, phono line input
- Slam/depth control
- Set-Safe protection circuitry
- Dimensions (HxWxD) 294x253x272mm





KEF Q5 speakers £600 EXCLUSIVE

KEF's latest Q-Series has featured strongly in *Choice* in recent months, with the floorstanding Q7 a particular recipient of our respect. Comprising six speakers with a centre and sub, the range is distinctively styled and clearly aimed at both stereo and multichannel users.

At the heart of the range is a new version of KEF's Uni-Q driver array (see box), using technology filtered down from the high-end Reference series. It seems this unit has particular strengths in the crucial vocal range and has strong imaging qualities to boot.

The mid-range Q5 couples the Uni-Q unit with a further 165mm bass unit, housed in its own enclosure with a rear facing reflex port for extra oomph. In fact, bass is claimed to start from a

KEY FEATURES

- ▶ Two and a half way bass reflex design
- ▶ 165mm bass driver
- ▶ 165mm bass/mid Uni-Q driver with 19mm aluminium dome tweeter
- ▶ Maple, Dark Apple or Black Ash finish
- ▶ Sensitivity: 91 dB
- ▶ Maximum output: 112 dB
- ▶ Impedance: 8 ohms
- ▶ Magnetically shielded
- ▶ Dimensions (WxHxD) 240x880x320mm

“Ports and all, the Q5 is a solid performer – bass is weighty and full, and there’s an explicitness to the midband that makes music instantly engaging.”



KEF'S UNI-Q

Often mistakenly referred to as a driver, KEF's Uni-Q system is actually an array of drivers comprising a 165mm bass/mid unit and a new 19mm aluminium dome tweeter. With the tweeter placed directly in the centre of the main cone both drivers act as one point source, the intention being to deliver a wider dispersion than conventional drivers can offer. This means a wider 'sweet spot' offering a broader stereo image to the listener.

Claimed to extend up to 27kHz, the new tweeter developed from the Reference series is described as a full bandwidth design, compatible with the increasing range of new high-resolution disc players (DVD-Audio and SACD) coming to market of late.

respectable 39Hz, not bad for such a slender (and beautifully curved) cabinet. There's room for a tasty set of solid bi-wirable binding posts round the back and a huge oval port that can be stuffed with the supplied bungs if things get wild.

Give the cabinet a tap and it gives a disconcertingly hollow sound. Although braced, there's no reliance on mass damping – these boxes are very light for their dimensions. High quality vinyl wraps each speaker, complemented by a good standard of driver fit and finish.

The front baffle houses the Uni-Q unit in a 'pod' right at the top of the cabinet, positioning the tweeter at ear height. One strength of the Q-Series is its wide dispersion tweeter and impressive off-axis response. This makes speaker placement slightly less critical – useful in room layouts where a traditional 'sweet spot' is hard to attain. The Uni-Q is reflex-loaded via a front-firing port, below which sits the extra bass driver.

Ports and all, the Q5 is a solid performer – bass is weighty and full,

and there's an explicitness to the midband that makes music instantly engaging. But it's that bass, or more precisely the way it integrates with the rest, that is the cause of some niggles. Unlike the Q7, who's oval-shaped 'race-track' drive unit seems to complement the Uni-Q unit superbly, the Q5's more traditional bass driver fails to truly meld.

The upshot is a sound with plenty of bass thump and an engaging and expressive midband, but somehow the two don't quite meet in the middle. There's some 'boxiness' too, though vocals have plenty of presence and instruments sound immediate and alive, helped by strong qualities in the imaging department. And if used as the front pair in a surround system you'd get real impact with movies, but this isn't the sharpest tool in the Q-Series box.

☎ KEF Audio 01622 672261
 🌐 www.kef.com

Instant upgrades

We test the latest 'miracle' cures for your system's woes



Acoustic Research HT130 interconnect cable £20

▶ This is a classic 'pseudo-balanced' cable, with identical conductors for hot and earth plus a screen connected at one end only, which may make its performance directional in some applications. Good quality materials give it good electrical characteristics, and in a nice touch for a budget cable it uses phono plugs with a split centre pin to give better grip in the socket. Sound is a definite upgrade on giveaway cables, but not truly outstanding even for a budget design – there are a lot of very good value cables out there. Although there's plenty of life and detail in the treble, bass is a little lumpy and unfocused and stereo imaging is not always terribly precise. Then again, if you're using small budget speakers you might find a little bit of bass 'tailoring' not unwelcome.

☎ Recoton 0161 702 5000

🌐 www.acoustic-research.com



Supra LoRad mains cable £15/m

▶ The attraction of a screened mains cable is that it should prevent 50Hz electrostatic fields around the cable which might induce hum in adjacent signal cables. In practice the fields are small and induced hum (due to that particular cause) low, but Supra's patent on this cable claims health benefits as well – now that's a big can of worms! It's a little fat but flexible, and there's plenty of copper there.

Whether directly due to the screening or not, it did seem to effect a small improvement on the delicacy and perceived noise floor of a CD player and a preamp. But then tightly twisted mains cables often do. Never mind the reasons: it seems to work. An entire system wired with it might be interesting!

☎ Glaive Ltd 01622 664070

🌐 www.supralorad.co.uk



Custom Design Acoustic Isolation Platform £40

▶ This is a very clever implementation of a well-known trick in the field of vibration control – 'constrained layer damping'. Specifically, two sheets of perfectly ordinary steel, of slightly different thicknesses are glued together and the whole is painted black. That's it. Simple, but highly effective. Hold a sheet and tap it and there's remarkably little sound. Place one on a shelf on your equipment rack and it will have quite a large effect in damping the shelf's own resonances. Put a smaller size (sold as an 'Acoustic Wrap' at £30) on a CD or DVD player, or other kit, and it will prevent the top panel from singing along with the music.

Result? Typically, a distinct gain in detail and 'air' around the sound. A large brick might do the same, but I can think of nothing this practical and unintrusive that will work half as well. It helps Custom Design's own equipment supports too...

☎ Custom Design 0191 262 4646





V-VAX Residual Oil Remover £6

Thank arch tweaker Jimmy Hughes for introducing this photographic product to the UK hi-fi scene. It's originally intended for removing oil residues 'ineradicable with normal cleaning procedures' from optical lenses, so using it to clean similar pollution from CDs seems to make sense. It should be applied with a microfibre cloth (the instructions mention 'tissue', but any kind of paper should be avoided as most of them are scratchy), then wiped off with the same.

As with Russ Andrews' Reveel, tested in the last offering of Instant Upgrades, ROR does indeed seem to confer sonic benefits to apparently clean, brand-new discs, typically a subtle improvement in precision and dimension of sound. In fact there seems to be little in it between Reveel and ROR: both give consistent improvements, but discs treated with one don't subsequently improve when treated with the other. We tried it with LPs, too, but there it seems to increase surface noise. Cheap, effective and recommended.

☎ Hove Photographic 01273 777576



ART Q-Dampers £70 (set of 4)

Yet another variation on the isolation foot, these are beautifully made out of solid graphite with a brass insert. The idea is that they should support your hi-fi components directly, bypassing the fitted feet (which will mean removing the feet if they are taller than 18mm) and improving in some unspecified way the vibration immunity of the equipment. More likely, simply supporting the equipment at a different place will change the resonant character of its chassis bottom, and accordingly it is as well to experiment with the best support position for these feet. They can also sit beneath speaker spikes.

Results are most pronounced with equipment that has a thin metal bottom plate, where mechanical resonances are indeed reduced, improving resolution. Speaker duty was less obviously an improvement, and a tweaked CD player with sound-deadened panels showed no discernible change. Q-Dampers can work, but are a little expensive for what they do.

☎ hififorsale.com 0870 241 2469

🌐 www.hififorsale.com



Cambridge Audio Isomagic DAC £100

This slimline DAC apparently fulfils a dual function: not only is it a DAC, it also sits beneath your CD player and acts as an isolation platform. Well, up to a point. The supplied squeazy feet (like ultra-soft squash balls) do give some vibration isolation, but the construction of the DAC itself is such as to confer no real advantage. Worse, its top panel is one big sounding board. Best to look on it merely as a neat, space-saving and cost-effective DAC design.

Features include optical and electrical inputs, and a clock output to reduce jitter with suitable Cambridge players. Construction is a little unimpressive. And the sound? Thanks perhaps to the Pacific Microsonics oversampling filter (which also makes this HDCD-compatible), it's a nice clean-sounding device with good detail, likely to be an improvement on many budget-ish CD players. There aren't many cheap DACs around and this is better than most.

☎ Richer Sounds 0800 333500

🌐 www.cambridgeaudio.com



A3.2 SERIES.
MACHINED, MIL-SPEC ALUMINIUM FRONT PANEL.
PLATINUM PLATED FITTINGS. REMOTE CONTROLLED. PHONO STAGE.
POWERFUL, ROBUST, BUILT.

ChoiceCuts



Our favourite musical morsels, old and new

Reviews by Tim Bowers, Jim Findlay, Alvin Gold, Jason Kennedy, Dave Oliver

NEW MUSIC FORMATS



OMNIBUS WIND ENSEMBLE

Music By Frank Zappa
SACD multichannel

Opus3

Music: Instrumental interpretations of work originally performed by rock bands are always going to be difficult. And when the composer in question is Frank Zappa the scope for variety of approach is great. This collection of classic period (1967-73) material has been well thought out and played by a Swedish 12 piece ensemble that obviously relishes its work. It is inevitably more relaxed than the originals but if anything ups the darkness factor – it can sound like Shostakovich does jazz at times. The highlights are *Inca Roads* and *Brown Shoes Don't Make It* but the 12 other tracks are very good and the last, *Ravel's Bolero*, inspired only loosely by Zappa's own interpretation, is simply lovely. **★★★★**

Sound: Cut at very low level this was originally an analogue recording made with tube electronics using a Blumlein single point microphone, so the four-channel mix captures plenty of natural reverb. **★★★★ JK**



RACHMANINOFF PIANO CONCERTO NO 3/ ENCORE LIU YANG RIVER/ Scriabin Etudes

Yuri Temirkanov (cond), St Petersburg
Philharmonic, Lang Lang (piano)
SACD multichannel

Telarc 60582

Music: Nineteen-year-old virtuoso Lang Lang is currently wowing audiences in the US and Europe, as well as in his country of birth, China. The lush Rachmaninoff is virtuosic but measured, with exquisite phrasing – if you go for Rachmaninoff's schmaltzy style, this disc is definitely the one. The encore piece, based on a Chinese folk song, is relatively simple and elegant. Scriabin's fearsomely difficult *Etudes* again respond to Lang Lang's immaculate technique and beautifully expressive phrasing. **★★★★**

Sound: The Rachmaninoff and the encore were recorded live at the Proms in 2001, and go a long way to capturing the distinctive flavour of the Royal Albert Hall work in a multichannel recording. The Scriabin is a studio recording, but scarcely less impressive. **★★★★ AG**

CINEMA SELECTION

Because these days hi-fi doesn't always just mean music



LORD OF THE RINGS: THE FELLOWSHIP OF THE RING

New Line/Entertainment in Video

Film: This fantasy epic squared up against *Harry Potter* late last year and, as far as anyone older than 12 and in full possession of their faculties was concerned, gave the weedy wizard a good kicking. This lush interpretation of Tolkien's tale of swords 'n' sorcery is breathtaking in its scope and execution and boasts a fine cast, all playing with total conviction. Elijah Wood is outstanding as unlikely hobbit hero Frodo Baggins and Ian McKellen puts in a vastly enjoyable turn as ageing wizard Gandalf. Dark, exciting and utterly absorbing, this is top-class movie making. **★★★★**

Sound & Vision: The production values of this disc are absolutely superb. The picture is wonderfully sharp, rich in colour and devoid of any discernible dirt. The Dolby Digital EX soundtrack is also a treat: this film is straight out of the blocks with an unrelenting barrage of surround sound magic and it's all captured beautifully. **★★★★ JF**

CD/VINYL



SIDSEL ENDRESEN & BUGGE WESSELTOFT

Out Here. In There

Jazzland/Universal

Music: Sidsel Endresen is a little bit like a Scandinavian Nico with some Björk and Marianne Faithful thrown in. Here she sings and talks while keyboard genius Wesseltoft delves into his dark side to produce sounds to match lyrics which probe rather deeper than usual. It's not all heavy though, there are some nice tunes, notably *Birds* and *Survival Techniques 3*. It's a minimalist and occasionally stark album that asks some tough questions, but it keeps you interested if not necessarily comfortable. **★★★★**

Sound: The relatively spare nature of this recording leaves plenty of space in the mix as the voice glides over various low key beats and keyboard sounds. It sounds clean and simple but in a calculated manner that's strong on atmosphere. **★★★★ JK**



DUTILLEUX TOUT UN MONDE LOINTAIN...

Orchestre Philharmonique de Radio France

Virgin Classics 7243 545502 2 5

Music: One of the most important 20th century French composers, Dutilleux is in a direct line of descent from Debussy and Ravel, and employs a musical language somewhere in the orbit of Messiaen, Boulez and Lutoslawski. If this makes it sound dry and challenging, nothing could be further from the truth. The three works here are passionate, refined and often lyrical, with plenty of colour and real substance. **★★★★**

Sound: The recordings were made in the presence of the composer, and have a good balance between orchestra and soloist. Overall an excellent recording, with pungent string tone and real warmth. **★★★★ AG**



BARRY ADAMSON

The King Of Nothing Hill

Mute

Music: The dark magus of Moss Side returns with his most soulful offering to date. Less opaque than some of his earlier sonic experiments, the former Magazine bassist appears to have had a direct funk injection, infecting *Cinematic Soul* with an incurable case of the Funkadelics. From there he takes us on a widescreen groove tour via some cod Barry White in *Black Amour* before returning to more familiar sonic dungeons on the dark and often atonal *Le Matins Des Noire* and the skewed cop chase of *The Crime Scene*. **★★★★**

Sound: Adamson is a man known to take up residency in his studio for several months during the production of an album and it shows in the attention to detail lavished on the arrangements for his dark, noirish soundtracks of the mind. **★★★★ DO**



THE POLYPHONIC SPREE

The Beginning Stages of...

Good Records

Music: Peeping through the summer's musical malaise comes this strange and endearing gem, pieced together by a 23-strong musical collective from Dallas. Its makers describe it as 'choral symphonic pop' – a ragged tapestry of sugar-sweet melodies and chirpy weirdness, sewn from assorted instruments (guitars to piccolos) and gilded by massed vocals. There's a definite taste of *Sgt Pepper*, infused with an alt.country slackness and the chorus line from *Godspell*, like the most beautiful campfire singalong you've ever heard. **★★★★**

Sound: Nothing special hi-fi wise, but a good system will ensure raw timbre is laid bare, the quiet bits really are quiet and massed-voice choruses burst through like sunshine. **★★★★ TB**

The world according to... **NAIM**

The 'Naim sound' has long been a byword for both innovative idiosyncrasy and hi-fidelity bloody-mindedness. Which side you lean to could depend on the quality of your ears...

Naim Audio continues to polarise opinion like no other hi-fi manufacturer. A global hi-fi icon, the Salisbury-based company founded by the late Julian Vereker MBE some 25 years ago commands the kind of brand loyalty rivals would die for. That some of the negativity – aimed partly at Naim's almost enshrined pace 'n' rhythm take on hi-fi sound and idiosyncratic design policy – stems from envy seems likely. Perhaps understandably.

Whereas other producers of audio hardware have customers, some inevitably casual, Naim has acolytes who would probably no more consider switching brands than gender. They've bought the kit but, more importantly, they've bought into a belief system that offers an alternative to the mix 'n' match vagaries of conventional separates system building.

Naim's USP is escape from all the confusion. Place a foot on the first slab of the Naim path to audio nirvana and the rest light up in neon, each step perfectly choreographed to plot the most cost-effective route through the next

Past Glories

NAC12/NAP 250 PRE/POWER AMP

Back in 1974 all amps allegedly sounded the same. This epochal combo, bereft of tone controls or any other frills, proved they didn't. Outboard pre-amp power supplies, star-earthing, modular interchangeable MM/MC phono stages and 'passive' phono EQ were largely unprecedented, too.

SBL SPEAKER

Naim's Separate Box Loudspeaker was a revelation when it appeared in 1987 with a small upper enclosure feeding into a much larger lower enclosure, increasing the effective volume and hence bass extension.

performance gateway. No blind alleys, no tantalising diversions, no exotic cables or snake oil. It's the Naim way or the highway.

I put it to Naim's 43-year-old sales manager, Doug Graham, that this makes the company he's been with for 11 years rather different from the current norm. Doug pauses for a moment before answering in his slow, soft Scottish brogue.

"We may be the only UK company that makes a point of listening to everything we make before we send it out."

"I think it's because we started sort of by accident that makes us different. It was Julian Vereker's passion for music that led him to start researching audio. Naim was born that way. Also, given that we don't change our product range very often, there is a confidence in our brand. That, coupled with the exceptional upgrade potential and reliability, means that there are still many Naim products over 25 years old out there in people's systems still delivering great performance.

"I'm not sure, but we may be the only UK company that makes a point of listening to everything we make before we send it out. That takes time but we believe it's worth it. Our customers are investors in our business. Also, we've never released a product that has purely been market driven. We create our own market."

Sticking with being different, I can't resist asking about the 'Naim sound' which is quite distinct and easy to recognise. In a nutshell, Naim doesn't play it like other hi-fi. I wonder if it's just the desire to be

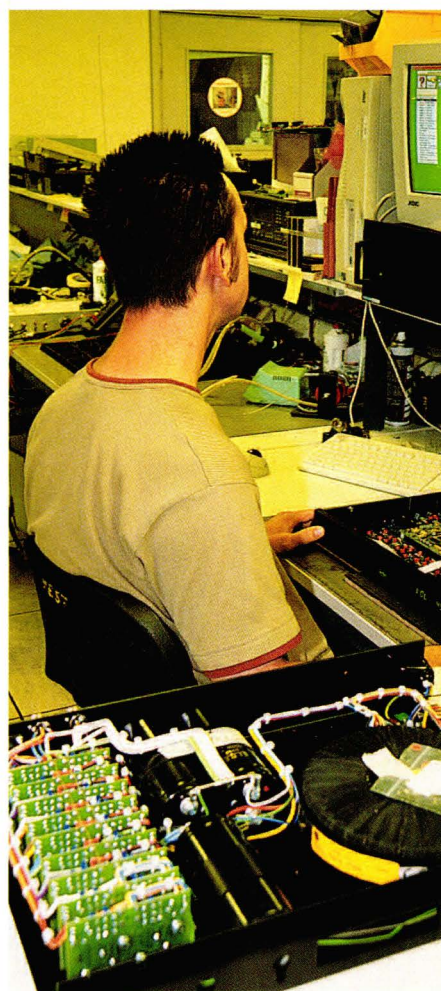
different surfacing again or has everyone else got it wrong?

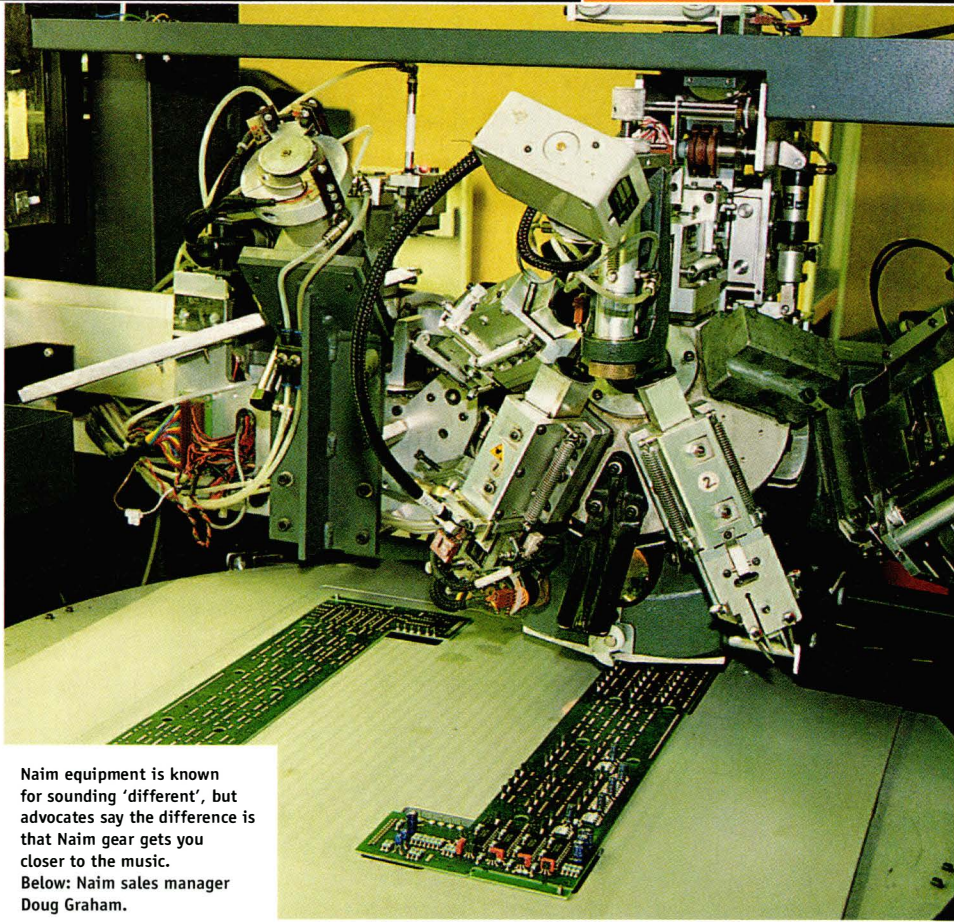
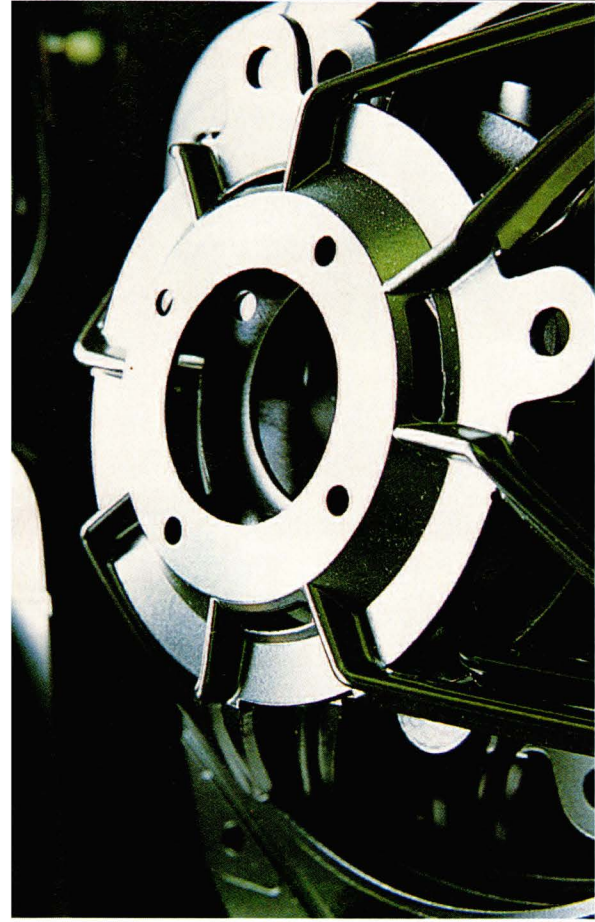
Neatly sidestepping the barb, Doug answers candidly. "Yes, I agree that our products sound 'different' and stand out in the market. If people refer to a 'Naim sound' they usually talk about speed, dynamics and low coloration. I think that this is all good, and surely what other manu-

factures strive for. When people ask about 'how it sounds' we normally say 'great', but the difference is that we're talking about the music not the gear. What we're trying to do is to get close to the music. We don't really want the equipment to 'sound'."

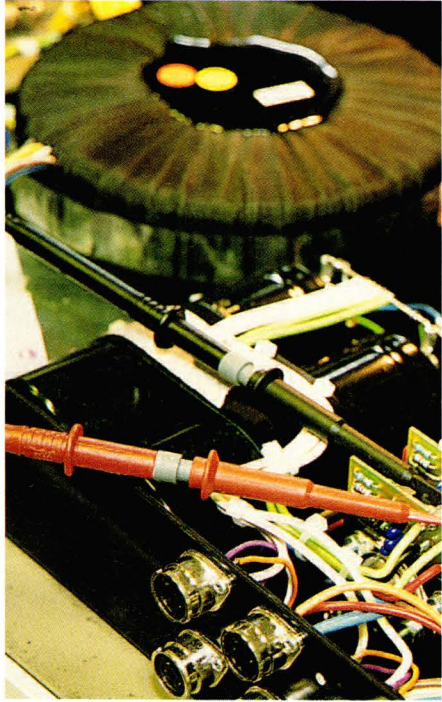
Which neatly inverts my point. And implies that if Naim doesn't have a 'sound' then most other hi-fi does. Either way, Naim isn't conforming. It seems to be working to a different agenda.

"We've always known about the detrimental noise of internal power supplies," continues Doug, "so part of our philosophy is built around separate isolation of these types of components. Ultimately it's the power supply you listen to. This leads to an 'electronic Lego' scenario where people can add to their systems easily and effectively. Also, Naim equipment lasts, and it's not uncommon for someone to integrate one of our current products with a Naim product they bought 20 years ago! Residual values of Naim are the highest on the



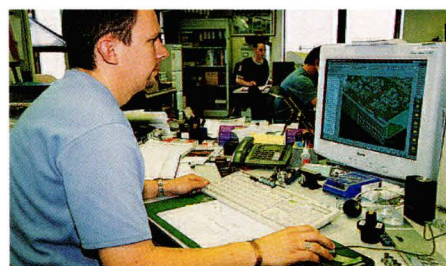


Naim equipment is known for sounding 'different', but advocates say the difference is that Naim gear gets you closer to the music.
Below: Naim sales manager Doug Graham.





The majority of work on Naim equipment is still done by hand.



planet, so the end user feels very comfortable knowing that what's in their lounge still has a lot of value (not just financial). It's like an investment with fun attached."

STRENGTH THROUGH JOY

But Naim's boring speaker cable, interconnects and fixation with DIN connections don't sound like much fun. If someone invented a genuinely superior RCA plug, I propose, surely it would be unwise for Naim not to ditch DIN. Then people could mix and match components much more easily, use their favourite interconnects and so on.

Doug straightens his bat once more. "We are always open to things that will help improve the performance of Naim. We have introduced a new reference pre-amp called NAC 552 which allows the user to configure the inputs to be either all five-pin DIN or DIN and two sets of phono sockets. We've included them because it's much better for the end user to use a phono to phono than a DIN adapter. It also means that people can use their 'mad' cables with our equipment. And we will put to bed the argument about which connector sounds best. We know."

Some softening of a once rigid dogma, then. Naim kit is also looking a lot prettier these days.

Why did it take so long?

"The Series 5 product range has been widely acclaimed for its build quality and its style, but this wasn't done just because we wanted to make the stuff look better; it's for sonic reasons. The case, the feet and how we mount the PCBs all contribute to improved performance. When we can apply these benefits to the rest of the products we will."

The Series 5 range was launched after Julian Vereker's death, aged just 54. Many thought it marked a departure for Naim, something harder to reconcile with Julian's penchant for stark individualism.

Doug sets the record straight. "Julian was very much instrumental in the Series 5 project before his death. He wasn't particularly involved in the design – he had amassed an impressive collection of excellent engineers long before this – but the project was 'his baby.'"

BIG IDEAS

The whole Naim operation, like many labours of love, started small.

"Julian Vereker's basement became the workshop. I think Salisbury was a nice quiet place then with half the population that it has now. We currently employ 106 people and rising. Over the last three years we've invested heavily in R&D, not just machinery but in

people too. To deliver exceptional products we need to employ smart people. R&D is 13 per cent of our workforce. That's very high for a manufacturing company of our size.

"Instead of using production line techniques, our people build products from start to finish. One day they may build three Hi-Caps, the next it might be a couple of CD players. We have a couple of robot insertion machines that do the donkey work, but the majority of the work is still done by hand. The factory is quite modern. We built a couple of extra buildings seven years ago because we needed the space to grow into."

My final suggestion to Doug is that digital doesn't seem to have done Naim any harm at all, even with the advent of multichannel movie and music formats. On the contrary, business is thriving.

"The advent of the NAC 552 has taken CD replay (for us) to a new level. As with all technologies, Naim is up to speed, but not being early adopters as such, we tend to wait until the technology has stabilised before getting too involved. We don't use our customers as guinea pigs. Having listened to SACD and DVD-A, the preferred choice would be SACD but right now who knows?

"AV done properly is great fun

and there is definitely a place for this in people's lives. We like to think that the AV2 processor is a benchmark for performance. Our foray into digital sound processing has been a huge success. At the end of the day, people want quality in their lives and Naim is recognised as a quality brand. We are loyal to what started the thing in the first place – music. Like we've always said. 'Naim makes music make sense'." ©

☎ Naim 01722 332266
 🌐 www.naim-audio.com

Current Key Products

NAP 500 REVIEWED HFC 208
 Naim's £10,000 power amp is up there with the world's best. Its Semelab output devices are so powerful no protection circuitry is necessary. Output of 140W per channel into eight ohms is backed up by massive current delivery.

SL-2 REVIEWED HFC 232



Long anticipated successor to the SBL speaker, the £4,995 SL-2. More stylish and easier to set up than the SBL, with remarkable powers of analysis and communication.

CDSII REVIEWED HFC 188
 Update of Naim's original two-box flagship CD player is bulky and quirky to use but is one of an elite group of digital products that genuinely exhibits "best of analogue qualities" in its bass, timing and lack of grain.

MS[®]
Mordaunt Short

WHAT HI-FI?
SOUND AND VISION



September 2002

"A great THX speaker package... worth waiting for."

Home Entertainment
MAGAZINE
BEST BUY

"This is a real thoroughbred home theatre system that can also turn its hand to music. Great stuff."

RECOMMENDED
HI-FI CHOICE
magazine

"This speaker impressed from the outset."



Home Entertainment
AWARDS 2001
HIGHLY COMMENDED

Movie Stars

The perfect balance between music and movies

Rarely, has a home cinema speaker package garnered such rave reviews as Mordaunt-Short's stunning Declaration 500 Series THX Select system. For once, the audio press has been united in its praise for a product.

What Hi-Fi? Sound and Vision could find, "nothing" against it, *Home Entertainment* "rarely recommended with such confidence", and *Hi-Fi Choice* was "impressed from the outset".

The 500 Series THX Select system underlines our commitment to engineering excellence. It also proves brilliance needn't be boring.

For more information visit our website www.mordaunt-short.co.uk/thx



For free literature on the 500 Series THX Select from Mordaunt-Short, call 01753 680868

www.mordaunt-short.co.uk



EDITOR'S CHOICE
HI-FI CHOICE
magazine
★

"It achieves good resolution at both ends of the audio band, but the really dramatic improvement is in its remarkably wide dynamic range and resolution of subtle low-level detail."



Big NAC

Naim's latest pulls out all the stops to redefine the art of the stereo preamplifier

VERDICT

Naim NAC 552 preamplifier

£11,750

⊕ A big step up from the '52, and very probably the best solid-state preamp around, with loads of flexibility.

⊖ Horrendously expensive, and doesn't quite match the midband transparency of the finest valve equipment.

⊙ **CONCLUSION**
Extremely expensive but still solid value for money, combining magnificent sound quality with fine flexibility and ergonomic convenience.

KEY FEATURES

- ⊕ Six line inputs
- ⊕ Seven DIN sockets
- ⊕ 'Display off' mode and optional automatic input
- ⊕ Volume control has 3-mode remote operation software
- ⊕ 'Split-rail' power supplies kept separate from the earth
- ⊕ Large transformer has new rectification and very low noise regulation
- ⊕ Weight: 14kg
- ⊕ Main circuitry PCBs spring-decoupled from environmental vibration

Naim's NAC 552 uses springs to isolate the circuit boards from any vibration that manages to get through the chunky casework.

A decade ago, Naim's two-box NAC 52 preamplifier set an exotic £4,000 plus price point for hi-fi components originating in the UK, and was particularly unusual for combining 'audiophile' sound quality with full remote control. The '52, now with Supercap, is still available at £6,300, but Naim has just upped the ante with a vengeance, introducing the NAC 552 at an intimidating £11,750.

In outline terms the two preamps have more similarities than differences, but the 552 has Naim's new three-part fascia, and is also exceptionally solidly built, each unit weighing some 14kg. Large knobs provide volume and balance, and two rows of eight buttons independently select inputs, record outputs, plus mono and mute modes on both. The matching 552ps power supply unit provides no fewer than 18 separate supplies, via Snaic and Burndy cables.

The 552 might not have tone controls, loudness or bypass buttons, but there are plenty of other features here. It's a line level only device with nine single-ended stereo inputs (there's no attempt to supply balanced in or outputs), but only six are available at any one time. Seven are Naim's favoured DIN sockets: three input-only sockets, three in/outputs for use with recorders, while the seventh also powers either Naim's Stageline or Prefix outboard phono stages, or Headline headphone amp. Two of the in/outputs may be configured for 'unity gain' for use with an AV processor. Naim has always eschewed phono sockets, but has finally yielded to customer pressure and incorporated two pairs of inputs here.

Just which sockets are used is up to you, and you can also decide which should be 'mapped' to which front panel (and handset) button. A little associated LED blinks briefly when a socket is selected. Other features include a 'display off' mode, and optional automatic input selection. The 552's volume control proved a little tricky operationally, because we had a very early production sample. Naim has now changed the motor drive software to improve this. For the programmable functions, the appro-

INSIDE THE NAC 552

Although the actual audio circuitry remains substantially unchanged from what Naim has been using for many years. The 552 features key innovations in component layout, power supply arrangements and anti-microphony measures.

This is the first Naim preamp to use 'split-rail' power supplies, feeding all the circuits from low-noise positive and negative feeds that are kept separate from the earth rail and hence any noise generated therein. The casework is notably rigid and solid, and the circuitry is on two PCBs, each mounted onto a heavy spring-decoupled subchassis to isolate the components from environmental vibrations. Four bolts hold the boards rigidly during transit, but are then removed, allowing the boards to 'float', when in use.

prately named Flash remote handset has a large and helpful LCD screen, but is also rather bulky and cumbersome.

PERFORMANCE

Powered up and inserted into a Naim system in place of a NAC 52, the superiority of the 552 was immediately obvious – even though it had hardly had time to get warmed up. The biggest benefit seemed to lie in the top end, which is sweeter, more open and detailed, and subjectively more extended too. Although the 52 has always impressed as a high-class preamp, the new NAC 552 put it firmly in its place, highlighting previously tolerated midband colorations in the earlier design, including a degree of nasality on speech, and a general crudeness with some lack of solidity.

The 552's bass too seems significantly cleaner, deeper and more confident, with less tendency to add a little thump and colour. The new preamp manages to achieve better resolution at both ends of the audio band, but the really dramatic improvement is found in its remarkably wide dynamic range and the associated resolution of subtle low-level detail. For the vast majority of the time, we used the 552 with Naim's NAP 500 power amp, and it was pretty clear that the two complemented each other remarkably

well, and together they represent a significant advance over the previous generation of Naim amplifiers – wider dynamic range, greater resolution, and lower coloration – albeit at a price. We also tried other power amps and they worked fine, though the 'open window' neutrality of the 552 did lay bare the characters of the various power amps and speakers. While the 552 offers an exceptionally impressive sound quality, it remains unmistakably a solid state – as distinct from a valve – device. This has both advantages and disadvantages, gaining in neutrality what it sacrifices in more romantic qualities. Furthermore, the better the source, the more obvious was the improvement to be had from using the 552. Using it to power a Prefix phono stage, in place of a regular HiCap outboard supply, brought a much more obvious improvement to vinyl replay than might have been expected.

This preamp might be just a little too matter-of-fact and lacking in romance for some tastes, but its real strength is its neutrality, and the way it just gets out of the way and lets the maximum amount of musical information through. This is a 'fit-and-forget' product, that does just what you want it to, while drawing very little attention to itself. Characterless is a word that springs to mind, and must be seen as a compliment, as transducer components like loudspeakers – and indeed the listening room itself – will always add their own contributions to the character of a system. ⊙

☎ Naim Audio 01722 332266
🌐 www.naim-audio.com

ALSO CONSIDER

NAIM NAC 52/SUPERCAP £6,300

Still a worthy and very competent preamp, with traditional Naim strengths, but some midband coloration.

AUDIO RESEARCH LS25 MKII £5,490

Valve device with remote and balanced or unbalanced in/outputs. Sounds clean and vibrant with no false romanticism.

MARK LEVINSON No 380 £3,995

Fully remote controllable and extensively programmable, with balanced and unbalanced inputs. Sounds cool-headed, taut and finely disciplined.

marantz SACD/DVD PLAYER DV8300

EDITOR'S CHOICE

HI-FI CHOICE
magazine



STANDBY

POWER ON/OFF

DD DOLBY
DIGITAL



DVD
AUDIO/VIDEO

COMPACT
DISC
DIGITAL VIDEO

DIGITAL
DTS
SURROUND

LUCASFILM
THX
SELECT

DIGITAL
DOLBY
DIGITAL



DVD
AUDIO/VIDEO

COMPACT
DISC
DIGITAL VIDEO

DIGITAL
DTS
SURROUND

LUCASFILM
THX
SELECT

POWER ON/OFF

STANDBY

SACD/DVD PLAYER DV8300

Pace setter

EXCLUSIVE Marantz joins the universal disc player race with the DV8300, but has it got the pace to be a winner?

Ever since SACD threw down the high-resolution music gauntlet to DVD-Audio we have been waiting for machines that would play both formats and save the hi-fi enthusiast the trauma of having to pick one or the other. Pioneer got there first with its DV-747A and now Marantz has entered the fray with a machine costing some £500 more. While it may look rather different to the Pioneer there are some distinct similarities between the two.

You don't have to look much further than the fascia to figure out where at

least some of the extra money has been spent though. It joins a select band of DVD players by sporting a THX Select badge which indicates that it has reached a certain quality standard and been approved by Lucasfilm. Other badges indicate compatibility with the usual cinematic audio compression systems as well as CD-Video.

Being a video-inclusive device you need a monitor to set it up, choose whether to play two or 5.1 tracks from your high resolution software, set up delays and levels and generally make the player fit in





“Marantz components are renowned for their abilities when it comes to timing – whatever disc type you give the DV8300, the beat is always clear and engaging.”

with the system you're using. When first encountering the OSD (on screen display) we were surprised to find a replica of the Pioneer graphics and set-up procedure – presumably the video side of this machine comes from the same source. The plot thickens when you notice that the manuals for both players are also identical. The DV8300 clearly has a lot in common with the Pioneer machine, albeit with Marantz tweaking at the critical points. Still, as we discovered last month with the £2,794 Townshend DV-747A, this is a highly tweakable player with considerable high fidelity potential.

The remote isn't in quite the same league as the player. It doesn't have any back lighting and finding keys like pause in low light conditions is a pain. It's the sort of remote you need to learn before you're going to be able to navigate movies

in cinematic conditions. Still, it does have a display dim and video on/off switching which are good for sound quality and rarely found on the competition.

One potentially useful facility is the ability to play back and even name tracks on MP3 encoded CDs. Whether music recorded on MP3 will stand up to the resolving powers of a decent system remains to be seen, but it's an option to try. It also plays discs made using the DVD-R/RW recordable DVD format (see page 60 for more information).

PERFORMANCE

We tested the Pioneer DV-747A recently at HFC Towers and more interestingly for the audiophiles among us, we've also had the Townshend turbo-charged version. The latter is sold direct and is somewhat more expensive at over two

WHAT FORMAT WAR?
Cast your mind back a few years. The DVD forum is finalising the details for DVD-Audio, a high-resolution digital music format with CD-beating potential. Copy protection issues delayed the launch for what seemed like an eternity, and then the Sony/Philips axis announced the launch of SACD. It was a bold move that looked like an attempt to maintain the licensing revenue generated by CD, and was also tantamount to economic and hi-fi war. Things started to look like VHS versus Betamax all over again, the slow uptake suffered by both formats an inevitable result. But there was always hope that a universal player could be created that would save the trauma of having to pick one format over the other. The DV8300 and its Pioneer antecedent are the audiophile cavalry that could save the day.

VERDICT

Marantz DV8300 universal disc player
£1,400

⊕ Comprehensive audio/video player with snappy timing and open, airy sound alongside a broad selection of features.

⊖ Doesn't quite match the dynamics or sonic integrity of some (more expensive) single format machines.

CONCLUSION

A genuine audiophile player for the multi-format generation. Great sound from both high-res and standard formats in an attractive and fully equipped box.

KEY FEATURES

⊕ Decoders: Dolby Digital, DTS, MP3, HD CD

⊕ THX Select approved

⊕ Compatible formats: CD, DVD-V, DVD-A, SACD, DVD-R/RW (video, VR)

⊕ Dual HDAM

⊕ Video DAC: 108mHz/12-bit

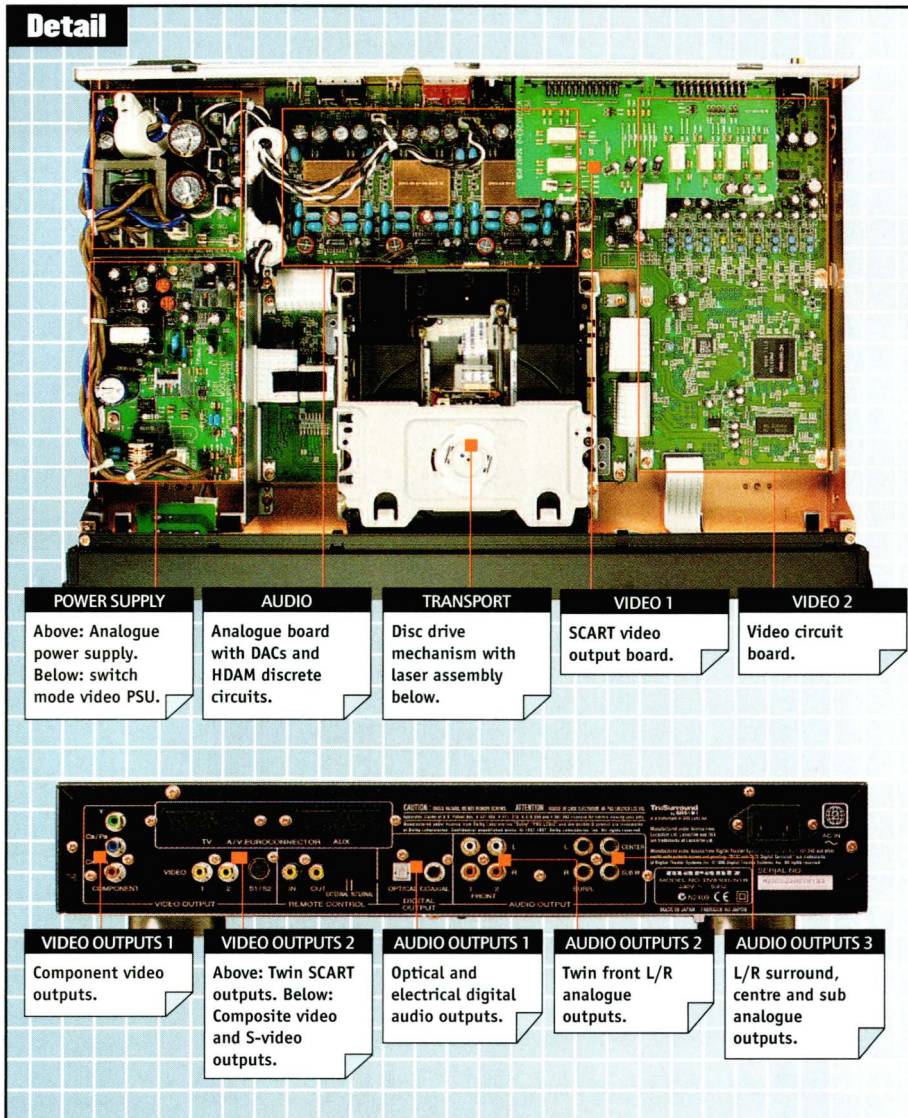
⊕ Audio DAC: 192kHz/24-bit, DSD

⊕ Finish: black or gold

⊕ Video outputs: RGB SCART, component, S-video, composite

⊕ Audio outputs: 5.1, stereo

⊕ Digital outputs: coaxial electrical, Toslink optical



“The DV8300 succeeds in creating a big, airy soundstage with good depth of image and plenty of atmosphere.”

and a half grand, but shows how far the '747 chassis can be pushed when there's a distinct lack of barred holds.

Marantz components are renowned for their abilities when it comes to timing, and this multi-format machine is no different. Whatever disc type you give it the beat is always clear and engaging, so much so that with some stuff it positively brings a smile to the face – we reviewers try to remain sombre and controlled at all times you understand. [Yeah, right! Ed] The latter response was a result of playing my favourite multichannel music title, *Miss E... So Addictive* by Missy Elliott. I haven't played it through more than two channels for a while but the enthusiasm with which

the Marantz whips up its 'kickin' beats' is a treat for sore ears. Timing is not just an issue with rhythmically driven material though, it's critical with almost any type of music save perhaps the most ambient. Joni Mitchell's *Both Sides Now* DVD-A is a good example, where the interplay of orchestra and voice is crucial to the music's overall feel. The DV8300 creates a big airy soundstage with good depth of image and plenty of atmosphere in which Joni's smoky voice takes centre stage.

SACDs sound pretty impressive too, the Gaudeamus mediaeval choral disc bringing out the player's ability to create height and scale to excellent effect. Compared to the Townshend '747 there is

a suggestion that the Marantz's treble is a touch dry, with less body than the more expensive machine extracts. Its high frequencies certainly go high – this is one of the central tenets of the high-res formats, and the sense of air and space is still remarkable, so it's only really a comparative issue. The only other area that the Marantz is relatively weak in is dynamics – it has a tendency to make you want to turn the volume up, suggesting that energy is not quite as well served as timing and imaging, but given the price one can have few complaints.

When using onboard decoding it works very well with Dolby Digital material as well, the new Tribe Called Quest video anthology making a good case for this popular format. Movies are likewise clear, concise and snappy with excellent voice resolution, which has its uses even when the bullets start flying. Video resolution is on a par with good DVD players and even the most discerning home cinema enthusiast can have few complaints.

As with the original '747, plain CD is exceptionally well handled for a video machine. Lambchop's *Is A Woman* filled the room with its lush, subtly darkened tones, the laid-back rhythms well served by the player's precise handling of transients and Kurt Wagner's lyrics presented in all their understated disquiet.

The Marantz DV8300 is clearly a better audio player than the Pioneer DV-747A and its limitations only become apparent in comparison with much more costly alternatives. Video performance is subtly better, which makes it very fine by anyone's standards. You will find better players for each of the formats the Marantz covers individually, albeit not inexpensively, but at the moment this remarkable machine is the best universal disc player available off the shelf. Marantz Hi-fi UK 01753 680868 www.marantz.co.uk

ALSO CONSIDER

PIONEER DV-747A £899
The first all-format machine and the basis for much of the Marantz represents the entry level for the genre and plays a mean CD to boot.

TOWNSHEND PIONEER DV-747A £2,794
Heavily modified version available as an upgrade or complete machine, kicks even single format player butt with ease.

DENON DVD-A1 £2,500
Serious DVD-A player which handles CD and video with remarkable finesse. Won't play SACD though.

TANNOY[®]

EYRIS

EYE CATCHING SOUND

"...the Eyris 2 goes for a controlled sound that is as dry as a Martini and as natural as breathing..."



To receive literature on the Tannoy Eyris range call our Sales Hotline 01236 702 509.

TANNOY | EYRIS | **WIDEBAND** TECHNOLOGY | tannoy.com

Smooth operator

In the wake of Nu-Vista, Musical Fidelity's latest CD player retains valve-related technology for a suave and sophisticated performance

Once upon a time, Musical Fidelity happened upon a tiny valve called the NuVista. Designed for military purposes, the valve had superb linearity and, when used in Musical Fidelity's amplifiers and CD players, it made for a sound that was fantastic for the money. But then, the entire world stock of NuVistas ran dry, with enough to keep the owners of NuVista products happy but leaving everyone else bereft.

Enter the A308^{CR} range. This uses technology hewn from the NuVista products, but with more commonly available electronics components. The £2,000 A308^{CR} CD player is a typical case in point. It takes all the 24-bit digital conversion and upsampling technology from the now unavailable NuVista and replaces the output board with something more conventional. Well, not that conventional – the series of choke-regulated power supplies found inside the player are more commonly found in valve amps, but it makes for an incredibly smooth power feed.

Some of the components look a little ordinary. There is no HDCD decoding, for example. Also, it has a rather basic display and transport mechanism that has an odd little tick right at the end of its travel – both of these would look okay in a budget CD player. However, these components are housed in the sort of casework that makes most CD players look puny by comparison. Everything else

VERDICT

**Musical Fidelity
A308^{CR}
CD player
£1,999**

▲ Big rich and warm sound that will make every one of your CDs sound fantastically musical.

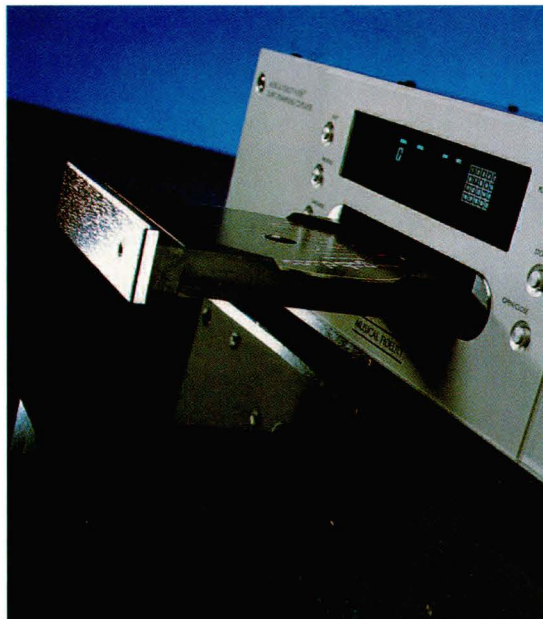
▼ Not the most analytical CD player around. Transport and display are a bit cheap-looking.

CONCLUSION

A real giant-killer, like the NuVista before it, the A308^{CR} steers just the right side of rose-tinted to keep the sound warm and musical. Well worth checking out.

KEY FEATURES

- ▶ 24-bit CD player
- ▶ Upsampling decoder
- ▶ Multiple choke-regulated power supplies
- ▶ Optical/coaxial digital outputs
- ▶ Single-ended phono analogue outputs



Like MF's matching amps, the A308^{CR} CD player uses choke-regulated power supplies to give a smoother power feed.



CD OR SACD?

There is some similarity between the design of the A308^{CR} CD player and an SACD player. Originally, Musical Fidelity had intended to produce an SACD player for the NuVista range, as the company considers this format better than the DVD-Audio competition. But the paucity of decent SACD titles (and the cost of licensing) meant the production of a standard CD player would be more practical. Still, Musical Fidelity had already invested time and research in understanding what makes SACD performance so good, and applied some of that knowledge to the NuVista 3D and subsequently the A308^{CR} CD players.

is equally solid in approach – the stereo audio and coaxial digital phono sockets are as robust as the casing.

The upsampling system is designed to put all the digital nasties inherent to CD out of band, by pushing the sampling frequency up 100kHz. This makes the way it copes with CD closer to SACD, as its distortions are up in the 25kHz to 30kHz region.

PERFORMANCE

This is a wide-bandwidth CD design, and requires a wide-bandwidth amplifier and speaker to get the best from it. Of course, the CD will sound good even hooked up



MUSICAL FIDELITY A308^{CR}
24 BIT UPSAMPLING CD PLAYER

NEXT

PREVIOUS

LANGUAGE

POWER

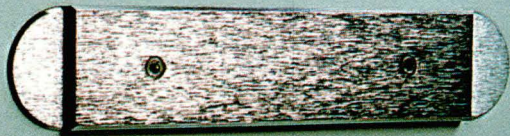


PLAY/PAUSE

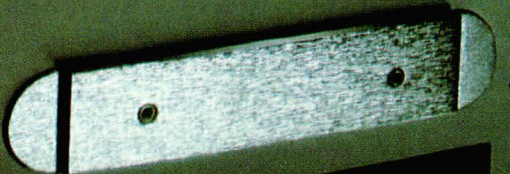
STOP

OPEN/CLOSE

MUSICAL FIDELITY



MUSICAL FIDELITY



POWER

PREVIOUS

LANGUAGE

PLAY/PAUSE

STOP

OPEN/CLOSE

to a £200 amplifier and a pair of budget bookshelf speakers, but to really hear what it can do, you need more powerful, better engineered components and naturally the A308^{CR} preamp/power amp combo (see HFC 231) springs to mind.


This has remarkable properties, like a one-player CD improvement programme. You can put any flavour of disc in the tray and the A308^{CR} will bring out the best in it. Discs sound rich and warm and clear, but not so euphonically boosted that everything is rose-tinted. Perhaps that last degree of disc analysis is missing – you cannot tell what the second viola player had for lunch, but you can hear into music which has more grace and charm than usual.


Soundstaging is particularly strong. It throws up a vast image – wider, deeper and even higher than the speaker boxes. This is especially important in classical or

opera – a disc with a vast array of singers and musicians, such as Britten's *War Requiem*, makes a sound that is expansive and fills the space between and around the speakers with aplomb.

That smooth sound takes on a glorious quality with any form of small music, from 1950s Sonny Rollins to 1990s early music madrigals. Things really come to life, singers take on a sonorous harmonic richness and sax playing becomes magical. Even powerful, gutsy rock like Led Zep passes muster – guitars crunch powerfully, drum kits are big and heavy and vocals are articulate and sung with gusto. The compression on the voice is entirely missing, however, and a more detailed player would highlight this style of recording. Instead, the smoothing off of detail makes for a more attractive, if less precise, performance.

So just how good is this smoothness?

In absolute terms it makes spending more than £2,000 a tough justification. When you pay more money, in most cases you get more robust proprietary transport mechanisms, more detail and transparency, but not much more musical enjoyment. There are exceptions – Wadia is an obvious one – but the A308^{CR} can make a mockery out of many a more expensive CD player. 

 Musical Fidelity 020 8900 2866

 www.musical-fidelity.co.uk

ALSO CONSIDER

AUDIONET ART V2 £2,300

Top-loading CD player with a choice of filters and a killer build. Sounds great, too.

WADIA 301 £3,650

Also with a built-in volume control, this revelatory CD player means you play more discs.

SONY SCD-1 £3,500

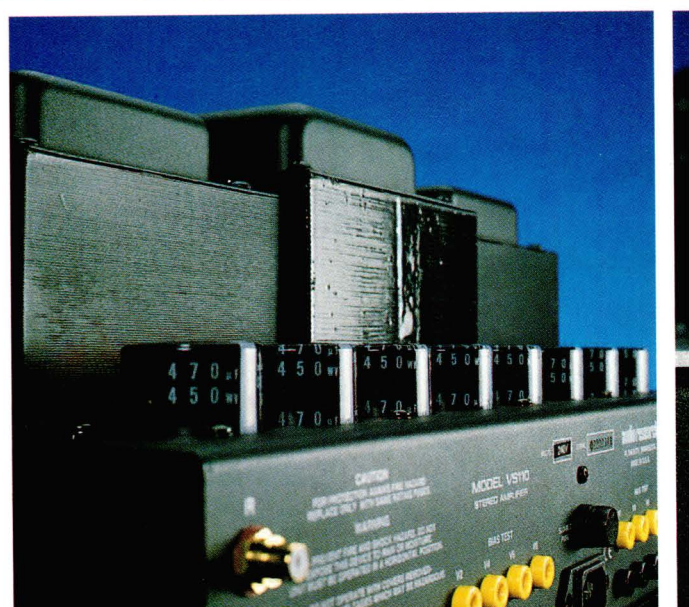
The huge SACD player is operationally slow but it sounds great with CD and SACD alike.



“Audio Research builds ’em big and ballsy and sees no reason why firepower should be limited just because it uses glass and not silicon.”



Audio Research believes in the more is more philosophy when it comes to valve-driven power.



American iron

EXCLUSIVE Audio Research's latest creation delivers big valve horsepower at a price designed to lure us impoverished Brits

Audio Research is a bit like the Cadillac of valve amplifier brands, it builds 'em big and ballsy and sees no reason why firepower should be limited just because it uses glass and not silicon. The new VS110 is its least expensive all-tube 100-watter so far but it's still a brute, weighing in at just under 28kg and measuring a full 50cm front to back.

Audio Research (ARC) makes a wide range of hi-fi electronics but specialises in amplification which so far has been of the stereo or monoblock variety. Its power amps could easily be used in a multichannel set up but the brand has shied away from processors and DVD players. It makes a few solid state components but its preferred amplification device is the valve, or tube as they're called in Plymouth, Minnesota where ARC is based.

Like its sister, the VS55 (50W, £2,699), the VS110 is the first Audio Research for a long time to expose its valves and live without a big front fascia. Instead ARC has gone for the popular shelf style which is probably the most economic way to make a chassis. This has the advantage of revealing the shiny, glowing tubes but the drawback of exposing the rather agricultural finish on the three transformers. It's not glaring but contrasts rather strongly with the smartly machined top plate. This economy however, presumably contributes to the 30 per cent saving over ARC's VT100 MkIII,

VERDICT

Audio Research VS110 power amplifier
£4,299

➤ Powerful, fluent and well resolved with great load tolerance and robust build quality.

➤ Poor finish on transformers, hot and tricky biasing procedure.

CONCLUSION

Full bodied in every respect, the VS110 combines valve virtues with high power in a musically engaging package that should turn into a family heirloom.

KEY FEATURES

➤ 100 watts per channel

➤ Four and eight ohm speaker outputs

➤ Individual biasing for output tubes

➤ Size: 44.5x20.1x50.5cm

➤ Output tubes: 4x6550EH per channel

➤ Input: single-ended RCA phono

an amp which delivers the same rated power from similar valves but has a fully enclosed chassis. It does of course measure rather better and this is reflected in the sound, but proves the point that ARC is doing its best to make the VS110 competitive.

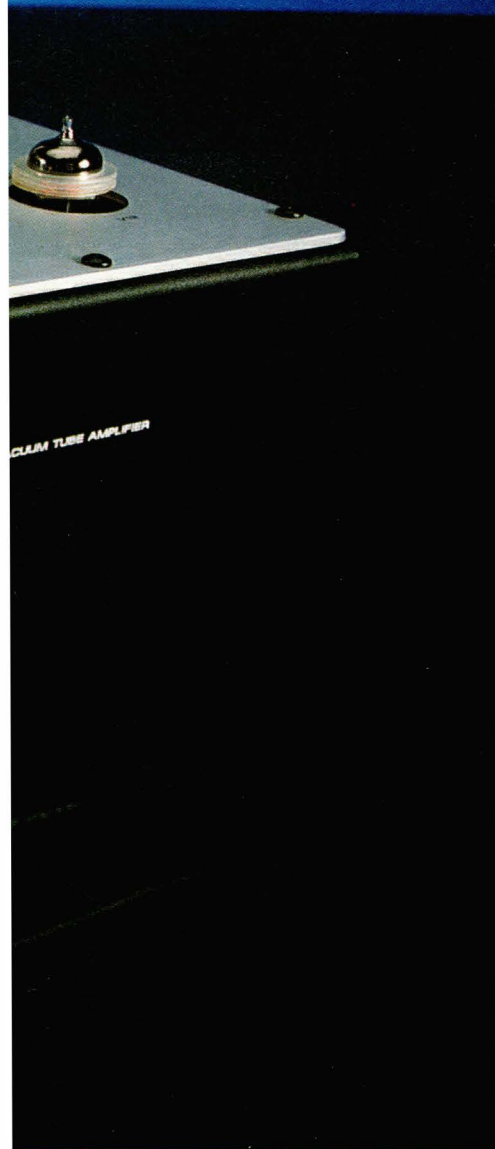
The drive power is derived from two pairs of matched 6550EH tetrode valves per channel which, surprisingly for this piece of all-American iron, are made in Russia. When the amp arrives, all the tubes are cosseted in foam padding, each marked to correspond with the inscriptions on the top plate, and installing them certainly contributes to the pleasure of using the amp.

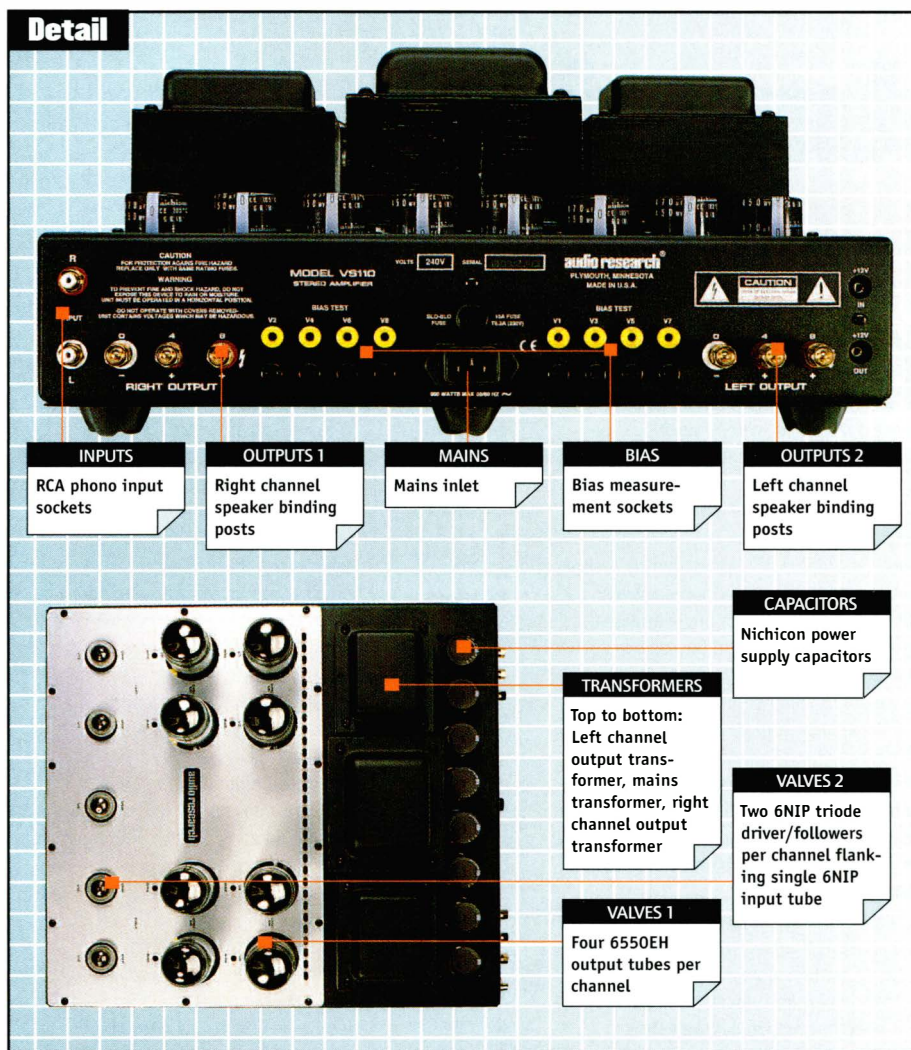
Connections for speaker cable include the usual four and eight ohm taps, but how you use them should be based on experimentation rather than nominal speaker ratings

A 100 watts is a lot of power for a valve amplifier – the majority produce less than 50 watts, but the ARC comes from the land where bigger is better. This is a state of affairs that applies to listening rooms as much as anything else so more power is necessary to deliver the volume levels required. Audio Research has long been a fan of the 6550 beam tetrode output tube, a device built in response to the British KT88 found on Quad II mono

A BRIEF HISTORY OF AUDIO RESEARCH

Audio Research is one of the oldest continually operating manufacturers in American audio. The company opened for business in 1970 in Minneapolis with one goal – to advance the state-of-the-art in music reproduction. It was founded by current President William Z. Johnson, who began designing custom audio electronics in the early 1950s and who also ran a hi-fi retail store until the mid-1960s. Johnson's efforts almost single-handedly revived vacuum-tube designs at a time when major manufacturers had abandoned this technology in favour of low-cost solid-state devices. Over subsequent years the brand has created many classic components, with pre-amps such as the SP-9 and its descendants gaining almost legendary status.





“Designed for bigger rooms and less sensitive speakers, the VS110’s sound is always comfortable and fundamentally musical.”

amps from the fifties and sixties. In this application you can adjust the bias of each output tube using a supplied tool and your own volt meter. This is a hot and tricky exercise that has to be done when the amp is fully warmed up, but keeping the bias as close as possible to optimum does reward with a more focused sound.

PERFORMANCE

As Audio Research runs the VS110 in class AB rather than the lower powered class A preferred by most valve amp makers, its sound is less valve-like in both good and bad respects. On the less impressive side you don’t get the hear-through midrange transparency or the lightness of touch but in exchange you have the one thing that

valve users covet – power. This is not to be underrated – it can add realism and substance to the performance that cannot really be substituted.

While the VS110 has a pretty even balance there is a slight warmth to the sound that when analysed seems to be coming from the upper bass, which is fuller and richer than it might be but does not seem to intrude with many speakers. We used three alternatives: B&W Signature 805, Living Voice Avatar OBX-R and Audio Physic Spark. Of these only the Living Voices sounded obviously thick with the VS110.

Dynamics are well catered for by the plentiful power on tap, the amp making the most of swings in level on classical

recordings that indulge in such excursions. The tubes really make their mark in the midrange – while it’s not as exaggerated as it can be it’s still the place where you can hear the most. This was the first occasion I have managed to decipher Da Brat’s “I bought the shoes, they Prada too” line from *Slap, Slap, Slap* on Missy Elliott’s *Miss E... So Addictive*, and it’s far from the first time I’ve tried! This is a great amp for vocals, it’s mostly a tube thing but powerful tubes don’t get in the way and the grumbling bass you get alongside is most appreciated.

Recording styles are well represented or discriminated between. Cream’s 1966 *Full Cream* revelled in its jangly, compressed sixties sound so beloved of bands like the White Stripes, while contemporary offerings like *Nepalese Bliss* from the Irresistible Force sounded chunky, lively and never short on bass. Next to a decent transistor amp like ATC’s SPA150-2 the VS110 is timbrally strong and has an appealing organic feel but there is a slight shortfall in grip and snap. For areas in which a tranny amp traditionally scores I’d expected the ARC to be a bit more competitive given its power rating. But that’s not why you use valves, their strength is in the resolution of tone – be it in voices or instruments a tube amp will always tell you more about the colour of the sound. It’s something that every live performance reveals yet we readily accept amplification that is frankly poor at reproducing it.

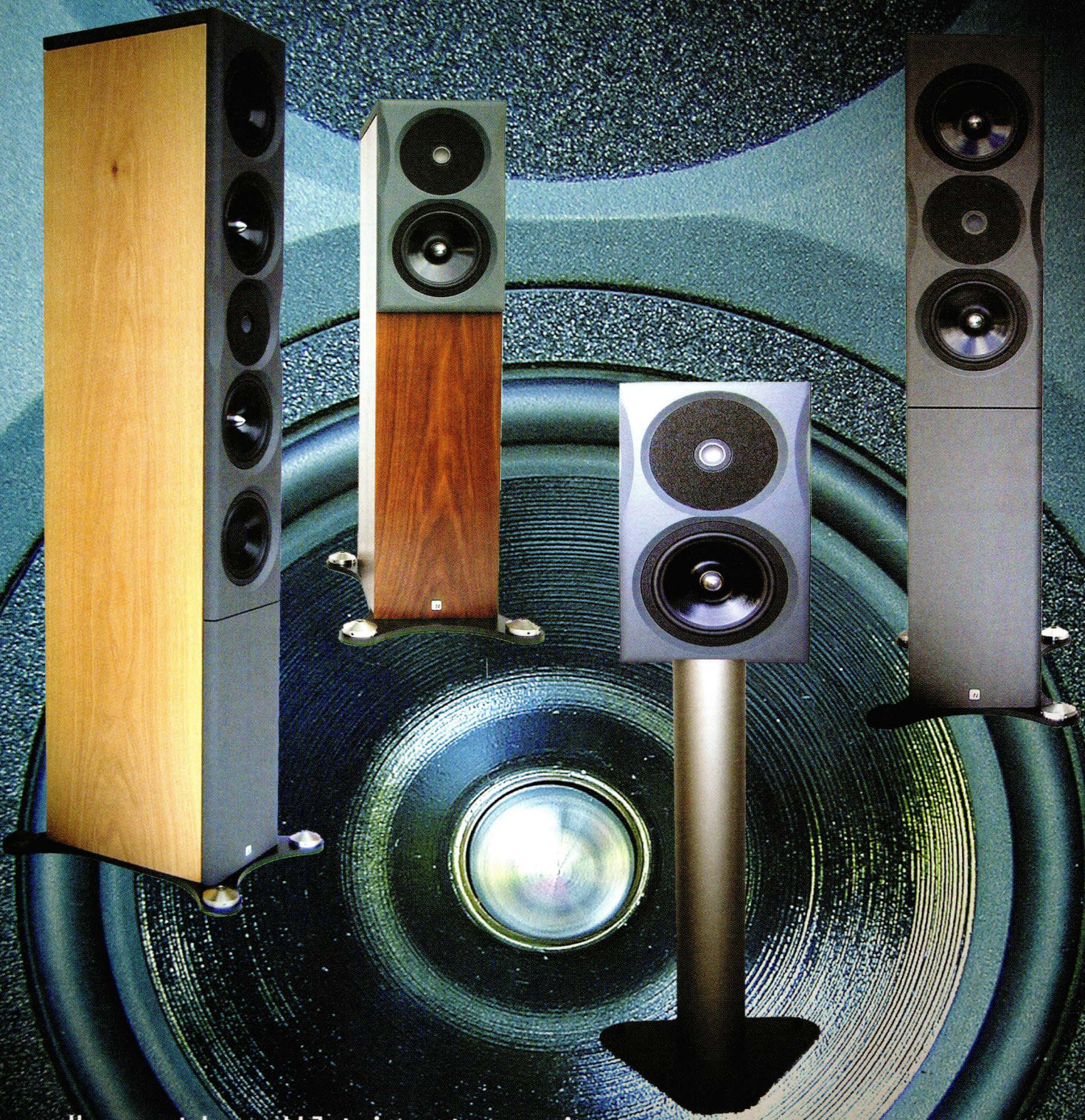
The VS110 is designed for a bigger room and/or less sensitive speakers than the one used but even in less challenging conditions delivers a sound that is always comfortable and fundamentally musical. It should be able to drive a wide variety of loudspeakers and provide its owner(s) with years of robust entertainment. Absolute Sounds 020 8971 3909 www.audioresearch.com

ALSO CONSIDER

EAR 509/II MONOBLOCKS £4,199
British heavyweight Tim de Paravicini’s classic power houses have a less valve-y sound than some and know how to kick ass.

ROGUE AUDIO M-120 MONOBLOCKS £2,695
120 watt US-built valve power at this sort of price has got to be worth anyone’s auditioning time. Makes you wonder how much you pay for the badge with other brands.

PAPWORTH M100 MONOBLOCKS £3,950
Beautifully made and finished with integral volume controls, this lesser-known British brand has been around long enough to know what it’s doing.



"...the Ultimum is
an exceptional achievement
in every respect" HI-FI CHOICE

Ultimum

by neat acoustics

www.neat.co.uk

01833 631021

High end, low rent

Denon's new DVD-Audio player uses much of the technology found in its DVD-A1, but costs less than half as much

There has been a rash of excellent DVD-Audio players recently, of which the highlights are the Marantz DV-12, and the Denon DVD-A. The latter rivals the DV-12 for its audio capabilities and trumps it with more sophisticated video processing and a proprietary Digital Link which allows it to deliver a 'high band' digital multichannel audio output for external processing. Now we have the DVD-3800 DVD-Audio player, which looks like the DVD-2800, but gets ideas above its station and price point by acting like a DVD-A1.

Digital Link is a significant advance, but it carries a cost penalty, so it has had to go. The DVD-3800 also lacks a few of the DVD-A1's other more exotic baubles. Video processing is slightly simplified – it's still equipped for progressive scan using Denon's high power PureProgressive circuit (see box), but the video D/A converter section is 12-bit, 108MHz using separate processors for interlace and progressive scan, where the DVD-A1 has a 14-bit architecture, using six converters. The audio section has been similarly thinned out with two 24-bit/192kHz Burr-Brown DACs, where the DVD-A1 has no less than eight. Both have HDCD and AL23 Plus (née Alpha) processing, which addresses zero cross distortion and quantisation noise. There are mechanical simplifications too, but

TECHNOLOGY: PUREPROGRESSIVE

The most sophisticated element of the DVD-A1 flagship has made the transition to the cheaper model unscathed. This is the PureProgressive progressive scan video processing, which converts interlace video with a Silicon Images SiL 504 video processor which is capable of number crunching at the rate of six billion operations per second. It performs 2:3 pulldown detection, converting 24fps film to 60Hz (NTSC) video, while film and other types of material are handled according to their field rate.

The processor can handle mixed material, even if it is incorrectly identified on disc, which is not uncommon. It uses an algorithm that stores four fields in memory, and processes them on a pixel by pixel basis, correcting MPEG motion artefacts to a very high standard.

VERDICT

Denon DVD-3800 DVD-A/V player
£1,000

- ▶ Silky sweet player
- ▶ Sound occasionally lacks solidity.

▶ **CONCLUSION**
Sets new standards at the price for sound and pictures, both of which are exquisitely refined and detailed.

KEY FEATURES

- ▶ Progressive scan
- ▶ HDCD
- ▶ Built-in Dolby and DTS processors
- ▶ Twin SCART
- ▶ Component out (NTSC only)
- ▶ Controllable via RS232 (serial) port



the baby flagship is still an impressive package, solidly built and weighing 10kg.

There are some great features. A Pure Direct mode can be programmed to turn off unnecessary circuits when using the audio section – video processing for example, the digital output or the front panel display. The player will display JPEG and Kodak Photo CDs, and MP3 compilations can be played. Twin Scarts are fitted and video is available in composite, S-Video, RGB and component (NTSC) form. An RS232 socket allows the player to be integrated into custom install systems, and operated by AMX, Crestron and similar controllers.

PERFORMANCE

If properly designed there is no reason why DVD players shouldn't perform well as CD players. Usually they don't, though finally this is beginning to change. TAG McLaren has had a particularly excellent example in the DPA32R, though this unit is a transport, reliant on an outboard processor to turn digits into sound. The previously mentioned Marantz and Denon players fit the brief more precisely, and now here we have a £1,000 DVD player that sounds as good as most CD players.

Using the various bypass options is not essential, but it is advisable, and switching everything unnecessary off helps give the sound a new purity and dynamism. But the Denon is always very clear and transparent. Its particular strengths are its subtlety, both in the way it reproduces fine detail, and in its expression of fine tonal colourings. In combination they make music from CD that is subtle, fluid and easy on the ear – enough to make some well-liked conventional players sound a little coarse. Intriguingly, it sounds quite different to the DVD-A1, and the Marantz DV-12, both of which are more overtly physical (and priced at over £2,000). There's more solidity in the bass with the senior models, and more of a sense of soundstage.

The Denon is also a very good DVD-Audio player, but somehow this factor seems to have slid down the priority list in recent months simply because of the famine of good quality recordings capable of stretching the medium much beyond what is available from compact disc. No doubt this will change with time, and then the Denon's purity and expressiveness, which was already apparent for example in the extraordinary vocal



“Here we have a £1,000 DVD player that sounds as good as most CD players.”



Audio playback is helped by the Denon's Pure Direct mode, which turns off unnecessary circuits to reduce electronic 'noise' when listening to music.

quality of a recording by jazz singer Chie Ayado, will stand it in good stead.

Watching films through the Denon acts as a reminder of how good DVD-based video can be when done right. We had no access to a progressive scan display, and in any case it would only have been useable with multi-region or R1 (US region) discs, and the player won't handle the latter as standard unless it is converted. Talk to your dealer rather than to Denon about this – it shouldn't be a problem in practice.

Even with interlace scan, when viewed on a good quality 100Hz PAL TV (a Philips 32PW8616), the Denon is impressive. The picture glows with life. Blacks are deep and pure, and subtle detail – hair for example – is rendered superbly.

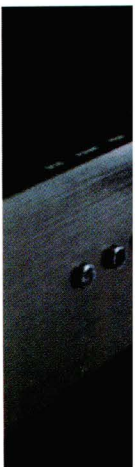
Colour can be varied by user adjustment, but we saw no reason to depart from the default values, while noise and colour bleed are negligible. For both audio and video, this DVD player sets the standard at £1,000.

Denon 01234 741200
www.denon.co.uk

ALSO CONSIDER	
MARANTZ DV-12	£2,500
A very impressive DVD-A player which is easy to set up and has no obvious limitations.	
TOSHIBA SD900E	£1,299
One of the best DVD-A players around, both as an audio and a video player.	
MERIDIAN DVD596	£2,350
DVD-Video player with DVD-Audio upgrade potential, with classic Meridian stripped-down exterior and class engineering.	



The B-400XS's stylishly functional remote is appropriately named the Gizmo.



The good bit

Densen's latest CD player is said to add an extra bit of data to ordinary 16-bit discs

Densen's motto is "Life is too short for boring hi-fi". At least, that's what's printed on its publicity material, and by claiming that its new range-topping CD player, the Beat B-400XS, adds an extra bit of data to that on the CDs it plays, you could say that Densen is living up to its ethos.

PlusBit, the technology which adds the reputed 17th bit to normal CDs, would seem to be the main difference between this player and the standard B-400 we reviewed early last year (*HFC* 212). On that occasion Densen's claims of immeasurable jitter acted like a red rag to a bull for technical editor Paul Miller who had little difficulty in measuring a good dollop of this insidious distortion. In a purely audio sense, however, the B-400XS is certainly an improvement on its ancestor.

On the other hand, our criticisms of the B-400's ergonomics don't appear to have had much effect and the display is still irritatingly tricky to read. This is because track number and time are extremely close and time readout of single figures is preceded by a zero, so the readout might be 09 01.34 for a point on track nine. The best way to avoid confusion is to switch off the display which can't be done with the remote. The latter, called a Gizmo, is a rather stylish thing in the Scandinavian mould – slim and solid with lovely buttons and attractive if small inscriptions. It comes complete with a mains charger instead

VERDICT

**Densen Beat
B-400XS
CD player**
£2,500
Gizmo remote
£300

▲ Entertaining player with a great sense of timing and the ability to get at the heart of the music.

▼ Can sound aggressive with some amplifiers and needs plenty of warm-up to sound its best. Expensive remote.

CONCLUSION

A quirky player in both design and technology, it succeeds in engaging the listener in a very appealing way.

KEY FEATURES

▶ PlusBit signal 'improving' technology

▶ Densen Denlink and BNC coaxial digital outputs

▶ Densen comms links

▶ Twin output sockets

▶ Twin DACs

▶ HDCD filtering

▶ Zero feedback class A output stage

▶ Phase invert switching

▶ Finish: black with chrome or gold buttons

of batteries and its high 'burst mode' power means that it works any-which-way you point it – this is probably why you need a charger. But it's not supplied as standard with the player and costs an extra £300. In the context of a complete Densen system this might seem OK – it is a system remote – but for the player alone you might think twice.

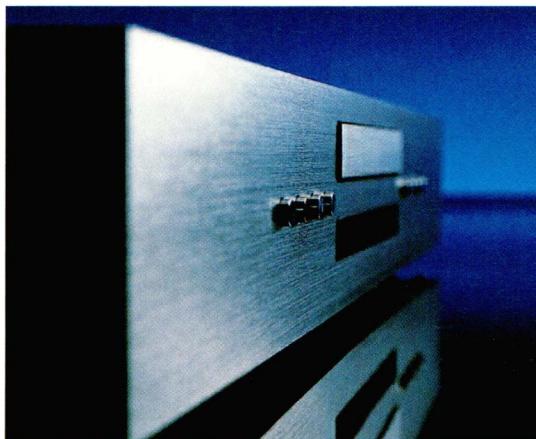
The B-400XS itself is a very clean, minimalist bit of industrial design, though it takes a bit of legend reading before you figure out which button does what. As all the inscriptions are on top you need to make sure you can view the player from above until you've learnt to drive it. It uses a Sony transport mechanism and processor with Densen control logic and digital to analogue conversion with filtering courtesy of Pacific Microsonic's HDCD processor.

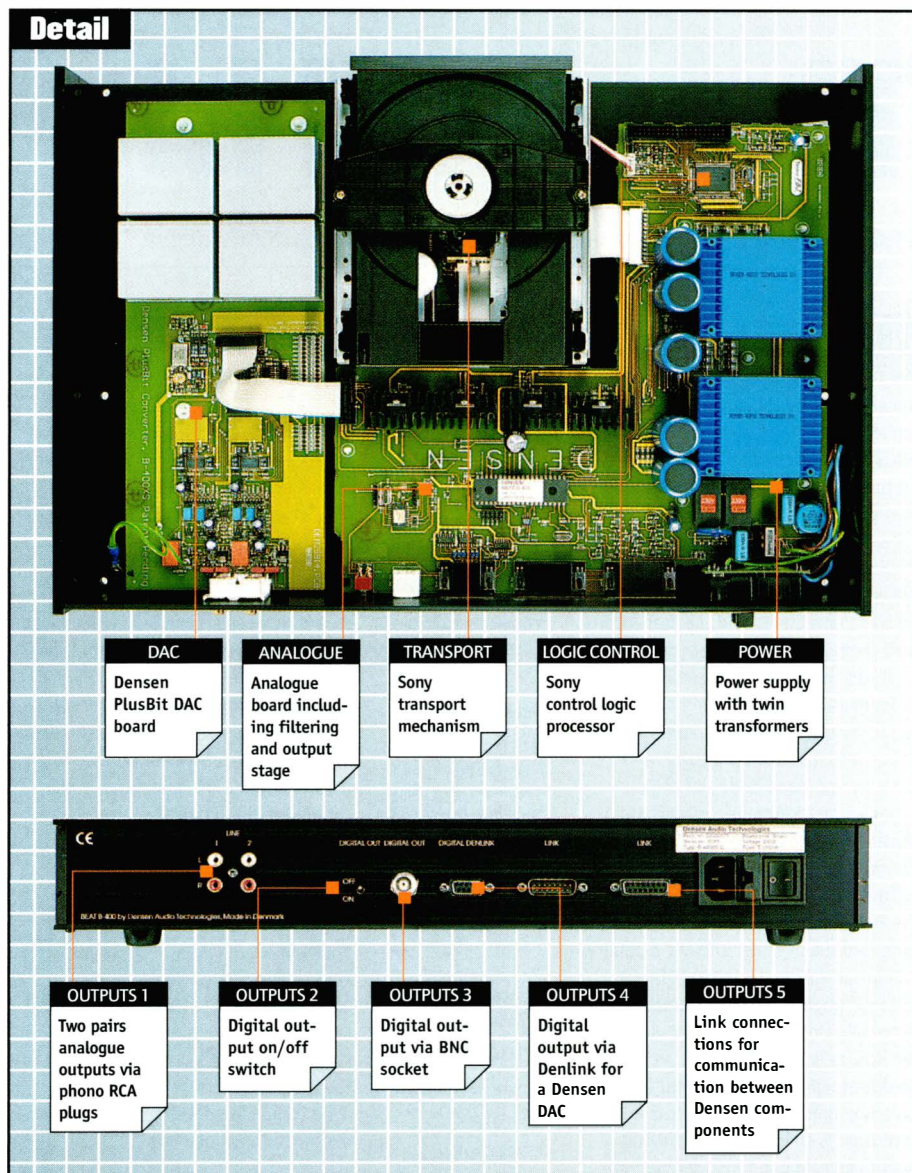
The back panel features an unusual selection of sockets alongside the usual analogue and digital (BNC) outputs. These consist of a digital Denlink for connecting to a Densen D/A converter (as and when one is produced) and two connectors that allow Densen components to 'communicate' – this is for complete system operability and multiroom functionality.

TECHNOLOGY: PLUSBIT

The technology that Densen has developed to allegedly recover extra information from discs is something called PlusBit. This, apparently, can by mathematical means "add as many bits to the original source material as is requested", so quite why Densen has gone for only one with this player is not entirely clear, but it is claimed to be "very costly to implement".

PlusBit is said to be completely different to upsampling (which is also carried out by the player). Here, it uses four converters and lets two of them slightly delay the sample, after which the normal time sample and delayed sample are overlaid. The result is said to be a sine wave that is the average of the two samples, which has the effect of smoothing the complete signal by one bit. So rather than extracting an extra bit of data it's providing a waveform that's as smooth as one would expect from 17-bits.





“The Beat B-400XS does what it says on the box, it’s not boring but neither is it uncouth”

PERFORMANCE

Make sure you warm up the Beat B-400XS before use. Play it cold and it sounds thin and nasty but given a day or two of acclimatisation it relaxes significantly. In our B-400 review we discovered “excessive ultrasonic and RF noise” in the player’s output stage, a factor which tests partnering amplification to the max. This may have been the reason the B-400XS sounded smoother with an ATC preamp than the Border Patrol valve preamp initially used – usually the tubes sound smoother than the trannies.

The first thing that strikes you about this

player is its sense of timing. This is pretty damn tight without, amplification permitting, resorting to edginess. It’s that old foot-tapping thing, you can’t help but follow the beat if there’s a clear one in the music – this must be what Densen is talking about with its motto. It’s said that in comedy timing is everything, but that’s not entirely true; comedians need to have something to say and the way they say it is not just timing. Likewise with music there are other factors to consider, not least being resolution of detail. Here the B-400XS is good but a wee bit sparse. Other players produce a richer sound with more

harmonics and tonal colour. However, it doesn’t take long for the B-400XS to worm its way into your affections.

There’s enough detail to keep most of us happy most of the time. Give it a great recording such as Anouar Brahem’s *Thimar* with its small ensemble of rich acoustic instruments and you revel in the tone and depth of image. Okay, you could get a more subtle version of events from the Townshend Pioneer DV-747A reviewed last month but that’s not apparent until you make the comparison. Another favourite, *Good Morning Susie Soho* by EST, sounds lively, open and musically inviting – you’ll find yourself easily playing whole discs of familiar material and if not revelling in new-found detail, enjoying the music instead, which is after all, the name of the game.

As the Marantz DV8300 universal disc player reviewed on page 28 turned up while we were listening to the Densen we stuck it in to see how it would fare. Given the £1,000 gulf in price the result was not embarrassing for Marantz, though it did give the Densen a chance to reveal a comparatively rich side to its personality and a good grip of dynamics. In other words the Marantz is not quite in the same league when CD replay is the arbiter, but it does have a few more strings to its bow.

The Beat B-400XS does what it says on the box, it’s not boring but neither is it uncouth or aggressive, providing you choose your amplification carefully. Its suitability will certainly vary depending on the equipment you intend to partner it with, and careful auditioning is required to ensure a suitable match.

As for that 17th bit, we didn’t get the impression we were hearing more music as such but what we did hear was thoroughly well presented and highly engaging. And any player that makes you want to listen to your music for longer is a good one indeed.

Densen 0045 7518 1214

www.densen.dk

ALSO CONSIDER

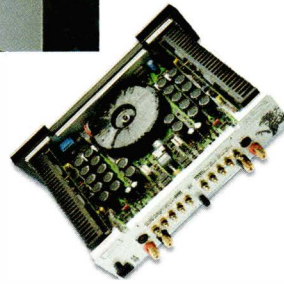
TOWNSHEND PIONEER DV-747A £2,794
Turbo-charged multiformatter offers a rich and natural sound with good compatibility.

SONY SCD-XA777ES £2,300
SACD player with excellent CD playback as well as handling the new multichannel format.

PRIMARE D30.2 £1,499
Another Scandinavian CD player, one which specialises in structure and solidity of image.

Custom Sight & Sound

Consultations
Demonstrations
Installations



Gryphon Audio Designs

Gryphon Adagio and Callisto

Innovative design, battleship construction, user friendly and musically superb. Qualities sometimes attained by some of the finest Hi-fi in existence yet these are descriptions of Gryphon's entry level components!

The latest Adagio CD player is a true dual mono design with two additional power supplies for the transport and digital circuits. The digital data stream is upsampled to 24bit/96KHz standard before processing and amplifying by a fully discrete, zero feedback, output circuit.

In addition to continuing the dual mono theme, the Callisto integrated amplifiers offer substantial power outputs of 100wpc (2100) and 200wpc (2200) which easily double into 4 ohms, driving virtually any loudspeakers including our favourite Red Rose and Wilson Benesch models.

Complete Solutions from Custom Sight & Sound.

Stop Press: New from Gryphon Audio

Cantata 'Room Adaptive Loudspeaker'

Featuring new technology that seamlessly matches this loudspeaker to virtually any room

Prelude / Encore Dual mono pre-power amplifier
Designed to complement the superb Cantata loudspeaker system

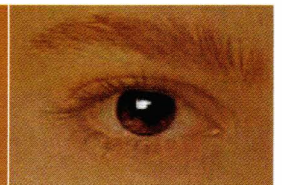
On show for the first time in the UK
Room 1044, The Hi-Fi show & AVEXPO 2002

Agencies Include

ATC
Audio Analogue
Audioprism
Cardas
Crestron
Gryphon
HNE
Isotek
Linn Home Theatre
Living Voice
Lutron
Red Rose Music
Revox
Runco
Sony SACD
Tact
Wadia
Wilson Benesch

Custom Sight & Sound

Incorporating Red Rose Music (London)
Phone-01992 571879 Web-cssinstall.co.uk
Mail-enquiries@cssinstall.co.uk



MAIN REVIEWS – Alvin Gold | LAB REPORTS – Paul Miller

DIGITAL RECORDERS

Just because they're digital doesn't mean that all recorders are the same

ON TEST



MARANTZ DR6000
£400



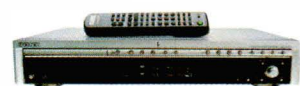
PHILIPS CDR802
£299



TASCAM CC-222
£699



ONKYO MS-B1
£1,200



SONY HAR-D1000
£600




SONY MDS-JE400
£130

From the day compact cassette relinquished its grip on the home recording market, which is where we're going this month, the industry has squabbled about the exact nature of the mousetrap that would replace it. Philips thought it had the answer with DCC (Digital Compact Cassette), which after all resembled a cassette, and was even partly backwards-compatible (DCC recorders play compact cassettes). DAT (Digital Audio Tape) had its time in the sun – about five minutes – before retreating into the low end of the studio world. But it did earn an honorable footnote in history when a then obscure Pioneer audiophile engineer called Kuniharu Nishi converted a DAT mechanism to run at double speed with 96kHz sampling, a move that led directly to this sampling rate's inclusion in the DVD standard. Sony must have thought it was onto a surefire winner with MiniDisc, which offers CD-like functionality plus re-writability shrunk into a 8cm caddy protected disc, and it has certainly out-puffed DCC and DAT. But it has only ever succeeded in some markets, while in others, notably the all-important USA, it bombed.

Hard disc drive (HD) recorders are the latest kid on the block, and look as though they have a healthy future. This is in part because of the growth of data reduced codecs like ATRAC (the compression system behind MiniDisc) and MP3 (the internet favourite), which allow large collections of music to be stored on relatively small discs. The two recorders in this project that are based on HD technology have 20-

30GB discs, miniscule by today's standards. Hard disc recorders have even spawned a whole new paradigm for home entertainment: so-called servers, which contain complete collections that in a multiroom system can act as a self-contained central music source for the whole house.

The big seller right now however is recordable CD: CD-R (one time recordable) and CD-RW (recordable/erasable). Given the ubiquitous nature of CD it could hardly be anything else. The technology is widely available and it is neither difficult nor expensive to implement, though it felt like magic when it was introduced, which seems only five minutes ago. And dear old analogue tape hasn't quite hit the buffers yet. There are six digital recorders on this test which use a promiscuous selection of recording technologies, and one indeed includes a cassette deck. 

EQUIPMENT USED

Denon DVD-3800 (as CD player)
Pioneer VSA-AX10 (via digital and analogue inputs)
TAG McLaren DPA32R
TAG McLaren 250MR monoblocks
JMLab Mezzo Utopia
Nordost SPM Reference speaker cables & Quattro-Fil interconnects
TAG McLaren interconnects & digilink

MUSIC USED

Alison Krauss + Union Station
New Favourite
Maazel/Pittsburgh Symphony Orchestra
Respighi – Pines Of Rome
Solti/Chicago Symphony Orchestra
Mahler – Symphony No3
Mary Coughlan *Love For Sale*

CD-RW

INPUT 1 SEL

PHONO

INPUT

OPEN/CLOSE

CD-TAPE
CONT PLAY

CD TIMER

OFF 2:00



MARANTZ DR6000 £400

01753 680868 www.marantz.com

Few frills, but who needs 'em when recordings are well nigh perfect

Although essentially a straightforward single mechanism CD recorder, the DR6000 boasts a number of refinements that help justify its price. These range from a full front panel control set with a multi-function jog control, a headphone level control (some don't even have a fixed level headphone socket), a quality display and double speed finalising which closes the disc when recording is completed. But as the Marantz will only copy from an external source, you can only record in real time.

Other features include CD Text (recording and editing), one-touch synchro-record with Marantz tape decks (if you can find one) and CD players, and a range of random and repeat modes. The on-board sampling converter will deal with all clock frequencies up to 96kHz and just beyond, though recording is always at 44.1kHz, the CD standard, while a discrete HDAM output buffer amp and some specialised passive components (mainly capacitors) help take care of the sound.

PERFORMANCE

If you already own a quality CD player, the Marantz makes a lot of sense, especially connected by a good coaxial digital cable. But it also happens to be

VERDICT

SOUND
★★★★★

FEATURES
★★★★☆

BUILD
★★★★★

VALUE
★★★★★

This is the model with greatest appeal for the quality market. The Marantz eschews gimmickry, but it does a simple job very, very well.

CHECKLIST

EXTERNAL SYSTEM CONTROL ✓

HEADPHONE SOCKET ✓

COMPUTER LINK OPTIONAL

REMOTE CONTROL ✓

a fine CD player in its own right, easily the best in the group, clearly outpointing the next best (the Philips CDR802). It is a little softer than the Denon DVD-3800 reference player, and it lacks some of the latter's bold, muscular dynamics, but it is fluid and expressive sounding, with good instrumental separation and stereo layering in the depth plane, which is sometimes suppressed by CD players. Arguably it plays to the strengths of acoustic and classical music more than it does to mainstream rock, but we're talking here about very subtle effects that certainly won't apply to every piece of music in a particular genre, or in every system.

The recording side of the Marantz is first rate. It makes clean, accurate and glitch-free copies which perform equally well whether played on the DR6000 itself or an external player – the Denon DVD-3800 for this test. Bass, midband, treble, imaging, dynamics – all these elements track the source disc with a high degree of accuracy, and while

differences were identified on most A-B comparisons, as often as not they were promptly overturned on the next comparison. At a deeper, more fundamental level, this was the deck that was most able to touch the right buttons – a recording of the Mary Coughlan test track *Love For Sale* was as impassioned and compelling as the original disc. Recordings made from analogue (vinyl records and so on) are not quite in the same class, but despite their slightly sugared tonality they remain airy, spacious and controlled, and easily the best in this test group. **C**

LAB REPORT

▶ In playback mode, output is slightly below the 2.0V norm at 1.9V but the overall S/N ratio is very respectable at 106dB and distortion low at 0.001% through the midrange.

▶ At very high frequencies, Marantz's discrete HDAM op-amp modules ensure that distortion is held as low as 0.004% at 20kHz while the optimised layout keeps channel separation >100dB across the audioband.

▶ Low-level linearity is good to +0.0/-0.4dB over a full 16-bit range while the player's response has a gently 'engineered' HF roll-off that's -0.5dB down at 20kHz.

▶ The digital filter successfully suppresses digital images by at least 62dB. This is still 50dB shy of state-of-the-art but still far better than many in this test.

▶ Jitter, meanwhile, is not increased beyond the player's inherent 430psec. Indeed, CDR and CD-RW copies made on the DR6000 suffer no real increase in jitter over the original digital source.

▶ **LAB CONCLUSION:** An excellent CD recorder that successfully leverages off Marantz's popular CD player technology.

"The Marantz makes clean, accurate, glitch-free copies which perform equally well whether played on the DR6000 itself or an external player."

DETAIL – CONNECTIONS



ANALOGUE IN, ANALOGUE OUT

COAXIAL DIGITAL IN/OUT

OPTICAL DIGITAL IN/OUT

REMOTE CONTROL (SYSTEM LINK) SOCKETS IN/OUT WITH EXTERNAL CONTROL/INTERNAL CONTROL SELECTOR SWITCH



PHILIPS CDR802 £299

☎ 0870 900 9070 🌐 www.philips.co.uk

It may feel a bit cheap, but strong recording performance and facilities make it a bargain

Yes it's a CD recorder, squire, but not as you know it. The replacement for the Philips CDR785 is a big, rather flimsy device with two loading drawers feeding two mechanisms. The first is a CD player with a three-disc carousel loader. The other is a CD recorder. Two mechanisms means the Philips can make recordings on its own, without any external player. But the integration of the two goes somewhat further, as the Philips can record at double speed – still slow compared to a computer drive, but a useful time saver for a small (but noticeable) reduction in sound quality. The multidisc CD play mechanism also makes it easy to produce compilations from multiple source discs.

The Philips will handle digital sources up to 56kHz, which in practice means up to and including 48kHz DAT. All the usual disc editing tools are available, including CD Text creation and editing. Finally, and new to this model, the CDR802 supports the playback of MP3 compilations on CD. It is only disappointing that an internal cooling fan is required, which makes operation seem a bit noisy at times.

PERFORMANCE

As a CD player the Philips surpassed expectations. By high-class CD player standards, it is a little over-emphatic and overtly detailed, even edgy, but it has a crystalline treble, a midband that is clear and tuneful, and a well defined bass. The whole effect is of a player that is open and punchy.

As a recorder, the Philips is hard to fault. Copies are unusually difficult to distinguish from the original, and although there was somewhat less body and space when CD-Rs were played on other good players, the differences were not always consistently identifiable.

Particularly impressive was the way that a CD dub of Mary Coughlan's rather dense but moving live recording of *Love For Sale* managed to maintain its ability to move and to communicate. Timing was especially sure in the jazzy later section, while the earlier bluesy opening, which can sound flat, didn't. The analogue record input also works well, second only to the Marantz.

CD dubs are supposed to be indistinguishable from the source, and it is not unknown for them to sound better, especially with early CD-R players,

VERDICT

SOUND



FEATURES



BUILD



VALUE



Versatility and good overall sound quality as a player, along with the ability to make CD copies virtually indistinguishable from the source, make this a strong contender at the price.

CHECKLIST

EXTERNAL SYSTEM CONTROL	✗
HEADPHONE SOCKET	✓
COMPUTER LINK	✗
REMOTE CONTROL	✓

perhaps because the preformed groove on the CD-R reduced the otherwise rampant jitter. This was not the case here, but copies were close enough to be *almost* indistinguishable from the source for much of the time. The copies also worked extremely well in the Denon DVD-3800, an excellent CD player (aside from its qualities as a DVD player), and we often found ourselves unable to distinguish source from copy. On the few occasions where there was an apparent difference it was quite subtle – the copies seemed slightly 'paler' in the midband. **D**

LAB REPORT

▶ The technical performance of the CDR-802 is not far short of the Marantz DR-6000, thanks to its low 0.001% distortion, generous 109dB S/N ratio and errors in low-level linearity of just +0.0/-0.6dB over a 90dB dynamic range.

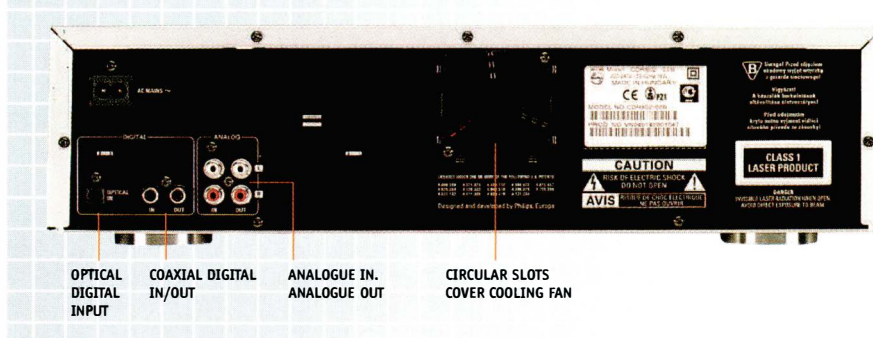
▶ Philips' digital filter is less impressive, so the rejection of stopband images is just 38dB and there remains some mild rippling of its HF response. At 20kHz, the response is -0.9dB down on the midband level but at least it decodes pre-emphasised CDs correctly.

▶ Replay jitter is very low at 221psec via the single CD/R/RW drive but leaps to a truly astonishing 69,350psec via any of the three autochanger positions. This explains why the single, CD recorder drive sounds far crisper and more detailed.

▶ When recording from a digital source, the low 0.001% midrange distortion is maintained over the top 20dB of its dynamic range and only increases to 0.1% with recorded signals as low as -60dBfs and 5% at -90dBfs.

▶ **LAB CONCLUSION:** CD-R recordings made via the autochanger are marginally flawed but those derived from the digital input are equal to the Marantz DR6000.

DETAIL – CONNECTIONS





WHY LISTEN TO RUBBISH?

ARCAM DiVA

2 CD players, 3 amps, 2 power amps, digital radio, AM/FM tuner, DVD player, AV receiver. Tel: 01223 203203 www.arcam.co.uk



MUSIC, MAESTRO

Audio Analogue's Maestro CD-Player presents music in a refined, enjoyable and entirely natural manner. And the Maestro Amp provides all the power, grace and control you will ever need. Find out why reviewers around the world rate these products so highly. Call us for brochures and review copies, or check out the details on our website.



23 Richings Way, Iver, Bucks, SL0 9DA, England
Tel: 01753-652669 Fax: 01753-654531
www.ukd.co.uk

Products shown:

Audio Analogue Maestro CD-Player £1,500, Audio Analogue Maestro Amp £2,600

FREE Hi-Fi Upgrade !

hififorsale.com's AudiophileCandy
2002 accessories catalogue



Featuring:

- The latest products
- Unbiased views & reviews
- A wide range of products from various manufacturers to compare
- Updated continually via our free flyers
- The latest audio technologies



Grab Your Copy Now

For your **FREE** copy of our latest catalogue please give us a call, or visit www.audiophilecandy.com and fill in our contact form

0870 241 246 9

Our NEW AuctionSite Goes Live !

Following the huge success of our www.hififorsale.com free advertising web site, we've now launched a dedicated auction site. Now you can bid on line, place items into auction, set your own reserve and bidding increments. Realise the true worth of your hi-fi visit our dedicated auction site at:

www.hififorsale.com



TASCAM CC-222 £699 ☎ 01923 819630 🌐 www.teac.co.uk

EXCLUSIVE This intriguing CD/cassette recorder combo offers a unique package of party tricks

Tascam, the semi pro and professional studio arm of Teac, makes recorders in just about every format, but this one takes the biscuit. The CC-222's main stock in trade is recording CD-R and RWs, but it can also record onto cassette tape. The cassette section has an auto-reverse mechanism with Dolby B, and can handle Type I and II (ferric and chrome bias) tapes. The CC-222 even has a moving magnet phono input for archiving LPs onto cassette or CD. This is also one of the rare CD recorders that works with computer blanks, and not just consumer audio ones, with all the potential cost and convenience advantages this brings.

There are some useful added features such as timed fades, a pitch control for cassette playback, a digital record level control with a wide operating range, and the ability to set trigger levels to initiate record starts. Dedicated dubbing keys make it easy to dump tapes to disc or vice versa, and the two can even be operated together for sequential play.

The Tascam's studio origins means that unlike domestic equipment you have full control over SCMS (Serial Copy

VERDICT

SOUND



FEATURES



BUILD



VALUE



This is the model for you if – and only if – you happen to need the unique package of facilities it provides. There is nothing else like it, but sonically it is not at the top of the heap.

CHECKLIST

- EXTERNAL SYSTEM CONTROL ✗
- HEADPHONE SOCKET ✓
- COMPUTER LINK ✗
- REMOTE CONTROL ✓

Management System). Discs can be made to inhibit any digital domain recording, to allow one generation of copies (like pre-recorded CDs) or to be completely SCMS free, according to the copyright status of the source.

PERFORMANCE

As a CD recorder and player, the Tascam is not the best. In both cases the character of the sound is raw and slightly thin, the balance emphasising detail at the cost of solidity and composure in the treble which is occasionally manifest as sibilance. Mary Coughlan's *Love For Sale* was lacking in the rich, resonant chest sounds, though again detail was emphasised, and the lyrics were easy to follow. CD dubs worked well, but there was a mild but generalised loss of presence and clarity. It was difficult to pin down any specific shortcomings, but the sound sometimes lacked the sparkle and immediacy so apparent on the live CD. With other recordings, the source and copy were indistinguishable on the test system, and recording from an analogue source is one of the Teac's strengths, with the inevitable slight degradation of space, detail and 'blackness' between notes

only obvious when replaying through the revealing Denon test player.

Cassette recording quality is of the quick and dirty variety, adequate for checking a mix on a personal stereo or car player, but little more. Recordings sound intermittently unstable, there are losses of detail and stability, including pitch stability, and the sound suffers a bloated mid-bass (a head contour effect, most likely). Finally, high recording levels (but still below '0VU' on the record level meters) yield a coarse, granular mid-treble that affects voice quality adversely. Ⓢ

LAB REPORT

▶ The inherent (replay) jitter amounts to a not insubstantial 1700psec of mainly data-induced distortions. The digital record/replay chain increases this to 3820psec with 16bit/44.1kHz data and 4450psec with 24bit/44.1kHz data.

▶ Distortion reaches a minimum of 0.003% between 0dBfs and -10dBfs and climbs steadily thereafter, to 0.8% at -60dBfs and 10% at -80dBfs. Beyond this point, the CC-222's DACs become quite non-linear with errors amounting to -4dB by -90dBfs.

▶ Distortion also increases at the greater frequency extremes, from 0.015% at 20Hz (bass) to 0.05% at 20kHz (high treble).

▶ Tascam's choice of digital filter is not first rate, so the rejection of digital images is a poor 29dB and even the frequency response is affected with a rippled HF response and -0.5dB dip at 20kHz.

▶ **LAB CONCLUSION:** A perfectly serviceable but slight 'unsuitable' technical performance from this CD recorder that would benefit from lower jitter and better digital filtering.

DETAIL - CONNECTIONS



COAXIAL
DIGITAL
IN/OUT

OPTICAL
DIGITAL
IN/OUT

ANALOGUE
OUTPUTS X2

EARTH
TERMINAL

PHONO
INPUT

ANALOGUE
OUTPUTS X2



ONKYO MB-S1 **£1,200** ☎ 01788 573100 🌐 www.onkyo.co.uk

Impressive in uncompressed mode, this pricey Onkyo is less convincing with MP3

The MB-S1 includes a CD-ROM mechanism for playing CDs or MP3 compilations at up to 20x play speed (depending on source) for high speed dubs. The 20Gb hard disc will record linear PCM (CD-quality 16-bit/44.1kHz), enough to rip around 30 CDs, which can be sorted by genre, artist, album, title or date, or into arbitrary groups. Alternatively, you can record data-reduced MP3 tracks using the generally well regarded Fraunhofer IIS algorithm at data rates of 96, 132 or 192kbps (kilobits per second) – 96kbps is enough for around 450 hours of music. There is even a clock/timer for unattended recordings.

Also supplied is a PC application called Carry Tunes, which acts as a software MP3 player which allows you to enter track information and make editing changes that can only otherwise be performed rather painfully on the Onkyo, direct or via the remote control. Its main function however is to transfer MP3 files to your PC across a USB link.

PERFORMANCE

Although not officially Windows XP compliant, Carry Tunes was installed and worked, but it is somewhat flaky, crashing out when other applications started on my XP system. In any case it

VERDICT

SOUND
★ ★ ★ ★ ★

FEATURES
★ ★ ★ ★ ★

BUILD
★ ★ ★ ★ ★

VALUE
★ ★ ★ ★ ★

As a PCM recorder, the Onkyo impresses, but the real power of the machine is its use of computer linked MP3, and here the limitations are set by the MP3 format itself.

KEY FEATURES

EXTERNAL SYSTEM CONTROL ✓

HEADPHONE SOCKET ✗

COMPUTER LINK ✓

REMOTE CONTROL ✓

is limited strictly to MP3, not PCM or any other format. As promised, the hard disc is quiet, but the CD mechanism makes occasional 'cat purring' noises – contentment no doubt, judging by its performance as a PCM recorder direct from CD. Hard disc recordings are essentially a match for the internal CD player, a clean and solid sounding design in its own right, roughly equivalent to many mid-price (say £200-£400) standalone players. It also offers a respectable, if slightly muted performance with external analogue sources.

But MP3 is a different matter. The three data rates do hold up different reflecting mirrors on the 16-bit PCM source, and predictably it is the 192kbps version that comes closest to offering something that is recognisably of good quality by hi-fi standards.

But even 192Kbps recordings have what is perhaps best described as a transistor radio quality. The outer form of the music is there, but any sense of inner complexity and depth is a

chimera that comes and goes, modulated it seems by the music itself. Low data rate recordings sound messy, and spurious tones and whistles sometimes make their presence felt. This doesn't always matter too much. It seems that the encode algorithm used here meshes with mainstream electronic pop, the kind generally composed and performed on a soundcard in a computer, with computer enhanced vocals and a dynamic range of zero. Anything more challenging – the Mary Coughlan is an excellent example – simply sounds like a caricature. And it's expensive... ❌

LAB REPORT

▶ A low 220psec of jitter increases to just 240psec once the data is recorded in uncompressed PCM mode onto the integral hard drive. Sadly, this increases to a high 6815psec when recorded at 128kbps with the realtime Fraunhofer MP3 algorithm.

▶ There is no improvement at the highest 192kbps data rate (actually it gets slightly worse at 7040psec) but you do win some benefit in increased bandwidth (response).

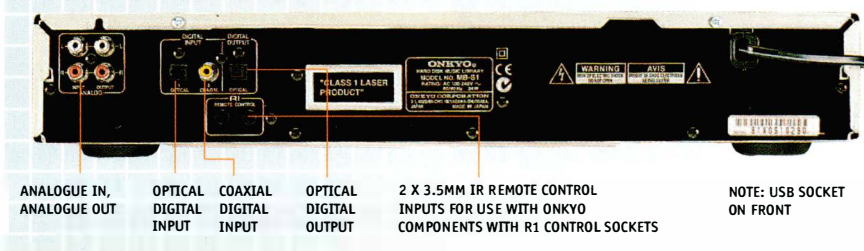
▶ Replayed CDs or linear PCM recordings have a -0.6dB 'kink' at 6.7kHz and a -1.2dB roll-off at 20kHz, a trend which is pretty much followed by 192kbps MP3 recordings.

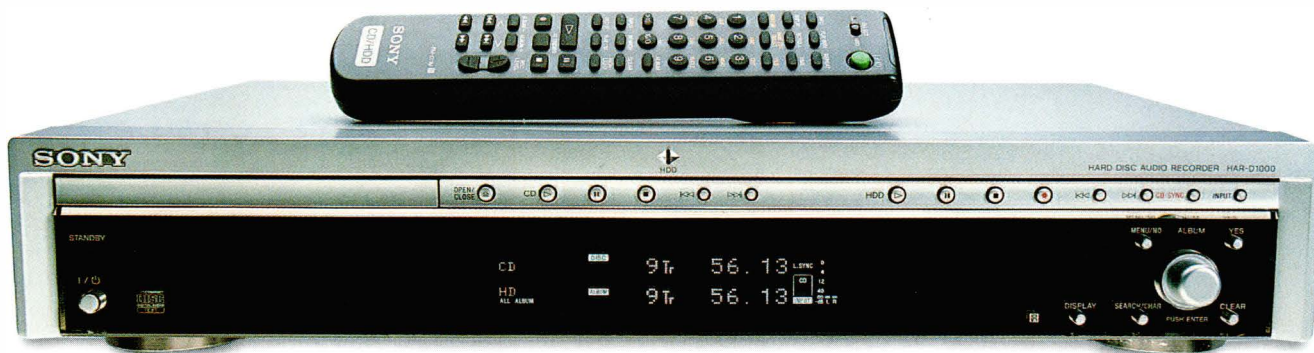
▶ Irrespective of data rate, distortion hovers around 0.003% at the peak 1.9V output. MP3 masking artefacts are visible surrounding major tones at around -85dB as well as a series of spurious 'idle tones' radiating out across the audio bandwidth.

▶ **LAB CONCLUSION:** One of the better hard-drive recorders so far available and particularly so in its uncompressed PCM record mode, limited disc space notwithstanding.

“The encode algorithm meshes with mainstream electronic pop with a dynamic range of zero. Anything more challenging sounds like a caricature.”

DETAIL – CONNECTIONS





SONY HAR-D1000 £600 ☎ 08705 111999 🌐 www.sony.co.uk

A huge capacity and an attractive price, but this recorder's sound quality is limited

Although this hard disc server is coupled to a CD player mechanism for replay and dubbing, it is otherwise firmly wedded to MiniDisc technology, as hard disc recordings are made using ATRAC3 data reduction at 132kbps, which allows about 600 hours of music and a maximum of 20,000 (very short) tracks on the 40Gb hard disc. There are no other coding options, and the Sony will only accept digital data in optical form.

A USB data link and a supplied PC application called M-crew allows the HAR-D1000 to be operated directly from a computer, with access to the on-line CDDb2 database for title and artist information, which can also be entered from the keyboard – well, it beats pffing around with the handset!

But the system requirements for M-crew demand careful study. It's suitable for Win98/2000 but not NT or Windows XP. The Mac platform is also cold-shouldered and apparently "the software may not function with computers you constructed yourself, or with an operating system that you upgraded yourself". Patronising, or what?

PERFORMANCE

A common problem with hard disc servers is the mechanical noise of the

hard disc itself. This one vibrates significantly and emits a low continuous hum from the rotating platters which can be audible if it is installed close to the listening position, though noise from the heads is muted.

On the whole, hard disc recordings are not bad, but there is a lack of what Jaguar (or its advertising agent) once claimed for the brand, namely grace, space and pace. The original CD version of the choral fifth movement from the *Mahler 3* set had a radiance and luminosity, and a sense of presence and air around the musicians that contrasted with the hard disc recording, which was superficially similar, and almost as detailed, yet which existed in a vacuum, and sounded drier and rather mechanical. Dylan's *One More Cup Of Coffee Before You Go* sounded slack and messy. It wasn't great through the integral CD player either, and only recovered its natural poise through the external reference player from Denon. In both cases the notes were all there,

"On the whole, hard disc recordings are not bad, but there is a lack of what Jaguar once described as grace, space and pace."

VERDICT

SOUND



FEATURES



BUILD



VALUE



Small, attractive and with enormous capacity for data-reduced music, this could be an excellent idea for those with large music collections who want a simple, low-cost music server mainly for background listening.

KEY FEATURES

- EXTERNAL SYSTEM CONTROL ✓
- HEADPHONE SOCKET ✗
- COMPUTER LINK ✓
- REMOTE CONTROL ✓

but the magic was gone. There were other differences too which were more difficult to pin down, but which sometimes manifested as a loss of complexity, or as temporary changes in the harmonic structure of notes or phrases. But differences were no sooner identified than they were gone, thanks to the effectiveness of the perceptual coding algorithms that power the ATRAC codec. Recordings on the HAR-D1000 are clearly inferior to ones made on Sony's MDS-JE480 MD recorder, with more obvious data reduction artefacts. This confirms that not all versions of ATRAC are born equal, and this one sounds more mechanical and less transparent than the best. ☹

LAB REPORT

▶ Less flexible than its Onkyo rival because all CD-to-HDD recordings are compressed via an ATRAC 3 algorithm, delivering a data rate of 132kbps.

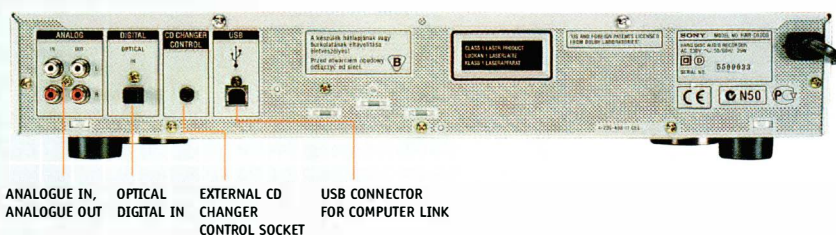
▶ In practice, even standard CD replay is severely compromised by a vast 11800psec of data-induced jitter and an even higher amount of uncorrelated, noise-like jitter.

▶ Once compressed and recorded, this figure climbs to an almost unbelievable 39760psec. Putting this in perspective, this is around 200x worse than the jitter performance of a good £200 CD player and must surely crush any chance of adequate audio quality.

▶ Otherwise, its performance *would* have been perfectly creditable with its 1.9V peak output, 99.5dB overall S/N ratio and modest 0.002% bass/midband distortion increasing to 0.025% at 20kHz.

▶ **LAB CONCLUSION:** Recordings are severely compromised by high jitter levels, which is a pity in the light of what is otherwise a well-engineered machine.

DETAIL – CONNECTIONS



SME

The way to play vinyl ...

Model 10



Model 20/2



Model 30/2



Series 300



Series IV



Series V



Ask for details of this superb range:

SME LTD · STEYNING · SUSSEX · BN44 3GY · ENGLAND

tel: +44 (0)1903 814321 · fax: +44 (0)1903 814269

email: sales@sme-ltd.demon.co.uk

or visit our website www.sme.ltd.uk

definitive audio

Living Voice · Vitavox · Electrofluidics · Art Audio · Border Patrol
Canary · DNM · Sugden · Wavac · Lyra · Monarchy · Western Electric · EMT
Wadia · Michell · Stax · Tom Evans · Nottingham Analogue · Van den Hul
Kuzma · Resolution · Wheaton · SME (including Model 30 on demonstration)

LIVING VOICE



Auditorium Avatar

Hi-Fi Plus *Editor's Choice*
Hi-Fi Plus *Product of the Year*
Hi-Fi Choice *Editor's Choice*

"The Avatar is a near perfect balance of size, bandwidth, efficiency and tonal refinement. Its slim lines and small footprint deliver a genuine 94db sensitivity, and excel when it comes to delivering the scale, vibrance and colour of the music. Its unobtrusive quality allows it to cut straight to the heart of a performance, unlocking the music trapped in the recording, whilst its refinement makes it equally at home with both basic and surprisingly expensive amplification."

Sale of Part Exchange and Ex-dem Items

	Sale	New
Proac Response 1SC including Target four leg stands.	£750	£1500
Impulse H2 Mahogany - boxed.	£1250	-
Cadence DS Rosewood.	£550	£1700
Living Voice Auditorium Walnut	£950	£1700
Linn Kelidh Walnut.	£390	£750
Rel Qbass subwoofer.	£200	-
Mirage M890i Canadian floorstanding speaker.	£390	-
Celestion A3 Rosewood - boxed - perfect.	£900	£1400
SJS Model 1 Line pre-amp.	£650	-
Conrad Johnson PV10 Phono pre-amp - new valves.	£700	£1400
AudioNote Soro Phono integrated - fully serviced + new valves.	£700	£1900
Cary 2A3 Stereo - new valves.	£775	-
Cary S500 Line pre-amp.	£350	-
Art Audio VP1 Phono - Special - Chrome.	£1000	£2000
Art Audio Concerto Power-amp 6550, inc Hovland caps	£1650	£2650
Art Audio Diavolo 6300B 15w - Black & Gold - inc volume pot.	£3000	£4200
Art Audio Concerto Line integrated 6550.	£1700	£2850
Canary 303 Mono power-amps. 12 months old - FAB.	£5750	£7250
Audio Innovations Series 500 Phono integrated - VGC.	£600	-
Audio Innovations Series 700 Line integrated.	£600	-
Border Patrol WE 300B Power-amp.	£3500	£4500
Croft EL 34 Integrated.	£300	-
Tom Evans Groove Phono stage.	£1150	£1850
Audio Research VT100 Power-amp.	£3000	£4400
Border Patrol MB Power-supply.	£800	£1000
Wadia 861 CD player - substantial.	£5000	£7950
Helios Model 2 CD player.	£900	£1300
AudioNote DAC5	£10000	£19000
SME Series IV tonearm.	£800	£1200
Nottingham Analogue Interspace + RB300 + DNM Recca (new).	£900	£1033
Michell Orbe + RB300. 12 months - spotless.	£1700	£2450
Nottingham Analogue Space tonearm (carbon) 1yr	£325	£450

Tel: 0115 973 3222 Fax: 0115 973 3666
internet: www.definitiveaudio.co.uk email: shout@definitiveaudio.co.uk



SONY MDS-JE480 £130 ☎ 08705 111999 🌐 www.sony.co.uk

Cheap and cheerful, but is MiniDisc still worth investing in?

You could be forgiven for thinking that Sony's baby, MiniDisc, had packed its bags and gone home, but new models continue to trickle out. Sony has the widest range of course, and the MDS-JE480 is the entry-level model. There are two long play modes, LP2 (2x) and LP4 (4x, around 320 minutes with an 80 minute disc), the latter using additional compression, which rules it out of serious consideration for quality purposes. An additional mono record mode is also available. The LP4 mode plays fast and loose with the MD format, introducing incompatibilities with most older players you may come across, and reducing the editing features available to the user, but a full range (split/combine/move etc) is available at other speeds. There is no headphone socket, and the only digital socket is a solitary optical in/output. A PC editing kit (PCLK-MN20) is also available.

PERFORMANCE

Like all data reduction codecs, ATRAC Type S, which is at the heart of the MDS-JE480, has a personality that is not always obvious at first, but which makes itself known slowly, over a period of time. This version of ATRAC seems to

VERDICT

SOUND
★★★★☆

FEATURES
★★★★☆

BUILD
★★★★☆

VALUE
★★★★☆

The MDS-JE480 is not capable of a truly high fidelity sound, but it is surely enough for utility applications like radio recording via timer. It is tidy, clean, stable – and very, very cheap, hence the Recommendation.

KEY FEATURES

EXTERNAL SYSTEM CONTROL ✗

HEADPHONE SOCKET ✗

COMPUTER LINK **OPTIONAL**

REMOTE CONTROL ✓

guard its secrets better than previous ones, which is another way of saying it does its job quite well. But on pure sound quality grounds, there is no contest with CD-R. The LP4 mode sounded very compressed and oddly sluggish, and it was quickly abandoned in the tests.

There are similarities between the sound of MD and MP3, on the whole marginally favouring MD. Tonally the MDS-JE480 is neutral, and it has the same squeaky clean and utterly stable quality we have become accustomed to from other digital formats. It offers good detail retrieval too, but not consistently so, and there are occasions when the texture of voices or instruments suffer.

Dynamics rate a split verdict. Loud passages following quiet ones (and vice versa) are handled without obvious compression. But in densely scored passages where loud and soft coexist in a complex changing relationship – many orchestral and choral recordings fall into this category – the sound loses the plot, and recordings simply don't communicate as directly. The Mary Coughlan recording *Love For Sale*, used throughout our tests, sounded muted (especially the saxophone entry at the beginning), and the rich vocal sound

was thinned out. The source recording sounded superficially similar, but clearly it was more open, and there was more energy and commitment in the music making. There are also obvious losses through when recording from an analogue source.

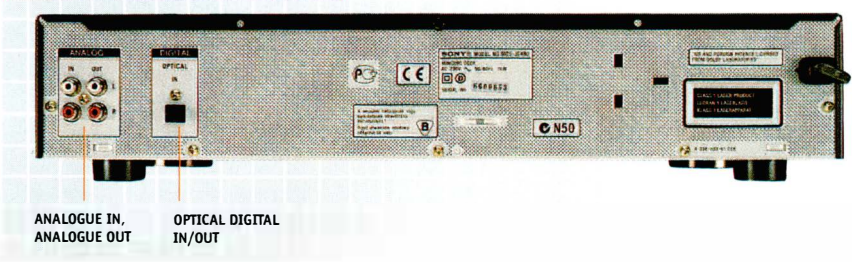
It is easy to be dismissive of the MD format these days, particularly in the light of inferior sound quality compared with CD-R, and the emergence of MP3 and hard disc/solid state storage formats. But it's still flexible and relatively cheap, and at just £130 this deck deserves Recommendation. **Ⓢ**

LAB REPORT

- ▶ The inherent response of the MDS-JE480 shows +/-0.1dB ripples from 2kHz onwards where there's a progressive loss in treble to, typically, -0.9dB at 20kHz. Recording a dense signal limits the response to around 15kHz in stereo mode and just 10kHz in LP4 mode with its maximum compression.
- ▶ The level of jitter through the digital path is also inherently high at around 2300psec but this increases to a phenomenal 19,250psec when recording in stereo mode.
- ▶ Distortion is as low as 0.002% through the bass and midrange, but increases closer to 0.015% at 20kHz with uncomplex musical recordings.
- ▶ The digital filter is not one of Sony's best, with a rejection of digital images of just -43dB, while the best-case S/N ratio is 94dB, just under the traditional 16-bit specification.

▶ LAB CONCLUSION: Once again, recordings are compromised not only by the act of data compression/reduction itself but also through high levels of digital jitter.

DETAIL - CONNECTIONS



DIGITAL RECORDERS CONCLUSIONS

Alvin Gold ties up the loose ends from our all-encompassing recorder round-up

Up until about ten years ago, there was an unspoken rule that each new format at least paid lip service to progress by equalling and preferably outperforming its predecessor. Much the same could be said of the new digital recording formats when compared to cassette. CD-R for example is no worse than CD. But this is not true of MP3 and to an extent MD's ATRAC, which sound poorer than linear sources like CD. Packing them into shiny boxes, charging a lot of money and raving about them in male fashion magazines which should know better does nothing to transform them into real hi-fi. But then a lot of everyday applications don't need real hi-fi.

Some general observations. First, these recorders are at their best when dealing with native file formats. CD-R performs best when recording 44.1kHz/16-bit source material as no conversion is required, for example from 48kHz to 44.1kHz. The one exception to the rule is when using data-reduced codecs like MP3 where the



losses in the codec itself are probably the dominant factor.

Second, the hard disc recorders are really quite impressive. There is nothing in the way they sound that suggests that the hard disc itself is a source of problems. On the contrary, the Onkyo MB-S1 has virtually identical jitter and other parameters whether using the optical or the magnetic drive.

Where they exist, the problems are in the execution. The Onkyo hard disc is quiet, quieter than its own CD mechanism, but the position is reversed with the Sony, which has hard disc that hums and rattles like a goods train.

In a similar vein, mainstream (ie affordable) A/D (analogue to digital) converters have always

lagged behind D/A converters sonically, and none of the models on test sounded as good when recording from analogue. In fact, it seems that few of the manufacturers involved really tried, perhaps on the presumption that their target market would be using them mainly to rip CDs and other digital sources. Anyone serious about analogue recording, including archiving vinyl records, may be better served by preparing digital data files using tools like Cool Edit 2000 on a PC.

The ranking order of the recorders was surprisingly easily determined. If you want a high audio quality, the Philips CDR802 and the Marantz DR6000, both CD-R/RW machines, take the ribbon. The Marantz has the better sounding analogue input, and it also makes better digital domain recordings, while the Philips has its own three-disc spinner and superior editing capabilities. The third and final CD-R/RW is the extraordinary Tascam CC-222 which is uncompetitive on sound quality grounds, but because it is basically a studio machine, it

can use data discs, and you can control SCMS copy management. It even has a cassette deck and phono input.

The two hard disc servers are quite different to each other. The Sony HAR-D1000 is perfectly practical and reasonably priced, but you're locked into ATRAC, which makes it a medium quality hard disc source at best, and it's a long way from leading edge sonically, either as a PCM (CD) player or as an ATRAC (hard disc) recorder. The Onkyo MS-B1 is much more impressive, and does at least provide the option of 'lossless' PCM recording, though the limited size of the hard disc makes this impractical for storing a lot of material on the hard disc. Oh, and its pricing is completely out of touch with the target market.

Finally, the Sony MDS-JE480 is a plain and simple MiniDisc recorder, but it has the benefit of a superior version of ATRAC to the one used in Sony's own hard disc recorder. It sounds better too. Frankly, at just £130 it's a steal. ☺



HINTS AND TIPS

- ☺ A key to good recordings is to use the best blank media you can lay hands on. There are substantial differences even between premium brands – no name cheapies invariably sound worse – and in the case of CD-R, 80-minute discs rarely perform as well as 74-minute types.
- ☺ When recording from CD, results can be enhanced by using a digital direct function where available, as these bypass the sample rate converter. Data-reduced codecs like MP3 and ATRAC introduce losses that may not be immediately obvious, but which tend to disappoint on longer exposure – and of course the missing information cannot be reinstated.
- ☺ If you have a choice, record digitally using an electrical digital connection rather than optical.
- ☺ Finally, recorders are not exempt from the usual rules, so use good supports, placing each component on separate shelves if possible, and the best possible wiring, especially on the input side.

DIGITAL AUDIO RECORDERS AT A GLANCE

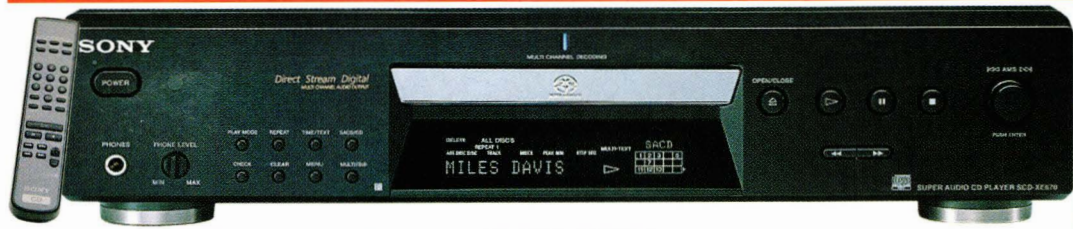
MAKE	Marantz	Philips	Tascam	Onkyo	Sony	Sony	
MODEL	DR6000	CDR802	CC-222	MS-B1	HAR-D1000	MDS-JE480	
PRICE	£400	£300	£699	£1,200	£600	£130	
SOUND	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★	
FEATURES	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★	
BUILD	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★	
VALUE	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★	
CONCLUSIONS	This unit has a short feature list, but gains audiophile appeal by performing better than most, both as a player and as a recorder.	Build quality is flaky, but this multidisc recorder is slick and accomplished, and pricing is attractive.	Cassette/CD-R recorder with unique and comprehensive feature set, but sound quality doesn't cut it.	CD/HD combo makes good linear copies but capacity is limited and MP3 recordings are not so hot.	CD/ATRAC hard disc combo disappoints both as a player and as a recorder, and has limited HD features.	Entry-level MiniDisc recorder does exactly what it says on the box, and at a beer-budget price.	

"THE BEST DEALS AROUND"

A QUOTATION FROM **HI-FI CHOICE** MAGAZINE

WE'LL BEAT ANY COMPETITOR'S PRICE 'TIL IT HURTS!
(INCLUDING WHICH? ACCREDITED WEBSITES)
... AND GIVE YOU UP TO
£100!
ASK IN-STORE FOR DETAILS

SUPER VALUE SONY CD PLAYER!



£180 OFF TSP

SONY SCDXE670 CD PLAYER (BLACK)

There is a massive £180 off TSP on this magnificent CD player, and as a bonus it will also play SACD discs. Or, as *Stuff* magazine put it: "Switch to audiophile friendly SACD and things really come to life."

TSP £299.95 WERE £149.95 **Stuff ******* Also available in silver £129.95

SALE!
£119.95
BRAND NEW BOXED

BRANCH LIST

BIRMINGHAM	0121 443 1516
BOURNEMOUTH	01202 720 380
BRIGHTON	01273 673 333
BRISTOL	0117 973 4397
CAMBRIDGE	01223 304 848
CARDIFF	029 2039 9988
CHELTFHAM	01242 372 572
CHESTER	01244 400 103
COLCHESTER	01206 563 131
COVENTRY	024 7655 595
EDINBURGH	0131 226 3544
EXETER	01392 272 772
GLASGOW	0141 226 5551
GUILDFORD	01483 449 222
HULL	01482 329 289
LEEDS	0113 245 5717
LEICESTER	0116 255 4656
LIVERPOOL	0151 708 7484
LONDON	020 8466 6565
BROMLEY	020 7352 8496
CHELSEA	020 7236 8006
CITY	020 8667 1100
CROYDON	020 8566 4422
EALING	020 7329 7374
FARRINGDON	020 8549 9999
KINGSTON	020 7403 1201
LONDON BRIDGE	020 7722 3359
SWISS COTTAGE	020 7831 2888
WEST END	
MAIDSTONE	01622 677 067
MANCHESTER NORTH	0161 773 0333
MANCHESTER SOUTH	0161 480 1700
MIDLESBROUGH	01422 211 113
MILTON KEYNES	01908 608 908
NEWCASTLE	0191 230 1392
NORWICH	01603 620 860
NOTTINGHAM	0115 924 1551
OXFORD	01865 243 444
PLYMOUTH	01752 222 256
READING	0118 959 1111
ROMFORD	01708 747 727
SEVENOAKS	01732 456 573
SHEFFIELD	0114 266 1616
SOUTHAMPTON	023 8023 1311
STOKE (HANLEY)	01782 289 009
SWINDON	01793 612 652
WATFORD	01923 218 888
WOLVERHAMPTON	01902 455 877

£80 OFF TOSHIBA DVD PLAYER

£100 OFF TSP

Home Entertainment EDITOR'S CHOICE

MULTI-REGION Available for only £99.95

SALE!

£79.95 BRAND NEW BOXED

TOSHIBA SD110E DVD PLAYER

"The SD-110E breaks the mould; the Toshiba name needs no introduction and AV performance is as good as anything you'll find on a DVD player this side of £500. An undisputed Editor's Choice." *Home Entertainment* magazine. TSP £179.95 WERE £149.95

Also available Toshiba SD120E & SD220E at unbelievable prices!

SONY DVPS700 TSP £399.95 WERE £499.95

£250 OFF TSP

REMOTE CONTROL

MULTI-REGION Available for only £199.95

SALE! £149.95 BRAND NEW BOXED

SONY DVPS700 DV4100 OSE TSP £399.95 WERE £499.95

£150 OFF TSP

REMOTE CONTROL

MULTI-REGION

SALE! £249.95 BRAND NEW BOXED

Home Cinema/Lifestyle Centres

Come and visit our dedicated Home Cinema/Lifestyle centres listed below which stock a larger range of products. Not all products are available in all stores. Please remember to phone before making a special journey.

Birmingham • Brighton
Bristol • London Chelsea
Chester • Colchester
London Farringdon
Liverpool • Newcastle
Prestwich • Romford
London West End

08700 112345 (NATIONAL RATE)

MISSION 771E SPEAKERS

HALF PRICE

"The 771e's have it all: they're compact, finished nicely in real wood veneers, relatively easy to drive and are capable of excellent imaging, untroubled by bass bloat..." - *WHAT HI-FI?* SOUND AND VISION magazine. WERE £199.95

SALE! £99.95 BRAND NEW BOXED PER PAIR

Also available 773e for only £199.95 per pair

90 WPC YAMAHA DIGITAL AMPLIFIER

HALF PRICE from TSP

Also available Marantz SR4200 for only £199.95

YAMAHA DSPAX620 AMPLIFIER

"...it's fantastic!" *WHAT HI-FI?* SOUND AND VISION magazine exclaimed. "We think it's an outstanding choice" they further commented that the DSPAX620 is "Well made, easy to use and sounds great-what more could you want?"

TSP £399.95 WERE £249.95

SALE! £199.95 BRAND NEW BOXED

Home Cinema/Lifestyle Centres

Come and visit our dedicated Home Cinema/Lifestyle centres listed below which stock a larger range of products. Not all products are available in all stores. Please remember to phone before making a special journey.

Birmingham • Brighton
Bristol • London Chelsea
Chester • Colchester
London Farringdon
Liverpool • Newcastle
Prestwich • Romford
London West End

Prices correct at time of going to press, E&OE. All trademarks are acknowledged.

MASSIVE SAVINGS ON ARCAM AMP

£180 OFF TSP

ARCAM A65 AMPLIFIER

"It's a classy looking piece...fit and finish is exemplary" *WHAT HI-FI?* SOUND & VISION magazine. With remote control, two pairs of speaker outputs and a headphone socket. TSP £379.95 WERE £249.95

In-store callers only

SALE! £199.95 BRAND NEW BOXED

PLASMA TV DEAL OF THE YEAR!

LG MZ-42PZ10 42" PLASMA SCREEN TV

"Seriously advanced plasma know-how... and inside a deeply appealing body." - *Home Cinema Choice* magazine.

TSP £3999.95 In-store callers only

£1000 OFF TSP

SCOOP! £2999.95 BRAND NEW BOXED

£2553.15 EX VAT

CUSTOMER SERVICE CALL CENTRE
0870 900 1000 (NATIONAL RATE)

TECHNICAL HELPLINE 0906 9 188 881 (Calls cost £1 per minute from BT landlines)

CATALOGUE HOTLINE 0845 1 300 200 (LOCAL RATE)

FOR A FREE BARGAIN-PACKED CATALOGUE/STORE LIST CALL:

BRING IN THIS AD FOR A FREE MINIDISC, CDR OR TAPE

POP INTO OUR STORE WITH THIS AD AND COLLECT EITHER A TDK MD74 MINIDISC WORTH £2.99, A BLANK CDR74 OR A TDK SA90 CHROME TAPE WORTH £2.49 WITH OUR COMPLIMENTS.

HI-FI CHOICE. NO PURCHASE NECESSARY. ONE VOUCHER/ITEM PER CUSTOMER. NOT IN CONJUNCTION WITH ANY OTHER OFFER/PROMOTION. WHILE STOCKS LAST.

AIWA ARCAM CAMBRIDGE AUDIO CELESTION DENON ELTAC KEF KENWOOD MARANTZ MISSION NAD PANASONIC PHILIPS PIONEER SHERWOOD SONY TEAC TECHNICS TOSHIBA WHARFEDALE YAMAHA AND MANY MANY MORE...

SOME PRICES MAY DIFFER IN OUR SHOPS IN BIRE DUE TO DISTRIBUTION COSTS AND CURRENCY FLUCTUATIONS. PLEASE QUOTE THIS AD WHEN CALLING.

CD-R/RW DISC round-up

Like blank tapes, there's often a significant difference between the sound quality of recordable CDs...



JVC CD-R 74mins £11 (10 pack)

▶ This disc comes with a folded inner label insert with two pages free for notes. In a series of listening tests with different types of programme material, recorded on a Philips CD-R recorder and played back using a TAG McLaren DVD32R, the JVC recordable disc gave a good, solid performance in tune with the middle discs in the group. The overall impression is of recordings that are well controlled at the frequency extremes, and which have more stability than some. The JVC disc lacks the rock solid performance of the very best in the group, but orchestral sound is stable and detailed, vocals expressive and value-for-money strong.

☎ JVC 0870 330 5000 # www.jvc.co.uk



Maxell XL-II 80mins 90p each

▶ One of the earliest and most remarkable observations made of recordable CD when it was first launched was that recordings often sounded better than the original, which eventually was attributed to jitter levels that were often lower than the source CD. This was with 74-minute discs, and we wanted to see if different capacity discs might alter the equation. In fact this 80-minute disc is clearly inferior to the 74 minute version, with a bloomy, overblown bass, though mid and treble information is well handled, with strongly projected, and highly intelligible voices. But it is no match for Maxell's XL-II 74.

☎ Maxell 01952 522222 # www.maxell.com



JVC CD-RW Rewritable 74mins £17 (10 pack)

▶ This rewritable disc from JVC looks and is packaged almost identically to the JVC CD-R, but the writing surface disc is much darker and completely opaque, an indication of the different chemistry of the writing layer. It sounds distinctive, with a lightweight quality thanks to a rather thin balance through the mid and treble. The bass is also rather light in weight, and this was obvious in a side by side comparison with another CD-RW tested in this group from TDK. There is a hint of instability in the sound of this disc, and the treble has a slightly edgy sound.

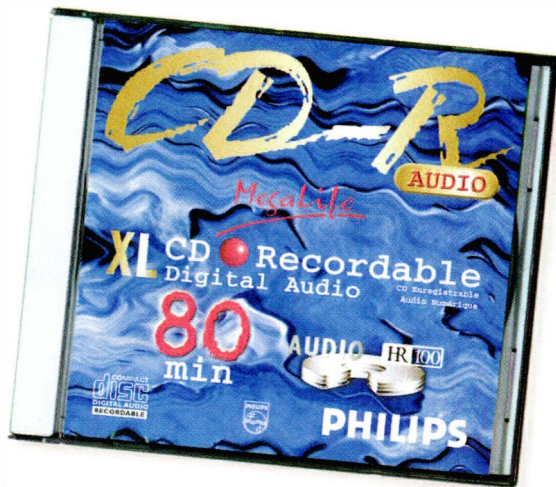
☎ JVC 0870 330 5000 # www.jvc.co.uk



Maxell XL-II RW Rewritable 74mins £1.40 each

▶ There is little to physically distinguish this 74-minute disc from its 80-minute non-rewritable Maxell counterpart except that it is more opaque visually. It sounds quite different though, and is clearly a superior product. In this case the frequency balance is shifted towards the bass. The treble is refined and clear, but reticent in character compared to the 80-minute version, and the bass is firmer. Orchestral material is handled well, and overall this disc was capable of making clear, stable and well controlled recordings. Clearly one of the good guys, but not the cleanest in the group.

☎ Maxell 01952 522222 # www.maxell.com



★★★★★

Philips XLCD 80mins £10 (10 pack)

▶ Bright blue packaging aside, there is nothing to set this disc apart from the crowd, though it is one of the more opaque-looking examples, which might be to its benefit in some recorders. Musically it turned in a strong mainstream performance, not as good as the best 74-minute discs, but similar to the JVC CD-R for example. It has a tonal balance that is discernibly on the light and bright side of neutral, but there is no edginess or aggression to the sound, and resolving power is excellent, though the sound lacks the solidity and weight of the best. If you need an 80-minute option this is a pretty strong one.

☎ 0870 900 9070 🌐 www.philips.co.uk

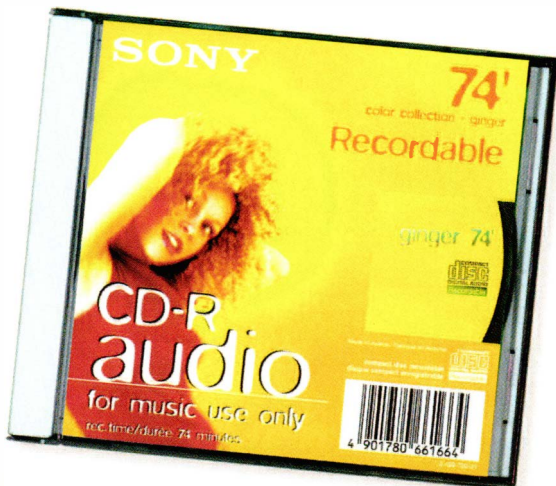


★★★★★

TDK CD-R Audio Pro 74mins £3.99 each

▶ Presented as a quality item, and only available in 74-minute lengths (no coincidence perhaps), CD-R Pro comes in a smoothly rounded jewel case, rather like the type used for SACDs. The disc boasts a 'polyolefin substrate' that 'increases the write and read accuracy of the laser', and gives an 'analogue-style richness'. Be that as it may, it is palpably at the top of the group. Recordings sound extremely stable and more 'together' than the others – there is no audible dissociation between bass and treble. Treble quality is smooth and highly detailed, the bass extremely solid and extended and the midband expressive and pure.

☎ TDK 01737 773773 🌐 www.tdk-europe.com



★★★★★

Sony CD-R 74mins £9 (10 pack)

▶ This Sony formulation will attract attention because it is available in a riot of colours – ginger, graphite, denim, fuchsia and lime. There is little room for cover notes, but a cutaway in the cover shows whether a disc is present. Sonically the Sony formulation simply failed to cut the mustard. The bass and treble sounded oddly detached from each other, the bass opaque and dull, the treble tinselly. The effect was that recordings sounded like a caricature of hi-fi, all brash detail but with little depth or substance.

☎ Sony 08705 111999 🌐 www.sony.co.uk



★★★★★

TDK CD-RW XG Rewritable 74mins £4.99 (5 pack)

▶ Packaged in a traditional jewel box, unlike TDK's top Pro formulation, this more mainstream rewritable disc is much cheaper and has a well designed sleeve insert. Musically it is roughly middle of the road. The bass sounds slightly boomy, but stable enough, and the treble is smooth, enjoyable and relaxed. Vocal intelligibility is not the best in the pack and there's a certain opacity about the sound, but it's all quite smooth, easy and well controlled. It's unlikely to make recordings that will offend and its low price makes it a decent value rewritable.

☎ TDK 01737 773773 🌐 www.tdk-europe.com

WHERE TO FIND US

BASINGSTOKE 01256 324311

2 Feathers Lane

E-mail: basingstoke@audio-t.co.uk

BRENTWOOD 01277 264730

30 Crown Street

E-mail: brentwood@audio-t.co.uk

BRISTOL 0117 926 4975

65 Park Street

E-mail: bristol@audio-excellence.co.uk

CAMBERLEY 01276 685597

173-175 London Road

E-mail: camberley@audio-t.co.uk

CARDIFF 029 2022 8565

134-136 Crwys Road

E-mail: cardiff@audio-excellence.co.uk

CHELTENHAM 01242 583960

38 Winchcombe Street

E-mail: cheltenham@audio-t.co.uk

CHESTER 01244 345576

88/90 Boughton

E-mail: chester@audio-excellence.co.uk

ENFIELD 020 8367 3132

159a Chase Side

E-mail: enfield@audio-t.co.uk

EPSOM 01372 748888

15 Upper High Street

E-mail: epsom@audio-t.co.uk

EXETER 01392 491194

156 Sidwell Street

E-mail: exeter@audio-excellence.co.uk

GLOUCESTER 01452 300046

58 Bristol Road

E-mail: gloucester@audio-excellence.co.uk

HIGH WYCOMBE

01494 558585

30-32 Castle Street

E-mail: wycombe@audio-t.co.uk

LONDON: W. HAMPSTEAD

020 7794 7848

190 West End Lane

E-mail: hampstead@audio-t.co.uk

OXFORD 01865 765961

19 Old High Street, Headington

E-mail: oxford@audio-t.co.uk

READING 0118 958 5463

4 Queens Walk, Broad Street Mall

E-mail: reading@audio-t.co.uk

SOUTHAMPTON 023 8025 2827

10-12 Hursley Road

Chandlers Ford

E-mail: southampton@audio-t.co.uk

SWANSEA 01792 474608

9 High Street

E-mail: swansea@audio-excellence.co.uk

SWINDON 01793 538222

60 Fleet Street

E-mail: swindon@audio-t.co.uk

TUNBRIDGE WELLS

01892 525666

6 High Street

E-mail: tunbridge@audio-t.co.uk

WORCESTER 01905 619059

Independence House

The Trinity

E-mail: worcester@audio-excellence.co.uk

All shops are closed on Mondays



For the very latest information
please check our web sites:

www.audio-t.co.uk

www.audio-excellence.co.uk

[www.audio-t.co.uk]
[www.audio-excellence.co.uk]

audio

E X C E L L E N C E

audio T

THE BEST OF BOTH WORLDS

Audio Excellence and Audio T have joined forces to bring you the benefits and security of buying from a larger dealer, yet each of our stores is run as an individual specialist shop. Our staff are enthusiastic and friendly, with the knowledge and experience to satisfy your expectations. Plus, we haven't forgotten that buying hi-fi should be as much fun as listening to it!

CUSTOM INSTALLATION

If you want your Hi-Fi equipment neatly and attractively integrated into your home we can plan out the system to be installed, the choice of the equipment to be used, where it will be installed in your home and how it will be connected. Call us for advice on how you can enjoy music all round your home.

- 57 YEARS JOINT EXPERIENCE
- 3 YEAR GUARANTEE ON HI-FI SEPARATES
- FULL DEMONSTRATION FACILITIES
- PRICE PROMISE
- 10 DAY EXCHANGES
- 30 DAY NO COST PENALTY UPGRADES
- PART EXCHANGES
- INTEREST FREE OPTION ON SALES OVER £250*
- HOME LOANS AND HOME DEMONSTRATIONS
- EVENING DEMONSTRATIONS BY APPOINTMENT

For your FREE copy of **MUSIC AT HOME**,
The Ultimate Guide 2002
FREEPHONE 0500 101501 (quote ref HFC02)

or visit our web site at www.music-at-home.co.uk



Products we sell
include:

ACOUSTIC
ENERGY
ALR/JORDAN
ARCAM
AVI
B&W
BOW
BRYSTON
CASTLE
CELESTION
CHORD
ELECTRONICS
CURA
CYRUS
DAVIS
DENON
DENSEN
DYNAUDIO
DYNAVECTOR
ELAC
KEF
LINN
LOEWE
MARANTZ
MERIDIAN
METZ
MICHELL
MILLER
& KREISELL
MISSION
NAD
NAIM
NAKAMICHI
ONKYO
PANASONIC
PIONEER
PMC
PRIMARE
PROAC
PRO-JECT
QUAD
REGA
REL
ROKSAN
ROTEL
RUARK
SENNHEISER
SHAHINIAN
SONANCE
SONY
SYSTEMLINE
TAG McLaren
TALK
ELECTRONICS
TANNOY
TEAC
WILSON
BENESCH
YAMAHA

Not all products
are stocked by
every shop so
please check with
your local branch
before travelling

*Subject to status.
Written details on
request

PROTECT AND SURVIVE?

As the music industry struggles to develop new anti-piracy technology for CD, what are the implications for consumers?

The infamous Napster and a host of similar websites offer 'free' music. Well, someone paid to record it and, understandably, record companies and musicians want to find some way to protect their property and income.

Having long since given up on asking people nicely to be reasonable about copying (yes, make a copy for your own car or portable player: no, don't make dozens of copies for your friends), their current fixation is with systems to prevent unauthorised copying. One is watermarking, in which a supposedly inaudible signal is embedded in the audio, which can be detected by recorders and used to prevent copying and/or trace the original source, but it's not compatible with existing hardware. However, a growing number of CDs already use a slightly simpler system to prevent copying and 'ripping' on home computers.

Actually there are at least four such systems. SunnComm's 'MediaCloQ' and Macrovision's 'SafeAudio' don't seem to be used on any UK releases to date, but many current Sony discs use Sony's own 'key2audio' and several titles from BMG and others use 'Cactus Data Shield' from Midbar.

How do these work, and should we be alarmed? The basic idea is to make discs unreadable on CD-ROM drives in computers so the data can't be 'ripped' to the hard drive, yet playback in ordinary CD

NATALIE IMBRUGLIA (WHITE LILIES ISLAND)



Natalie Imbruglia's recent *White Lilies Island* CD was one of the first to sport Cactus copy protection.



"The World Wide Web abounds with detailed instructions on how to rip 'protected' discs."



players should be unaffected. To do this with existing drives and players, data on the disc is corrupted in some way – regular CD players are more forgiving than CD-ROM drives and so will cope.

But key2audio and Cactus both corrupt the 'subcode' data to confuse CD-ROM drives – at worst, this should only give a slightly incorrect time display on an audio player. We found both protected and unprotected examples of identical titles and can confirm, perhaps for the first time in a hi-fi magazine, that Cactus and key2audio do not corrupt the audio: the bits recovered from both copies were completely identical.

So far, so good. But then it all goes horribly wrong. For a start, SafeAudio apparently does corrupt the audio, relying on 'error concealment' in audio players – ie informed guesswork. We can't assume this will be inaudible.

Next, all these systems make discs not only uncopyable but unplayable in CD-ROM drives. Music at work? Sorry, pal, buy a proper player. OK, Cactus discs include an area dedicated to a computer-playable, lower quality version, but this reduces maximum playing time and doesn't work on all computers. And then there's compatibility, or the lack of it, with upmarket players which use CD-

ROM transports. And compatibility with CD recorders: the Cactus-protected title wouldn't play in my (professional!) Marantz recorder.

On the other hand, while digital copying via consumer audio CD-R recorders is not possible, I had no problem copying and ripping both Cactus and key2audio discs via the S/PDIF (Sony/Philips Digital Interface) output of a consumer player and the digital input of a pro CD recorder, (and also via the digital audio input of my PC's sound card). In any case, the Internet abounds with detailed instructions on how to rip 'protected' discs using current drives and protection-aware ripping/copying software. It only needs one hacker to follow any of those routes and post the files to some web site and the protection is broken for good.

Two versions of the Imbruglia disc, one with copy protection (above) and one without (below). Note the bar code at the centre of the protected disc.

The record labels may be throwing out the baby with the bathwater here. People will learn to look out for the warnings on CDs and avoid titles they know they can't play on their PC, opting instead for a lower-quality MP3 download from someone who's hacked the protection already, legal or no. Watermarking can work but from a hi-fi perspective is questionable since it will almost certainly become audible in many instances. It's hard to envisage any feasible technological fix for the copying problem. Sounds utopian, but we and the record companies might just have to learn to trust each other a little more. ☹

DVD - FOR THE RECORD

Recordable DVD is here, with three different formats vying to take the place of your clunky old VCR. So which is winning the battle, and can you use them to record your music too?

DVD recording is in its early phase, dominated by early adopters. Much of the silicon and other critical components are in small scale production and extremely expensive, and retail pricing is on the whole artificially low, as manufacturers vie for market share.

Now that recordable DVD has finally arrived, it is inevitably with three mutually incompatible formats (see *hardware* box). The first major protagonists are Pioneer, Panasonic and Philips. Pioneer is market leader in PC DVD writers with its DVD-R format, which sells in the millions. DVD-R was launched in Japan at the end of 1998 with 3.95Gbyte discs, which increased to the present 4.7Gbyte – the same as DVD-Video – about a year later. This is now standard for all three formats, though

Panasonic's DVD-RAM also comes in double sided 9.4Gbyte form.

In the domestic arena Pioneer is not yet a major player, though it makes the DVD-R recorder badged as a Sony in Japan. In Europe the real fight for domestic standalone recorders is between Panasonic and Philips, who are driving prices down aggressively to establish their format as pre-eminent. Pioneer seems to have been sidelined for now, but its strength in the computer drive market factors strongly in its favour.

Panasonic's contribution to recordable DVD is DVD-RAM, technically the most elegant of the three. Its UDF computer file format allows drag and drop editing, better addressing, and RAM has a much more extended lifetime (>10,000 cycles as opposed to >1000 cycles). DVD-RAM also currently has the most impressive

video feature set. For example, time Slip allows playback while recording, but future Pioneer and Philips models will have their own versions of the same feature in due course. DVD-RAM is incompatible with DVD-Video (though

present. This format is also an important player in the US, but has little presence in the Far East.

DVD wouldn't be DVD if someone, somewhere wasn't thinking about chucking it all overboard and starting again. Driven by high

"Now that recordable DVD has finally arrived, it is inevitably with three mutually incompatible formats."

RAM players will play DVD-Video discs), which is one reason why market share is so important.

The main domestic competition is from Philips' DVD+RW, which is not a DVD forum-approved format and not CPRM (Content Protection for Recorded Media) compatible. This could leave users high and dry if broadcasters switch CPRM on, though this looks unlikely at

definition TV in Japan and the US, there are various proposals for a high capacity replacement for DVD, of which the most credible is Blu-ray. This is a 12cm disc with capacities ranging up to 27Gbyte and eventually 50Gbyte on single and double sided discs, with data transfer rates of up to 36 megabits per second. But don't hold your breath. ☹

RECORDING MUSIC ON DVD

DVD-recordable's killer application is recording TV broadcasts off air with superior picture quality, random access and greater longevity than VHS tape. But DVD recordable formats are not designed at present for recording high quality audio. It's not that none of the protagonists thought audio was important, just that they realised that recording video was the priority. It's only now that they're beginning to turn their attention to high resolution multichannel audio recording onto DVD, which technically is probably not too difficult, but which is sure to cause all kind of copyright protection issues.

FUTURE SOUND

Nobody yet knows if audio recording capabilities will stretch to DVD-Audio standards – 5x24-bit/96kHz, or 2x24-bit/192kHz – and SACD recordable doesn't seem to be on the table at the moment. DVD-Audio has already been used to store compilations of CD audio discs – for example, Denon has released a single DVD disc of the Inbal/Frankfurt RSO Mahler symphonies 1-9 in Japan, with a running time of 699 minutes in CD standard 16-bit/44.1kHz PCM, which shows one of the ways recordable audio DVD could be used in the future – building huge music compilations. Of course, all three recordable DVD formats will record audio, they wouldn't be much use if they didn't, but they are limited to the lowest common denominator of video sound formats – two-channel, data-reduced Dolby Digital 2.0. This has the important advantage that any DVD-Video player understands the format natively, but it doesn't sound great and is easily outperformed by CD-R in quality terms. There is no official road map for the introduction of recordable audio DVD, but realistically it cannot be less than a year, and it could be considerably longer.

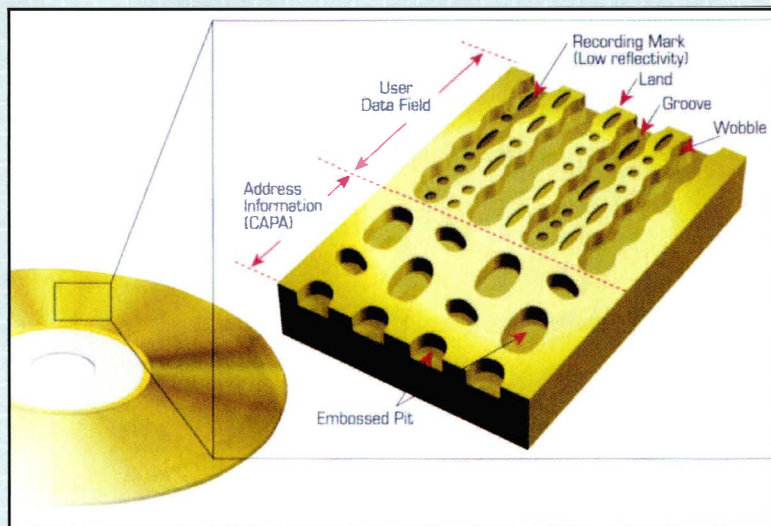
HARDWARE



FORMAT DVD+R/ DVD+RW

Players compatible with this format use DVD+R (one-time record) and DVD+RW (re-recordable) media. It is technically similar to, but incompatible with DVD-R, though +R discs will usually play on DVD-Video players, and +RW ones sometimes will too. It will record up to six hours of video using Variable Bit Rate technology depending on the quality level required, with two hours at high quality DVD-V level. It offers some minor editing advantages over DVD-RW but the latter's multimedia dominance combined with DVD-RAM's greater flexibility may mean an uphill battle, despite heavy recent promotion by Philips. Discs: Philips branded DVD+R discs cost around £7.50, and DVD+RW £15. Unbranded discs are available for much less.

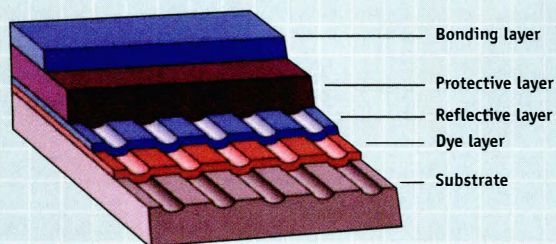
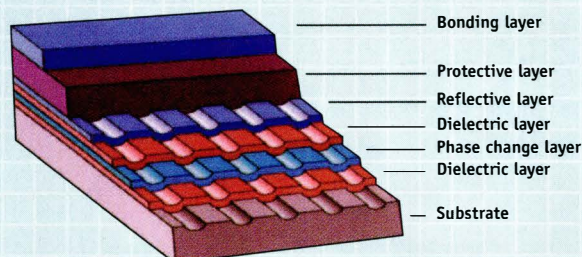
Example recorder: Philips DVD890 £599

TECHNOLOGY**DVD-RAM close up**

DVD-RAM makes use of the DVD Forum-approved wobble-land-groove recording system. The idea is that it utilises the best elements of the land-groove and wobble-groove systems.

In land-groove, data is recorded in the tiny lands as well as grooves in the disc, unlike standard optical discs which only keep data in the grooves.

In the wobble-groove system, the walls of the grooves are undulated, rather than smooth. Counting the undulations in the groove walls assists with accurate location of data via the CAPA (Complimentary Allocated Pit Addressing) system.

Inside a DVD-R disc**Inside a DVD-RW disc****FORMAT DVD-RAM**

CPRM compatible DVD-RAM format discs come pre-formatted and, unlike other formats, require no preparation before use. They can be bought with or without a protective caddy. Current DVD-RAM recorders will also record DVD-R discs, but not -RWs. New models are emerging with built-in hard discs and Smartcard readers. Time Slip allows simultaneous record and playback, and simple editing features include a multiple playlist feature. There are four play length/quality modes, but RAM discs won't play on most DVD players. Discs: Panasonic branded 4.7Gbyte without caddy around £15, with caddy £17. 9.4Gbyte with caddy £25. Discs pre-formatted for video can be reformatted for data, and discs can be removed from caddies. Unbranded discs available for much less.

Example recorder: Panasonic DMR-E30 £549

**FORMAT DVD-R/ DVD-RW**

The Pioneer DVR7000 is a flagship domestic model using the DVD recording format currently dominant in PC/multimedia circles. It suffers from slightly long-winded initialisation and closing procedures, though it has some basic editing features in high compatibility Video mode which offers one to two hours of recording. In CPRM-compatible VR (Video Recording) mode, recordings can be from 1-6 hours in 32 quality steps, with sophisticated editing features (cut, paste, combine scenes, undo using DiskNav on screen navigation), but play only on RW-compatible DVD-Video players, including all of Pioneer's own. Discs: Pioneer branded DVD-R discs cost around £5, and DVD-RW, £10. Unbranded discs are available for much less.

Example recorder: Pioneer DVR7000 £1,299

Wadia

The Hi-Fi Show &
AVEXPO

The Red Rose Music 'Baby Reference System 2', on demonstration for the first time at a UK show. Conceived by Mark Levinson this compact, elegant yet essentially simple system delivers a superbly musical performance at a fraction of the cost of conventional hi-end systems.

Hear the delightful 'Rosette 1' integrated amplifier or the more powerful and refined 'Passion' driving a pair of the compact 'Rosebud' ribbon hybrid loudspeakers and you have the basic ingredients of a quite magical system.

For most music lovers, Compact Disc remains the format of choice and is most likely to remain so for the foreseeable future. With this in mind we have chosen to partner the Baby Reference System with the latest 'Wadia 301' Cd player. This acclaimed player is the perfect choice for a Cd based Red Rose system, a 'must hear' for all true music lovers.

Check out the Music
Renaissance Hotel Room 1046



301 CD PLAYER

RED ROSE MUSIC



PASSION INTEGRATED AMPLIFIER

AVEXPO
Sept 14-15th
Renaissance Hotel
Room 1046



Musical Design Co

Tel; 01992 573030

Email; mdc.hifi@virgin.net

Web; mdc-hifi.co.uk

Subscribe

SAVE 34%

When you subscribe to Hi-Fi Choice!



WHY SUBSCRIBE?

- ▶ **SAVE MONEY - off the shop price**
- ▶ **Free home delivery**
- ▶ **Money back guarantee***
- ▶ **Never miss an issue**

HOW TO SUBSCRIBE:

- ▶ **Complete and return the form below**
- ▶ **Call our HOTLINE: 0870 444 8650**
- ▶ **Subscribe online:**
www.futurenet.com/promotion/pg233/89



SUBSCRIPTION ORDER FORM

I WOULD LIKE TO SUBSCRIBE TO HI-FI CHOICE FOR 13 ISSUES Your subscription will start with the next available issue

YOUR DETAILS (BLOCK CAPITALS)

Title _____ Initials _____

Surname _____

Address _____

Postcode _____ Country _____

Tel no. (inc. code) _____

E-mail address _____

Terms & Conditions: * on any unmailed issues. You will receive 13 issues in a year. This offer is open to the UK only. Overseas rates are available on request. Call +44 1458 8650.
We may use your contact details to inform you about other offers and reputable companies, whose products and services may be of interest to you. Please tick this box if you do not wish to receive such offers

CHEQUE/ CREDIT CARD 13 issue rates

PAYMENT METHOD

- UK £29.97 - save £15.53
- Cheque (E's sterling drawn on a UK bank account payable to Hi Fi Choice)
- Mastercard Visa American Express
- Switch Issue no./valid date /

Card no.

Expiry date /

Signature _____ Date _____

SEND TO: HI-FI CHOICE Subscriptions, UK: Future Publishing, FREEPOST B54900, Somerton, Somerset, TA116BR.
Order code: HF233 Offer ends: 01/10/02

REVIEWS & LAB REPORTS - Paul Messenger

SERIOUS STANDMOUNTS

Luxury standmounts may look the part, but can they deliver the aural goods?

This group test brings together a collection of luxury standmount speakers from several of the smaller, but nonetheless serious brands. The last few years have been characterised by a fashion trend for compact floorstanders to dominate the market, partly because they appear, at least superficially, to offer superior value for money, but also because customers like their all-of-a-piece cosmetic appearance.

However, there are signs of a backlash and a return to the standmount, at least among customers primarily interested in performance. Indeed, the standmount actually has some significant advantages over the floorstander, for several very good reasons. Its enclosure surface area is usually much less, so cabinet coloration is lower and easier to control. The shape of the box is usually better too, from the point of view of balancing out internal standing waves. And although there are those who don't like the appearance of speaker stands, they certainly do a better job of mechanically supporting the small speaker and its drive units than the floorstander can usually manage.

One bonus with the relatively

high prices of our group is the flexibility this affords the designers. Variety is very much the watchword here, the group as a whole tending

to emphasise what a large variation exists in the market for standmounts, from genuinely tiny 'miniatures' like the Diapason and Sonus Faber models, up to the generously proportioned Harbeth, which is actually bigger than many compact floorstanders.

Each of these models has its own unique physical characteristics, distinguishing it from the others assembled here, and indeed from the rest of the marketplace. The Diapason Emera has cunningly curved and beautifully finished panels that manage to avoid all parallel faces. The Sonus Faber Concerto's sides are handsomely clad in chunky thick walnut slabs, while the rest is finished in leather. In contrast, Energy's Veritas v2.1 has a shiny laminate surface, alongside a very unusual heavily damped, domed synthetic rubber top.

But by far the most radical speaker here is Infinity's Intermezzo, which has an all-cast-metal enclosure, and built-in 250-watt bass amplifier, complete with RABOS equaliser system. Harbeth's Super HL5, meanwhile, very much reflects the company's heritage with its classic BBC monitor shape and size. ☺

EQUIPMENT USED

Naim CDS II CD player
 Rega Jupiter CD player
 Linn LP12 turntable
 Rega RB1000 tonearm
 Linn Arkiv B, Dynavector XV-1 cartridges
 Magnum Dynalab MD 102 tuner
 Naim NAC52 preamp
 Naim NAP500 power amp
 Naim NACA5 speaker cables
 Kudos S100 speaker stands

MUSIC USED

Leftfield *Rhythm And Stealth*
 The Beastie Boys *Hello Nasty*
 Christy Moore *Live At The Point*
 Ry Cooder & VM Bhatt
A Meeting By The River
 Grainger/LWO/Wick
By Plane From Paris
 Tom Waits *Rain Dogs*
 Grateful Dead *Reckoning*
 Eminem *The Eminem Show*
 Cambridge Singers/Rutter
There Is Sweet Music
 BBC Radios 3 & 4

ON TEST



DIAPASON EMERA
£795



ENERGY VERITAS V2.1
£895



HARBETH SUPER HL5
£1,699



INFINITY INTERMEZZO 2.6
£1,600



SONUS FABER CONCERTO
£999





DRIVERS

TWEETER: 27mm isodynamic
WOOFER: 6.5-inch frame with 120mm polymethylpentene cone

LAB REPORT

▶ Pair-match is good at low frequencies, but slightly compromised at high frequencies. The port is tuned to 55Hz, which is only slightly below the 'natural' 75Hz driver/box resonance.

▶ Sensitivity registers a very generous 90-91dB/W, partly, it has to be said, because the impedance is decidedly low, dipping to around 3 ohms minimum through the bass region (centred on 55Hz), the lower midband (150-300Hz), and again in the extreme treble (c20kHz).

▶ Ultimate bass extension rolls off pretty rapidly below 40Hz, but the overall in-room alignment is pretty good, and suited to siting well clear of walls.

▶ The frequency balance holds a tight +/-2dB across the broad midband, 130Hz-3kHz, but there's a dramatic loss of output above 3kHz in our far-field measurement.

▶ **LAB CONCLUSION:** Good sensitivity is compromised by modest bass extension and a rather current-hungry impedance. The balance is fine up to 3kHz, but with weak lower treble.

DIAPASON EMERA £795

01753 652669 www.diapason-italia.com

EXCLUSIVE One of the most beautiful standmounts you can buy has its fair share of character

A newcomer to the pages of *Hi-Fi Choice*, one glance will tell the experienced eye that this little loudspeaker comes from Italy, where craftsmanship in woodworking comes together with design skills to create some of the most beautiful examples of the speaker maker's art.

That's arguably even more true of Diapason than other Italian brands which have come our way. Indeed, the £795 per pair Emera, with its multi-faceted hardwood front panel, must lay a strong claim to being one of the more attractive looking speakers ever produced.

Avoiding parallel sides is a good thing for loudspeaker enclosures, because it helps avoid the creation of focused standing waves that correspond to the spacing between the panels. The Emera goes much further than most, in that none of its faces get close to being parallel – indeed, only the top and the base are even flat.

The front panel is made from solid walnut – lacquered silver or black versions are available for an additional

VERDICT
SOUND
★★★★☆
EASE OF DRIVE
★★★★☆
BUILD
★★★★★
VALUE
★★★★☆

A beautiful looking sub-compact with a delightful yet also functional real-wood enclosure. The sound has fine dynamic life and expression, but a lack of lower treble results in some coloration.

CHECKLIST
CLOSE TO WALL ✗
WIDTH 20cm
HEIGHT 36cm
DEPTH 31cm
BI-WIRABLE ✗

£55 – and is beautifully shaped like a cut diamond, so that just the driver mounting area is flat, an arrangement which will assist good distribution and avoid baffle-edge diffraction effects. It's also tilted back, aiding driver time alignment. The top and base are far from parallel, while the sides and rear, made of veneered plywood substrate, form a continuous boat-shaped curve. The latter naturally makes siting the terminals tricky, and the Emera uses just a single pair, poking out at odd angles below the port.

The Emera has an open metal weave grille which takes a bit of removing and does nothing to disguise the drivers. The main driver is a 6.5-inch with a 120mm clear transparent polymethylpentene cone, while the tweeter is an 'isodynamic' device – a circular semi-ribbon type, where the coil is printed as a spiral on a plastic disc diaphragm.

PERFORMANCE

The timescale involved in group testing loudspeakers makes it quite impossible to run in the various models, so we

specifically ask for the distributor's co-operation. However, in the Emera's case apologies were received, and while we did our best, there was simply no way of reaching the full 150(!) hours mentioned in the manual.

This is a lively little loudspeaker dynamically speaking, no question, very communicative in its overall disposition, and generally free from boxy effects. But there's no avoiding the subjective consequences of the discontinuity between midrange and treble, and the general lack of high frequency energy in the lower treble in particular.

That in turn adds a nasal twang to voices, and makes speech, most obviously, sound a little hooded and shut in, almost as though the speakers were covering their mouths with their hands. The 'shut in' effect is unquestionably more noticeable with speech than with music, and some might like the way it helps the speakers and system avoid sounding aggressive. The treble comes back higher up however, adding useful extra sparkle, which helps the overall result. 🎧

ENERGY VERITAS V2.1 £895 ☎ 01787 249656 🌐 www.energy-speakers.com

EXCLUSIVE Very clean sounding and neutral speaker from the land of Mounties and maple syrup

VERDICT

SOUND



EASE OF DRIVE



BUILD



VALUE



Overall this is a clean and neutral speaker with low coloration, but lacks a little excitement.

CHECKLIST

CLOSE TO WALL ✗

WIDTH 23cm

HEIGHT 40cm

DEPTH 32cm

BI-WIRABLE ✓

Veritas is the name used by major Canadian brand Energy to distinguish its upmarket models. This £895 per pair V2.1 is the slightly smaller brother of the 2.2, reviewed back in *HFC* 223. The £400 price difference between the two is not just a matter of size, however. This smallest Veritas is a simple two-way design, where its bigger brother features a dinky little dome midrange driver.

For the size it's exceptionally solidly built, turning the scales at a hefty 12kg. The two sides, front, base and back all have a shiny black finish, and the front edges are sliced to minimise the apparent width. Radically but intelligently, the top is covered in a matt black rubber compound, formed into a dome more than an inch thick in the centre, which looks a little odd, but makes plenty of sense in damping any coloration from this surface.

The 2.1's bass driver is also interesting. It has a deep motor assembly in order to accommodate two counter-wound voice coils, each with its own magnetic gap. All in the interest of

improved linearity. The cone material itself is an unspecified composite, with a stippled surface that should help break up standing waves. A large bolt tensions the driver's motor metalwork against the rear panel (and the enclosure as a whole), just above the twin terminal pairs, and below the large port. The tweeter has a mesh-protected 25mm aluminium dome, and there's also a moulding to help secure the matching stand.

PERFORMANCE

The Veritas V2.1 surprised me by arriving with one of the pair out of phase with the other. That was my first impression, though subsequent checks showed that the errant speaker wasn't totally out of phase – just its bass unit! Whether that's better or worse is difficult to say. Having correctly identified the problem, it's easy enough to rectify

via the rear terminals. But the real concern is whether either customer or dealer would correctly diagnose the problem in the first place.

Having sorted that out, we find an exceptionally well balanced and neutral loudspeaker, albeit one that lacks something in the excitement stakes. A very evenhanded design, it's not an easy speaker to criticise, but it did little to raise the enthusiasm unduly either. And it does show a slightly ungainly tendency to 'thump' in the bass, which was particularly evident on bass-rich material like *The Eminem Show* and Leftfield's *Rhythm And Stealth*, but also added a touch of 'chestiness' to male speech.

However, for most of the time this didn't seem to be a problem, and the V2.1 generally sounded commendably clean and free from coloration, delivering precise and spacious imaging with little boxiness. 🗨️

"It's an exceptionally well balanced and neutral loudspeaker, albeit one that lacks something in the excitement stakes."



DRIVERS
TWEETER: 25mm metal dome
WOOFER: 6.5-inch double-coil driver with 120mm composite cone

LAB REPORT

▶ Huge pair-match discrepancy confirmed the out-of-phase bass driver. Once corrected, the match was still below average, especially at high frequencies.

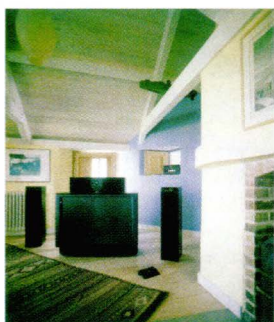
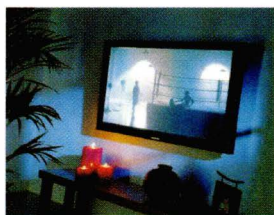
▶ Sensitivity registers a modest 87dB/W, despite the fairly low impedance, which looks pretty smooth, registering 4 ohm minima through the bass region (centred on 48Hz), the lower midband (150-200Hz), but staying above 8 ohms over 600Hz.

▶ With an enthusiastic port tuned to 48Hz, ultimate bass extension is good, though marred by excess 40-60Hz in-room, even with speakers clear of walls. Midbass excess apart, the overall balance is well ordered right across the band.

▶ It could be smoother through the lower half of the spectrum, but things are altogether flatter, if somewhat laid-back, above 1kHz, with just a slight crossover notch around 1.7kHz.

▶ **LAB CONCLUSION:** Balance is mid-bass heavy low down, but much smoother higher up. Sensitivity is low considering the quite demanding impedance.

“My kind of music”



Hi-fi and home cinema that looks as good as it sounds. Whether it's a single component for your **hi-fi** system, a full surround sound **home cinema** system or a complete **custom installation** service. Our 68 page colour guide gives invaluable advice on all the products you need, from the brands that matter, to fill your home with music.



And it's **FREE!**

Simply call Freephone **0500 101501***
visit **www.music-at-home.co.uk**
or return the coupon today

*Please quote reference HFC02c

Please send me my **FREE** copy of **The Ultimate Guide**

NAME

ADDRESS

.....

.....

POST CODE

Music at Home HFC02c, Freepost ANG11174, (UK Only)
Southend-on-Sea, SS2 6ZT

LAB REPORT

▶ Pair-match is very close right across the band. Port here is tuned to 35Hz, well below the 'natural' 55Hz driver/box resonance.

▶ Sensitivity registers a very generous 91dB/W, and this is not too seriously compromised by the impedance, which is low but not exceptionally so, hovering around 5 ohms through much of the bass region, and again above 10kHz.

▶ With the port tuned to a low 35Hz, ultimate bass extension is pretty good. The overall in-room alignment is slightly dry: best suited to siting in free space – some wall reinforcement can be tolerated if necessary.

▶ The frequency balance is good up to 2kHz, if just a tad forward from 600Hz–1.3kHz. A presence dip, centred on 3.2kHz, is fairly obvious while the treble as a whole is a little restrained.

▶ **LAB CONCLUSION:** Good sensitivity, plus fine bass extension and alignment are combined with a fine overall balance, marred only by a rather obvious presence dip centred on 3.2kHz.



HARBETH SUPER HL5 £1,699

01444 484371 www.harbeth.com

EXCLUSIVE It might look like the height of 1960s tech, but sonically it's top notch 2002

Originally founded by the head of BBC Engineering Research, Dudley Harwood, along with wife Beth, Harbeth was acquired by Alan Shaw in the late 1980s and is currently celebrating its 25th anniversary in the speaker business.

The BBC heritage remains very much at the heart of Harbeth's activities, and is very evident in this Super HL5. It's the latest incarnation in a line that goes right back to the birth of the company, and indeed further still, to those original LS5/5-type compact monitors that the BBC developed during the 1960s, and which became immensely influential in the subsequent evolution of British hi-fi loudspeakers.

The Super HL5 doesn't quite follow the classic 5/5's 30x60x30cm size/shape, but its 32.5x64x31cm gets very close, and in consequence looks decidedly bulky and old-fashioned for a standmount today. Indeed, because of their bulk the 'standard' 60cm stand

VERDICT
SOUND ★★★★★
EASE OF DRIVE ★★★★☆
BUILD ★★★★★
VALUE ★★★★☆

It might look bulky and old-fashioned, but this classic format monitor still shows its smaller brothers the way home sonically, combining authority and transparency with a good helping of neutrality.

CHECKLIST
CLOSE TO WALL ✗
WIDTH 32.5cm
HEIGHT 64cm
DEPTH 31cm
BI-WIRABLE ✓

isn't really appropriate here, so special 40cm Kudos S100s were used instead. Given its bulk, the Super HL5's total weight of 15kg is quite modest.

The enclosure is also unusual for its detachable front and back panels, and is covered on five sides (excluding the back) by good quality real wood veneer. There are three drive units, though this is at heart a two-way with an additional 19mm supertweeter which only comes into operation above 10kHz. The bass/midrange is handled by a cast frame eight-incher with a 150mm flared TPX cone, while the treble proper has a 25mm metal dome. The main driver is loaded by a front port, and twin terminals are fitted on the rear.

PERFORMANCE

Although the balance here is just a tad too restrained and laid back for true neutrality, in every other respect this is a remarkably involving and entertaining speaker, with superb overall coherence,

a considerable impression of scale and transparency quite unmatched by the others in this test group.

The generous main driver here seems to provide a dynamic freedom and tension not found with the smaller 6.5-inchers, and the much larger enclosure in turn seems to give that drive unit a better chance to 'breathe'. Not only is there greater dynamic freedom, but also superior dynamic tracking, inasmuch as the 'layering', in the way that instruments of different characters and loudness seemed to play together, seemed particularly convincing. Ditto the stereo soundstaging, which seemed well ordered with precise positioning and good depth perspectives.

The presence might be a little laid back, but the evenness through the bass and lower midband is particularly effective at creating just the right weight and authority, while remaining impressively free from thickening or heaviness. ●



DRIVERS

TWEETER: 25mm
CMMD dome
WOOFER: 6.5-inch
frame with
120mm CMMD
cone

LAB REPORT

▶ Pair-match is good though not exceptional, perhaps because the front panels are asymmetric and mirror-imaged

▶ Unusually, because of the built-in main driver amplifier, sensitivity is effectively determined by the tweeter here, and would seem to be equivalent to 89dB/W.

▶ With sealed-box loading and variable active equalisation, bass extension is not fixed. Set for free-space siting, it shows good extension to 27Hz (-6dB), with an alignment as flat as any. 'Shelf' setting takes a modest 3dB from mid-bass.

▶ The in-room, far-field frequency balance is flatter and more even than most up to 800Hz, but then shows a wide, shallow depression all the way up to 5kHz.

▶ Only the tweeter is driven by the system amplifier here, so the load stays comfortably above 6 ohms.

▶ **LAB CONCLUSION:** Built-in bi-amping makes life very easy for the driving amplifier. Balance is smooth and broadly laid back, with fine bass extension for the size.

INFINITY INTERMEZZO 2.6 £1,600 ☎ 020 8731 4670 🌐 www.infinitysystems.com

EXCLUSIVE Active RABOS bass system helps make a good speaker into a great one

Uniquely different from the rest of the test group – indeed the rest of the marketplace – this £1,600 per pair Intermezzo 2.6 from Harman's Infinity brand shows just what can be achieved when the big boys come out to play. Indeed it shares numerous features with the decidedly upmarket Prelude MTS, reviewed in *HFC* 228, but at a much more affordable price.

This is a two-way standmount, which is conventional enough, but that's where the predictability ends. Here we have a cast full metal jacket of an enclosure, a single built-in BASH 250 watt power amplifier, plus various other electronic bits and bobs, including RABOS (Room Adaptive Bass Optimisation System).

The half-active-drive approach is very clever, allowing useful protection and features while still using regular speaker-level connections from the system amplifier – which now has a much easier time, as it only has to drive the tweeters. The only disadvantage of this system is that you have to supply

mains power to each speaker.

RABOS is an ingenious but decidedly complex means of 'tuning' the loudspeaker to reduce the excitation of bass room modes, likely to be most useful in 'problem' rooms. One switch on each loudspeaker adjusts the bass alignment between close-to-wall and free-space siting, and another operates a high pass filter for use alongside a subwoofer.

Both drivers have aluminium diaphragms, stiffened by anodised oxide ceramic 'skins', the main driver a 120mm diameter cone/dome, the tweeter a 25mm dome. The cast enclosure has a nice silver finish, and is decorated by a simulated wood strip and grille, both available in a range of alternatives. The matching stands and wall brackets also make aesthetic good sense.

PERFORMANCE

Harman offered to send someone to do the RABOS thing and, finding the manual a tad scary, I gratefully accepted. The man from Harman reckons the untrained can set up RABOS

using the supplied test CD and sound level meter in about half an hour.

Intriguingly, not to say mysteriously, although my 'before' and 'after' room measurements looked virtually identical, there was no denying the sound quality improvement that the treatment introduced.

Without RABOS this is still a very good loudspeaker, a little on the laid-back side of neutral perhaps, but delivering very impressive weight, scale and drive from something so compact. Adding the RABOS tweaks simply opened up the soundstage, somehow making the speakers sound larger still, and significantly less boxy to boot.

The laid-back presence remains this speaker's strongest element of 'character', and this encourages one to wind up the wick a little, which is fun. But the lasting impression of the Intermezzo 2.6 is the quite delightful way it simply seems to 'disappear' acoustically, and allow just the music to fill the room. All told this is a hugely entertaining and highly enjoyable loudspeaker, that looks as good as it sounds. 🎧

VERDICT

SOUND



EASE OF DRIVE



BUILD



VALUE



Laid-back character seems to 'disappear' acoustically, and allow just the music to fill the room. A hugely entertaining hi-tech loudspeaker, that looks as good as it sounds.

CHECKLIST

CLOSE TO WALL	×
WIDTH	25cm
HEIGHT	38cm
DEPTH	29cm
BI-WIRABLE	×

SONUS FABER CONCERTO HOME

£999 ☎ 020 8971 3909 🌐 www.sonusfaber.com

Italian good looks paired with exceptional midband delivery make for a classy performer

VERDICT

SOUND



EASE OF DRIVE



BUILD



VALUE



Demure combination of leather with solid walnut sidecheeks looks good and sounds even better, with great midband voicing and communication skills. Well aligned for close-to-wall siting.

CHECKLIST

CLOSE TO WALL	✓
WIDTH	24cm
HEIGHT	36cm
DEPTH	34cm
BI-WIRABLE	✗

Sonus Faber is an Italian brand with a great reputation for combining some of the sweetest sounds around with equally attractive cabinetwork. Despite its not inconsiderable price, this £999 per pair Concerto is part of the company's 'budget' Home range. At first sight it looks very like the slightly bigger brother of a Concertino, which *Choice* reviewed some four years ago, though in fact the whole range has been updated, with new drivers and other changes.

At 13 litres internal volume, it's a comfortably compact, two-way, port-loaded standmount, just a little larger than the Concertino in every dimension. And this is no ordinary cuboid box. The base might be horizontal, but the back, front and top are all set at angles, the better to disperse internal reflections and standing waves.

Stylishly, fat side-cheeks are fashioned from solid thick walnut and heavily post-formed around the

periphery to soften the lines of the whole speaker. Judging by the four little gilt studs in each face, these side cheeks are bolted onto an inner enclosure, and are claimed to be decoupled in order to control resonances. A soft textured leatherette finish covers the other four faces. The whole build feels very chunky and solid, tipping the scales at a substantial 9kg.

The main driver has a 125mm diameter fibreglass matrix cone and a classy cast chassis, and is flush-mounted into the baffle surface. The 28mm soft dome tweeter is also flush-fitted, and offset from the enclosure centre line (to spread baffle-edge standing waves). A large port is also integrated with the front baffle. To preserve aesthetic and acoustic symmetry, the two samples of the pair are mirror-imaged. A single pair of terminals pokes out at the rear, and both drivers have magnetic shielding, just in case you want to place them close to a TV set.

PERFORMANCE

This is a very classy loudspeaker indeed, and sounds altogether more impressive than its baby brother. The Concerto sits conveniently quite close to a wall, which helps to fill in its dry bass character very nicely, yet at the same time it remains open and largely free from the 'hollow', 'echoey' character which often accompanies near-wall siting.

One might perhaps wish for a little more deep bass weight and 'grunt', but that's the inevitable sacrifice made by all small loudspeakers, and there are corresponding potential advantages in the lack of box colour and superior midband delivery.

And it's in the vital midband that this speaker's true strength lies. It sounds smooth and even, yet is also lively and communicative, a combination which is far from easy to achieve. The voicing is beautifully judged, with just the right amount of restraint to avoid aggression without leaving the sound 'shut in'. 🎧

LAB REPORT

▶ Sensitivity registers a quite generous 89-90dB/W, thanks in part to the 'dry' bass alignment, and also the fairly low impedance, with 4 ohm minima through the bass region (centred on 45Hz), the lower midband (150-300Hz), and again around 5-8kHz.

▶ The bass here rolls off pretty steadily below 100Hz, giving an alignment that's well suited to close-to-wall siting.

▶ Overall balance is smooth and well controlled right across the band, holding within good +/-4dB limits from 40Hz right up to 10kHz under in-room far-field conditions. There's just a slight forward emphasis in the half-octave from 800Hz to 1.2kHz, and a slight 'notch' centred on 5kHz.

▶ Pair-match looks pretty good across the band, notwithstanding mirror-image construction. Port is tuned to 45Hz, well below the 'natural' 70Hz driver/box resonance.

▶ **LAB CONCLUSION:** Decent sensitivity combines with a good bass alignment for close-to-wall siting. Balance is smoother and better controlled than most, holding within +/-4dB, with slight mid forwardness.



DRIVERS

TWEETER: 27mm silk dome, magnetically shielded
WOOFER: 180mm cast frame with 125mm fibreglass matrix cone, magnetically shielded

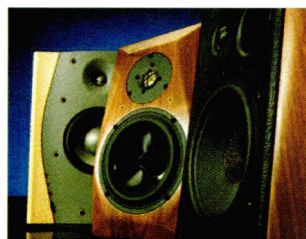
SPEAKER CONCLUSIONS

Luxury standmounts have plenty to offer the discerning listener says Paul Messenger

Spending £800 or more on a classy little standmount ought to guarantee a decent standard of performance. So it's no surprise to find that these speakers are all rather good. Whether they represent good value for money, however, is a trickier question. You could achieve a similar standard of performance for rather less cash, but inevitably with rather less style.

These speakers all qualify as 'luxury standmounts', and even though most are 6.5-inch two-ways, the variation between them is quite enormous. Furthermore, given the effort that most have put into the aesthetics, it would be churlish not to give some credit for this design aspect.

Ironically, arguably the most attractive looking speaker in the



group, the Diapason Emera, is also one of the less convincing in performance, while the speaker that's perhaps the least physically appealing – the bulky Harbeth Super HL5 – turns out to be joint-leader of the pack in sound quality. Although the reviewer can point out these contradictions, weighing up the pluses and minuses must be down to the individual customer and his/her preferences and order of priorities.

While the £1,699 Harbeth Super HL5 stands out as one clear Recommendation for its classic values, a Best Buy accolade goes to the Infinity Intermezzo 2.6 for quite different reasons. Both may carry similar price tags, but they couldn't be more different in virtually every other respect.

The Harbeth offers fine scale, expression and transparency, while the Infinity puts its hi-tech part-active ingredients to very good use with a lovely, spacious freedom from boxiness from a very compact enclosure – superb value all-in-all. Our third HFC Award Badge goes to Sonus Faber's Concerto, which has gorgeous midband integrity with a fine inherent musicality, and works well close to a wall.



SPEAKERS AT A GLANCE

MAKE	Diapason	Energy	Harbeth	Infinity	Sonus Faber
MODEL	Emera	Veritas v2.1	Super HL5	Intermezzo 2.6	Concerto Home
PRICE	£795	£895	£1,699	£1,600	£999
SOUND	★★★★☆	★★★★☆	★★★★★	★★★★★	★★★★☆
EASE OF DRIVE	★★★★☆	★★★★☆	★★★★☆	★★★★★	★★★★☆
BUILD	★★★★★	★★★★☆	★★★★★	★★★★★	★★★★★
VALUE	★★★★☆	★★★★☆	★★★★☆	★★★★★	★★★★☆
CONCLUSIONS	Beautiful looking real-wood enclosure. Fine dynamic life, but lack of lower treble causes coloration.	A clean and neutral speaker with low coloration, but lacks a little excitement. Disappointing quality control.	Might look old-fashioned, but this classic monitor combines authority and transparency with good neutrality.	Laid-back and seems to 'disappear' acoustically, this highly enjoyable loud-speaker looks and sounds great.	Looks good and sounds even better. Great midband communication skills and well aligned for close-to-wall siting.

LAB REPORT

SENSITIVITY	GOOD	BELOW PAR	GOOD	AVERAGE	AVERAGE
EASE OF DRIVE	BELOW PAR	AVERAGE	AVERAGE	EXCELLENT	AVERAGE
BASS EXTENSION	BELOW PAR	GOOD	GOOD	GOOD	AVERAGE
PAIR MATCHING	AVERAGE	BELOW PAR	GOOD	AVERAGE	GOOD
OVERALL RATING	55%	55%	80%	75%	65%

TRY THEM WITH THESE

CD PLAYERS

AUDIO NOTE CDT ZERO/ DAC ZERO 1X
£1,300

This intriguingly different combo, where the DAC avoids digital processing and filtering, gives a very smooth, open, easy-on-the-ear sound.

NAIM AUDIO CD5 £1,125

At its best, this smooth, polished performer sounds dynamic, vivid and compelling. Can be upgraded with FLATCAP 2 (see Amplifiers, below).

SONY SCD-555ES £1,200

Fabulous build and superb sound from both CD and SACD sources. Hard to better for the price.

AMPLIFIERS

PRIMARE A30.1 £1,500

Smooth, detailed singing quality, elegant appearance and a healthy power output too.

NAIM NAC112/NAP150/FLATCAP 2
£1,850

Clean simplicity, with Naim's rhythmic and punchy character, but an altogether sweeter sound than earlier generations.

ELECTROCOMPANIET EC4.7/ 120DMB
£3,448

This bulky Norwegian pre/power combo has wonderful wide-band transparency, broad dynamic range, and fine musical tension.

HINTS AND TIPS

- Choice of stand can have a big influence on the sound, and the better the speaker, the more important it is to use a top quality stand. If your dealer will co-operate, it's well worth experimenting with alternatives to get the best results.
- Finding the right place to put the loudspeakers acoustically (with respect to the room walls) is very important. Our reviews include suggestions, but every room is different, so do take time and trouble experimenting. Often, even small changes can have a big effect on the excitation of room modes, and the smoothness of the bass region.
- Speakers often take some time to run in. Expect them to improve steadily over the first 100 hours or so.
- Don't forget to use decent speaker cable if you want your system to perform at its best.



A Taste of the High End

We've never been fans of instant coffee. Don't misunderstand us, there's nothing wrong with it, but it just doesn't taste like real coffee.

Now we know its possible to spend quite a bit of money and get something that pretty much tastes like real coffee and we know that some so-called real coffee can taste truly awful. And, yes, you can buy instant coffee in any high street in the country. But once you've tasted the difference ...

At Heatherdale Audio we import freshly roasted beans and we prepare them

ourselves just before we use them. We mix freshly drawn water with the ground beans and filter them through unbleached paper. The result, poured steaming into a pristine white mug is a true work of art with a flavour to die for.

OK, so it may take a little longer to get right than its instant equivalent and it may not be available just anywhere and, cup for cup, it may cost a bit more - but, once you've tasted it, there's no looking back.

"More of an experience than a beverage", as one of our customers recently said.

Heatherdale Audio's new Mark Levinson Audition Suite is now open. Whatever your tastes in music and whatever your budget, we have a system that can liberate your senses and your music collections. Put together some of your favourite music, give Heatherdale Audio a ring and join us for a really good coffee. It's free*.

Heatherdale
audio limited

Tel: 01903 872288 Fax: 01903 872234

Heatherdale Audio, 202 Findon Road, Worthing, BN14 0EJ
heatherdale@hifi-stereo.com www.hifi-stereo.com

* the hi-fi, unfortunately, isn't.

**Mark Levinson Reference • Mark Levinson • Revel • Madrigal • Thiel • Lyra
• Stax • Martin Logan • Exposure • Sonus Faber • Proceed • Koetsu
• Ortofon • Mitchell • Clearaudio • VPI Record Cleaners**

**SEE IT...
...HEAR IT...
...FEEL IT (BUY IT!)**

PRESENTED BY:
HOME CINEMA CHOICE
WHAT VIDEO & TV
TOTAL DVD

HOME Entertainment Show 2002

*The latest from
the World Leaders in
Hi-Fi and Home Cinema*

SATURDAY, OCTOBER 12th

9.30 - 18.00

SUNDAY, OCTOBER 13th

10.00 - 17.30

**AT THE RENAISSANCE HOTEL, MANCHESTER
BLACKFRIARS STREET (Opposite No 1 Deansgate)**

ORGANISED BY:

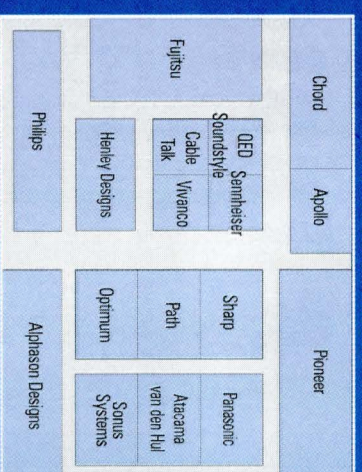
Practical Hi-Fi

*The North's Leading Group of Hi-Fi and
Home Entertainment Stores.*

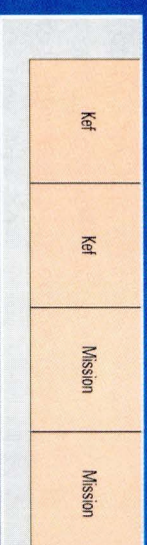
- Blackpool • Bolton • Carlisle • Lancaster
- Manchester • Preston • Warrington

Admission £3.00

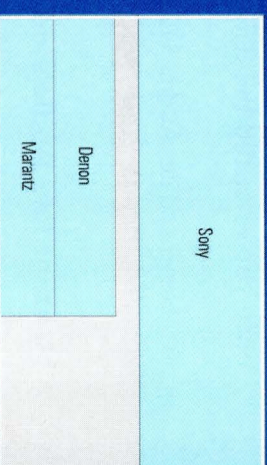
GRAND BALLROOM



MEZZANINE FLOOR



MEZZANINE FLOOR SUITES



FIRST FLOOR



SECOND FLOOR



THIRD FLOOR



HI-FI CHOICE BUYER'S BIBLE



Welcome to the *Hi-Fi Choice Buyer's Bible* – the ultimate guide to the very best high performance hi-fi and AV gear you can buy. Here you'll find all our favourite current products listed under easy to use categories, together with 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 thorough 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.

SOURCE COMPONENTS

- 76 CD PLAYERS
- 78 DVD PLAYERS
- 80 VINYL
- 82 RADIO TUNERS
- 91 DIGITAL RECORDERS

AMPLIFIERS

- 92 STEREO AMPS
- 94 AV AMPS

LOUDSPEAKERS

- 96 STEREO SPEAKERS
- 100 AV SPEAKER PACKAGES

ANCILLARIES

- 103 HEADPHONES
- 104 CABLES
- 107 STANDS AND SUPPORTS

109 GLOSSARY

DEALER CLASSIFIED

- 110 DEALER GUIDE
- 116 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.

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 six-channel surround 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.

Q&A

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 75 ohms 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 4 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.

TOP BUYS



NAD C451i £330

Dynamic, tonally varied and confident sound combines with class-leading detail resolution. Excellent value and highly entertaining.



Marantz CD6000 KI Signature £500

An affordable high end machine, this very impressive player has it all: brawn, finesse and class. Not to mention the full range of features.

Our favourite CD PLAYERS

Audio only CD and SACD players

STATUS	PRODUCT	£	COMMENTS	SPECIFICATIONS							ISSUE NUMBER
				SACD COMPATIBLE	ELEC DIG OUTPUT	OPT DIG OUTPUT	CD-RW COMPATIBLE	CD TEXT	BAL ANALOGUE OUT	HEADPHONE SOCKET	
UP TO £1,000											
R	Arcam CD92	900	High resolution player needs a touch of spit and polish to be completely convincing								212
SR	Cambridge Audio D500	200	Clean and highly articulate player wears well in extended use								202
R	Cambridge Audio D500 SE	200	A really lively sounding player with good detail but just a hint of dryness								217
LR	Cyrus CD7	800	New Cyrus player has strong all-round attributes to match its good looks								212
LR	Exposure 2010	600	Undistinguished in the final analysis, but the 2010 nevertheless is a return to form for this famous marque								231
F	Linn Genki	995	Explicit, rather bright sounding player with strong multi-room appeal								212
SR	Marantz CD6000 OSE LE	300	Detailed, well rounded, at home in any musical context – a real bargain								217
SR	Marantz CD6000 KI Sig	500	Impressive mid-market player is an unusually accomplished all-rounder, and is also well built								231
R	Marantz CD-17 MkII	800	Sophisticated player with a short but attractive feature set, and a new-found bounce in its step								206
SR	NAD C 541i	330	High octane player has the occasional rough edge, but is remarkable value for money								231
R	NAD Silverline S500	1,000	It sounds as good as it looks, which is notably refined and easy on the ear								195
R	Rotel RCD-02	375	Against some strong competition in the same price area, the new Rotel generally holds up well								231
R	Rotel RCD-1070	495	Technically sound and well equipped, if a little lacking in excitement or involvement								226
R	Rotel RCD-991	825	Strong midrange player with switchable dither levels to provide some system tweaking ability								212
R	Talk Electronics Thunder 3	1,000	Clean, fast, and the availability of a complete upgrade path makes this a good long-term proposition								195
ABOVE £1,000											
R	Arcam FMJ CD23T	1,200	Refined FMJ series player now boasts CD-RW and CD Text compatibility								226
EC	Audionet ART V2	2,300	Built to last forever, this CD has a dark natural sound with excellent bass and would be cheap at twice the price!								231
R	Creek CD53	1,199	Fine, assured and well built player – balanced outputs too								226
SR	Cyrus CD7Q	1,150	This refined and expressive addition to the top of the Cyrus range builds on the qualities of the lesser models								226
R	Marantz CD17 MkII KI Sig	1,200	Fabulously built player adds musical integrity to an already impressive basic model (the CD17 Mk II)								226
EC	Mark Levinson No390S	6,495	Superbly built and comprehensively equipped with genuinely high resolution sound								231
EC	Musical Fidelity CD-PRE24	2,000	Substantial player incorporates upsampling and extensive analogue and digital preamplification facilities								229
R	Naim Audio CD5	1,150	Recommended subject to audition – a dynamic machine, yet some physical minuses								212
EC	Naim NACDSII/XPS	6,265	Brings you the Naim sound, but for once doesn't have to rely on Naim ancillaries to get the results								188
SR	Primare D30.2	1,499	Superb high resolution player gives a strong taste of musical structure and physicality								226
EC	Sony SCD-333ES	1,200	High-end multichannel SACD player is excellent with CD, impressive in surround								224
EC	Sony SCD-XA777ES	2,300	Superb multichannel player that set the benchmark for the format at its launch								223
EC	Sony SCD-1	3,500	The first SACD player sounds fabulous but it's a slow operator and doesn't support multichannel								194
EC	Wadia 301	3,650	Insightful player with digital preamp options and good onboard volume control, try it direct for maximum effect								228

SPECS KEY SACD COMPATIBLE Plays high resolution SACD discs in two and multichannel modes. 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 COMPATIBLE 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 jack fitted to the CD player. VARIABLE OUTPUT Player features both fixed level and variable, volume adjustable outputs.



Primare D30.2 £1,499

A top-class player, with a characteristically powerful and authoritative, but also a subtle and engaging sound. It works best in high-grade, high-resolution systems.



Wadia 301 £3,650

Revelatory player that gives new insight into everything it plays, can be used directly into a power amp to good effect and has an optional digital preamp function.

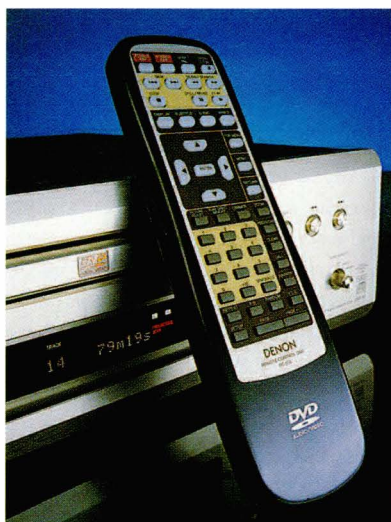
DVD PLAYERS

Disc players for video and audio



DVD has proved a phenomenal success in commercial terms and has virtually extinguished the market for budget CD players – you can't really beat a multiformat player when it comes to features. Early DVD players were not particularly good CD spinners because of the enormous amount of RF interference produced by video circuits, but as this problem has been identified manufacturers have begun to address it. Nowadays most DVD players are competent CD players and a few are remarkably good – often as not they are the ones that play DVD-Audio discs as well.

The great advantage of DVD, apart from being the first digital video format for the home, is that it offers discrete multi-channel sound. In the case of plain DVD video discs this music is encoded in either the Dolby Digital or DTS format, both of which use 'lossy' compression to fit onto the disc alongside the video data. You can



use a DVD player with your stereo system by connecting the stereo outputs, though this won't give the surround benefits that the format specialises in.

Q&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 component video closely followed by RGB Scart which is clearly superior to S-video and the basic composite video option.

DO I NEED A MULTICHANNEL AMP TO USE A DVD PLAYER?

Only if you want to hear the benefits of surround sound. DVD players can be used with stereo amps to great effect but you won't be able to decode the Dolby Digital and DTS soundtracks on movies.

DO I NEED PROGRESSIVE SCAN VIDEO?

Not unless you have a Progressive scan/NTSC compatible monitor or TV – as yet there is no PAL version.

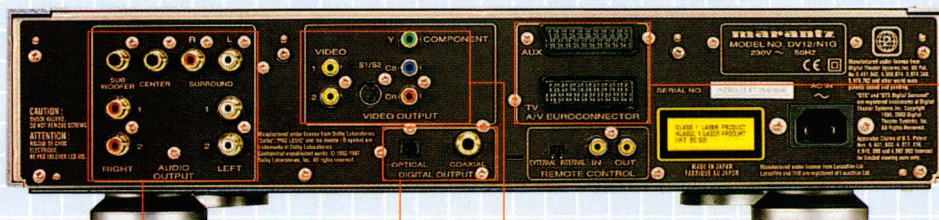
DVD-AUDIO

DVD-Audio is a high resolution format that offers multichannel, stereo and Dolby Digital tracks on dedicated DVD-A discs. The discs can be played on any DVD player but the CD-beating high fidelity sound can only be appreciated with a DVD-A player. While offering similar benefits to SACD it has the advantage of on-screen display for information – lyrics,

images and so on. To save you having to decide which format to go for, a few brands are bringing out universal players to cover SACD and DVD-A, and this would seem to be the best route if you want to enjoy high resolution digital audio. If you're after a high-end model look for one with a 'high bandwidth' digital audio output as well as 5.1 analogue outputs.



BACK SHOT



ANALOGUE AUDIO OUTPUTS: For stereo and multichannel connections, use these for best results with DVD-Audio, SACD and CD.

DIGITAL OUTPUTS: For Dolby Digital, DTS and PCM audio bitstreams.

VIDEO CONNECTIONS: Yellow sockets are composite; red, green and blue sockets are for component which gives best results, while the black multi-pin socket is S-video which sits qualitatively between the two.

SCART

CONNECTIONS: These are a good quality option for video, especially ones that output RGB.

Our favourite DVD PLAYERS

AV disc players

STATUS	PRODUCT	£	COMMENTS	SPECIFICATIONS					ISSUE NUMBER
				DVD-A COMPATIBLE	SACD COMPATIBLE	ELEC DIG OUTPUT	OPT DIG OUTPUT	HEADPHONE SOCKET	
UP TO £1,000									
R	Arcam DIVA DV88	1,000	Video player built with non-obsolence in mind, but picture quality exceeds musical quality as a CD player			●	●		213
R	Harman/Kardon DVD25	350	Reasonable video player is an excellent CD player, making this a good choice for buyers who put music first			●	●		228
R	JVC XV-SA72SL	350	Fantastic value for money from a player which makes good music with DVD-Audio and CD alike	●		●	●		220
R	Pioneer DV-545	330	Stylish and well-equipped slimline DVD-Video player is an extremely attractive all-rounder			●	●		221
EC	Pioneer DV-747A	899	UK's first universal player, compatible with virtually everything. Remarkably good with every format	●	●	●	●		226
BB	Toshiba SD-510E	320	Great all-rounder DVD-Audio from a slightly idiosyncratic player at a new low price point for Toshiba	●		●	●		228
R	Yamaha DVD-S1200	700	Clean, agile sound quality, and decent, if unexciting DVD-A performance round off a good, if costly player			●	●	●	228
ABOVE £1,000									
EC	Denon DVD-A1	2,500	A convincing case for the DVD-A format, battleship construction combined with sonic and visual finesse	●		●	●		230
EC	Marantz DV-12S1	2,500	THX Ultra progressive DVD-A player is a classy all-rounder, and absolutely top notch in legacy CD mode	●		●	●		229
EC	Meridian DVD596	2,485	Very classy player with DVD-A upgrade potential, one of the few that is also a superb CD player			●			218
EC	Meridian 800	10,805	The ultimate in DVD replay, modular construction, buffered ROM drive, upsampling and high-res digital outputs	●		●		●	230
R	Pioneer DV-939A	1,200	Near state of the art video and attractive, easy on the ear music making, from CD and DVD-Audio alike			●	●	●	213
BB	Toshiba SD900E	1,299	Top class DVD-Audio player and also a superb DVD-Video player – in this context pricing is competitive	●		●	●		213
EC	Townshend DV-747A	2,899	Major upgrade to Pioneer machine turns it into a giant slayer of a disc player, available as an upgrade to existing owners	●	●	●	●		232

SPECS KEY **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 jack fitted to the DVD player.

TOP BUYS



Toshiba SD-510E £320

Great DVD-Audio performance for the price and decent picture quality to boot.



Pioneer DV-747A £899

This extraordinary machine plays virtually every type of disc with exceptional finesse.



Harman/ Kardon DVD25 £449

A viable replacement for a straight CD player, but slightly less impressive on screen.



Marantz DV-12S1 £2,500

A very impressive player with a contained yet powerful sound and excellent video.



Sound Fantastic



Olsons new *Sound Fantastic* range of units are specifically designed for both the home and professional hi-fi audio markets.

Each unit is fitted with a 10A mains R.F.I. filter with earthline choke and transient suppressor, designed to filter mains-borne transients, switching surges, R.F. interference, intermittent spikes and other disturbances.

- ✓ Robust steel construction
- ✓ 13A Sockets
- ✓ 10A Panel Mount Fuse
- ✓ RFI 10A Mains Filter & Surge Suppressor
- ✓ External Earth Stud
- ✓ 2m x 1.5mm Screened Cable
- ✓ UK Plug - 10A Fuse Fitted
- ✓ Colour Black
- ✓ Specials to order

TYPE NO.	NO. OF SOCKETS	OVERALL LENGTH	PRICE
HF 4	4	446mm	£83.72
HF 6	6	557mm	£92.47
HF 8	8	670mm	£98.70

Call 020 8905 7273

Home Entertainment



Home Entertainment, May 2001

OLSON ELECTRONICS LIMITED
OLSON HOUSE, 480 HONEYROT LANE,
STANMORE, MIDDX HA7 1JX
TEL: 020 8905 7273 FAX: 020 8952 1232
email: sales@olson.co.uk www.olson.co.uk



FROM
£83.72
inc. VAT & p&p

24 HOUR SERVICE. VISA, MASTERCARD AND SWITCH ACCEPTED



VINYL

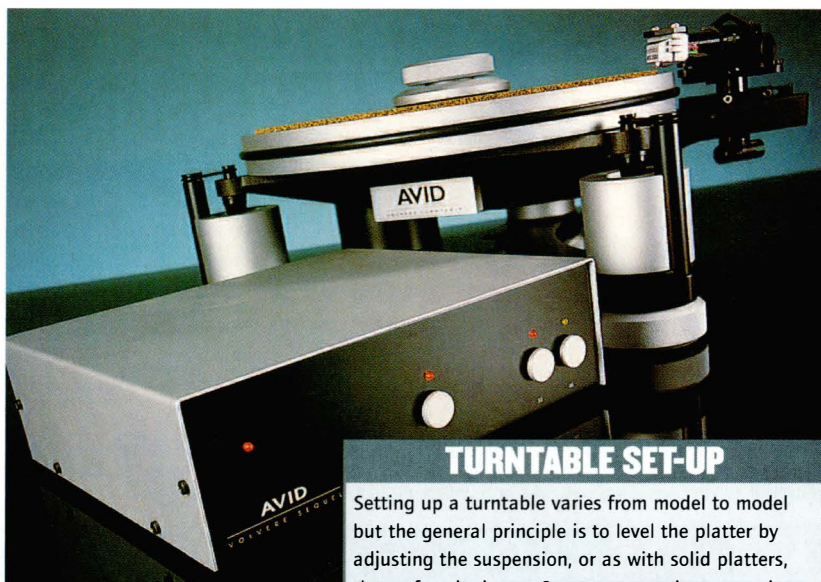
Turntables, cartridges and phono stages



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.



TURNTABLE SET-UP

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.

There are two types of phono cartridge: moving magnet (MM) and moving coil (MC), and with a few exceptions the latter outperform 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.

TOP BUYS



NAD 533 £220

A simple and well founded turntable combined with a tonearm which is fine value for money helps deliver an impressive level of performance at a very modest price.



Rega P3 £298

Latest version of a hi-fi classic is a very capable deck for a very modest price with very little serious competition from other makes. A great turntable for the money and a very safe buy.



Audio Note TT1/ARM1 £594

Simple, unpretentious and relatively inexpensive, Audio Note's TT1 delivers a real taste of high-end performance at a realistically affordable price.



Avid Volvere Sequel £3,500

A beautifully made turntable that delivers a high-end vinyl experience without costing the earth. Neutral, even-handed, detailed and frankly spellbinding.

Our favourite BB BEST BUY RE RECOMMENDED EC EDITOR'S CHOICE

TURNTABLES

Record players

STATUS	PRODUCT	£	COMMENTS	SPECIFICATIONS					
				SPEEDS	SUSP SUBCHASSIS	SWITCHABLE SPEED CHANGE	SUPPLIED WITH ARM	SUPPLIED WITH CART	ISSUE NUMBER
BB	Audio Note TT1/ARM1	594	Simple and unpretentious, it delivers a real taste of true high-end performance at an affordable price	33/45	●	●	●		203
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	●	●			229
EC	Avid Acutus	5,000	Extremely capable design with no apparent shortcomings, don't sell your vinyl 'til you've heard it on this!	33/45	●	●			194
R	Clearaudio Champion Level 2	1,955	Neutral balance, great looks but only so-so detail. Benefits greatly from isolation	33/45			●	●	223
R	Dual CS415-2	160	No denying it's cheap and cheerful, but it does what it's paid for happily enough	33/45			●	●	214
R	Linn LP12 Basik	1,100	Trails the full LP12 significantly, but pace, rhythm, timing etc are still top rank	33	●		●		103
R	Michell Gyro SE	829	Stripped-down version of classic GyroDec, offering strong and lively sound	33/45	●				223
BB	Michell Orbe SE	1,725	A superb turntable, able to mix it with the best at virtually any price	33/45	●				192
BB	NAD 533	220	Sonically a little crude, but musically satisfying results at a very modest price	33/45			●	●	203
BB	Rega P2	198	Updated Planar 2: just as much fun as ever and now even better value as the competition falls away	33/45			●		214
R	Rega P3	298	Updated Planar 3, building on the strengths of the P2 with added subtlety and detail	33/45			●		214
BB	Rega Planar 25	619	Great-looking turntable has a silky smooth sound with exceptional midband coherence	33/45		●			203
EC	Rega P9	2,248	Exceptionally elegant hi-tech player with complex outboard supply, ceramic platter, and wonderful RB1000 tonearm	33/45		●	●		228
EC	SME Model 10A	3,411	Elegant and extremely capable design with Series V/309 hybrid arm, superbly built	33/45	●	●	●		195
EC	SME Model 20.2A	5,274	Beautifully built, extremely neutral damped and suspended deck with superb sound. Inc V arm	33/45/78	●	●	●		186
R	VPI HW19 Junior	650	A notably large and handsome turntable with good sound quality and considerable upgrade potential	33/45	●	●	●		203
EC	Well Tempered Reference	5,500	Superb mechanical stability and unflappability result in a clean reproduction	33/45	●	●	●		205

Our favourite PHONO CARTRIDGES

MM and MC cartridges

PRODUCT	£	COMMENTS	SPECIFICATIONS			
			MM	MC	REPLACEABLE STYLUS	ISSUE NUMBER
Allaerts MC1B	1,295	Highly capable and entertaining Belgian cartridge that warrants the finest turntable and phono stage you can afford		●		203
Audio Technica AT110E	29	Excellent performance for the price, with little more than some mild coloration and a touch of hardness at high levels	●		●	214
Clearaudio Aurum Beta S	270	Clear improvement over cheaper Alpha, and good sound all round by any standards	●			223
Dynavector DV-20X L	350	Articulate-sounding, with impressive treble resolve, though lightweight at times. Needs a high-quality turntable and arm		●		192
Dynavector DRT XV-1	2,900	Capable of conjuring one of the most tactile, three dimensional sound stages on the vinyl planet. Extremely entertaining		●		208
Grado Prestige Black	40	Offers admirable detail and treble extension, with good bass and ambience too	●		●	214
Lyra Helikon	1095	Highly capable and highly neutral, this is a cartridge for all seasons, albeit fussy about vinyl quality	●			215
Ortofon MC 10 Supreme	300	A full and cultured-sounding cartridge, with collective attributes far outweighing its shortcomings		●		192
Reson Recca	250	If you're after a high-quality moving magnet cartridge, they don't get much better than this	●		●	192
Reson Etile	485	Plenty of life and detail, and refined with it		●		223
Sumiko Blue Point Special	250	A no-nonsense performer with engaging musical properties – one of the best around for less than £300		●		192

Our favourite PHONO STAGES

Phono stages

PRODUCT	£	COMMENTS	SPECIFICATIONS				
			MM PHONO INPUTS	MC PHONO INPUTS	ADJ. GAIN	ADJ. IMPEDANCE	ISSUE NUMBER
Creek OBH-8SE	160	Neutral, relaxed and involving sound from this neat little unit	●				223
Pass Labs XOno	2,995	Not absolutely neutral, but the overall result is so beguiling it's hard to resist	●	●		●	201
Primare R-20	500	Fights a little shy of densely scored music, but generally an enjoyable and neutral performer	●	●		●	201
Pro-Ject Phono Box	40	Moving-coil compatibility is a dubious extra in a way, but MM performance is acceptable at this giveaway price	●	●			201
Tom Evans Microgroove/Lithos	700	Stunning detail, gives new insights into familiar discs		●			223
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

TURNTABLE 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.

CARTRIDGE SPECS KEY **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.

PHONO STAGE SPECS KEY **MM PHONO INPUT** Designed for a moving magnet cartridge. **MC** Designed for a moving coil cartridge. **ADJ. GAIN** Gain can be tailored to specific MC requirements.

ADJ. IMPEDANCE Impedance can be tailored to specific MC requirements.

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 said to be available to 80 per cent of the population and the long term plan is to switch public broadcasting over to digital, 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 relatively 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 muddled 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 which aren't available on FM, and if it's niche 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.

TOP BUYS



Denon TU260L II £130

The benchmark for all other budget tuners with great sound and plenty of features.



NAD S400 £600

A nicely judged performer that maximises the potential of FM broadcasting.



Pure DRX-601E £300

This 'budget' DAB model can meet much more expensive alternatives head-on.



Arcam DT-8 £650

Highly professional implementation of DAB technology makes this one of the best options on the digital tuner market.

Our favourite TUNERS

BB BEST BUY R RECOMMENDED ES EDITOR'S CHOICE

FM & DAB HI-FI SEPARATES

STATUS	PRODUCT	£	COMMENTS	WAVEBANDS	PRESETS	RDS	REMOTE CONTROL	SIG. STRENGTH METER	ROTARY TUNING KNOB	ISSUE NUMBER
FM TUNERS										
R	Cambridge T500	180	Very capable tuner suited to good and less good reception conditions	FM,M,L	64					193
R	Creek T43	399	Quality UK-made tuner offering classy sound in all areas at a very fair price	FM,M,L	64					193
R	Cyrus FM7.5	400	Beautifully made and presented, with sound that's a small but worthwhile advance over budget models	FM	7					211
BB	Denon TU-260L II	130	The return of the all-time favourite, now enhanced with RDS and sounding as fine as ever	FM,M,L	40					193
BB	Harman Kardon TU940	180	Good sound and particularly good signal recovery under tricky reception conditions	FM, M	30					221
BB	Marantz ST6000	180	Another budget killer from Marantz, with sound well above its class and useful features	FM, M, L	90					211
R	Myryad T-30	400	Attractive product that produces attractive sounds too: capable of very musical performance with a good aerial	FM	29					193
BB	NAD S400	600	One of the best around – bass and treble are both well extended and detail is excellent	FM	30					230
BB	Primare T21	600	Identical to NAD S400 and likewise a very fine tuner	FM	30					230
R	Sony ST-SE570	130	Good, honest, budget tuner – loads of features, just a trifle bland	FM, M, L	30					221
DAB TUNERS										
R	Arcam DT-81	650	A very smart and polished DAB performer	DAB	16					221
R	Pure DRX-601ESM	330	Cheap, small and capable, but with major tonal variations from neutral which confuse the issue	DAB	90					230
BB	Pure DRX-601E	300	Cheapest DAB separate to date, and concedes little if anything to more expensive models	DAB	9					211
R	TAG McLaren T32R+DAB	2,290	Classy hi-fi at its best: top sounds on FM and DAB and a joy to own and use	DAB,FM,M,L	99					230

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 titles 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.

Would you like
more entertainment
in your home?



Sevenoaks Sound & Vision

specialise in designing and installing the finest home cinema, hi-fi and multi-room systems.

From custom designed multi-room and home cinema installations to starter systems, Sevenoaks are committed to providing a comprehensive product range from all the leading manufacturers coupled with expert advice and backed with our first-class customer service.

If you're interested in home entertainment and want to avoid the confusion, contact your local Sevenoaks outlet on **Freephone 0800 587 9909** and **experience more.**

Outlets Nationwide

Aberdeen • Bedford • Birmingham • Brighton • Bristol • Bromley • Cambridge
Cardiff • Chelsea • Cheltenham • Crawley • Croydon • Edinburgh • Epsom
Exeter • Glasgow • Guildford • Holborn • Hull • Ipswich • Kingston
Leicester • Leeds • Lincoln • Liverpool • Maidstone • Manchester
Newcastle • Norwich • Nottingham • Oxford • Peterborough • Plymouth
Preston • Reading • Sevenoaks • Sheffield • Southampton • Southgate
Swansea • Swiss Cottage • Tunbridge Wells • Watford • Witham (Essex)

www.sevenoakssoundandvision.co.uk

home cinema

lighting systems

discrete installations

plasma & projection

multi-room audio

experience

more

PRO-JECT



Turntables & Tuners

Arcam DIVA T61 Tuner.....	£249.95
Denon TU260L MKII Tuner.....	£109.95
Marantz ST4000 Tuner.....	£119.95
Michell Gyro SE/RB300 Turntable.....	£1017.95
Project Debut Phono Turntable.....	£144.95
Project Debut II Turntable (Colours).....	£129.95
Project RPM4 Turntable.....	£324.95
Sony ST-D777ES FM/DAB Tuner.....	£549.95
Videologic DRX-601E DAB Tuner.....	£269.95

Debut II Turntable (Black) £114.95

"The original Debut turntable romped away with a Product of the Year Award in 1999, and the MKII version continues the extremely good work. It's a simple affair, that's easy to set up, but don't let the price fool you - it sounds a whole lot more expensive than that. This is a fine turntable, and it clearly reveals the benefits of listening to vinyl, with a rich and detailed soundstage, and a good dynamic response.

It's available in six funky colours, so you should find one to suit your decor, and at just a smidge over £100, you can have no excuse not to keep that old vinyl collection in employment for a good few years yet."

★★★★★ WHAT HI-FI? Awards 2000

Selected outlets are Project Turntable Centres. Colour Options are available at additional cost



MUSICAL FIDELITY A3.2 Series

A3.2 CD Player £999.95 A3.2 Amplifier £979.95

Replacing the What Hi-Fi? Sound and Vision Award Winning A3 CD and Amplifier, the new A3.2 models have been further refined and re-styled. The A3.2 CD Player now incorporates the same DAC, filter assembly and control mechanism as the highly-acclaimed Nu-Vista CD Player. The A3.2 Amplifier draws on experience gained through the development of the Nu-Vista M3 amplifier and as such has inherited many of its qualities, producing a sense of ease and flexibility that is normally only associated with far more expensive designs.



CD Players

Arcam DIVA CD62T.....	£369.95
Arcam DIVA CD82T.....	£599.95
Arcam DIVA CD92T.....	£899.95
Arcam FMJ CD23T.....	£1199.95
Cyrus CD7Q.....	£1149.95
Denon DCD485.....	£139.95
Linn Genki.....	£994.95
Linn Ikemi.....	£1949.95
Marantz CD4000.....	£99.95
Marantz CD6000Ki Signature.....	£449.95
Meridian 507.....	£1194.95
Musical Fidelity A308 ^{SP}	£1999.95
Musical Fidelity NuVista 3D.....	£2999.95
Rotel RCD-02.....	£379.95
Rotel RCD1070.....	£494.95
Sony CDPXE570.....	£109.95

Recorder Selection

Marantz DR6000 CD-RW.....	£329.95
Pioneer PDR609 CD-RW.....	£199.95
Sony MDS-JE770 MiniDisc.....	£229.95
Yamaha KX393 Cassette Deck.....	£119.95
Yamaha KX580SE Cassette Deck.....	£199.95

B&W Bowers & Wilkins DM601S3 Speakers £249.95

"Ultimately it's the 601 S3s' lack of any weakness that makes them so special. Their talent is so widespread that most of the competition is left reeling. Detail, resolution, dynamics, insight... everything is present and correct, and these speakers rate highly in every area.

What more can we say? These new B&Ws are a terrific buy. The price rise over their predecessors pits them against tougher rivals, but on this showing B&W has little to worry about. Unlike the competition."

★★★★★ WHAT HI-FI? SOUND AND VISION January 2002

Please Note: Some products may not be available at all outlets. Advertisement valid until at least 26th September 2002, E&OE.

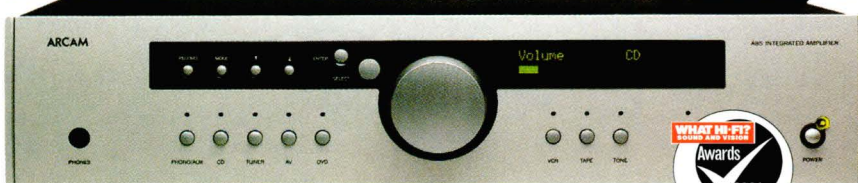


more entertaining



Amplifier Selection

Arcam DiVA A65 Plus Amplifier	£369.95
Arcam DiVA A75 Plus Amplifier	£469.95
Arcam FMJ A32 Amplifier	£1149.95
Cyrus ACA7.5 Pre Amplifier	£699.95
Cyrus Smart Power Amplifier	£549.95
Cyrus S Amplifier	£499.95
Denon PMA355 Amplifier	£199.95
Linn Kolektor Pre Amplifier	£494.95
Linn LK85 Power Amplifier	£494.95
Marantz PM4200 Amplifier	£149.95
Musical Fidelity A3.2 Pre Amplifier	£999.95
Musical Fidelity A3.2 Power Amplifier	£999.95
Musical Fidelity A308 Amplifier	£1999.95
Rotel RA-02 Amplifier	£349.95
Sony TA-FE570 Amplifier	£149.95



Stereo Amplifiers Best Buy £601-£1000

ARCAM

SOUND & VISION

DiVA CD72T CD Player

£449.95

DiVA A85 Integrated Amplifier

£799.95

DiVA CD72 "The CD72 will have you jumping out of your seat from the very first notes. Both powerful and punchy, it delivers every ounce of air and detail present from detailed midrange to smooth, singing treble. Sometimes a product comes along that sets new standards..." **★★★★★** **WHAT HI-FI? SOUND AND VISION Awards 2001**

DiVA A85 "You'll have realised by now that we rather like this amp. It took us completely by surprise, and further strengthens Arcam's already impressive product range... The A85 is superb, and we can't wait to put it up against its peer in a group test." **★★★★★** **WHAT HI-FI? SOUND AND VISION March 2001**



MONITOR AUDIO

Silver 8i Speakers **£699.95**

"No other speaker in this test can match the Monitor Audios when it comes to delivering seismic basslines with sofa rattling power and weight. That this part of the spectrum also enjoys plenty of speed and control confirms the Silver 8is' position as bass kings... A great speaker needs more than simply great bass, however, and the Silver 8is do far more than merely thump. With the likes of Curtis Mayfield's 'Move On Up', they produce a sound of such verve that it becomes hard to sit still... They produce music with plenty of excitement - but don't forget the subtleties too. Add excellent build and an easy load and these Monitor Audios make a formidable case for themselves." **★★★★★** **WHAT HI-FI? SOUND AND VISION April 2001**

PURE DIGITAL DRX-701ES Digital Tuner **£249.95**

PURE Digital (formerly VideoLogic Systems) introduce their new PURE DRX-701ES DAB digital radio tuner. This advanced hi-fi tuner builds on the huge success of its predecessor, DRX-601ES, which was awarded What Hi-Fi Sound & Vision magazines Tuner Product of the Year 2001.

Says Kevin Dale, president, PURE Digital: "Our DRX family are the UK's best selling and highest award winning DAB products. Using the META third-generation DAB processing technology enables us to include a wider range of outstanding features and performance, like favourite station learning and signal strength diagnostics, while also bringing down the price of hi-fi DAB tuners by nearly a third compared to our previous generation product."

DRX-701ES is attractive in any setting, featuring a stylish precision machined aluminium front panel, anodised in either black or silver, along with matching black or silver finish casework and controls, cool blue LED indicators and an easy to read blue/white display.



VideoLogic



CD Players
Best Buy £501-£800



CYRUS

CD7 CD Player £799.95
7 Integrated Amplifier £699.95

Cyrus 7 CD "This player is just as convincing with thundering orchestral strings and brass, making a great job of Bernstein's recording of Mahler's Symphony No 5 and it has the definition to unravel the instrumental strands in the Kronos Quartet's disc of Phillip Glass string quartets... It's that that makes it special - and this is a very special player indeed." ★★★★★ **WHAT HI-FI? SOUND AND VISION** November 1999

Cyrus 7 Amplifier "This is a fabulous amplifier. It's fast, punchy and has bags of power on tap but crucially delivers huge sackfuls of subtlety when the music requires. Some of the other amplifiers in this group may be better with particular genres of music but as an all-rounder it takes some beating." ★★★★★ **WHAT HI-FI? SOUND AND VISION** November 1999

MISSION

78 Series

10%
Off RRP on all
78 Series Speakers

782 bases its performance on a 165mm Nomex bass unit fitted to a reflex enclosure ensuring excellent low frequency extension from a graceful and compact cabinet. The **783** houses a larger 200mm bass unit with massive motor system, capable of floor shaking, yet tightly controlled low frequency extension. Both use Keraform midrange drivers for outstanding clarity and midrange detail coupled to superb dynamic range together with Mission's silk dome tweeter.

The **780** and **781** are the pinnacle of Mission's research into creating a three dimensional soundstage, extensive bandwidth and dynamic range from the smallest possible cabinet dimensions. The **780** is massive in its sonic capabilities. Its 130mm Keraform bass unit is carefully matched to a novel reflex enclosure for full bodied bass extension, the qualities of Keraform produce a dynamic and ultra detailed midrange. In the **781** a 165mm Keraform driver takes advantage of a larger cabinet to extend bass performance and increase efficiency whilst maintaining that superb midband transparency and finely detailed treble.

780 "Versatile and with a sound that works well with a wide variety of hi-fi kit, these speakers were worthy of this title last year, and this year have achieved the tough task of making it the double."

★★★★★ **WHAT HI-FI? SOUND AND VISION** Awards 2001



Speaker Selection

Acoustic Energy Aegis Evo One	£179.95
Acoustic Energy Aegis Evo Three.....	£349.95
B&W CDM 1NT.....	£749.95
B&W CDM 7NT.....	£1249.95
B&W DM303.....	£179.95
B&W DM602 S3.....	£299.95
Cyrus CLS70 (Black).....	£799.95
KEF Q3	£399.95
Linn Katan (Maple).....	£634.95
Linn Ninka (Maple)	£894.95
Mission 780.....	£269.95
Mission M71	£129.95
Monitor Audio Silver 'S' S6.....	£599.95
Monitor Audio Gold Reference 10.....	£799.95
Monitor Audio Gold Reference 20.....	£1499.95
Ruark Epilogue II.....	£344.95
Wharfedale 8.1	£99.95

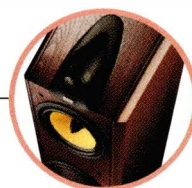


Q1
Speakers **£249.95**



"Overall the Q1s are excellent speakers. Some rivals may edge ahead on a short audition, but give these standmounters a little time and they're sure to impress. Are they better than the likes of B&W's 601S3 or Mission's 780s? The answer will have to wait for a group test. But until then it is fair to say that these are the most competitive speakers that KEF has had at this price point for years"

★★★★★ **WHAT HI-FI? SOUND AND VISION** May 2002



more entertaining



System Selection

- Cyrus** Quattro Ex Power Amplifier & Speakers . . . **£849.95**
- Denon** 201 Ex Speakers **£629.95**
- Denon** DM50 Ex Speakers **£269.95**
- Linn** Klassik Music System Ex Speakers **£999.95**
- Marantz** Eclipse 19 Inc Speakers **£549.95**
- Marantz** Eclipse 21 Inc Speakers **£649.95**
- Marantz** Eclipse 22 Inc Speakers **£699.95**
- Marantz** Eclipse 25 Inc Speakers **£799.95**
- Tag McLaren** Aphrodite Ex Speakers **£2994.95**
- Teac** Reference 100 Inc Speakers **£299.95**
- Teac** Reference 500 Ex Speakers **£699.95**
- Yamaha** Pianocraft E150 Inc Speakers **£249.95**



ROKSAN

Caspian MKII CD Player
Caspian MKII Amplifier

£994.95
£894.95

Caspian Amplifier "The Caspian has been around for a few years, but Roksan has developed it to a point where it now leads the class in all-round terms. In specific areas other amps equal it, but overall none can beat its combination of clarity, timing and dynamics. The Caspian is a worthy winner."

★★★★★ **WHAT HI-FI? SOUND AND VISION** February 2001

Caspian CD Player "If you can stretch to it, though, Roksan's Caspian is the player to go for. Yes, it's the most expensive here, but no rival can touch it when it comes to bringing music to life - regardless of genre. And that's what hi-fi is all about."

★★★★★ **WHAT HI-FI? SOUND AND VISION** May 2001



TEAC

Reference 300 System **£549.95**

"Teac's Reference 300 system is an absolute belter. The company's Reference series has won lots of awards and many admirers in the past, and the 300 range at £200 less than the bigger 500 series, is no disappointment. Your £600 buys you everything but speakers: an amplifier, tuner, CD player and cassette deck... As beautifully built as we've come to expect from Teac, this system delivers the goods with style."

★★★★★ **WHAT HI-FI? SOUND AND VISION** Awards 2001

DENON

D-M30 CD Receiver
SC-M50 Speakers

£229.95
£69.95

"Denon's gorgeous D-M30 has a fine pedigree - and a record of success. Its forebear the D-M3 kept impressing us with its balance of good looks and great sound, winning two What Hi-Fi? Awards on the trot. Now the latest generation takes home a Product of the Year gong two years in a row. On its own merits, too, as this is much more than a rehash of the D-M3. Upgraded audio circuitry, improved power supply and the Mission-designed speakers all improve the package. The sound is superb, well-balanced and weighty... It's a big system in a very cute box."

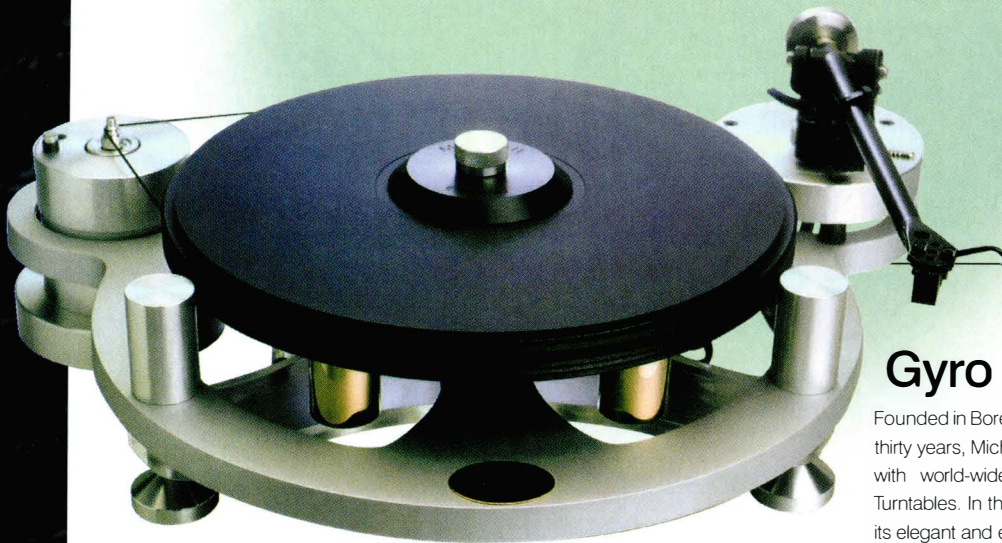
★★★★★ **WHAT HI-FI? SOUND AND VISION** Awards 2001

Optional Recorders:

CDR-M30 CD-RW Recorder • DMD-M30 MiniDisc Recorder • DRR-M30 Cassette Deck

Please Note: Some products may not be available at all outlets.
 Advertisement valid until at least 26th September 2002, E&OE.





Turntables
Best Buy £501-£1000

J A Michell Gyro SE Turntable **£1017.95**

Founded in Borehamwood by mechanical engineer John Michell. For over thirty years, Michell Engineering have been at the forefront of quality audio, with world-wide appreciated products like the GyroDec and Orbe Turntables. In the early eighties, the revolutionary GyroDec Turntable, with its elegant and effective suspension system, was introduced. The Gyro SE is a smaller and cheaper package that retains the classy sound of the GyroDec and can be upgraded to the full GyroDec specification by adding a plinth and dustcover.

Price includes Rega RB300 Tone Arm

"The beautifully engineered Gyro SE not only looks the part but has a wonderfully clean and fluid sound."

★★★★★ WHAT HI-FI? SOUND AND VISION July 1999

MUSICAL FIDELITY

A308 Amplifier **£1999.95**

The New A308 Series from Musical Fidelity has been designed to follow in the footsteps of their superb limited edition Nu-Vista products. Using easier to manufacture casework and newly developed circuitry has resulted in both a huge price reduction and superior sonic performance in several areas. The A308 sound is completely seamless and integrated with no harshness, grain or edginess. Bass performance is both fast and deep, imaging is three-dimensional. The immediately noticeable quality of the new A308 circuitry is its incredible high frequency performance which is smooth, sweet and extended.

To achieve the build quality Musical Fidelity want, a huge investment has been made in production, tooling and custom extrusions which not only look handsome, but also offer excellent mechanical integrity. In brief, the A308 series has genuine state-of-the-art electronics housed in solid, well made metalwork and gives the music lover a true audiophile product with a great sound, great circuits and great build quality.



Genki CD Player **£994.95** LINN Majik Line Amplifier **£694.95**

Genki "Tempting though it is to think of Genki as a Glaswegian word, it's actually Japanese, and the nearest definitions we could find involve vitality, vigour and spirit. And used as adjectives, these words go a long way towards describing the sound of the Genki, which always manages to communicate the music first and foremost, and let the rest of the hi-fi thing look after itself."

It's a very well-thought-out player, too, from its clear and simple control layout to the provision of four sets of analogue outputs, two at fixed level, and two with level control. Completing the package is a 24-bit Burr-Brown DAC and Pacific Microsonics HDCD filter. Few owners will worry about all that stuff, however, as they'll be too busy enjoying the way Genki plays music, its purity of tone and sense of drama on Mozart's Don Giovanni being a fine example of its talent. By any standards this is a superb player, and not just one for the army of Linn enthusiasts."

★★★★★ WHAT HI-FI? SOUND AND VISION March 2000

Majik The Linn Majik is a sophisticated control amplifier complete with on-board stereo power amplifiers. A core entry-level product for powerful and flexible control of hi-fi, video or multi-room installations. "Sneaky" add-on modules expand its functions. It can accommodate many source components. The Majik is available in two versions: The 'Phono' version has five line-level inputs and one Moving Magnet phono input and the 'Line-level' version has six line-level inputs.



Please Note: Some products may not be available at all outlets.
Advertisement valid until at least 26th September 2002, E&OE.



more entertaining



scotland and north

- Aberdeen** 491 Union Street **01224 587070**
- Edinburgh** 5 The Grassmarket **0131 229 7267** Closed Monday
- Glasgow** 88 Great Western Road **0141 332 9655** Open Sunday
- Hull** 1 Savile Row, Savile Street **01482 587171**
- Leeds** 112 Vicar Lane **0113 245 2775** Open Sunday
- Liverpool** 16 Lord Street **0151 707 8417**
- Manchester** 69 High Street, City Centre **0161 831 7969**
- Newcastle** 19 Newgate Street **0191 221 2320**
- Preston** 40-41 Lune Street **01772 825777** Open Sunday
- Sheffield** 635 Queens Road, Heeley **0114 255 5861** Open Sunday

midlands and east

- Bedford** 29-31 St Peters Street **01234 272779**
- Cambridge** 17 Burleigh Street **01223 304770**
- Ipswich** 12-14 Dogs Head Street **01473 286977**
- Leicester** 10 Loseby Lane **0116 253 6567**
- Lincoln** 20-22 Corporation Street **01522 527397**
- Norwich** 29/29a St Giles Street **01603 767605**
- Nottingham** 597-599 Mansfield Road **0115 911 2121**
- Oxford** 41 St Clements Street **01865 241773**
- Peterborough** 36-38 Park Road **01733 897697** Open Sunday

midlands and west

- Birmingham** 12 Queensway Arches, Livery Street **0121 233 2977**
- Bristol** 92b White Ladies Road, Clifton **0117 974 3727**
- Cardiff** 104-106 Albany Road **029 2047 2899**
- Cheltenham** 14 Pitville Street **01242 241171**
- Exeter** 28 Cowick Street **01392 218895**
- Plymouth** 107 Cornwall Street **01752 226011**
- Swansea** 24 Mansel Street **01792 465777** Open Sunday

london and south east

- Brighton** 57 Western Road, Hove **01273 733338**
- Bromley** 39a East Street **020 8290 1988**
- Chelsea** 403 Kings Road **020 7352 9466**
- Crawley** 32 The Boulevard **01293 510777**
- Croydon** 369-373 London Road **020 8665 1203** Open Sunday
- Epsom** 12 Upper High Street **01372 720720** Open Sunday
- Guildford** 73b North Street **01483 536666**
- Holborn** 144-148 Grays Inn Road **020 7837 7540**
- Kingston** 43 Fife Road **020 8547 0717** Open Sunday
- Maidstone** 96 Week Street **01622 686366** Open Sunday
- Reading** 3-4 Kings Walk Shopping Centre **0118 959 7768**
- Sevenoaks** 109-113 London Road **01732 459555**
- Southampton** 33 London Road **023 8033 7770**
- Southgate** 79-81 Chase Side **020 8886 2777**
- Swiss Cottage** 21 Northways Parade, Finchley Rd **020 7722 9777** Open Sunday
- Tunbridge Wells** 28-30 St Johns Road **01892 531543**
- Watford** 478 St Albans Road **01923 213533** Open Sunday
- Witham (Essex)** 1 The Grove Centre **01376 501733**

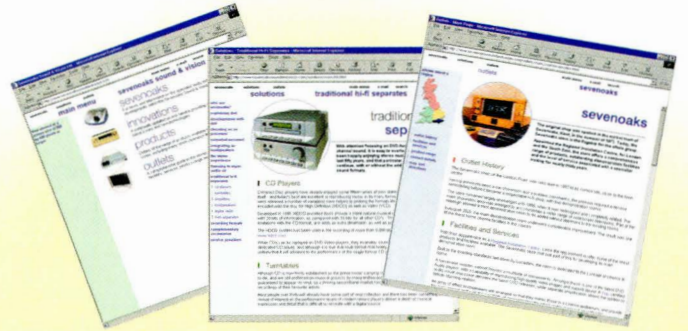
Please call to verify hours of business.
Contact our outlets via **E-Mail** outlet@sevenoakssoundandvision.co.uk

who are sevenoaks?

Founded in 1972, Sevenoaks Sound & Vision are one of the largest and most successful hi-fi and home cinema retailers in the country

Each Sevenoaks Sound & Vision outlet stocks a wide range of quality products, covering all categories of specialist home entertainment, from DVD Players to Widescreen Plasma Televisions and Projection Systems, all at highly competitive prices.

Friendly staff are available in all stores to advise, demonstrate and guide you through the home entertainment jungle.



sevenoaks online

The Sevenoaks Sound & Vision website has news and information on the Sevenoaks group and its 44 outlets nationwide. The website is designed to provide you with answers to the questions you may have when buying new equipment.

The site has comprehensive guides to a range of products and technologies from vinyl and compact disc to all the latest formats, including DVD Audio, SACD and widescreen plasma monitors and front projection systems.

There are regularly updated stock clearance lists with hundreds of products on offer and detailed pages to help you locate your nearest outlet.

For impartial advice and information, just click on sevenoakssoundandvision.co.uk

stock clearance

With over forty outlets nationwide, the Sevenoaks Sound & Vision group stock and display a wide range of products. As technology delivers improvements in performance, so individual models and product ranges are changed or superseded. The preceding models are made available at a reduced price, for clearance. Visit our Website for an up-to-date list of the clearance stock, listed by outlet, within the Sevenoaks Sound and Vision group.

0% finance option*

Spread the cost of buying. 0% finance option is available on the vast majority of products we stock. *Written details on request. Licensed credit brokers. Minimum balance £400. Subject to status.

pricing policy

Whilst we do not claim always to be the cheapest, we try to ensure our prices are highly competitive. Take into account the expert advice, unrivalled product selection, demonstration facilities and excellent pre, during and after sales service and the lower price might not look such good value.

In the event you can find the same products and excellent service at a lower price, please bring it to our store managers' attention. We will always endeavour to offer you the best deal.

Display Stock Clearance

Limited quantity summer sale offers - call now

Arcam DV88 Player



Limited quantity available in Black or Silver

Was £999
£795
You Save over £200.00

Excellent DVD & good CD replay at a bargain price. Few only! Composite, S-video, component output & analogue audio output

What you get!

- Available for audition
- Full two year warranty

- 0% APR if required
- Local Delivery & installation

Arcam A85 Amplifier



Limited quantity available in Black or Silver

Was £799
£625
You Save over £170.00

85w of DC coupled power with twin switchable speaker outlets, preamp out, adjustable input sensitivity and great sound.

What you get!

- Available for audition
- Full two year warranty

- 0% APR if required
- Local Delivery & installation

One only Arcam offer worth considering below (New product with full two year warranty)

FMJ A22 Amp/Dave (was £1849) **£999.00** FMJ P25 3 Ch Amp (was £999) **£599.00**

Naim Audio NAC82 Preamp



Each year we replace our Naim demonstration stock giving you an opportunity to make a substantial saving on our normal price! All products are boxed with full two year warranty.

Was £2500
£1795

Other Naim products on offer

- NAC 52 Preamp (£3850) **£2690**
- NAC 102 Preamp (£1210) **£859**
- NA CDX Player (£2470) **£1729**
- NAP 180 Power Amplifier (£1220) **£859**
- NAP 250 Power Amplifier (£1910) **£1339**
- HI - CAP Power Supply (£795) **£559**

Arcam/Mission CD62/A65+/M72



Complete with 6m QED spkr lead For speaker alternatives see below.

Arcam CD62 player, A65+ amplifier & Mission M72 Speakers

Save £120.00 !!!

£759

Add Stylish New R45 Radio Headphones For only £79.00 Reception up to 90 metre



What you get!

- 2 year Electronics & 5 year Speaker warranty
- Free Delivery & Local Installation
- *0% Interest Free Credit available

Want different speakers?

- Upgrade to KEF Q1 speakers add £70
- Upgrade to B&W 601s3 spkrs add £70
- Upgrade to Mission M51 spkrs add £115

For additional upgrade to this system please call

248 Lee High Rd
London, SE13 5PL
Mon/Sat 10 - 6.30
(Closed Thursday)

Billy Vee
SOUND SYSTEMS



Auditions?...

We supply the finest hi-fi, A/V & DVD in London and you can be sure that any of the products you see advertised here are on display and available for audition directly in the shop or in our comfortable listening rooms.

Helpful experienced staff are always on hand to help explore the many new possibilities open to you.

Warranty?...

All hi-fi and A/V is covered by our no nonsense two year minimum warranty with many ranges incorporating a five year in house cover. And... if you want to upgrade, we offer a part exchange service so you are not left with your old hi-fi

Where?...

We are on the main A20 road between Lewisham and Blackheath BR Stations. Buses: 122 321. Local parking is available.

When?..

We are open between the hours of 10am to 6.30pm Monday - Saturday (Closed Sunday and Thursday)

To your door

Next day delivery £5 call 020 8852 1321

INTEREST FREE CREDIT!

0%

* Interest free credit or deferred credit is available for purchases of £400 or above over 6 - 12 mths. Call for details single or combined purchases included

PRODUCT RANGE

Arcam * AVI * B&W * Chord Co * Denon
Linn * Mission * Naim * PMC * ProAc
Pro-ject * Pioneer * Rega * REL *
Sennheiser * Sugden * TAG * Yamaha

THE A LIST

Arcam DiVA CD72T CD Player	£29.00
Arcam DiVA CD82T CD Player NEW!	£599.00
Arcam DiVA A65+ Amplifier NEW!	£340.00
Arcam DiVA DV88 Player	£999.00
Arcam FMJ DV27 DVD Player	£1595.00
Linn Genki CD Player	£995.00
Naim CD 5 Player	£1150.00
Linn Kolektor/LK85 Pre/Power	£950.00
Linn Pekin Tuner	£54.00
Naim Nait 5 Amplifier	£825.00
Naim NAT05 Tuner NEW!	£74.00
Naim AV2 Processor NEW!	£2200.00
Rega Planet 2000 CD Player	£48.00
Rega P 2 T/T inc RB250 arm NEW!	£198.00
Rega P 3 T/T inc RB300 arm NEW!	£298.00
Pro-ject Debut MM inc Arm/Cart	£115.00
Sugden Bijou Amp & Preamp	£1228.00
TAG McLaren AV32R Processor	£2299.00
TAG McLaren DVD32R DVD Player	£3995.00
AVI Neutron Speakers	£49.00
B&W DM 601/3 Speakers NEW!	£240.00
B&W CM2 Speakers	£550.00
B&W VM1 lifestyle 5 Spkr+Sub NEW!	£850.00
KEF KTH2005 lifestyle 5 Spkr+Sub	£799.00
Linn Katan Speakers NEW!	£635.00
Mission M51 Speakers NEW!	£299.00

E&OE - Arcam, KEF - Shop callers only

Display Bargains up to 50% off

Arcam AVR100 AV Receiver (799)	50% £399.00
Blueroom Minipods Var colours (289)	£199.00
Lexicon MC1 Processor (was 5500)	£3995.00
Linn Karik/2 CD Player S/H (new 1850)	£895.00
Linn 5105 Power Amp (was 1200)	50% £549.00
Linn Kan Speakers (was 325)	£239.00
Linn Keosa Speakers (was 405)	£279.00
Linn Ninka - Cherry Spkrs (was 985)	£725.00
Linn Keilidh Spkrs Black S/H (new 775)	£365.00
Linn LK140 Power Amp (750)	£550.00
Linn Keltik Speakers Wal (was 6000)	£3495.00
Linn LP12/Lingo/Akito S/H (new 2250)	£1195.00
Marantz DV4100 DVD (was 399)	50% £179.00
Marantz DV7000 DVD (was 599)	50% £269.00
Naim NAP 250 Power Amp (was 1805)	£1445.00
Naim NAP 250 S/H Power Amp (1475)	£999.00
Naim NAP500 Power Amp (10995)	£7995.00
Naim Intro Speakers Beech (790)	£579.00
Pioneer LCV10 Laptop DVD (999)	60% £399.00
ProAc Tablette 2000 Speakers (64)	£456.00
Rotel RV985 DVD Player (was 625)	50% £299.00
TAG DV32R DVD Player (was 3995)	£2995.00
Yamaha DSP AX620 Amplifier (399)	£239.00

2 year warranty on most goods. UK Delivery £5 per item

020 8318 5755

DIGITAL AUDIO RECORDERS

CD, MiniDisc and hard disc recorders

MiniDisc

MD's strength is versatility. You can record and re-record many times over. Editing facilities are second to none – you can erase mistakes, name tracks and re-order a disc's contents with a few simple button pushes, making it ideal for building compilations. They're pretty robust too.

Sound quality is below that of CD-R/CD-RW. The format uses a Sony-developed compression technology called ATRAC, which discards part of the data in order to squeeze it on the disc. If you're copying from CD to MD, the result tends to sound a little cold in comparison, lacking a degree of detail and ambience. But to most people it still sounds light years ahead of cassette – clean and hiss-free.

Recordable CD

With recordable CD you have a choice of two disc types – CD-R discs are the cheapest, but you can only record once. CD-RW discs are a little more costly, but you can re-record on them *ad infinitum*.

Though the latest machines incorporate some useful editing facilities, CD-R/RW is not as flexible as MD. However, sound

quality is higher – if you're recording from a CD, the best models will give you a copy that is very close to the original. In terms of compatibility, most CD players will play back a CD-R disc, but older models may have trouble with CD-RW (though you can of course play the disc back on your own recorder). If you want to play a CD-R/RW on a DVD player, check for compatibility.

Hard Disc

The latest contender on the digital recording scene is also the most flexible. Some HD (hard disc) recorders can store whole music collections if you use a compression format like MP3. HD recorders are taking over from multidisc CD changers as sound servers in multi-room installations where their ability to play more than one piece of music at a time is a great boon. HD also offers impressive editing facilities on a par with those of MD and they can also record from CD (or to CD-R/RW) at high speed.

At present sound quality isn't the driving force behind the format – flexibility and storage capacity being bigger issues – and a plain CD-R/RW machine will outperform an HD recorder in fidelity terms.

TOP BUYS



Pioneer PDR-609 £280

This classy single-deck CD player is an even better burner, with useful features.



Marantz DR6000 £400

Quality in a box – it eschews gimmickry, but it does a simple job very, very well.



Pioneer MJ-D508 £200

Some useful value-added features, and a sharp selling price. Hard to beat.



Yamaha CDR-HD1000 £700

First of a kind – complex PC technology in a well-executed audio recording product.

Our favourite BEST BUY RECOMMENDED EDITOR'S CHOICE

DIGITAL RECORDERS

CD-R/RW, MD and HD recorders

STATUS	PRODUCT	£	COMMENTS	SPECIFICATIONS				
				DECKS	HD CAPACITY (GB)	OPTICAL IN/OUTPUTS	ELEC IN/OUTPUTS	ISSUE NUMBER
CD-R/RW RECORDERS								
R	Denon CDR-1000	400	A respectable player and recorder, though some midband congestion was noted when recording	1		●	●	218
RE	Marantz DR6000	400	Classy CD-R/RW recorder is also a classy CD player, in contrast to most CD recorders	1		●	●	218
R	Marantz DR-17	1,500	Highly recommended, but with a jitter problem that, resolved, would improve sound quality	1		●	●	205
RE	Philips CDR951	380	An improvement on previous models, it delivers the musical goods in some style	1		●	●	205
R	Philips CDR785	350	Ragged play quality, but a good record performance from this well equipped, well priced CD-R/RW deck	1		●	●	218
RE	Pioneer PDR-609	280	Classy single deck CD-R/RW burner is also a good if characterful player	1		●	●	218
R	Pioneer PDR-W839	350	Good quality twin CD burner makes recordings that can be hard to distinguish from the original. Good value too	1		●	●	218
MD RECORDERS								
R	Pioneer MJ-D508	200	Well equipped but musically sleep inducing player that receives its Recommendation due to price	1		●	●	205
HD RECORDERS								
R	Yamaha CDR-HD1000	700	CD-R and hard drive in one – save your music to hard disc, edit then dump to CD-R for MiniDisc style flexibility	2	20	●	●	223

SPECS KEY **DECKS** Amount of drive mechanisms on board – twin-deck recorders use one to play while the other records. **HD CAPACITY** Amount of gigabytes of storage capacity, for HD only. **OPTICAL IN/OUTPUTS** Optical Toslink in and outputs for digital connection to a CD player or DAC. **ELEC IN/OUTPUTS** Electrical coaxial in and outputs for digital connection to a CD player or DAC.

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 most 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 to carry out their task: transistors or valves. Transistors are popular because of their practical and technical advantages, but valves – aka tubes – live on due to aspects of sound quality that transistors cannot replicate. If you want to play loud, use transistors, 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 200 watt 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.

Q&A

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-AMPLING?

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 if required.

TWO-CHANNEL AV

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

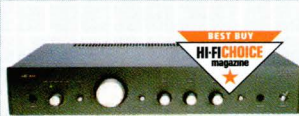
tend to be better at reproducing music because they don't have the (electrical) noise-inducing digital processing of AV amps. AV amps cost three to four times as much as stereo models of similar quality.

TOP BUYS



ATC
SIA2-150 £2,375

A versatile and powerful integrated. Main strengths are an engaging, detailed soundstage, which produces forward and open vocals without becoming too overbearing.



Arcam
A65 Plus £370

Articulate and coherent integrated that will charm you with its midrange and high frequency sophistication. Power is limited but it's a quality not quantity device.



NAD
C370 £450

This powerhouse stereo integrated just about has it all, including a flexible set of features. Tremendous power output (for the price) helps too.



Sugden
A21a £899

Build quality is not very slick and it runs uncomfortably hot, but don't worry about the low power specification – sound is in the very top class.

Our favourite BB BEST BUY R RECOMMENDED EC EDITOR'S CHOICE

STEREO AMPLIFIERS

Integrated amplifiers

STATUS	PRODUCT	£	COMMENTS	SPECIFICATIONS					
				LINE INPUTS	PHONO INPUT	REMOTE CONTROL	HEADPHONE SOCKET	POWER OUTPUT (W)	ISSUE NUMBER
UP TO £1,000									
BB	Arcam A65 Plus	370	Highly articulate and fluent, offers unusual insight for its price	5	●	●	●	40	232
BB	Arcam DiVA A75 Plus	470	Quick, lively and well presented amplifier, bass is sharper and more tuneful than its predecessor	5	●	●	●	50	224
BB	Arcam DiVA A85	800	Much enhanced design topology gives a more hard hitting, engaging sound than previous Arcams	7		●	●	85	214
R	Cyrus 5	500	An enjoyable amp that is assured and unflappable, although detail is unremarkable	7		●	●	45	205
R	Cyrus 7	700	Welcome return to form for the Cyrus stable: this is the best sounding audio brick around	6		●	●	60	196
BB	Denon PMA-255UK	140	Great beer-budget buy, with everything necessary for basic but decent high fidelity operation	5			●	30	208
R	Exposure 2010	599	Neatly turned out amplifier, with mainstream appeal but a bit on the bland side	6		●		50	214
R	Kenwood KAF-3030R	200	Kenwood's best amplifier for some years has a lean bass but excellent mid and treble	5		●	●	50	217
R	Marantz PM8200	599	Warm, solid and likeable sound, with the occasional flash of steel when under pressure	5		●	●	60	224
R	Musical Fidelity X-A2	500	A chip off the old block; sounds very similar to the X-A1 and XA-100R	6				75	208
R	Myryad Z140	450	Slimline beauty with genuine integrity and coherence if relatively limited power	5	●	●	●	50	232
R	NAD C320BEE	220	Spirited and enthusiastic amp with slight bass hump and a sound that will suit relaxed speakers	7		●	●	50	232
BB	NAD C350	300	A typical NAD: refined, warm tonality, adequate detail, and a strong power yield	7		●	●	60	208
BB	NAD C370	450	Flexible, ultra-high power integrated amplifier delivers a real punch, but is not without finesse	6		●	●	120	217
R	Naim Nait 5	825	As always with the Nait, less is more, and the Nait 5's 30 watts seem to go a lot further with some sources	6		●		30	214
R	Pioneer A-607R	300	Lively, articulate amp with plenty of drive and a hint of brightness	5		●	●	60	192
R	Roksan Kandy KA-1	475	Power with control, barely compromised by a small degree of dryness	6		●	●	120	205
R	Roksan Caspian	795	Mainstream Roksan line level amp works well under most circumstances	6		●		70	201
BB	Rotel RA-931 MkII	189	Simple, non-remote amp majors on clarity and transparency, without sounding over-analytical	4			●	35	208
BB	Rotel RA02	349	Agile and capable slimline design with an engaging sound that draws you into the music	4	●	●	●	40	232
BB	Sugden A21a	899	This single-ended, Class A transistor amp has exquisite resolving ability and presence – an authentic classic	5				25	224
ABOVE £1,000									
BB	Arcam FMJ A32	1,150	Remarkably flexible and well featured with excellent sound quality for the price	7	●	●	●	100	228
BB	ATC SIA2-150	2,375	Starkly revealing powerhouse that eats most integrateds for breakfast	5		●		150	228
R	Canary Audio CA-608	2,250	If you value the grand scheme of things and appreciate a bit of dynamic vigour this could be the amp for you	4				24	202
R	Marantz PM-14 MkII KI	2,000	Highly sophisticated and well equipped with a refined and relaxed sound quality that's hard to resist	7	●	●	●	100	228
BB	Primare A30.1	1,500	Smooth, detailed singing quality, elegant appearance, and healthy power yield	6		●		100	214
R	YBA Intégré	1,550	Careful system matching is essential, but this is definitely one of the good guys	6		●		50	214

Our favourite BB BEST BUY R RECOMMENDED EC EDITOR'S CHOICE

STEREO AMPLIFIERS

Pre/power amplifiers

STATUS	PRODUCT	£	COMMENTS	SPECIFICATIONS						
				PREAMPLIFIER	POWER AMPLIFIER	LINE INPUTS	PHONO INPUT	REMOTE CONTROL	POWER OUTPUT (W)	ISSUE NUMBER
UP TO £2,000										
BB	Arcam A85/P85	1,330	Integrated/power amp combo won't suit all systems, but delivers classic A85 virtues plus extra gravitas and range	●	●	7		●	85	225
R	Arcam FMJ A32/P35	1,980	One of the few correctly matched integrated/power combinations, the sound has real gravitas and sophistication	●	●	7	●	●	100	227
EC	ATC CA2	750	Stripped down version of ATC's range topper delivers considerable transparency and bandwidth. Excellent value	●		5		●		221
BB	Creek P43R/A43	900	Great value, with a particularly impressive way with dynamics	●	●	6		●	140	212
BB	Croft Vitali/Series 5C	2,000	Oddball retro style and ergonomics, but truly magical voice coherence and projection, great transparency	●	●	3	●		30	216
R	Cyrus aCA7.5/Smart Power	1,250	Great for classical, jazz, and existing Cyrus owners	●	●	7			60	212
R	Densen Beat 200/300	1,985	Classy jet black cast boxes pack plenty of punch with good total musical coherence (remote £300 extra)	●	●	6	OPT	OPT	100	216
R	Musical Fidelity X-P100	800	Good long-term listening prospects; detailed and with a little fruitiness	●		6	●	●		200
EC	Musical Fidelity A308CR	3,898	Bold looking design with an absence of sonic signature that proves there is life after NuVista	●	●	4	●	●	250	231
R	Myryad MP100/MA240	1,600	Smart finish and impeccable manners, smooth, clean performance	●	●	6		●	120	212
R	NAD Silverline S100/S200	2,000	Beautifully built kit that sounds as good as it looks with heaps of power	●	●	7		●	200	200
EC	Naim NAC112/NAP150	1,425	Clean, clever simplicity, plus a very well balanced sound that's much sweeter than earlier Naims	●	●	6		●	50	213
BB	Rothwell Indus/Rubicon	1,488	Quirky valve combo with passive pre-amp has a lovely neutrality and consistency across a wide dynamic range	●	●	6			10	216

SPECS 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.

Our favourite BEST BUY RECOMMENDED EDITOR'S CHOICE
STEREO AMPLIFIERS continued

Pre/power amplifiers

STATUS	PRODUCT	£	COMMENTS	SPECIFICATIONS						
				LINE INPUTS	PREAMPLIFIER	PHONO INPUT	REMOTE CONTROL	POWER AMPLIFIER	POWER OUTPUT (W)	ISSUE NUMBER
ABOVE £2,000										
R	AudioNote M2Phono/P2SE	2,698	Wonderfully natural and inviting sound with great warmth and drama, but limited loudness capability	4	●	●		●	18	216
EC	Audio Research LS25/VT100	12,199	This is not so much a fine valve amp, as a fine amplifier, full stop (LS25 MkII/VT100 MkII)	6	●	●	●	●	100	216
EC	AVI S2000M	2,398	This preamp/monoblock pairing does most things very well and images better than most	5	●		●	●	150	221
EC	Border Patrol P20	6,750	Muscular 300B P-P design with fluidity and dynamics to match the best		●			●	20	231
R	Bryston BP20/3B-ST	2,850	Recommended for pretty much any demanding application	8	●		●	●	120	212
BB	Bryston BP-20/4BST	3,375	Quick, articulate and powerful, this is an excellent all-round amp which controls difficult loudspeakers superbly	8	●			●	250	230
BB	Electrocompaniet EC4.7/120DMB	3,448	Bulky Norwegian combo has wonderful transparency, wide dynamic range and fine musical tension	6	●		●	●	120	216
EC	Mark Levinson No380/No334	9,490	Pre has precision and warmth with unusual configurability, power has refinement, authority and transparency to spare	6	●		●	●	125	195
EC	Naim NAP500	10,995	Wonderful neutrality, bandwidth and dynamic range, plus Naim's traditional leading edge definition					●	140	208
R	Primare A30.1/A30.2	2,700	Powerful, smooth, but slightly uneven with some speakers, but excellent control and separation in others	6	●		●	●	100	225
R	TAG McLaren DPA32R/250MR	4,940	In a class of its own for extendibility and is tremendously subtle, though it can sound constrained dynamically	6	●		●	●	250	230
R	T+A PA 1520 R	2,400	Powerful, punchy amp has many positive qualities, but sometimes seems to try too hard	8	●			●	260	230

AV AMPLIFIERS

Surround sound amps for music and movies

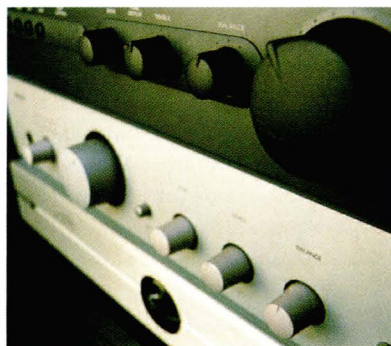


The multichannel, surround sound or AV amplifier is a popular option thanks to the success of the DVD player and home cinema. Now you can buy five channels or more of amplification for the price of two. Now that multichannel music is also on the agenda there's a lot to be said for a good AV amp or receiver (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 poten-



tial. 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.

Q&A

HOW MANY CHANNELS?

Depends on how many speakers you want. Multichannel music discs come with 6 or 5.1 channels but for new movies, 7.1 systems are 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 amplification on board 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 high quality 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 justice as well as

their movie DVDs, and the number of AV products delivering sufficient quality is on the increase. Most aren't cheap however – 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're too fond of to part with.

TOP BUYS



NAD T761 £650
The simple fact is that it does the job better than most others, whether singing piano or forte, and none of the features it doesn't have were missed.



Arcam AVR200 £800
Home cinema purists may want a bit more low-frequency muscle and it hardly bristles with extra features, but Arcam's DiVA receiver is competent with music and movies alike.



TAG McLaren AV32R EX £2,994
A superb multichannel product, THX Ultra approved and fully 7.1 compatible with analogue bypass for high-res sources, this is a benchmark among processors.



Bryston SP1/9B THX £7,100
Purist hi-fi meets surround amplification and decoding with the minimum of musical compromise. Processor/preamp now features 7.1 and 5.1 analogue throughput.

Our favourite AV AMPLIFIERS

Multichannel amplifiers

STATUS	PRODUCT	£	COMMENTS	SPECIFICATIONS				
				RECEIVER	LINE INPUTS	7.1 COMPATIBLE	5-CHANNEL POWER (W)	ISSUE NUMBER
INTEGRATED AV AMPS								
[R]	Arcam AVR200	800	Upgraded AVR100 with Dolby Pro-Logic II and some bass management. Great for stereo, bit bass-light for multichannel	●	6		70	229
[MB]	Harman Kardon AVR 5500	749	Powerful sounding receiver with some clever features like an automatic set-up. Powerful but a bit hard-edged	●	8	●	85	229
[MB]	Marantz SR-5000	430	Something of a rough diamond, but a powerful and entertaining package	●	5		105	198
[MB]	NAD T761	650	First rate home cinema amp that sounds more powerful than its specs imply, and competes with specialist stereo amps	●	9		80	223
[R]	Onkyo TX-DS989	2,850	Authority personified, excellent AV signal processing, but sound quality a tad subtle	●	9	●	160	210
[R]	Sony VA777ES	1,500	Smart circuitry gives this model unusual precision and transparency, and it is a fine all rounder		9		100	210
AV PROCESSORS AND POWER AMPS								
[EC]	Bryston SP1/9B THX	7,100	Stripped back 5.1 channel processor/amp combo reaches genuine audiophile heights.		6	OPT	120	219
[EC]	Meridian 861	9,833	Powerful surround processor with flexible modular construction, marvellous versatility to drive any speaker configuration		6	●		230
[R]	Myryad MDP500/MA240/360	3,799	Superb three-box, five-channel A/V amplifier. Great with movies and beats most multichannel amps hands down with music		9	OPT	120	215
[R]	Roksan DSP/5 ch amp/VSU	2,440	Clean, powerful stereo expanded seamlessly, if without distinction, to 5.1 channels		4		80	210
[EC]	TAG McLaren AV32R EX	2,994	Flexible A/V processor, unusually good with music. Excellent for multichannel system in standard or 7-channel 'EX' form		6	●		215

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.

RA
 Information and products that really work.
 For a FREE Mail Order Catalogue, or to order call UK FREEPHONE **0800 373467** and quote AC102
 Russ Andrews Accessories Ltd., FREEPOST NWW881A, KENDAL LA8 9ZA Tel: +44 (0)1539 825500 Fax: +44 (0)1539 825540 E-mail: AC102@russandrews.com www.russandrews.com

Introducing the NEW... SuperCone!

Our Oak Cone Feet range now has a superb addition! Created to be freestanding under your equipment -these SuperCones provide total stability, with the three mini Oak Cone Feet eliminating micro rocking. The result is a deeper bass, increased detail and a more spacious soundstage.

Actual size: 57mm diam. 42mm high.



£75 for a set of 3

Russ Andrews
 Mail Order Cables & Accessories

Sole UK Distributor for KIMBER KABLE

STEREO SPEAKERS

Speaker pairs for stereo sound



While loudspeakers are relatively straightforward in construction they have one of the most difficult jobs in hi-fi – turning an electrical signal into an acoustic one. Most consist of two or more drive units in a box that usually has a port in it to make life easier for the cone in your mid and/or bass driver. Alternatives to this arrangement include panel speakers, which use electrostatic or ribbon technology, and horns, which use drive units in complex cabinets that greatly improve efficiency.

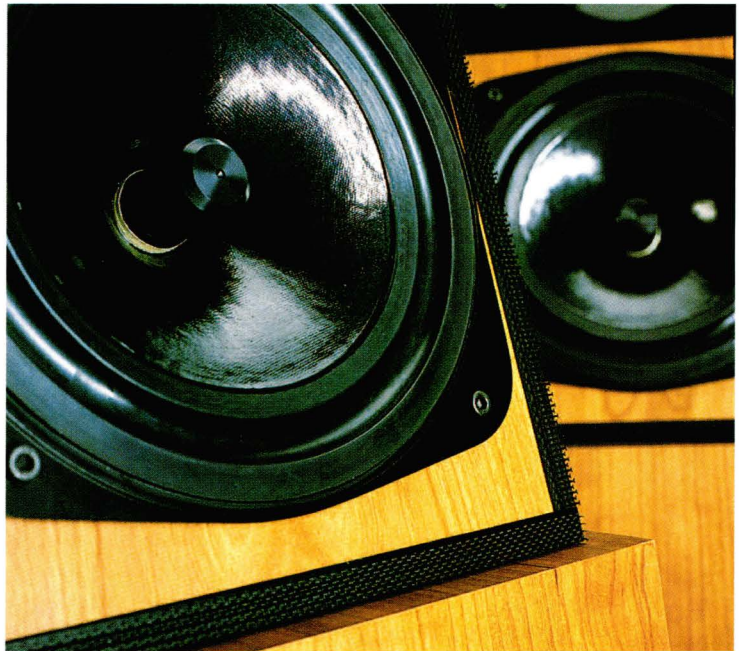
Box speakers are either designed to stand on the floor (floorstanders) or on a stand (stand or shelf-mounts). Floorstanders have greater internal volume which can translate into greater efficiency and/or bass extension, but less substantial designs also introduce cabinet resonance and thus distortion. 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.



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 like 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.

POWER

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 25 watts plus, while an average (A) speaker will need 50 watts or more, and a below average (A-) speaker could require 100 watts plus to sound its best. These are guidelines rather than rules.

Q&A

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.

TOP BUYS



Acoustic Energy
Aegis Evo One £180

A good looking budget standmount incorporating some serious engineering for the money. Sound is crisp, relaxed and sophisticated.



Dynaudio
Audience 42 £400

It might be expensive for a vinyl-covered miniature, but it's an aristocrat amongst the breed, and we'd be surprised if there's a better small speaker around for the price.



PMC
FB1 £1,410

A well built floorstander that delivers the goods sonically with the sort of subtlety and delicacy that's likely to have strong audiophile appeal.



B&W
Signature 805 £2,250

You won't get this degree of resolution out of a wider bandwidth speaker at anywhere near the price, and most of your music will sound considerably better through them.

Our favourite STEREO SPEAKERS

Stereo speakers

STATUS	PRODUCT	£	COMMENTS	SIZE (WxHxD) (CM)	FLOORSTANDER	EASE OF DRIVE	BASS FROM (Hz)	FREE SPACE	CLOSE TO WALL	ISSUE NUMBER
UP TO £1,000										
HB	Acoustic Energy Aegis Evo 1	180	An unusually classy and sophisticated performer for the price; laid-back sound and good looks too	19,36,24		A	30	●		226
R	AR S20	150	Might not have the most dynamic sound around, but it's an honest and effective musical communicator	20,37,28		A	28	●		215
R	Audio Note AZ One	449	Delivers music with great gusto and enthusiasm, but also more than its fair share of coloration	23,83,29	●	A	30		●	215
R	AVI Biggatron Red Spot	599	Good bass coherence and timing, but the lean and decidedly forward balance won't be to every taste	19,5,37,30		A	30		●	211
HB	B&W DM303	180	Chunky looking and lively sounding, with deep bass, a fine midband, and a restrained top end	20,33,23		A	23		●	226
HB	B&W 602 S3	300	Large lively standmount with fine bass and low box colour; comprehensively vindicates a timeless formula	23,49,29		A	22	●		224
HB	B&W DM603 S3	600	Excellent all-rounder, smooth for its price with fine bass and mid, though top might be more refined	20,91,29	●	A-	25	●		231
R	B&W CDM-1NT	750	An uncommonly stylish and sonically self-effacing standmount that should be very easy to live with	22,40,29		A	30	●		208
R	Blueroom Minipod	249	Blobular styling aside, it's hard not to fall for the Minipod's openness, expression and detail	18,34,17		A	50		●	225
R	Castle Durham 3	399	A very attractive near-miniature wall-mount with a lively and communicative disposition – lots of fun	19,37,22	●	A	45	●		227
R	Celestion A Compact	600	Provided the room isn't too large and your tastes not too heavy, this is a charming little number	17,24,21		A-	45		●	193
HB	Dynaudio Audience 42	400	An aristocrat of the vinyl-covered miniature breed. A terrific small speaker for the price	17,29,24		A	40	●		215
R	Dynaudio Audience 62	729	Pricy but cute vinyl floorstander is a class act sonically – lightweight but clean and dextrous	20,86,26	●	A	30	●		231
R	Elac JET 205	650	Sweet, smooth, clean and delicate tweeter justifies hefty price tag, but a little lacking in warmth and body overall	20,33,29		A	40	●		231
R	Energy e:XL 25	400	Neat slimline design delivers a fine all-round performance for the price, but could sound smoother	15,87,31	●	A-	25	●		201
R	Epos M12	499	Retains the beguiling midband coherence that made the ES12 such a favourite. A genuine class act	20,38,26		A	40	●		215
HB	Heybrook Optima	259	A dumpy ugly duckling with a heart of gold. Deserves a better tweeter, but communicates well	22,88,29	●	A+	30	●		193
HB	Heybrook Heylios	269	Classically styled standmount has a fine balance of smoothness and dynamics, plus real wood veneer	24,36,27		A+	25	●		201
R	Heybrook Duet	750	Looks slightly old-fashioned, sounds a bit coloured but its fine timing and liveliness serve music well	23,43,30		A+	27	●		199
HB	Infinity Alpha 30	300	Some sharpness and nasality, but fine musical literacy plus a good measure of dynamic expression	22,86,29	●	A	30		●	215
R	Jamo E 850	400	A tad bright perhaps, but a cleverly conceived and good-looking speaker at a very reasonable price	18,87,34	●	A-	30	●		224
HB	JBL Xt40	430	Real wood and a cute shape, with a punchy driving bass, and a restrained overall balance	23,82,31	●	A	40	●		210
HB	JMLab Chorus 715	529	A fine all-rounder, this compact floorstander is lively and well balanced with good dynamic drive and grip	20,94,28	●	A-	22	●		227
R	JMLab Cobalt 816	899	A little lean, cool and bright, but has righteous dynamic expression and lively communication skills	22,99,29	●	A	22	●		224
R	Mission 771e	199	Beautifully styled miniature has a delightfully voiced midband, and real wood finish too	17,31,22		A	45		●	207
R	Mission M71	129	Neat looking and very discreet sounding at a very nice price; experiment for best placement	17,29,28		A	40		●	226
HB	Mission M73	199	Good-looking floorstander. Dynamics are a little limp, but it has a good overall balance. Excellent value for money	20,88,31	●	A	25	●		215
R	Mission 773e	399	Beautifully designed slim floorstander could be more neutral but still delivers an all-round entertaining sound	18,88,26	●	A-	30	●		193
R	Mission 782	699	Ultra-compact floorstander has a glorious midband and slightly odd bass. Good communication skills	17,82,28	●	A	25		●	199
R	Mission 775e	799	Lots of speaker for the money, and musically involving too, if a little short on serious weight and authority	23,115,30	●	A	25		●	204
HB	Monitor Audio Bronze 2	180	A real corker, which combines solid material value for money with a fine all-round sonic performance	19,35,27		A	30		●	207

SPECS KEY SIZE W,H,D (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 plus **ACT** Active – the speaker has its own in-built amplifier. **BASS FROM** How low the speaker goes – the smaller the number the deeper the bass. **FREE SPACE** The speakers work best away from wall(s). **CLOSE TO WALL** The speakers will work best when up against a wall (but avoid corners).

Our favourite ■ BEST BUY ■ RECOMMENDED ■ EDITOR'S CHOICE

STEREO SPEAKERS

continued

Stereo speakers

STATUS	PRODUCT	£	COMMENTS	SPECIFICATIONS				
				SIZE (WxHxD (cm))	FLOORSTANDER	EASE OF DRIVE	BASS FROM (Hz)	FREE SPACE
R	Monitor Audio Bronze 3	270	Good value with better dynamic expression than most of its ilk	19,87,24	● A	30	●	215
R	Neat Neat Petite III	845	The treble is peaky, but this is still one of the most coherent and communicative miniatures around	20,31,20		A 30	●	211
R	Opera SP-1	525	A strong case for serious hi-fi with curves. Sound is clear, crisp and detailed	16,29,23		A 50	●	225
BB	PMC TB2	700	A worthy successor to the TB1, which sets a high standard in its size/type for neutrality and transparency	20,41,31		A 30	●	211
R	Spendor S3	600	Beautifully voiced, unboxy, lacks some dynamic and loudness capabilities. Best suited to small rooms	17,31,21		A- 30	●	224
BB	Tannoy mX2	150	Surprisingly refined considering its very modest price: very communicative with outstanding midband delicacy	19,33,25		A 45	●	207
BB	Tannoy mX3	230	A great all-round compromise at a very modest price, combining good looks with fine midband voicing	19,87,26	● A-	40		201
BB	Tannoy Revolution R2	400	Bargain price real wood floorstander is beautifully voiced and very even-handed, if a tad laid-back	17,94,24	● A-	20	●	193
R	Tannoy Eyris 1	600	Pricy but very cute wall-mount miniature; oddball but has marvellous midband subtlety and delicacy	17,35,26		A+	●	227
R	Tannoy Eyris 2	999	This super-slim and cutely different looking floorstander is very communicative, despite weak treble	17,91,26	● A	20	●	231
BB	Triangle Antal XS	875	Ugly duckling has a rather tasty sound, with plenty of vigour and excitement	22,108,30	● A-	40	●	219
R	Wharfedale Diamond 8.2	150	Sonically a bit crude and in yer face, but neat styling and plenty of speaker for your money	21,37,25		A- 30	●	226
ABOVE £1,000								
R	Arcadyis Concept 2	1,199	Solid oak floorstander is a little lazy sounding, but is well balanced and smooth with modest coloration	19,90,26	● A-	25	●	211
R	ATC SCM20 SL	2,051	Not too transparent but has great dynamic grip and bass to die for. Needs a powerful amp	24,44,33		A- 65	●	219
EC	ATC SCM10A	1,269	Stylish, active power houses with plenty of subtlety when required (balanced connection only)	23,39,31		A 45	●	221
EC	ATC SCM50A SL	7,255	350 watts of power combine with superb drive units and a 48kg cabinet to provide alarming resolution	35,72,48		A 38	●	218
R	Audio Note AN-E/D	1,520	This classic large standmount might have throwback aesthetics, but it delivers an exceptional all-round sound	36,79,28		A+ 20	●	204
R	Audio Note AN-J/SPe	1,675	Retro styling but a vigorous and dynamic performer that creates fine musical tension	33,59,25		A 38	●	219
R	B&W Nautilus 805	1,400	A small-sounding loudspeaker dynamically, but very stylish, clean and 'unboxy', delivering loads of detail	24,42,31		A 28	●	199
EC	B&W Nautilus 802	6,000	Outstanding example of the high-tech speaker builder's art, needs real power but gives real sound	39,111,55	● A-	34	●	183
R	B&W Nautilus 801	8,500	The 801 is a magnificent loudspeaker in nearly every respect, but it is one that likes to play loud	52,111,69	● A-	34	●	186
EC	B&W Nautilus 800	11,000	Unequivocal challenge for world domination. One of the most revealing speakers around	45,120,65	● A-	<20	●	231
EC	B&W Signature 805	2,250	Staggering transparency and resolution for the money, one of the best standmounts money can buy	24,42,34		A- 42	●	232
R	BC Acoustique Araxe	1,300	Neat compact floorstander is a very lively communicator, if a little short on deep bass grunt	21,92,30	● A-	40	●	204
BB	Castle Harlech S2	1,000	Improved Harlech is slightly aggressive, but lots of fun, and very good-looking too	20,96,33	● A	50	●	219
R	Castle Howard S3	1,350	A solid all-rounder with uniquely spacious imaging, bit pricy compared to some though	21,99,32	● A+	38	●	229
R	Dali Noble	1,059	Easy on the eye and the ear but unerringly musical. Some might prefer harder-hitting dynamics and bass	18,117,23	● A	41	●	225
R	Dali Evidence 870	1,249	A real heavyweight, sonically and physically, and good for movies as well as music	25,106,36	● A-	20	●	204
BB	Dynaudio Audience 82	1,460	Bulky, with vinyl finish, but offers exceptional neutrality, bass extension, power handling and loudness potential	22,106,36	● A	30	●	229
R	Dynaudio Contour 1.3 MkII	1,198	Stand-out performer among compact standmounts; neutral, with fine punch and dynamic range	20,38,29		A- 45	●	219
R	Excel 202A	1,795	Very pro-styling, a compact active monitor in the BBC tradition - neutral, unboxy and laid back	15,21,5,36		ACT 25	●	214
EC	JBL Ti-2K	1,250	Solid standmount with boat-tail rear end and highly detailed, spacious sound alongside weighty bass	42,28,42		A 45	●	230
BB	JMlab Cobalt 826	1,279	Big three-way French floorstander is lively, informative and mostly neutral, if a tad bright	22,103,34	● A-	35	●	219
EC	JMlab Micro Utopia	3,349	Superb top-of-the-line standmount with magnificent powers of analysis and communication; no deep bass	26,43,41		A- 50	●	220
R	Linn Katan Aktiv/LK140	2,325	Too small to have much grunt or loudness, but bright top is very sweet, clean and detailed	17,34,23		ACT 40	●	214
EC	Living Voice Avatar	2,700	Dynamic and highly resolved yet physically discreet design with a relaxed balance	22,104,27	● A+	40	●	218
EC	Living Voice Avatar OBX-R	4,000	Discreet but extremely fine design with external crossover and an affinity with great amps and sources	22,104,27	● A+	45	●	196

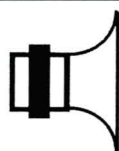
BANDOR Luxury Drivers



New Swindon office and lab opening soon!



NEW PRODUCT
15" Bass Driver.
300+ watts power handling (continuous) R.M.S.
Aluminium cone, humidity proof.
Impedance 4 ohms + 8 ohms res.
frequency (fo) 15Hz

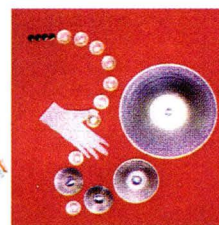


BANDOR loudspeakers - the specialist product of an Englishwoman with 36 years experience in the field - embody numerous features which ensure excellent performance. Cone, voice-coil former and voice-coil are formed from aluminium alloy, providing good heat dissipation and low thermal compression. **Bandor** originated the use of a thin, curvilinear, anodised, spun

CONE. © DOREEN BANCE JORDAN 1982

Possessing outstanding ability to reproduce transients faithfully, and reproduce a wide frequency band, the 50mm unit covers 100Hz-20kHz, allowing flexibility in the choice of crossover frequency for multiple-driver loudspeakers: e.g. 200Hz (or lower for modest power handling) may be chosen, thus avoiding the critical zone 1-4 kHz where phase errors are most audible, and assists in securing good imaging. In the bass drivers, generous Xmax values allow the realistic reproduction of the pedal organ and bass drum, when correctly loaded. A manufacturer who uses **Bandor** exclusively, advertises that his sales are mostly to professional musicians..

For full brochure please contact **BANDOR MINIATURE LOUDSPEAKERS**
11 Penfold Cottages, Penfold Lane, Holmer Green, Bucks. HP15 6XR
Tel: 01494 714 058 Fax: 01494 715 903 Email: bandor@netcom.co.uk



Website design and maintenance by
Adrian J Jordan
www.bandor.com
© Bandor Miniature Loudspeakers, 1983
All rights reserved



Do you want to choose your hifi in a comfortable and relaxing environment . . . ?

Do you want friendly and helpful advice (and a cup of tea) . . . ?

Do you want to buy your system based on what you hear (and not what somebody tells you) . . . ?

Do you live in GUILDFORD . . . ?

. . . or Addlestone, Aldershot, Ashford (Middx), Ashstead, Bagshot, Basingstoke, Bracknell, Camberley, Chertsey, Crowthorne, Cranleigh, Dorking, Epsom, Esher, Farnborough, Farnham, Fleet, Frimley, Godalming, Hartley Wintney, Haslemere, Hook, Horsham, Kingston, Liphook, Leatherhead, Molesey (East & West), New Malden, Odiham, Petersfield, Reading, Reigate, Redhill, Richmond, Shepperton, Virginia Water, Walton-on-Thames, West Byfleet, Weybridge, Windsor, Woking, Wokingham, Yateley?

Nobody else in these areas stocks all the following major brands: Acoustic Energy, Arcam, B&W, Castle, Cyrus, Denon, Epos, Harman Kardon, Infinity, KEF (Reference), Linn Products (including records), Marantz, Meridian, Mission, NAD, Nakamichi, Pioneer, Primare, PROAC, QED (Systemline), Quad, Rega, Revox, Rotel, Tag McLaren, Target, T.D.L., Yamaha (including Home Cinema Systems) & Top Tape.

Visit us first and you won't need to go anywhere else, we have superb demonstration rooms where you can decide in comfort, and we will deliver and install free of charge (and part exchange is possible).

Complete service – We are the only outlet in the area to offer the complete service. As well as stocking selected items from the above manufacturers we are able to service and/or repair on the premises all the above brands (and others also).

PJ HIFI

Guildford's only REAL Hi-Fi shop

“Complete range of TAG McLaren Audio available for demonstration”

NEW LINN CD PLAYERS CD12 and IKEMI on Permanent demonstration

LINN AV51 SYSTEM MERIDIAN DIGITAL THEATRE & Arcam/Yamaha/Denon AV all on permanent demonstration

We are at
3 BRIDGE STREET, GUILDFORD
(by the traffic lights - adjacent to Yates Wine Lodge)
01483 504801 • 01483 304756

Access • Visa • Switch • American Express • Diners Club • Open Monday – Saturday 9am-6pm (later by appointment)

Our favourite BB BEST BUY R RECOMMENDED EC EDITOR'S CHOICE
STEREO SPEAKERS continued

Stereo speakers

STATUS	PRODUCT	£	COMMENTS	SPECIFICATIONS					
				SIZE (WxD) (cm)	FLOOR STANDER	EASE-OF-DRIVE	BASS FROM (Hz)	FREE SPACE	CLOSE TO WALL
BB	Meridian M33	1,560	Compact active wallmount packs remarkable dynamic vigour into a very discreet package	15,38,22	ACT	45	●	214	
R	Naim Allae	1,990	Chunky little floorstander has a 'cold' overall balance, but remarkable powers of musical analysis	24,94,28	●	A	40	●	229
EC	Naim NBL	6,925	Elegant, large floorstander is exceptionally informative with an awesome dynamic range and dry, forward balance	29,116,47	●	A-	20	●	200
EC	Naim SL-2	4,995	Delivers magnificent musical analysis and communication skills in a notably discrete physical package	28,103,33	●	A-	20	●	232
EC	Neat Ultimatum MF9	8,500	Superb musical communicator with splendidly deep and agile bass and fine open neutrality	22,150,40	●	A-	20	●	226
R	PMC LB1	1,150	Still fully competitive eight years after our original review, this genuine compact monitor is now a modern classic	17,5,53,26	●	A-	40	●	199
BB	PMC FB1	1,410	Has the lively coherence of a simple two-way alongside impressive bass weight and extension	20,105,31	●	A	20	●	204
R	PMC AML1	3,700	Sparkling active Pro monitor with serious attitude, 'in yer face' balance and great dynamics	20,40,32	●	A	25	●	214
EC	Royd Revelation RR2	1,199	Pretty little floorstander delivers genuinely deep bass without 'thump'; lovely clean, open midband too	19,89,18	●	A-	20	●	221
R	Ruark Prologue II	1,250	Attractive shape with a punchy and unusually open and neutral sound that's impressively free from harshness	22,5,96,24	●	A+	40	●	229
R	Ruark CL20	1,650	This punchy rock'n'roller has plenty of drive and enthusiasm, but can sound aggressive	23,93,34	●	A	38	●	219
BB	Snell E.5 Mk2	1,520	Large floorstander has serious deep bass extension, and also a delicate midband with low coloration	22,109,30	●	A	20	●	211
R	Spendor SP2/3e	1,295	Large standmount is polite to a fault, but has beautiful 'hear-through' transparency – a genuine classic	28,55,33	●	A+	50	●	219
R	Spendor S8	1,700	Classic midband neutrality and transparency, the S8 has great subtlety and fine bass grunt too	23,92,32	●	A+	40	●	229
EC	Spendor S9	2,500	Meaty three-way with superb bass and explicit mid – one for detail fans	24,99,8,38	●	A+	37	●	223
EC	TAG McLaren F1	17,995	Oddball aesthetics with accurate, unflappable, controlled and consistent sonic neutrality	40,127,48	●	A-	25	●	202
EC	Tannoy Dimension TD10	5,000	Extremely competent and rhythmic speaker, a futureproof supertweeter and detail to die for	35,101,37	●	A-	38	●	215
EC	Tannoy Dimension TD12	6,500	Art Deco-inspired style plus magnificent headroom and genuine monitoring neutrality – a tour de force	42,126,41	●	A-	23	●	225
R	Tannoy ST-100	1,200	This add-on supertweeter adds a subtle and delicate effect while broadening the soundstage, but at a price	15,10,5,6	●	A+	N/A	●	206
R	T+A Talis TLS3	1,799	Super slim and beautifully engineered metal towers deliver marvellous musical results with superb imaging	15,130,17	●	A	30	●	225
R	Vandersteen 2Ce Sig	1,990	Very superior midband neutrality, impressive freedom from boxiness, and splendid stereophony. A classic	41,109,26	●	A-	30	●	229
EC	Veritas H3	6,000	Loads of fun with wonderful dynamic and temporal integrity from horn-loaded Lowther drivers	30,110,47	●	A+	50	●	191
R	Vienna Acoustics Mozart	1,500	Gorgeous slimline floorstander sounds very laid back but also very charming and musical	17,97,30	●	A-	25	●	199
R	Waterfall Victoria	1,500	Glass enclosures go with any decor. The Victorias make music in a confident and involving way	21,100,21	●	A	45	●	225
EC	Wilson benesch Discovery	5,500	Innovative three-way with built-in stand, combines great subtlety with weight and headroom	23,47,38	●	A-	45	●	212

AV SPEAKERS

Speaker solutions for multichannel surround sound



Multichannel speaker systems have a front left/right (L/R) stereo pair, a centre or dialogue channel, two (5.1) or four (7.1) surround speakers and often a subwoofer. For best results, each of these speakers bar the sub should be identical. The problem is that few surround systems are dedicated to music and perform a home cinematic role as well, meaning the centre speaker has to sit above or below a

video monitor. Centre channels are usually wide and short for this reason.

This should not be a barrier to great surround for music and movies however, as many brands make centre channels with a very close sound to their L/R designs.

Music v movies

High resolution SACD and DVD-A music recordings tend to be mastered with sur-

round speakers in the ITU standard position which is as far behind the listener as the front channels are in front. 5.1 movie soundtracks tend to place surround channels not so far behind and to the side of listeners. Usually, practical limitations will dictate a limited range of placement options, but if you are a dedicated music fan, check out the ITU set-up regulations in the booklet supplied with SACD discs.

SET-UP

Ideally you should set up surround speakers with as much care as you would stereo systems, but practical issues tend to have a significant bearing on surround and centre speaker placement. Surround channels can be floor or wall-mounted and centres usually have to perch on the TV or underneath it. Given these limitations, adjust your L/R front speakers to give the

best tonal match with the centre. If there's more than just you listening, 'toe in' the speakers so that their axis crosses in front of the listening position – this gives a wider stereo image. And if there's a subwoofer it should be placed near the front speakers. Use a sound pressure metre (available from Tandy among others) to accurately set levels.

SUBWOOFERS

Subs start working where your stereo speakers run out of steam at low frequencies. The idea is to create deeper, better controlled bass rather than more of it. They usually have onboard amplification (active) and connect to either the LFE (Low Frequency Effects) channel in a home cinema set-up or the speaker terminals in a stereo set-up.

TOP BUYS



Tannoy
mXAV4 package £500
A supremely competent package at an exceptionally attractive price. Impressively smooth, well balanced and integrated.



B&W
600 S3 package £750
Decent size, high quality main drivers make plenty of sense in both stereo and multichannel modes.



JBL
Xti-series package £1,190
A bit pricey and bulky for surround sound duties, but a fine sounding and good-looking package at a pretty sharp price.



JMLab
Cobalt package £1,797
There's no avoiding their fine underlying sound quality. Both stereo and multichannel are reproduced with style and aplomb.

Our favourite AV SPEAKER PACKAGES

BEST BUY RECOMMENDED EDITOR'S CHOICE

Multichannel speakers

STATUS	PRODUCT	£	COMMENTS	SPECIFICATIONS					
				EASE OF DRIVE	NUMBER OF SPEAKERS	BASS FROM (HZ)	FREE SPACE	CLOSE TO WALL	ISSUE NUMBER
BB	Acoustic Energy Aegis	650	High value package with deep bass and smooth neutrality	A+	5	22	●		198
BB	B&W 600 S3 package	750	Unquestionably delivers the sonic goods. High quality drivers in standmount enclosures	A-	5	22	●		224
R	Castle CAV Sterling	1,250	Lovely real wood veneers. Sound has fine dynamic drive and expression, but can sound a little hard	A	5	28		●	224
BB	JBL Xti-series	980	Hexagonal boxes all round, this package has decent authority and all round tension	A	5	40		●	210
R	JMLab Cobalt	1,797	A little lean and bright, but with righteous dynamic expression and lively communication skills	A	5	22	●		224
R	JMLab Electra system	3,017	Bold, solid system, tremendous consistency, and easy to grow with an added subwoofer	A	5	50	●		232
BB	KEF Q AV7	1,300	With latest Uni-Q refinements, this system is astonishingly accomplished and amazing value	A+	5	35	●		232
R	Mirage Omni 2	2,650	Dark tonality, but superb imagery makes this an excellent all round choice	A	5	30	●		232
R	Mordaunt-Short Declaration 500	1,600	Good value vinyl THX Select package with Power Towers. Good authority but must be 5.1-connected	A	5	25		●	210
R	PMC FB1/TB2	2,485	Classy if bulky and pricey package has good transparency, coherence and weight	A	5	20		●	210
R	Rega Jura/Ara/Senta	938	Classy real wood package does a good all-round job, but sounds bright and might have more surround weight	A	5	25		●	210
R	Spendor S-Series	1,650	Ultra-tinies lack some dynamic and loudness capabilities, but beautiful voicing and freedom from boxiness.	A	5	30		●	224
BB	Tannoy mXAV4	500	Lacks some grunt but smooth and refined with seamless surround coherence, excellent value	A	5	20		●	210
R	Wharfedale Pacific	700	Plenty of speaker package for the money. Balance is somewhat wayward but unquestionably entertaining	A-	5	25	●		224

SPECS KEY **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 plus.
NUMBER OF SPEAKERS The amount of individual loudspeakers in the package. **BASS FROM** How low the speaker goes, the smaller the number the deeper the bass.
FREE SPACE The speakers work best away from wall(s). **CLOSE TO WALL** The speakers will work best when up against a wall (but avoid corners).

Our favourite SUBWOOFERS

BEST BUY RECOMMENDED EDITOR'S CHOICE

Bass speakers

STATUS	PRODUCT	£	COMMENTS	SPECIFICATIONS			
				SIZE W,H,D (CM)	POWER (W)	BASS FROM (HZ)	ISSUE NUMBER
R	Acoustic Energy Aesprite 308	650	Tuneful and dynamic sound with music or movies from this compact sub which comes with handy remote	41,37,30	200	35	225
R	Monitor Audio ASW100	300	For the price this compact subwoofer performed well	32,32,34	120	27	225
R	REL Storm III	900	Excellent sub with powerful, detailed and deep bass. Comprehensive facilities, including flexible filter adjustment	42,62,33	150	18	225
EC	REL Stadium III	1,500	It's a bulky piece of furniture but offers superior filtering as well as an ability to delve deep into the bass nether regions	59, 56, 39	200	16	217
R	REL Strata III	700	A little more bottom octave might have been preferable, but in terms of agility and coherence this is a fine hi-fi subwoofer	42, 52, 33	100	20	210
BB	Ruark CL300	2,000	Shows what a good subwoofer can do: controlled, detailed and dynamic. A delight with music and movies alike	60,52,5,40	300	30	225

SPECS KEY **SIZE W,H,D (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.



The Date : Saturday 16th – Sunday 17th November 2002

The Venue: The Hilton Manchester Airport

Why you should be there...

- The fastest growing Hi-fi and Home Cinema Show in the UK returns for it's 3rd year
- Bigger and better
- Same venue, same dates, more sponsors, more exhibitors, better value
- This year sponsored by Hi-fi Plus, Hi-fi Choice and Smarthouse
- 60% of stand space already allocated

New for 2002

- **Visitor presentations every 30 minutes** So you can plan your day
- **Custom install** The modern way to total pleasure
- **Lecture theatre** Varied subjects every hour
- **Sponsor demonstrations** Watch the press for details
- **Outside OB unit** Bringing the outside inside
- **Bring & play** Hear your own vinyl
- **Free magazines** Increasing the shows value
- **Giveaways** Everyone gets one
- **Cafe 'meet relax' area**
- **And for the kids...** Playstation 'par excellence' fully equipped giant screen that will completely blow them away
- **Plus our normal free show programme and competitions**

Advance Tickets

£6.50 available by e-mail, fax or letter to: CCL Chesterfield Communications Ltd, Events House, 1 Chester Road Tattenhall, Chester CH3 9AE Tel 01829 770884 Fax 01829 771258

Free tickets before 31/07/02

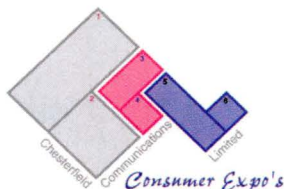
Discounted Tickets £5.50 before 31/08/02

The show also features a new trade and entrance hall and defined area for home entertainments.

The show will open from 10am – 6pm on Saturday 16th and 10am – 5pm on Sunday 17th.

Admission on the door will be just £7.50 (the same as '01)

Further up to the minute information will be available at our website www.chestergroup.org, please email us with your comments, and with what you would like to see at the show.



Exhibition organisers

CCL Chesterfield Communications Ltd
Events House, 1 Chester Rd Tattenhall, Chester CH3 9AE
Tel 01829 770884 Fax 01829 771258
Mob 07810 697123

Email :roy@chestergroup.fsnet.co.uk or carl.tydd@monitorgroup.co.uk
Website: www.chestergroup.org

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 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 supra-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.

Our favourite HEADPHONES

STEREO HEADPHONES

PRODUCT	£	COMMENTS	SPECIFICATIONS							
			ELECTROSTATIC	SUPRA-AURAL	CIRCUMAURAL	OPEN BACK	CLOSED BACK	WEIGHT (g)	3.5MM JACK ADAPTOR	ISSUE NUMBER
AKG K44	20	Lively, enjoyable and remarkably detailed: a bargain			●		●	190	●	219
AKG K100	36	Leather-clad groover with bags of power and clarity, for a respectable asking price		●			●	190	●	205
Audio Technica ATH-D40fs	105	Detailed and involving sound with a professional 'studio' quality appeal			●		●	250	●	194
Grado SR-60	90	For sheer musical enjoyment these are hard to beat. Retro styling may not be to everyone's taste		●			●	200	●	194
JVC HA-DX3	250	Great headphone with a rich bass, careful midrange and high comfort factor			●		●	340	●	205
Philips HP890	70	A remarkably sophisticated and very comfortable headphone			●	●		330	●	219
Sennheiser HD590	160	Assured and confident player with very low coloration and great comfort			●	●		270	●	205
Sony MDR-CD480	40	Generally neutral and nicely detailed – comfortable too			●	●		250	●	219
Technics RP-F800	50	Comfortable budget model that sounds sublime with great dynamics		●			●	160	●	205
Stax System II	400	Luxury option at its price, but the sound delivery is five-star quality all the way	●		●	●		295	●	205
Vivanco SR222S	30	Not that subtle, but high fun factor compensates		●			●	250	●	219
Vivanco SR950	80	Cuddly feel and sound make these an enjoyable pair of 'phones			●	●		252	●	194

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. **OPEN BACK** Vented capsules let sound in and out. **CLOSED BACK** Sealed capsules. **WEIGHT** In grammes. **3.5MM JACK ADAPTOR** Allows connection to personal stereos, computers etc.



Tel: 020 8348 5676 (2-7pm)

Fax: 020 8341 9368

Email: ConnectionCable@aol.com

Esoteric High Fidelity Cables

Dealers in: Absolute • Audio Note • Audioquest • Deltec • Electrocompaniet • Harmonix • Kimber • Mandrake • MIT • Siltech • Symo • Transparent • Van den Hul • WBT • and others

... the **RIGHT** cables
... in **YOUR** system
... for **YOUR** ears
... in **YOUR** home

Contact us by phone, fax, or email and we'll do our best to help you achieve your goal.
(Auditions may be subject to a handling charge)

CONNECTIONS (A division of Connection 90' Travel Ltd.)

CABLES

Wires to hook your system together



Hi-fi cables come in two varieties – interconnects and speaker cables.

Interconnects come in preset lengths, generally with RCA phono plugs attached though some equipment uses XLR connectors for balanced connection. Speaker cable is sold by the metre and can be used without plugs or can be fitted with screw or solder-on types.

Choosing the best cables is not quite as

straightforward as it might seem. One problem with cables 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 though, 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, but if you are after a smoother sound the light carriers have the advantage, as they do if long lengths are needed (10m+). Optical outputs tend to have Toslink connectors (around 99 per cent) but some electrical digital outputs are of the superior BNC type which uses a bayonet-type socket – check which type your digital component has before buying a digital interconnect.

Our favourite CABLES

Interconnects and speaker cables

PRODUCT	£	COMMENTS	SPECIFICATIONS					ISSUE NUMBER
			STRANDED	SOLID CORE	COPPER	SILVER	DIGITAL CABLE TYPE	
ANALOGUE INTERCONNECTS								
Acoustic Research Master	50	Decent performance all round and good interference rejection	●		●			224
Audioquest Coral	99	Slightly forward imaging hardly detracts from its excellent tonal qualities and detail	●		●			200
Cable Talk Advanced 3	35	Good sound and great detail, but a slight brashness in the treble	●		●			211
Chord Calypso	30	Informative, clear sound at a decent price	●		●			211
Ecosse The Composer	30	A high degree of realism and delicacy, and a fantastic price (0.8m)	●		●			211
Ecosse Reference Diva	100	Very good performance in all areas, with particularly fine, tuneful, bass (0.8m)	●		●			224
Ixos Gamma Audition II	30	Detailed and neutral, with just a hint of pleasant mellowness	●		●			211
Monster Interlink 400 Mk2	70	Really lively and enjoyable sound	●		●			224
Profigold PGA4201	5	No pretensions, but sound is perfectly listenable with fair detail and extension	●		●			211
Prowire VHQ	10	This crisp cable lacks a little refinement, but it's great for the price	●		●			211
QED Qunex 1	20	Well balanced, and easily rivals more expensive cables	●		●			211
van den Hul The Bay C5	45	Terrific detail, nice balance – a great cable	●		●			224
van den Hul D102 MkIII HB	85	A fine cable, but the competition has crept up and it no longer leads the pack	●		●			200
Vivanco Prowire SHQ	30	Good performance all round with just a hint of bass congestion – very good value	●		●			224
DIGITAL INTERCONNECTS								
Audioquest Digital One	35	A neutral and capable cable that adds little or no character to the sound			●		E	207
QED Qunex P75	25	A superbly capable interconnect that's highly detailed and well balanced			●		E	207
Ross OP004	20	Sounds much like most other Toslink leads: slightly lacking detail, but good value					O	207
van den Hul Optocoupler	50	Noticeably has the edge over other optical leads, but still second best to electrical types					O	207
SPEAKER CABLES price per metre								
Audioquest Slate	15	Capable across the board, with just the smallest degree of dryness, but very listenable		●	●			203
Black Rhodium Aero Space S130x2	76	Great kick in the bass, but the treble can sound dry and recessed.	●		●			227
Ecosse Reference MS2.3	23	Favours excitement over refinement: can be slightly bass-shy, but plenty of life.	●		●			227
Electrofluidics Monolith 2020	45	Excellent bass extension and very fine performance elsewhere – one of the best cables available all round		●	●			203
Ixos Gamma 6003	2.99	A little midrange dryness, but bass is among the best at this price, strong and consistent	●		●			203
Kimber 4PR	5	Considering the price, this cable's very slight dryness is forgivable when everything else is so right		●				192
Kimber 8VS	18	Beautifully full, open and transparent sound right across the board. Price for 1m terminated pair	●		●			227
Kimber 8TC	39	Very capable in all areas, particularly good at imaging and with firm bass. Price for 5m terminated pair	●		●			203
QED Silver Anniversary	5	A few minor flaws but overall performance is very assured for this price	●		●			192
QED Profile Silver 12	15	Very slightly laid-back, but good tone and detail – wears its achievements lightly	●		●			215
Supra Ply 3.4/S	7.95	Good in all areas with rich bass and just a touch of treble roughness	●		●			203
Tara Labs Prism Nexa	9.95	Slight tonal softness affects both bass and treble, but the overall sound is very listenable	●		●			215
Townshend Isolda	50	Superb sound all round, and amplifier compatibility enhanced by included stabilising inductor		●	●			203
van den Hul The Snowline	5	A hint of high-end civilisation with a few rough edges and a slightly warm balance	●		●			215

SPECS KEY **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.



ECOSSE REFERENCE CABLE



CS 2.3

"You won't do better than this corker of a speaker cable from yep...you guessed it - Ecosse"
WHAT HI-FI? ★★★★★



The CONDUCTOR CA 1

"...this is a great cable for the money" WHAT HI-FI? ★★★★★

The LEGEND

"no nonsense incredible sound...against high-end interconnects at twice the price it stands out as good value for money" HI-FI NEWS 2002



ES 2.3

"...make no mistake ES 2.3/CS 2.15 is superb" WHAT HI-FI? ★★★★★

"a fine audiophile sound that is clean as a whistle" HI-FI WORLD 2002

MS 2.3

"...they communicate a room-filling sound that few cables at this price - or any price manage"

WHAT HI-FI? ★★★★★



The PRODUCER

"at this price you won't get a better digital lead" WHAT HI-FI? ★★★★★



The MAESTRO MA 2

"sonically they amaze, high end owners take note" WHAT HI-FI? ★★★★★



The COMPOSER

"easily our cable king...it's hard to believe the price tag" WHAT HI-FI? ★★★★★



Guaranteed to improve your system - or your money back call us now 0141 353 0509
www.ecossecables.co.uk e-mail info@ecossecables.co.uk

Agencies include:

- ARCAM
- LINN
- NAIM
- MERIDIAN
- REGA
- B&W NAUTILUS
- PROCEED
- M+K
- NEAT
- PMC
- LOEWE
- SONY PRO
- FUJITSU
- STAX
- GRADO
- ORTOFON
- DYNAVECTOR
- SHAHINIAN
- XLO

EXCEED EXPECTATIONS

If choosing your new hi-fi or home cinema in a civilised and relaxed atmosphere from a well-chosen selection of genuine performance equipment appeals, then we are for you.

See and hear the very best with us.

Infidelity

INDECENTLY GOOD HI-FI

9 High Street, Hampton Wick,
Kingston upon Thames, Surrey KT1 4DA

020 8943 3530

Full custom installation of home cinema, distributed audio/video and home automation products
Email: infidelity@compuserve.com
www.infidelity.co.uk
Open: Tues - Fri 10.30am - 7pm, Saturday 10am - 6pm



www.Lektropacks.co.uk

PREMIUM QUALITY AV ACCESSORIES

Remove Disruptive Sync signals

Digital Video Stabilizers

Removes all copy protect signals, distorted horizontal and vertical sync signals plus teletext information - all of which may affect signal stability. Allows perfect viewing and recording of DVD, Videotape and Satellite movies. Available in 2 versions giving you a choice of simple Phono or Scart in/out connections. Supplied with suitable DC power supply.

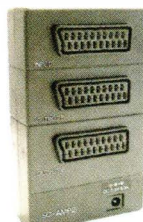


Order code CP-2 (Phono) £34.95 CP-2S (Scart) £39.95

Two equal RGB Scart Outputs

Active 2 way Scart Splitter

Two equal Scart outputs from any source. Ideal for connecting to the output of any DVD or Satellite/Cable box when you need to retain an equal signal and feed to 2 separate monitors. Works with RGB, S video, Composite video + Stereo audio signals. Also useful for making 2 video copies. Complete with DC power supply. **Order code SC-AMP2 £39.95**



EVERY CABLE YOU NEED

5 STAR Ratings from What/Hi-fi and What-Video magazines. High quality custom cables plus a range of Superb Home cinema leads - for better sound & vision.



**CALL 08700 711 911
FOR FREE 56 PAGE CATALOGUE**



THE SCOTTISH HI-FI+HOME CINEMA SHOW

The Date : Saturday 19th – Sunday 20th October 2002

The Venue: The Thistle Hotel, Cambridge Street, Glasgow G2 3HN

Why you should be there...

- Scotland's premier showcase for hi-fi, home cinema, multi-room audio and home entertainment
- Unprecedented range of products and systems on show
- CD, vinyl and DVD based systems
- Video projectors and Plasma screens on demonstration
- Dedicated Custom Installation section for ideas on discrete installations
- Exhibitors already confirmed include ART Audio, Focal JM Lab, Kef, Naim Audio, Rega, Tannoy, etc.
- Magazine sponsors include Hi-fi +, Hi-fi Choice and Smarthouse
- Dealer sponsors include Loud & Clear, AudioSalon and Stereo Stereo
- Glasgow City Centre venue – easy to find, good transport links, shopping and other attractions nearby

Show activities

- Welcome presentations every 30 minutes
- Live music and recitals throughout the weekend
- Seminars and presentations from manufacturers and industry representatives
- Bring & Play your own CDs, vinyl and DVDs
- Freebies and giveaways from the shows sponsors
- Café area to relax and recuperate
- Family entertainment including video games on the big screens

Advance Tickets

£4 available by e-mail, fax or letter to: CCL Chesterfield Communications Ltd, Events House, 1 Chester Road Tattenhall, Chester CH3 9AE Tel 01829 770884 Fax 01829 771258

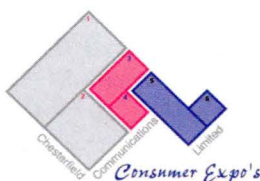
Discounted Tickets £3 before 31/07/02

Over 45 exhibitors are expected to attend the show in 2002. Individual product demonstrations will take place over the top three floors of the hotel, with a full size trade hall and lecture theatre on the ground floor.

The show will open from 10am – 6pm on Saturday 19th and 10am – 5pm on Sunday 20th.

Admission on the door will be just £5, family ticket £13, 2 adults and all children 4 – 14

Further up to the minute information will be available at our website www.chestergroup.org, please email us with your comments, and with what you would like to see at the show.



Exhibition organisers

CCL Chesterfield Communications Ltd
Events House, 1 Chester Rd Tattenhall, Chester CH3 9AE
Tel 01829 770884 Fax 01829 771258
Mob 07810 697123

Email :roy@chestergroup.fsnet.co.uk or carl.tydd@monitorgroup.co.uk
Website: www.chestergroup.org

hi-fi+

HI-FI CHOICE

smarthouse

STANDS AND SUPPORTS

Equipment racks and speaker stands



In hi-fi there are two types of stand. One is a rack that holds turntables, amps, CD players etc and is described as an equipment support and the other is a speaker stand. The latter comes in three basic varieties, two for standmount speakers: light-weight, multi-legged types; and heavy designs with less legs and the ability to be mass loaded for extra solidity. The lighter variety is said to

have a quicker sound while heavyweights give deeper bass and a calmer sound. The third speaker stand type is a platform that sits under floorstanding speakers or speaker/stand combinations, the pneumatic Townshend Seismic Sink being an example.

There are two speaker-to-stand interfacing options – spikes or Bluntak in each corner of the top plate. Try both and take your pick.

Our favourite EQUIPMENT SUPPORTS

Equipment supports

PRODUCT	£	COMMENTS	SPECIFICATIONS					
			HEIGHT	TOP PLATE SIZE (CM)	WELDED	NUMBER OF SHELVES	SHELF TYPE	ISSUE NUMBER
Avik Furniture A4	350	Good sound and stylish Scandinavian looks at an affordable price	80.5	47		4	MDF	193
Atacama Europa	250	Stylish, expandable modular design with agreeable full-bodied sound – great value	67	48.6		4	MDF	193
Atacama Equinox	280	Stable, modular design with style. Excellent bass transients and a fresh design concept	81	50.50	●	4	Glass	217
Audiophile Furniture Base	615	Price is justified by its earth-shattering sonic abilities – a worthy upgrade	82	43		4	MDF	193
Avid Isosshelf	1,100	An enthusiast's equipment support stand free from coloration if a little fiddly to set up	87.5	48		5	MDF	193
Clearlight Audio RDC Aspekt	550	Stunning neutrality and detail from a well damped design. Its performance makes the price tag good value	75	53.5,45		4	MDF	217
Custom Design Aspect650	270	Smart looks and practical thanks to adjustable shelves. Sound is fair with some loss of detail	66	46	●	4	Glass	206
Elemental Audio Isotube X4	849	A hefty stand that demonstrates just how much difference a good support can make	90	49	●	4	Glass	193
Quadraspire Q4	280	Simple but modestly effective and very attractive	52	49		4	MDF	206
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	217
Sound Organisation Z560	195	Excellent value rack. five shelves too! Well balanced and under 200 quid!	92	50.40		5	Glass	217
Standesign Design 4	190	An all-in-one support at a budget price with good sonic performance	88.5	50.8	●	4	Glass	193
Townshend Seismic Sink Stand	900	Serious resolution and stunning isolation from air decoupled self levelling design. If you have the cash, buy one	61	53,39.5		4	MDF	217

Our favourite SPEAKER STANDS

Speaker stands

PRODUCT	£	COMMENTS	SPECIFICATIONS					
			HEIGHT	TOP PLATE SIZE (CM)	FILLABLE	WELDED	NUMBER OF LEGS	ISSUE NUMBER
Atacama Nexus 6	60	An excellent all-round performer and a genuine hi-fi bargain	60,50	14,5,18	●		3	202
Cyrus CLS50 Stand	200	Unusual combination of style and performance, and a definite contender in the right environment	64	17, 19			1	220
Custom Design R/S300 MkII	100	A solid stand improving on the original with better focus and detail	61,56,51	16,5,18	●		2	202
hne Cableway	399	Looks great, sounds great, so start saving! Clean, sweet and neutrality is exceptional with orchestral material	63	17, 20	●		1	220
Kudos S50	115	Formidable bass with real authority, and a wide dynamic range across a broad bandwidth	61	15, 20	●		1	220
Mana Sound Base	175	The Sound Base plinth simply improves the sound of every speaker placed on it	8	29,32			N/A	202
Partington Dreadnought	100	Fully welded high class engineering gives a very clean, open sound at a sharp price	61	17, 15	●	●	5	220
Partington Dreadnought Ultimate	299	Super heavyweight stand that is an open window to the speaker placed on it	63	21,24	●		1	202
Sound Organisation Z522	95	Very hefty build for the price helps deliver a solid sound with good authority and drive	60	16	●		4	220
Townshend Seismic Sink	499	Unique inflatable plinth that works well wonders decent floorstanders as well as standmounted speakers	4	38,48			N/A	202

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. **SHELF TYPE** Material that shelves are made of.

SPEAKER STANDS SPECS KEY 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.

TRIANGLE

Loudspeakers that love music

Triangle loudspeakers continue to amaze the world's hi-fi press. Stereophile's Sam Tellig – probably the world's most respected hi-fi reviewer – had this to say about the Celius 202. "One of the finest speakers I have ever heard in 17 years of reviewing and 40 years involvement with hi-fi. It's that good." Find out for yourself why top reviewers rate Triangle so highly. Contact us today for the brochure, review copies and dealer list.



23 Richings Way, Iver,
Bucks SL0 9DA England

Tel: 07000 853443

Tel: 01753 652669

Fax: 01753 654531

www.ukd.co.uk

COME FOR A SPIN IN THE NEW ENZO

This month's T3 talks to Ferrari about its 660bhp, 218mph, V12 monster



TOMORROW'S TECHNOLOGY TODAY
★★★★ FIRST REVIEWS OF THE WORLD'S BEST TECH GEAR

T3

October 2002 - www.t3.co.uk

HOME CINEMA HEAVEN

The ultimate home cinema set-up (whatever your budget)

Record to DVD

EXCLUSIVE Panasonic's wallet-friendly DVD recorder put through its paces



Inside Ferrari's Enzo

How Ferrari put F1 technology into a car you can buy

PLUS WIN YOUR OWN ENZO
see page 27

Hard disk hi-fi

Turn your hi-fi into a jukebox. We test the best models



Picture messaging

Why you need MMS on your mobile



HOW TO...

- BUY YOURSELF A GREAT HI-FI
- GET THE MOST OUT OF DIGITAL VIDEO
- BE A DJ MASTER WITH YOUR LAPTOP
- PUT YOUR DIGITAL PHOTOS ONLINE

OCTOBER 2002 PRICE PER COPY £3.50

9 771364 284049

TOP 5 MOBILE PHONES | **FUJII'S IXUS-BEATER** | **MP3 KEY RING** | **£100 DAB TUNER**



ISSUE 77 ON SALE WEDNESDAY 4 SEPTEMBER

GLOSSARY

TECHNICAL TERMS

5.1-CHANNEL AUDIO Six discrete channels, typically front left and right, centre, surround left and right, and LFE (Low Frequency Effects) for a subwoofer.

BALANCE Most loudspeakers have a characteristic frequency balance resulting from emphasising parts of the audio range and/or de-emphasising others.

BASS The lowest three octaves of the audio band – hence 'low bass' refers to the bottom octave (20-40Hz); 'mid-bass' the middle octave (40-80Hz); and 'upper bass' the 80-160Hz octave.

BI-AMP (sometimes tri-amp) Loudspeakers equipped with separate access terminals to each drive unit can be driven by separate (matching) power amplifiers for each driver.

BI-WIRE (sometimes tri-wire) Loudspeakers with separate access terminals to each driver can be driven by separate cable runs between the amp and each driver.

CD-R Recordable CD that cannot be erased, though discs that have not been completely filled can have tracks added until the disc is finalised.

CD-RW Re-writable or re-recordable CD, incompatible with older CD players.

CLASS A The operation of an amplifying stage or device in which current always flows, as opposed to Class B, where some of the devices are effectively turned off some of the time. Class A tends to have the advantage of offering lower distortion while Class B tends to generate less heat.

CLASS AB Most practical amps operate in Class A for the first fraction of a watt and Class B thereafter.

CLIPPING An amplifier's output waveform is 'clipped' if the volume is advanced too far and no more 'volts' are available to sustain ever-increasing power levels. Distortion increases dramatically at this point.

CLOCK Any electronic oscillator that is used to generate a timing reference signal. Used to synchronise the data being taken from a disc.

CROSSOVER A simple electrical network which divides the full bandwidth signal received from the power amplifier, apportioning appropriate parts of the spectrum to the various drive units.

DAB (digital audio broadcasting). Digital radio using frequencies in the band 217.5 - 230MHz. Broadcasters use varying degrees of compression and offer a broad range of programming.

DAC or Digital-to-Analogue Converter. The stage in any digital component at which incoming digital data is used to reconstruct a recognisable analogue (music) waveform.

DOLBY DIGITAL DD (AC3) A compressed digital audio format that typically contains five or more entirely discrete channels, eg 7.1 EX where side and rear channels are used.

DOLBY PRO-LOGIC, DPL Forerunner to DD that 'steers' information to the front L/R, centre and mono surround channels via an analogue matrix.

DRIVE UNIT/DRIVER A transducer which converts electrical energy into acoustic energy, eg bass driver, tweeter.

DSD (direct stream digital) The coding format used for SACD offers a frequency response of over 100kHz and a dynamic range over 120dB, it has over four times the data capacity of CD.

DSP or Digital Signal Processor. Integrated circuit that handles the decoding of digital audio streams. In 5.1 processors it separates the left from right and front from rear while managing the various bass options.

DTS or Digital Theatre Sound Competitor to Dolby Digital with a reduced 4:1 compression ratio that, ostensibly, promises higher quality.

DVD-A High-resolution variant on DVD offering up to 192kHz bandwidth and 24-bit dynamic range. Discs are compatible with standard DVD players.

ELECTRICAL DIGITAL Any digital connection that uses an electrical cable rather than optical. Includes the balanced ('AES/EBU') interface.

FILTERS Filters are intrinsic to digital audio, both analogue and digital. These are often very sophisticated in design, and in total they probably have rather more to do with the 'personality' of CD player sound than most other factors.

FREQUENCY RESPONSE The range of frequencies, from low to high, which a loudspeaker will reproduce.

IMPEDANCE With speakers, the complex electrical load that a loudspeaker presents to the amplifier which is driving it.

JITTER An insidious distortion specific to digital audio caused by the clock, used to regulate the conversion of data into analogue audio, being imprecise.

KBPS (Kilobits per second) Digital data rate measurement system used primarily with highly compressed formats such as MP3, DAB etc. The higher the amount, the better the quality.

LINE LEVEL Practically every modern source component (except phono cartridges) gives an output in the region of 1-2V, referred to as 'line level'. It follows that all inputs labelled 'CD', 'tuner', 'aux' or 'tape' are designed for this input level and are thus interchangeable.

LOSSLESS COMPRESSION A method of reducing the number of data bits (density) without corrupting the original description of the musical signal.

LOSSY COMPRESSION Reduction in data density by recourse to a psycho-acoustical model that predicts what is, and what is not, 'audible' within a sequence of music.

MIDRANGE The middle three or so octaves of the audio band, where the

ear is most sensitive, covering the approximate frequency span from 160Hz up to 3kHz.

MP3 (MPEG layer 3) Lossy compression format for digital audio that drastically reduces data content in order to squeeze music through internet connections or allow hundreds of CDs to be stored on a hard disc.

OUTPUT IMPEDANCE A measure of resistance to alternating current, a source with low output impedance (below 100 ohms) helps ensure compatibility with most amplifiers, even with long interconnect cables.

PCM (pulse code modulation) The digital coding system for analogue waveforms used for CD and DVD. Quality is limited by the oversample and bit rates used – CD is 44.1kHz/16-bit while DVD-A is capable of 192kHz/24-bit.

PRESENCE BAND Critical section of the audio band at the point where midrange and treble meet.

QUANTISATION NOISE A form of distortion or noise resulting from errors in the description of the musical signal by the digital code.

SACD (super audio CD) was launched in 1999 and is a Sony/Philips format based on DSD coding that offers high resolution stereo and multichannel sound from hybrid discs that can also be played on ordinary CD drives.

SAMPLE RATE The rate at which the musical waveform is sliced up into discrete chunks. For CD this is 44.1kHz or once every 0.023msec. DVD will also support 48kHz and 96kHz.

SENSITIVITY The relative loudness that a speaker generates for a specific voltage input. Expressed in decibels per watt (dB/W).

THX Standards system for home cinema set-ups which includes amplifier power and speaker dispersion characteristics. THX Ultra is more stringent than THX Select.

TOSLINK The proprietary name given by Toshiba to the optical fibre signal transmission system it invented for consumer applications.

TRANSISTOR/MOSFET the two main types of power semiconductor used in solid state amplifier output stages.

TREBLE High frequencies, the top end of the audio band, ie above 3kHz.

TWEETER Treble driver.

TWO/THREE-WAY Loudspeaker crossovers split the signal into two or three frequency bands, a two-way speaker can have more than two drive units.

WATTS (per channel) The watt is the unit of electrical power and the WPC rating is the maximum average undistorted power that an amp can deliver to a typical speaker. However, speaker sensitivity variations can make more difference than amplifier output.

DESCRIPTIVE TERMS

AGGRESSIVE Forward and bright sonic character.

AMBIENCE The impression of an acoustical space, such as the performing hall in which a recording was made.

ANALYTICAL Highly detailed.

ARTICULATE Intelligibility of voice(s) and instruments and the interactions between them.

ATTACK The leading edge of a note and the ability of a system to reproduce the attack transients in music.

BALANCE Essentially tonal balance, the degree to which one aspect of the sonic spectrum is emphasised above the rest. Also channel balance, the relative level of the left and right stereo channels.

BODY Fullness of sound, with particular emphasis on upper bass. Opposite of thin.

BOXY The sound of a loudspeaker with audible cabinet resonances.

BRIGHT A sound that emphasises the upper midrange/lower treble.

DARK A tonal balance that tilts downwards with increasing frequency. Opposite of bright.

DECAY The fadeout of a note, it follows the attack.

DEFINITION (or resolution) The ability of a component to reveal the subtle information that is fundamental to high fidelity sound.

DEPTH (of image) The perception of music being reproduced behind the loudspeakers and inhabiting a reproduction of the acoustic space of the original recording.

DETAIL The most delicate elements of the original sound and those which are the first to disappear with lesser equipment.

DRY A sound that is devoid of 'juice', which usually comes across as fine-grained and lean. Also a loss of reverberation as produced by a damped environment.

DYNAMIC The suggestion of energy and wide dynamic range. Related to perceived speed as well as contrasts in volume both large and small.

EUPHONIC An appealing form of distortion that generally enhances perceived fidelity, often ascribed to the harmonic elaborations of some valve amps.

FAST Good reproduction of rapid transients which increase the sense of realism and 'snap'.

FOCUS A strong, precise sense of image projection.

FORWARD(NESS) Similar to an aggressive sound, a sense of the image being projected in front of the speakers and of music being forced upon the listener.

GRAINY A slightly raw, exposed

sound which lacks finesse.

GRIP A sense of control and sturdiness in the bass.

GRUNT See grip.

HARD Uncomfortable, forward, aggressive sound with a metallic tinge.

HARSH Grating, abrasive.

IMAGING (stereo) The sense that a voice or instrument is in a particular place in the room.

JUICY Sound that has joie de vivre, energy and life.

LOW-LEVEL DETAIL The quietest sounds in a recording.

MUSICAL or musicality. A sense of cohesion and subjective 'rightness' in the sound.

NATURALNESS Realism.

OPAQUE Unclear, lacking transparency.

OPEN Sound which has height and 'air', relates to clean upper midrange and treble.

PACE Often associated with rhythm, a strong sense of timing and beat.

PRESENCE A sense of an instrument or voice occupying a place in the listening room.

PRESENCE RANGE The upper midrange.

SEISMIC Very low bass that you feel rather than hear.

SIBILANCE An emphasis of the 'S' sound, often heard on radio.

SNAP A system with good speed and transient response can deliver the immediacy or 'snap' of live instruments.

SPEED A fast system with good pace gives the impression of being right on the money in its timing.

STURDY Solid, powerful, robust sound.

THICK A lack of articulation and clarity in the bass.

THIN Bass light.

TIMBRE The tonal character of an instrument.

TIMING A sense of precision in tempo. See speed and pace.

TRANSCIENT The leading edge of a percussive sound. Good transient response makes the sound as a whole more live and realistic.

TRANSPARENCY, transparent. A hear-through quality that is akin to clarity and reveals all aspects of detail.

TWEAK To tune a system or component in an attempt to get the best performance from it.

TWEAKER Someone who enjoys this process.

VEILED Loss of detail due to limited transparency.

WARM A fullness in the lower midrange/upper bass.

WEIGHT A sense of substance and underpinning produced by deep, controlled bass.

BIRMINGHAM

Naim...Meridian...Arcam...Tag McLaren...
Teac...Mission...Stands Unique...
and much, much more.

152a High Street, (Sharing ASDA Car Park) Bloxwich, Walsall

01922 493499

0121 321 2445

and NOW AT 111 The Parade, Sutton Coldfield, Birmingham

QUALITY HI-FI for the midlands

• 3 Hi-Fi Studios • Home Trials • Home Cinema Theatre •
• In House Service Department • Mail order available •
• Interest Free Credit available

(On Selected Items, subject to 20% deposit. Written details on request)

MUSIC MATTERS
THE AUDIO SPECIALISTS

Our extensive range of products includes the very finest hi-fi and home cinema from Arcam, Audioquest, Audio Research, B&W, Castle, Celestion, Chord, Cyrus, Denon, Dynaudio, Jamo, KEF, Krell, Marantz, Martin Logan, Meridian, Michell, Mission, Monitor Audio, Musical Fidelity, Naim, Panasonic, Pioneer, Pro-Ac, Project, Quad, REL, Rotel, Ruark, Sennheiser, SME, Sonus Faber, Tag McLaren, Tannoy, TEAC, Technics, Theta and Yamaha.

INTEREST FREE CREDIT ON SELECTED ITEMS APR 0%. Written details on request. Licensed Credit Broker.

Open Tuesday to Saturday 10.30 - 5.30. Late night (not Stourbridge) Wednesday until 6.30

363 HAGLEY ROAD, EDGBASTON, BIRMINGHAM B17 8DL. TEL: 0121-429 2811 FAX: 0121-434 3298	93-95 HOBS MOAT ROAD, SOLIHULL, WEST MIDLANDS B92 8JL TEL: 0121-742 0254 FAX: 0121-742 0248	9 MARKET STREET, STOURBRIDGE, WEST MIDLANDS DY8 1AB TEL: 01384 444184 FAX: 01384 444968	10 BOLDMERE ROAD, SUTTON COLDFIELD, WEST MIDLANDS B73 5TD TEL: 0121 354 2311 FAX: 0121 354 1933	344 UXBRIDGE ROAD, HATCH END, MIDDLESEX HA5 4HR TEL: 020 8420 1925 FAX: 020 8420 1928
---	---	---	---	---

BERKSHIRE

Fraser's
Independent Audio Visual Specialists for
over 20 years
Demo Room Available
Brands include:

- ARCAM • ATACAMA • B & W •
- DENON • (DENON GOLD) • KEF •
- LOEWE • MARANTZ • MISSION •
- MUSICAL FIDELITY • NAD •
- PIONEER • PROJECT • REL •
- SIM2 • TANNOY •
- VIDEO LOGIC • YAMAHA •

Unit 35, Observatory Centre, High Street,
Slough, Berkshire SL1 1LE
Tel: (01753) 531785

V'audio
Hi-Fi Consultants

Home demonstrations and honest advice a speciality, using specially selected equipment from AVI, ATC, AUDIO ANALOGUE, ALR JORDAN, ALON, ELECTROCOMPANET, HEYBROOK, RUARK, SHEARNE, OPERA, ORACLE, MICHELL, MARK LEVINSON etc.

Home cinema on demonstration using:
SONY, NAKAMICHI, HARMAN-KARDON, DAVIS, SIM2, STEWART SCREENS, JAMBO, TRIANGLE etc

Please ring for an appointment

36 Druid Hill, Stoke Bishop, Bristol BS9 1EJ.
Tel: 0117 968 6005
www.vaudio.co.uk

ea-1
coming soon

SUFFOLK

atc
audio physic
bow
densen
harbeth
lyra
michell
primare
stax
sme + many more

signals
hi-fi for grown-ups

tel ipswich 01473 655171 fax 01473 655172
www.signals.uk.com

Radlett Audio
EST. 1978

THE HIGH-END SPECIALIST SINCE 1978

ATC, Audio Analogue, Avantgarde, Bow, Bryston Copland, EAR, Lyra, Mark Levinson, Naim Audio, Notts Analogue, PMC, ProAc, Proceed, Rega, Roksan, Ruark, Sonus Faber, Spondor, Stax, Sumiko, Teac, Wadia and lots more.

9 Holywell Hill, St. Albans, Herts. AL1 1EU
Tel: 01727 855577 • Fax: 01727 858727

Loud & Clear
HI-FI & HOME CINEMA

freedom of choice

520 ST. VINCENT STREET FINNIESTON GLASGOW O141 221 0221
26 HAMILTON PLACE STOCKBRIDGE EDINBURGH O131 226 6500
www.loud-clear.co.uk

SALES & SERVICES

WEST SUSSEX

WORTHING AUDIO

20 Teville Gate, W. Sussex BN11 1UA
Tel: (01903) 212133

The friendly shop with the best sound systems in the South.

Friendly advice • 3 yr guarantees • easy parking
Open Mon-Sat 10am-6pm Late night Wed 7:30pm

Agencies include: Dynaudio, Exposure, Marantz, Orelle, Origin Live, Restek, Ruark, Audio Technica, Talk Electronics, Target, TDL, Tripod, Sphinx Laboratories and many more.

REVOX SERVICE THE MANUFACTURERS' APPOINTED SERVICE COMPANY **REVOX SERVICE**

Correct Revox Spare Parts Pricing
24 Hour Estimation procedure
Manufacturer Upgrades and Advice
Delivery and Collection Service
Comprehensive Guarantees

Factory Trained Engineers
Rapid Response Turnaround
Full Revox range serviced
Written Technical Reports
Late Evening Opening

THEAR TECHNOLOGY LIMITED
TTL House, Sheeptick End, Near Lidlington, Bedfordshire, MK43 0SF
Telephone 01525 841999 Facsimile 01525 841009

EAST SUSSEX

ADAMS & JARRETT

0800 146569

REL • KEF • RUARK

MERIDIAN • YAMAHA

CABLETALK • ROTEL

NORMAN ROAD, ST LEONARDS-ON-SEA, EAST SUSSEX

MARANTZ • TACT

NAD • TANNOY

Tel: 01424 437165 Fax: 01424 444148

TALK ELECTRONICS

www.audio-shed.co.uk

DYNAUDIO

LONDON



THE INNOVATIVE
AUDIO/VISUAL
HIFI RETAILER

SERVING LONDON
FROM BATTERSEA

ORANGES & LEMONS

020 7924 2040

61/63 WEBBS ROAD, SW11

Our eighth active year

0% Credit Finance available

ARCAM. B&W. CABLETALK. CASTLE. CHORD CO.
DENON. EPOS. JAMO. KEF. MARANTZ. LINN.
NAD. NAIM. NEAT. PMC. REGA. ROTEL. RUARK.
SOUNDSTYLE. STANDS UNIKO. YAMAHA.
Visit www.orangesandlemonshifi.com

LONDON



O'Brien Hi-Fi

ARCAM • AUDIO NOTE • AUDIO RESEARCH • AUDIO
TECHNICA • BEYER • CABLETALK • CHORD • CREEK •
DIAPASON • EPOS • JADIS • JEKLIN • MICHELL • MUSICAL
FIDELITY • NAD • NAIM • ONKYO • OPERA • PROJECT • QED •
REGA • RESON • SENNHEISER • SME • SONNETER • SONUS
FABER • SUGDEN • TEAC • THORENS • TRANSPARENT
CABLES • UNISON RESEARCH • VIENNA • WILSON



Cleanance / Second Hand / Ex Demo Equipment • Details on request

0% Instant Finance Available

Written details on request
Demonstration Room • Free car parking • Major Credit Cards
Personal Export • Mail Order • Installation Service • Repair facilities
5 mins walk: Raynes Park B&R • 20 mins Waterloo
5 mins from A3 (Raynes Park B28exit) • 25 mins M25 Junc 10

MARTIN LOGAN
60 Durham Rd, West Wimbledon, London SW20 0TW
Tel: (020) 8946 1528 Fax: (020) 8946 0331
Email: obrienhi-fi@iname.com

SCOTLAND

Sounds Perfect

HiFi & Home Cinema Specialists

St Andrews St, Dundee

(01382) 226592

MIDDLESEX

Music Matters
344 Uxbridge Road
Hatch End Pinner HA5 4HR
See our main entry under the West Midlands
**The finest Hi-Fi home
cinema & multi-room
from a selected range
of suppliers**
Tel 020 8420 1925

LONDON

AUDIO CONCEPT

27 BOND STREET, EALING W5 ☎ 020 8567 8703

AAWK. APOLLO. ASH DESIGN. AUDIO ANALOGUE. BANG & OLUFSEN. BOSE. BOSTON. B&W. CABLE TALK.
CHORD COMPANY. COSMIC. DENON. ELAC. EPOS. HARMON KARDON. JBL. KEF. MARANTZ.
MISSION. MUSICAL FIDELITY. NAKAMICHI. NORDOST. ONKYO. OPERA. ORELLE. PRIMARE. QUAD. REL.
ROKSAN. ROTEL. RUARK. SOWJINK. SOUND STYLE. STANDS UNIKO. STRAIGHTWIRE. SUPRA.
TAG MOLAREN. TALK ELECTRONICS. TARGET. TEAC. THORENS. VAN DEN HUL.

Two demonstration rooms.

Repairs & Service. Closed Wednesday

NORFOLK



Basicallly Sound of Norfolk

STOCKISTS OF LEADING HI-FI

Audio Analogue, Bever, Dynastector, Final, PMC, Briston, Sound Organisation,
Tear, Naim Audio, Chario, Chord Co, Opera Speakers, Demm, Epos,
Grado, ProAc, QED, Rega, Soundstyle, Stax and others.

0% FINANCE AVAILABLE

The Old School
School Road
Bracon Ash
Norfolk, NR11 8HG
Tel: (01508) 570829
www.basicalllysound.co.uk

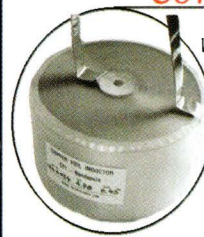
NORFOLK

ea-2

coming soon

ACCESSORIES

Components



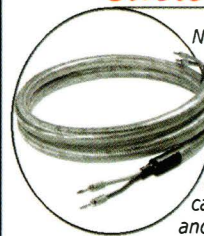
We stock a huge
range of electrolytic
and film capacitors,
resistors, inductors,
etc.

Speaker Kits

Choose from 50
loudspeaker kits,
from bookshelf
to floor-standing,
and choose your
own finish.



Cable and Wire



Neotech reference
cables use the
finest 99.99997%
Single Crystal
Copper or Silver
conductors. See our
range of speaker
cables, interconnects,
and connectors.

Connectors & Accessories

Superb range
of binding posts,
spikes, sockets,
plugs and
adaptors.



Online Store: www.audiocom-uk.com

T: 01646 685601
F: 01646 685602
W: www.audiocom-uk.com
E: sales@audiocom-uk.com



To advertise here, contact Ben on

0207 317 0259

WHAT'S ON THE WEB!

ea-1
coming soon

www.hiwayhifi.com

www.hifijunkies.co.uk

www.hifibitz.co.uk

www.cable-shop.co.uk

SENNHEISER HEADPHONES SPARES AND ACCESSORIES
THEY ARE ALL IN OUR ON-LINE CATALOGUE OF QUALITY HEADPHONES, AUDIO LEADS, VIDEO LEADS, SPEAKERS, STANDS, SERVICE AIDS, BEYERDYNAMIC HEADPHONE SPARES, PARTS, AND MUCH MORE-VISIT US TODAY AT www.strachan-direct.co.uk
STRACHAN ELECTRONICS
9 CROALL PLACE, EDINBURGH, EH7 4LT
Tel: 0131 556 9549 E-mail: sales@strachan-direct.co.uk

www.HiFiBitz.co.uk
the award winners are just a click away

You'll love our NEW Mains Block!

With 4, 6 or 8 way options, choice of cables, EarthTerminal, nickel plated contacts with contact enhancer, and the option of an in-built mains purifier, this versatile block will suit any system.

Call now for more information or to order your **FREE MAIL ORDER CATALOGUE.**

NEW! from £120

FREE Catalogue UK Freephone 0800 373467
quoting ref: AC82
Mail Order Direct

Russ Andrews Accessories Ltd
Free UK Delivery • Cable Upgrade Scheme • Lifetime Guarantee
30 Day Home Trial • Expert Advice

Russ Andrews Accessories Ltd., FREEPOST NWW881A, KENDAL, LA8 9ZA. www.russandrews.com
Tel:+44 (0)1539 825500 Fax:+44 (0)1539 825540 E-mail: AC82@russandrews.com

LINCOLNSHIRE

Lend us your ears and we'll blow your mind . . .

Arcam, ATC, B & W, Celestion, Denon, Kenwood, Kef, Marantz, Meridian, Michell, Mission, NAD, Pioneer, Panasonic, Quad, Rotel, Ruark, Sony, Tag McLaren, Tannoy, Teac, Technics, Yamaha and more.

Audition the very best at Lincolnshire's premier Hi-Fi dealer . . .

MANDERS HI-FI LTD.
AUDIO • TV • VIDEO & SATELLITE SALES

2-4 EDWARD STREET (Off Pasture St.) GRIMSBY. TEL: (01472) 351391

To advertise here, contact Ben on 0207 317 0259

SALES & SERVICES

15,768 readers use Hi-Fi Choice as a purchasing aid. Are you missing out on this lucrative audience?

CHESHIRE

BADA BRITISH AUDIO DEALERS ASSOCIATION
the symbol of security

Doug Brady Hi-Fi
Family business est. 1960. Home trials.
Systems £500-£60,000:
CD/DVD/VINYLA/V
Kingsway North, Warrington
Tel: 01925 828009 Fax: 825773
2.3miles J21-M6. Private Parking
Map FAXED & on website
www.dougbradyhifi.com
Email:
doug.brady@dougbradyhifi.com

LEICESTER

WA WILMSLOW AUDIO
THE LOUDSPEAKER SPECIALISTS


* UK's largest supplier of kit loudspeakers - all on demonstration
New range of Visaton Home Cinema kits available.

* Range of replacement drive units from ATC, Morel, Peerless, Scan-speak, Seas, Visaton, Volt etc. for use in AR, Glé, Heybrook, IMF, KEF, Mission, ProAc, Rogers, TDL plus many others.

* Comprehensive stock of components, capacitors (SCR & Hovland), inductors, cable, damping and grille materials.

Phone today for your FREE catalogue or check out our Website:

WILMSLOW AUDIO
50 Main Street, Broughton Astley,
Leicester LE9 6RD
Tel: 01455 286603 Fax: 01455 286605
Website: www.wilmslowaudio.com



MAIL ORDER

EE FOR TOTAL HI FI & AV SHOPPING

MARANTZ • TANNOY • TECHNICS • PANASONIC • PIONEER • SONY • JVC JAMO • TOSHIBA • HITACHI • CASTLE

109 BROADWAY, BEXLEYHEATH, KENT DA6 7JH
020 8298 7880

Mail Order: 01474 353000 (not available on Marantz)

MAX
Midland Audio X-change

Midland Audio X-Change x-Demo & Second Hand Items

	Was	Now
CD players DACs & Transports		
Acuphase DP70V CD Player S/H	4500	1995
Audio Synthesis DAVE Decade S/H	3000	1799
Densen Beat 400 CD Player S/H	1280	799
Sony SACD1 S/H	4000	2495
Sony DVP7700s CD/DVD Player S/H	1100	399
Theta Pearl CD Transport S/H	1349	799
Theta Carmen CD/DVD Transport S/H	3499	2399
Theta Basic Transport S/H	1500	650
Theta Pro Basic II DAC S/H	2990	1099
Trichord Research Pulsemaster AT&T & Big spu S/H	1195	349
Wadia 3200T CD Transport AT&T S/H	1750	995
Wadia x64x DAC 24 Bit AT&T S/H	4000	1599
Turntables Tonearms & Cartridges		
Basis 1400/RB300 Turntable x-Demo	1299	899
Basis 2000/RB300 Turntable x-Demo	1999	1399
Basis 2001 Turntable x-Demo	2999	2399
Basis 2004 Turntable x-Demo	4500	2999
Clearaudio Signature MC Cartridge (4 hours use)	1500	649
Naim Armaggon PSU S/H	645	379
Nottingham Analogue "The Foot" 12" Carbon Tonearm S/H	1100	699
Nottingham Analogue Mentor S/H	2600	1799
Roksan Artemiz Tonearm S/H	899	499
Roksan Artemiz Tonearm S/H	899	599
Roksan DX2/XPS5V/Arteserxes XI DS1.5 S/H	1198	679
Roksan Xerxes Bk/Tabriz/Corus Bk S/H	1599	599
Roksan Xerxes X R/W Turntable S/H	1295	749
Preamplifiers		
Audio Analogue Bellini Preamplifier x-demo	575	399
Audio Research SP14 Phono Preamplifier S/H	2950	1099
EAR 802 Valve Preamp S/H	1599	499
Einstein "The Tube" Preamplifier x-Demo	6000	3999
Krell KAV-S Processor/Preamplifier DTS/AC3/Pro Logic S/H	14989	4599
Linn Kolektor Silver S/H	495	349
Paul Haynes Tube Phono Stage S/H	1500	749
Roksan L2 preamplifier S/H	1295	499
Amplifiers		
ATC SIA-2 150 Integrated S/H	2495	1799
Audio Research CL60 Power Amplifier S/H	3360	1295
Audio Research CA50 Valve Integrated S/H	3495	1999
Audio Analogue Denezett Power Amplifier x-demo	599	425
Bow Technologies Wazoo XL Amplifier (New & Boxed)	2495	1950
Electrocompaniet ECI-3 x-demo	1095	695
Electrocompaniet ECI-4 x-demo	1990	1299
Electrocompaniet AW180 Mono Amplifiers x-demo	4000	2999
Great 820 OTL Stereo Valve Amplifier S/H	3295	1995
Linn LK85 Silver S/H	495	349
Mark Levinson N0334 Power amplifier x-demo	5495	4499
Roksan Rok S1.5 Power Amplifier S/H	1499	945
Union Research S6 Valve integrated S/H	1600	1299
Loudspeakers		
Audio Physic Virgo 2 Birds eye maple x-Demo	3250	2499
Audio Note ANK-SPX S/H	1399	650
BKS 107 MKII Supreme Ribbon Hybrids x-demo	2199	1599
Indigo Model Two Centre Channel Cherry S/H	199	129
Indigo Model Three Cherry S/H	599	299
JM Lab Mezzo Utopia New and Boxed	7799	6500
Opera Operetta Mahogany x-demo	795	575
ProAC studio 100 Cherry x-demo	799	599
Revel Salon Black/Aluminium (6 months old) S/H	15000	11599
Robertson Audio DX7 Cherry x-Demo	995	599
Tolem Tabu Mahogany x-Demo	2300	1599
Cables & Accessories		
Air Pod size 1 x3 S/H	210	120
Air Pod size 2 x3 S/H	150	99
Audio Note AN-V 1m Silver interconnect S/H	420	199
Cogan Hall EM-D 0.6m S/H	199	99
Cogan Hall Intermezzo 0.6m S/H	299	149
Elemental Audio Amplifier Platform S/H	549	299
Finite Elemente Pagode E55/014 4 Tier Maple Stand x-Demo	849	599
Grado RS1 Reference Headphones New	695	499
Kimber DX-50 illuminations AES/EBU 1.5m S/H	350	149
Mana Reference Table S/H	410	199
Naim Audio 2x5m Speaker cables white S/H	N/A	45
Opera Lux 3 Tier Table Clear/Stainless x-Demo	950	499
QED Genesis Silver Spiral 2X 3 M S/H	395	199
Roksan HA01 1M Interconnect S/H	99	49
Roksan HA01D 0.5m Digital Interconnect S/H	49	25
Stax Lambda Pro Electrostatic Headphones S/H	649	299
Tara Labs "Floating GroundStation" New	775	499
Tara Labs "The One" 1m Balanced New	2175	1499
Tara Labs RSC Prime Balanced 1m S/H	250	149
Target R1 Stands S/H	329	199
Transparent Music Link Plus RCA-RCA 1Mm S/H	429	199
Transparent Music Link Ultra Balanced 1m S/H	1499	699
Transparent Music Link Ultra Balanced 7.26m S/H	2349	1499
Transparent Music Link Ultra XL Balanced 1m S/H	1499	995
Transparent Music Wave Ultra B Cable 2.5m S/H	3199	1599
Transparent The Wave 2.7m S/H	599	199
Tuners & Tape Decks, Power Supplies		
Denon CDR M30 CdRw Recorder (New&Boxed)	399	199
Magnum Dynalab FT-R Remote Switcher for FT101A/Etude (New & Boxed)	450	299
Revox A77 MKIV Reel to Reel 1/2 Track S/H	N/A	279
Revox B77 MKII Reel to Reel 1/2 Track S/H	2800	698
Teac T-BX10 Tuner S/H	399	149



Midland Audio X-change are looking for Audio Research, Krell, Mark Levinson, Naim Audio, DCS, Wadia, cash paid call John Roberts on 01562 822236 now!

Red Rose Systems now available from £4000

Midland Audio X-change is looking for good used British & American Hi-fi

<http://www.midlandaudiox-change.co.uk>

call John Roberts Tel / Fax 01562 822236

181 Franche Rd • Kidderminster • Wors • DY11 5AD

e-mail sales@midlandaudiox-change.co.uk

Mobile 07721 605966

MAX Midland Audio X-change

Front End Problems?
contact:
The Cartridge Man
It doesn't have to cost an arm and a leg to get the best - listen to my Koetsu - and - Decca - eater.
Also agents for Croft, Moth, Hadcock & Michell & E.A.R. Graham Slee projects.
Valve equipment re-build service available
- Plus cartridge re-tipping service
020 8688 6565
Website: www.thecartridgeman.com

MISSION
FULL RANGE ON DEMONSTRATION
HOME CINEMA WIDESCREEN PLASMA & DVD
OTHER BRANDS INCLUDE ARCAM, CABLE TALK, DENON, DUAL, JAMO, KENWOOD, MARANTZ, NAD, PIONEER, QED, QUAD, SENNHEISER, SONY, TANNOY, TARGET, TECHNICS, THORENS, YAMAHA.
COSMIC OPEN 7 DAYS A WEEK
A world of difference
244-256 STATION ROAD, ADDESTONE, SURREY
TEL: 01932 854522 FAX: 01932 832432

ACCESSORIES

ea-2
coming soon

BADA BRITISH AUDIO DEALERS ASSOCIATION
the symbol of security

PHASE 3 HIFI
LEADING HI-FI & 'HOME CINEMA' SPECIALISTS
FOUR LISTENING AND VIEWING STUDIOS
*EXPERIENCED AND FRIENDLY SALES STAFF
*INSTALLATION SERVICE *CREDIT FACILITIES
*HOME DEMONSTRATIONS *PART EXCHANGE
ARCAM • B&W • NAUTILUS 800 • CASTLE CHORD ELECTRONICS • DENON • KEF LINN • LOEWE • MARANTZ • MERIDIAN NAIM • PIONEER • ROTEL • YAMAHA
213-215 TARRING ROAD, WORTHING, WEST SUSSEX BN11 4HW
TEL: (01903) 245577 FAX: (01903) 505824

IAN HARRISON HIFI SALE!!
TRADE IN YOUR OLD MOVING COIL CARTRIDGE AND SAVE UP TO 60% OFF A NEW ONE

PLEASE PHONE OR WRITE FOR SALE PRICES

MICHELL, ROKSAN, CLEARAUDIO, AUDIO NOTE, DENON, TRANSFIGURATION, KOETSU, SUMIKO, ORTOFON, SOUTHER, GRAHAM, VAN DEN HUL, E.A.R./YOSHINO, CONVERGENT AUDIO TECHNOLOGY, HARBETH, NORDOST, TEAC, SONY, SENNHEISER, GRADO, RESON, GOLDRING, QED, SONIC LINK, ARGENTO AUDIO, DECCA, MOTH, CREEK, AUDIO TECHNICA, APOLLO, SOUNDSTYLE

All goods are brand new & boxed with full U.K. guarantees.
No ex-dem or ex-display equipment.
No grey imports. Delivery is free (U.K. only).
Goods are not supplied on approval.
Sorry, no general catalogue.
Please phone or write for specific details.

MAIL ORDER ONLY FROM:
7 MILL HILL, REPTON, DERBY, DE65 6GQ, U.K.
TEL: 01283 702875 9AM-9PM INCLUDING SUNDAYS

YORKSHIRE

Acoustic Energy
Atacama
Castle
Celestion
Copland
Cyrus
Grado
Harman-Kardon
JBL
KEF
Krell
Linn
Marantz
Martin-Logan
Meridian
Michell
Mission
Monitor Audio
Musical-Fidelity
Myryad
NAD
Ortophon
Pickering
Primare
Pro-Ac
Project
REL
SME
Sonus-Faber
Stax
TAG McLaren
Tannoy
TEAC
Thorens
Yamaha
& lots more...

Award Winning Retailers... **Vickers Hi-Fi**

The North of England Hi-Fi Specialists

- ▶ Quality Hi-Fi separates from £100 to £10,000
- ▶ Widest choice in the area ▶ Independent advice
- ▶ Consumers Choice Gold Award Winners
- ▶ Over 35yrs experience ▶ Qualified staff
- ▶ Comfortable dem rooms ▶ Superb showrooms
- ▶ Main road location ▶ Major car parks nearby
- ▶ Insurance estimates ▶ Service Dept.
- ▶ Up to 3 years Interest Free Credit* only 20% deposit
- ▶ Carriage Free Mail Order (inc. credit) *subject to status
- ▶ Delivery & installation
- ▶ Part Exchange
- ▶ Open 10:30am - 5:30pm 6 days: Mon. to Sat.
- ▶ Visa, Mastercard, Switch etc.

24 Gillygate, York YO31 7EQ

Tel: 01904 629659

www.Vickers-HiFi.co.uk

Specialists in high fidelity sound reproduction - since 1967

KENT

90% of our customers prefers our "warm and old-valve" sound to their expensive transistor preamplifiers & power amplifiers. We have a signed testimonial to prove that one customer prefers £900 "EL34 Lim Signature" to £2,600 preamp / power amp/power supply made by a famous name. Do you need further proof that price is not a substitute for the "valve sound" ? Money refunded to 10% of customers who prefer transistor amplifiers.

Money back guarantee (less £30 return carriage, within 1 month) that our valve amplifiers delivers clear sweet treble, without harshness, from CD players

+ 100% fatigue free + Sibilance on female voices is well controlled and greatly reduced.

'His' sound like 'His' and not 'Hissssssk'

+ Singers accentuation and accents become blatantly obvious + Random background noise/crossover distortion disappears, creating an inky black silence, so you can hear quiet notes, breathing noise, artificial reverberation, etc
+ more powerful bass slam than most transistor amplifiers and most 300B Single Ended amplifiers + 40 watts



£900 • £600

Telephone 01634 373410 for Mr Andrew Everard review in Gramophone Magazine and Summary of 18 testimonials from satisfied customers + www.affordablevalvecompany.com + Amplifier shown without CE safety cage, to prove that this is a genuine valve amplifier. Customers must not remove the CE safety cage + Reliable. 2 years guarantee

Shop prices have to be much higher to pay for shops rent, rates, wages, etc.

£5,000 would be a reasonable shop price for our £1,350 "EL34 High End" with potted transformers and stainless steel chassis (steel bottom cover and CE safety cage). Buy direct and save £££

Money back guarantee (less £30 return carriage, within 1 month) that our valve amplifiers driving our £1,200 3 way speakers (to be released) produce very realistic voices and instruments. You can never be sure if you are listening to a Hi-Fi set or real life singers and musicians ('live' recordings, life sized volume, eyes closed)

+ Massive 10 inch woofers produce deep realistic bass. No subwoofers needed.

+ We won't even charge you £30 for return carriage, if you can find a more realistic sound for £7,000 or less.



MEGA TEST: FIVE 42INCH PLASMA TVs RATED!

www.home-entertainment.co.uk
HomeEntertainment
THE COMPLETE HOME CINEMA BUYING GUIDE

TESTED: YAMAHA'S DSP-AZ1 AV RECEIVER

NEW-LOOK ISSUE ON SALE 5 SEPTEMBER

DEALER DIRECTORY

Choosing a good hi-fi dealer is the most vital step in acquiring the system that is right for you. This unique directory gives full information on dealers able to help in your area.

BATH/BRISTOL

THE RIGHT NOTE, tel: 01225 874728. Give your ears a new reference point for the best sounds at any price. Forget reviews and trying to put together a system like a patchwork quilt with the 'best' bits around. It's *our* job to do the assessing, you judge the results. Come here, or we'll come to you, and *plan* a system for the future, even if you spread the purchases. Leave "upgrade-itis" behind, save money and enjoy music. Just listen, and you'll know. CD: Accuphase, Advantage, Audio Synthesis, Balanced Audio Technology, dCS (Elgar etc), Meracus, Pass, Sugden, Wadia. Vinyl: Audio Synthesis, Basis, Clearaudio, DNM, Graham, (The) Groove, Lehmann (Black Cube), Michell, Sumiko, Transfiguration. Amps: Accuphase, Advantage, Balanced Audio Technology, CAT, DNM, Gamut, Lumley, Meracus, Michell, Nagra, Pass, Sonneteer, Spectral, Sugden. Speakers: Audio Physic, BKS, Ethos, Harbeth, Lumley, Magneplanar, NEAT, Totem, Verity Audio. Tuners: Accuphase, Magnum Dynalab. Cables: Argento, Chord Co, DNM, Hovland, Nordost, SonicLink, Siltech, Yamamura Churchill. Mains: Accuphase.

BEDFORDSHIRE

RICHARDS AUDIO VISUAL, 4 Greyfriars, Bedford MK40 1HP. Tel: 01234 365165. Email: richavbed@aol.com **FRIENDLY PERSONAL SERVICE. MULTI-ROOM HOME INSTALL SPECIALISTS. FREE HOME SURVEYS.** Stockists of Arcam FMJ, Audioquest, B&W, Bose, Cabletalk, Cyrus, Denon, Marantz, Mission, Moth, Optimum, Ortofon, Pioneer, Pro-Ject, QED, REL, Rotel, Ruark, Sennheiser, Soundstyle, Stands Unique, Talk Electronics, Tannoy, Target, Teac, Van den Hul, Yamaha and more. **LISTENING ROOM. 0% FINANCE.** Open 6 days 9.30-5.30. **CAR PARK AT REAR OF SHOP.**

BIRMINGHAM

SOUND ACADEMY, 111 The Parade, Sutton Coldfield, Birmingham B72 1PU. Tel: 0121 321 2445. Audio equipment from leading and specialist brands, with 3 demo floors, home trials, home cinema with instore demo theatre, evening demos by appointment. In house service dept. Mail order avail. Int. free credit subject to status. Open 6 days 9am - 6pm. Late night Friday. Expert advice, cable dressing and free installation. Also at 152a High Street, Bloxwich, Nr Walsall, W Midlands. Tel: 01922 493499/473499. **BADA**

BUCKINGHAMSHIRE

NORTHWOOD AUDIO. 98 Cambridge St., Aylesbury. Tel: 01296 428790. Established since 1992. Independent specialist retailer. Extensive Hi-Fi, A/V and Multiroom experience catering to your needs. From Vinyl to SACD, Valve to Solid State, from LCD to Plasma. Audiomeca, Audio Note, Cable Talk, Castle, Chord, The Chord Company, Cura, Denon, Elac, Epos, Exposure,

Heart, JM Labs, KEF, Linn, Marantz, Michell, Micromega, Monitor Audio, NAD, Nakamichi, PMC, ProAc, Quadraspire, Rega, REL, Revox, Roksan, Rose, Rotel, Ruark, Sony, Sennheiser, Sonus, Talk Electronics, Tannoy, Teac, Tube Technology, Videologic, Vienna Acoustic. Export orders welcome. 2 demo rooms. Credit facilities available. Website: www.northwoodaudio.co.uk. Email: info@northwoodaudio.co.uk

CHESHIRE

ACOUSTICA, 17 Hoole Rd, Chester CH2 3NH www.acoustica.co.uk. Tel: 01244 344227. All that's best in Hi-Fi and Home Cinema from quality manufacturers including Naim, Rega, Bowers & Wilkins, Sugden, Musical Fidelity, Rotel, Primare, Teac, Harman Kardon, JM Lab, Spondor, Quadraspire, Royd, Michell, Sonus Faber, SIM/Seleco Projectors & Yamaha. We offer friendly, helpful advice, interest-free credit and trade-in facilities, and deliver and install systems through Cheshire, Merseyside and North Wales. Open Tues. - Sat . 10-5.30, evenings by arrangement.

AUDIO COUNSEL, 14 Stockport Rd, Cheadle, Cheshire. Tel: 0161 428 7887. Please see entry under Greater Manchester.

ACTON GATE AUDIO, 4 Ruabon Rd., Wrexham. Tel: 01978 364500. Audio Visual specialists. AAD, Arcam, Audio Analogue, Bose, Celestion, Castle, Denon, Harman- Kardon, Jamo, JBL, Marantz, Michell, Mission, Mordaunt-Short, Musical Fidelity, Myryad, NAD, Quad, Roksan, Ruark, Tannoy, Teac, UKD, Unico, Vibe, Videologic, AV Specialists. Demonstration room, installation service. Easy parking and motorway access. Mastercard, Visa etc.

THE HI-FI SHOWROOMS, 12A West Str, off West St Car Park, Congleton, Cheshire. Tel: 01260 280017. E-mail: mail@hifishowrooms.co.uk. Web site: hifishowrooms.co.uk. Naim Audio, Audiolab, Rega, REL, Arcam, Technics, KEF, NAD, Harman-Kardon, Yamaha, Rotel, Lexicon, RCF, Millennium, NHT, JBL, Onkyo, Sony, Marantz, Toshiba, Panasonic, Ruark, Jamo, Celestion, Qed, Teac, Castle. Front and rear projection systems, 3 demonstration rooms, 1 A/V with 8ft screen, customer car park. The North West's Premier Audio Visual Specialist. Mastercard, Visa, Amex, JCB. 9.15-5.30, Closed Sun/Mon.

DORSET

MOVEMENT AUDIO, 588 Ashley Road, Parkstone, Poole. Tel: 01202 730865/380018. www.movement-audio.co.uk. Arcam, Audio Vector, B&W, Castle, Chord Electronics, Cyrus, Denon, Densen, Lavardin, Marantz, Mission (inc. FS series), NAD, Pioneer, Roksan, REL, Rotel, Tannoy (inc. Dimension), Yamaha. 3 demo rooms, Hi Fi and Home Cinema specialists, easy parking on site, high quality used equipment, massive range of audio and video leads and connectors etc. Credit facilities. Open Tues-Sat 10-5.30. **BADA**

MOVEMENT AUDIO, 926 Wimborne Road, Moordown, Bournemouth, Dorset. Tel: 01202 529988/ 520066. www.movement-audio.co.uk. Arcam, B&W, Celestion, Denon, KEF, Marantz, Michell, Musical Fidelity, NAD, Opera, Pioneer, Project, Quad, REL, Roksan, Rotel, Tannoy, Teac, Yamaha. Home cinema and Hi Fi specialists, full demo facilities, friendly expert advice, home demo and installation, easy parking, credit facilities, Visa/Mastercard. Open Tues-Sat 9.30-5.30. **BADA**

SUTTONS HI-FI, 18 Westover Road, Bournemouth. Tel: 01202 555512. Acoustic Energy, Arcam, Atacama, Celestion, Cable Talk, Denon, Definitive Audio, KEF, Linn, Meridian, Mission, M+K, QED, Rotel, Sennheiser, Teac, Sony, Talk Electronics, Tag McLaren, Wharfedale, Yamaha, DTS & Dolby Digital, DVD. 2 single speaker listening rooms, home demonstrations, free installations. Open Mon-Sat 9-5:30. Call for details **BADA**

WEYMOUTH HI-FI, 33-35 Maiden Street, Weymouth. Tel: 01305 785729/766345. www.movement-audio.co.uk. Arcam, B&W, Castle, Celestion, Denon, KEF, Meridian, Mission, Musical Fidelity, Panasonic, Pioneer, Project, Quad, Rotel, Technics, Yamaha plus large range of P.A. and DJ audio and lighting, multi room and commercial installation specialists, Home Cinema and DVD, Projection TV and plasma, 2 demo rooms, credit facilities, Visa/ Mastercard. Open Mon-Sat 9.30-5.30 **BADA**

ESSEX

CHEW AND OSBORNE, 148 High Street, Epping, Essex CM16 4AG. Tel: 01992 574242. 26 King Street, Saffron Walden, Essex CB10 1ES. Tel: 01799 523728. Specialists in home entertainment equipment for over 35 years. Demo facilities in all branches with extensive range of Hi-Fi & A/V products including Yamaha, Pioneer, Sony, Arcam, Bose, B&W, Marantz, Tannoy, Cable Talk, Pro-Ject. Plasma screen specialists. Installation service available. Interest free credit facilities. Service department.

KENT

JOHN MARLEY HI-FI CENTRES LTD, DOVER HI-FI, 43 High Street, Dover. Tel: 01304 207562. Acoustic Energy, Musical Fidelity, Monitor Audio, NAD, Pioneer, Pro-Ject, Roksan, Rotel, Tannoy, Technics, Yamaha. A/V demo room. Full service department. Open Mon-Sat 9-5. Closed Wednesdays. Credit facilities, major credit cards accepted. Established 30 years. Expert advice. Friendly service.

Members of the British Audio Dealers Association are able to offer:

- Two year guarantee, transferable to another BADA dealer should the purchaser move more than 30 miles from his/her original address
- low cost five year guarantee option
- proper demonstration facilities
- seven day exchange or refund scheme if the dealer's advice is taken on product selection
- fully guaranteed service work
- customer complaints procedure in the event of problems

For more information contact **BADA** on

020 7226 4044



INDICATES MEMBERSHIP OF THE BRITISH AUDIO DEALERS ASSOCIATION

LANCASHIRE

ADVENTURES IN HI-FI, 5 Bishopsgate, off Hallgate, Wigan WN1 1NL. Tel: 01942 234202. For the best hi-fi and home cinema products from quality manufacturers including B&W, Royd, Bryston, Neat, Michelle, Naim, Rega, Cyrus, NAD, KEF, Denon, Dynavector, Shalinian, JM Lab, PMC, Project, Quadraspire. We offer friendly advice, excellent demonstration facilities, 0% finance, free delivery and installation throughout the North West. Opening hours 10.00 - 5.30 Tuesday to Saturday, evenings by appointment.

LEICESTERSHIRE

LEICESTER HI FI CO, 6 Silver Walk, St Martins Square, Leicester LE1 5EW. Tel: 0116 253 9753, fax: 0116 262 6097. Website: www.leicesterhifi.co.uk. Email: info@leicesterhifi.co.uk. Arcam, B&W, Bryston, Chord Electronics, Copland, Cyrus, Denon, Greig IK Loudspeakers, KEF, Marantz, Michell, Miller & Kreisel, Mission, Musical Fidelity, NAD, Nakamichi, Nautilus, Pioneer, PMC, Project, Quad, Rotel, Roksan, Sony, Talk Electronics, Tannoy, Teac, Technics, Yamaha, etc. 4 listening areas/rooms over 3 floors, we can demonstrate, deliver and install. Hi/A/V and multiroom. Credit facilities. All cards taken, open Mon - Sat 9.30-5.30 **BADA**

ZOUCH AUDIO LTD, The Old Coach House, Off South Street, Ashby De-La-Zouch, Leicestershire LE65 1AN. Tel: 01530 414128. We have ranges of equipment that will suit everyone from the Hi-Fi newcomer to the most demanding enthusiast. Advantage, Aloia, Apollo, Argento, Audioquest, Balanced Audio Technology, Boulder, Burmester, Cabass, Clearaudio, Creek, Croft, Ecosse, Epos, HNE, Howland, Karma, Linn Classic, Lothx, Lumley Loudspeakers, Magnat, Meadowlark Loudspeakers, Musical Fidelity, NAD, Pass Labs, Project, Red Rose, Roksan, SAT, Sonic Link, Sonus Systems, Soundstyle, Sugden, Thule, Triangle, Van Den Hul, Videologic, Vienna Acoustics, VTL, Wadia. Open Tues-Sat Only 3 minutes from junction 13A/M42.

LINCOLNSHIRE

STAMFORD HI-FI, 9 Red Lion Square, Stamford, Lincs PE9 2AJ. Tel: 01780 762128. Aiwa, Denon, KEF, Kenwood, Marantz, Mission, NAD, Pioneer, Quad, Technics, Yamaha, plus all major speaker manufacturers. Expert advice, comparator demonstrations on two floors, part exchange, Hi-Fi purchased for cash. No appointments necessary, home trial facilities, free installation, service department. Mastercard, Visa & credit charge, finance available. Mon-Sat 9-5.30pm, closed Thursdays.

LONDON

CORNFLAKE.CO.UK, 37 Windmill Street, London W1T 2JU. Tel: 020 7631 0472, fax: 020 7436 7165. E-mail: help@cornflake.co.uk. Open Tues-Sat 10-6, Thurs 10-7. The specialists in high quality sound, be it for one room or many more. They offer friendly advice, and a full delivery and installation service is available. Two listening

rooms with full A/V facilities demonstrating Arcam, ATC, AVI, Barco, Bryston, Dynaudio, Mark Levinson, Naim, Origin Live, Proceed, PMC, Rega, Royd, Yamaha and more. Service department. Amex, Mastercard, Switch, Visa and worldwide mail order service. Still the coolest Hi-Fi shop in London. www.cornflake.co.uk.

GRAHAMS HI-FI, Canonbury Yard, 190a New North Rd, London N1. Tel: 020 7226 5500. Winner Sony/HFN Greater London Dealer Award 1986/89/90. "One of the 5 best hi-fi shops in the world", Arcam, Linn, Meridian, Naim, Rega, etc. Systems from £500. Free parking, 4 demo rooms, service dept, open Tues-Sat. Ring for appointment. **BADA**

ORANGES & LEMONS, 61-63 Webbs Road, Battersea SW11. Tel: 020 7924 2040. Juicy fruit from London's newest, freshest hi-fi/home cinema retailer. Telephone for demonstrations or just pop in. All the usual, ie friendly and efficient service, free home installation, credit cards, 0% finance available, plus all the very best from: Arcam, Cable Talk, Chord Co, Demion, Denon Lifestyle, Epos, NAD, Naim, Neat, QED Multiroom, Quad, Rega, Roksan, Rotel, Royd, Ruark, Soundstyle, Stands Unique, Wilson Benesch, Yamaha with more to come. The innovative AudioVisual retailer. **BADA**

GREATER MANCHESTER

AUDIO COUNSEL, 14 Shaw Road, Oldham OL1 3LQ. Tel: 0161 633 2602, fax: 0161 633 2502. Arcam, Audiolab, Rega, Naim, Rotel, Royd, Marantz, Sonus Faber, Ruark, Epos, Denon, Yamaha, Bang & Olufsen. Free installation. Major credit cards and credit facilities. Open Tuesday-Saturday 10.5.30, 8pm on Thurs.

ADVENTURES IN HI-FI, 5 Bishopsgate, off Hallgate, Wigan WN1 1NL. Tel: 01942 234202. See main entry under Lancashire.

MERSEYSIDE

ACOUSTICA, 17 Hoole Rd, Chester CH2 3NH. Tel: 01244 344227. See our main entry under Cheshire.

MIDDLESEX

MUSIC MATTERS, 344 Uxbridge Road, Hatchend, Middlesex HA5 4HR. Tel: 020 8420 1925. Arcam, Audio Research, B & W, Castle, Celestion, Chord, Cyrus, Denon, Dynaudio, Jamo, KEF, Krell, Marantz, Martin Logan, Meridan, Michel, Mission, Monitor Audio, Musical Fidelity, Naim, Panasonic, Pioneer, ProAc, Project, Quad, REL, Rotel, Ruark, Sennheiser, SME, Sonus Faber, Tag McLaren, Tannoy, TEAC, Technics, Theta, Yamaha. Excellent demonstration and home trial facilities. Free installation. Customised multi-room systems. All major credit cards accepted. Full credit facilities available. Tues - Sat 10.30-5.30, Thurs 10.30-6.30. **BADA**

WEST MIDLANDS

SOUND ACADEMY, 152a High Street, Bloxwich, Nr Walsall, W Midlands. Tel: 01922 493499/ 473499. Audio equipment from leading and specialist brands, with 3 demo

floors, home trials, home cinema with instore demo theatre, evening demos by appointment. In house service dept. Mail order avail. Int. free credit subject to status. Open 6 days 9am - 6pm. Late night Friday. Expert advice, cable dressing and free installation. Also at 111 The Parade, Sutton Coldfield, Birmingham B72 1PU. Tel: 0121 321 2445. **BADA**

MUSIC MATTERS, 363 Hagley Road, Edgbaston, Birmingham B17 8DL. Tel: 0121 429 2811. Arcam, Audio Research, B & W, Castle, Celestion, Chord, Cyrus, Denon, Dynaudio, Jamo, KEF, Krell, Marantz, Martin Logan, Meridan, Michel, Mission, Monitor Audio, Musical Fidelity, Panasonic, Pioneer, ProAc, Project, Quad, REL, Rotel, Ruark, Sennheiser, SME, Sonus Faber, Tag McLaren, Tannoy, TEAC, Technics, Theta, Yamaha. Excellent demonstration and home trial facilities. Free installation. Customised multi-room systems. All major credit cards accepted. Full credit facilities available. Tues - Sat 10.30-5.30, Thurs 10.30-6.30 **BADA**

MUSIC MATTERS, Hobbs Moat Road, Solihull, W. Midlands B92 8JL. Tel: 0121 742 0254. Tues - Sat 10.30-5.30 Thurs 10.30-6.30 **BADA**

MUSIC MATTERS, 9 Market Street, Staffordbridge, W. Midlands B78 1AB. Tel: 01384 444184. Tues - Sat 10.30-5.30 Thurs 10.30-6.30 **BADA**

MUSIC MATTERS, 10 Boldmere Road, Sutton Coldfield, W. Midlands B73 5DT. Tel: 0121 354 2311. Tues - Sat 10.30-5.30 Thurs 10.30-6.30 **BADA**

ACOUSTICA, 114 Wolverhampton Road, Stafford ST17 4AH. Tel: 01785 258216. See our main entry under Cheshire.

NORFOLK

BASICALLY SOUND, The Old School, School Rd, Bracon Ash, Norwich NR14 8HG. Tel: 01508 570829. Audio Analogue, Bayer, Bryston, Cabletalk, Chord Co., Creek, Opera Speakers, Denon, Dynavector, Epos, Grado, Heybrook, Naim, Opera, ProAc, PMC, Sound Organisation, Rega, Royd, Soundstyle, Teac, etc. 2 comprehensive demo rooms. Home trial. Free installation. Visa, Mastercard, HP facilities. 0% Finance. Tues-Fri 9.30-1, 2-5.30. All day Sat. **BADA**

AUDIO IMAGES, 128 London Road North, Lowestoft NR32 1HB. Tel: 01502 582853. See main entry under Suffolk.

NOTTINGHAMSHIRE

DEFINITIVE AUDIO serves the first time buyer and the seasoned audiophile with the same high level of care and interest. Our aim is long term customer satisfaction. We achieve this with impartial advice, quality back-up service and a genuine interest in your needs. We have an established reputation for delivering sound quality benchmarks with innovation. Our range of carefully selected brands includes Art Audio, Border Patrol, Living Voice, Musical Fidelity, Wadia and many more. We have extensive part-exchanged stock. Open Mon-Fri 9.30-6.30, Sat 10.00-1.30. Visa/Mastercard /Switch/Amex. For more information call 0115 973 3222 or fax 0115 973 3666.

NOTTINGHAM HI-FI CENTRE, 120-122 Alfreton Road, Nottingham. Tel: 0115 978 6919. www.nottinghamhifi.co.uk. We are the area's leading specialists. Relax in our superb demonstration rooms and enjoy the very best in Hi-Fi, multi-room and home cinema solutions. Our outstanding customer service means a two-year parts and labour guarantee, an on-site service department and a full delivery and installation service. Home trials and free easy parking are also available. Established in 1968, we have been giving sound advice for over 30 years. Open Mon-Sat 9 - 5.30. **BADA**

OXFORDSHIRE

ASTLEY AUDIO LTD, 3 Marketplace, Wallingford OX10 0EG. Tel: 01491 839305, fax: 01491 825024. Founded 1975. Great deals on Aura, B&W, Denon, Dual, KEF, Kenwood, Marantz, Mission, Mordaunt Short, Panasonic, Pioneer, Sony, Tannoy, Technics, Yamaha. Home trial, installation and delivery service. Service dept on site. 2 yr guarantee on most products. Interest free credit on selected items. 1 home cinema room, 2 listening rooms. Mastercard, Visa, Amex, Diners. Instant credit. Tues-Fri 9-5.30, Sat 9-5. Tapes & C.Ds stocked.

OVERTURE HI-FI, 3 Church Lane, Banbury OX16 8LR. Tel: 01295 272158. Arcam, Bose, Cura, Denon, Linn Products, Mission, Naim Audio, Quad, Yamaha. For sensible unbiased advice, call Oxfordshire's audio experts. Superb demo facilities. Home cinema, multiroom & commercial installations. No appts nec, service dept, free install, home trial. Mastercard, Visa, instant credit. Mon-Fri 10-6, Sat 9.30-5.30. **BADA**

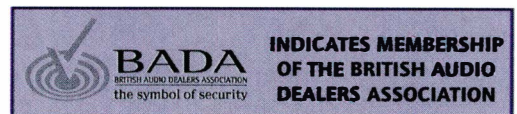
OXFORD AUDIO CONSULTANTS, Cantay Hse, Park End Street, Oxford OX1 1JE. Tel: 01865 790879, fax: 01865 791665. E-mail: oxford.audio@btinternet.com. Quad, Denon, B&W, Pink Triangle, Krell, Sonus Faber, NAD, Rotel, Musical Fidelity, Pioneer, Marantz, Copland, Teac, Audio Analogue, Castle, Yamaha, ProAc, REL. Demo room. Home trial and free installation. Instant credit, Mastercard, Amex, Visa. 10-6 Mon-Sat. **BADA**

SHROPSHIRE

CREATIVE AUDIO, 9 Dogpole, Shrewsbury SY1 1EN. Tel: 01743 236055. Email sales@creative-audio.co.uk, www.creative-audio.co.uk. One of the largest ranges of quality HiFi/Audio Visual equipment outside of London. Arcam, Ash, Atacama, Cabletalk, Celestion, Chord, Cura, Cyrus, Denon, Dual, Heybrook, KEF, Mission, Onkyo, Optimum, NAD, Naim, QED, Quad, Rega, Soundstyle, Stands Unique, Teac, Wharfedale. Large selection of bargain special purchases available on most makes. Comfortable listening room, expert installation (including multiroom and DVD home cinema), free 2 & 5 year warranties, selected used equipment, part-exchange welcome, specialist workshop facilities. Mastercard/Visa/Switch/Amex and low cost finance from £250 up to £15,000.

SOMERSET

MIKE MANNING AUDIO, 110 Middle Street, Yeovil, Somerset BA20 1NE. Tel: 01935 479361.



54 Bridge Street, Taunton. Tel: 01823 326688. www.mikemanning audio.co.uk. The HiFi and A/V specialists. The best in HiFi from: Arcam, B&W, Castle, Denon, Densen, Heybrook, JM Lab, KEF, Loewe TV & Video, Marantz, Naim Audio, NAD, Pioneer, PMC, Rega, Rotel, Royd, Shahinian, TDL, Teac. Dedicated listening lounge for relaxed and unpressured demonstrations. Home installations on most systems. Full service department. Mastercard, Visa, Instant Credit Closed Mondays

STAFFORDSHIRE

ACOUSTICA, 114 Wolverhampton Road, Stafford ST17 4AH. www.acoustica.co.uk Tel: 01785 258216. All that's best in Hi-Fi and Home Cinema from quality manufacturers including Naim, Rega, Bowers & Wilkins, Sugden, Musical Fidelity, Rotel, Primare, Teac, Harman Kardon, JM Lab, Michell, Ruark, Kef, NAD, Onkyo, SIM/Seleco Projectors, NEC Plasma & Yamaha. We offer friendly, helpful advice, interest-free credit and trade-in facilities, and deliver and install systems throughout Staffordshire and the Midlands. Opening hours Tues. - Sat. 10.30-6.00, evenings by arrangement.

SUFFOLK

ANGLIA AUDIO, The Street, Hessett, Bury St Edmunds, Suffolk IP30 9AZ. Tel: 01359 270212. Hi-Fi and speaker centre dedicated to quality hi-fi since 1971. Open 10-6. Closed Wednesdays and Sundays. Evening and Sunday demos by appointment.

AUDIO IMAGES, 128 London Road North, Lowestoft NR32 1HB. Tel: 01502 582853. The shop for real Hi-Fi separates and home cinema. Refreshingly different range as well as established manufacturers. Hi-Fi from budget to high-end, transistor & valve. A/V from £100 to a £100,000 custom install. Projection systems, DVD players and movies. Separate demo room, range of credit facilities, free fitting & the best and friendliest service available. **BADA**

EASTERN AUDIO, 41 Bramford Rd, Ipswich IP1 2LU. Tel: 01473 217217. Email: HiFi@eastern-audio.com. Giving sound advice for over 25 years. Parking. Demo room. Lots of free advice. Arcam, Meridian, Denon, Quad, NAD, B&W, Celestion, Project, KEF, Castle, Technics, Top Tape, plus all the usual and unusual leads, cables, stands, racks, headphones, cartridges & styli etc. **BADA**

STOWSOUNDS, Stone Farm, Borough Lane, Gt Finborough, Suffolk IP14 3AS. Tel: 01449 675060. Specialist Hi-Fi dealer with great products from Acoustic Solutions, Alchemist, Atacama, Audioquest, Beyer, Cable Talk, DPA, Electrocompaniet, Exposure, Grado, JM Labs, Kimber, Magnat, Neat, Nordost, QED, SonicLink, Sonneteer, Sound Organisation, Soundstyle, Stands Unique, Van den Hul, other makes and used equipment available, call us for more details.

SURREY

COSMIC HI-FI SUPERSTORE, Est 1962, 244-256 Station Road, Addlestone, Weybridge, Surrey KT15 2PS. Tel: 01932 854522/

832400/851753, fax 01932 832432. Open 7 Days a week, Mon-Sat 9-6pm, Fri till 8pm, Sun 10-4pm. Large free car park, fully equipped service department, massive showroom. Arcam, Audio Quest, Cable Talk, Denon, Dual, Elac, Jamo, Kenwood, Marantz, Mission, NAD, Nakamichi, Pioneer, Quad, Sennheiser, Sony, Tannoy, Target, Technics, Thorens, Wharfedale, Yamaha home cinema, widescreen TV, projection TV, Laserdisc. Int. free credit. All major credit cards.

INFIDELITY, 9 High Street, Hampton Wick, Kingston Upon Thames, Surrey. Tel: 020 8943 3530. Arcam, Densen, B&W Nautilus, Musical Technology, Meridian, Linn, Naim Audio, Neat Acoustics, Royd, Rega Research, Rotel, Shahinian, Proceed & more. Single speaker listening room. Apts pref, free installation, service dept. Major credit cards. Closed Mon, Tues-Fri 10.30-7. Sat 10-6. **BADA**

PJ HI-FI, 3 Bridge Street, Guildford GU1 4RY. Tel: 01483 504801/ 304756. Mon-Sat 9am-6pm. Arcam, B&W, Denon, Linn, Meridian, Mission/Cyrus, Kef, Marantz, NAD, Pioneer, Primare, Proac, Quad, REL, Rega, Rotel, Tag McLaren, Yamaha. Demo rooms for Hi-Fi/home cinema, parking, delivery & installation. Service department on premises. Call now. **BADA**

SUSSEX (EAST)

THE POWERPLANT, 40 Church Rd., Hove, East Sussex, BN3 2FN. Fax: 01273 748419. E-mail email@powerplant.co.uk. Whatever your budget we can help you choose from our carefully selected range of today's finest hi-fi and home cinema equipment. Recommended agencies include Arcam, ATC, B&W, B&O, Cyrus, DEF Tech, Imerge, Linn, Living Control, M&K, PMC, ProAc, QED Systemline, Rega, Revel, Seleco, Stewart, Tag McLaren Audio, Yamaha. Excellent demonstration facilities, knowledgeable and friendly staff. Multiroom specialist, CEDIA member. Open Tues - Sat 10.30 am- 5.30 pm. Late evenings by appointment. All major credit cards. Full credit facilities. **BADA**

SUSSEX (WEST)

AUDIO DESIGNS, 26 High Street, East Grinstead, West Sussex RH19 3AS. Tel: 01342 328065. www.audiodesigns.co.uk. Hi-Fi, home cinema & multiroom specialists. Authorised stockists of: Arcam (inc. FMJ, DIVA & Alpha), ASH, The Chord Company, Cyrus, KEF (inc. Reference), Linn (inc. CD12 & Klimax), Loewe (inc. Spherros), Marantz, Mission, Naim (inc. CDS & NAP500), Pioneer, PMC, Primaire, ProAc, Project, QED, Quadraspire, Rel, Rotel, Ruark, SIM2 (inc. DLP), Sennheiser, Soundstyle, Stands Unique, Tag McLaren, TEAC, Thorens & more. Probably the largest demonstration stock in the South, with three dedicated demonstration rooms together with a friendly team of staff and service facility. Finance available. 9.30-6 Mon-Sat. **BADA**

BOWERS & WILKINS LTD, (Est 1945), Littlehampton Road, Worthing, (near Thomas a Becket). Tel: 01903 264141. E-mail: sales@bowersandwilkins.co.uk. Web site: www.bowersandwilkins.co.uk. 1 minute from A24 & A27. Free local parking. Acoustic Energy, B&W, Denon, JBL, Marantz, NAD, Optimum,

Philips, Tannoy, Teac, Technics, and many more in 4 demo rooms. Systems, Hi-Fi and home cinema, DVD and projection TV. Service dept, installations. Open 6 days a week. Mastercard, Visa, instant credit to £1,000 subject to status.

TYNE AND WEAR

GLOBAL HI-FI CENTRE. HI-FI & HOME THEATRE SPECIALISTS. 87 CLAYTON STREET, NEWCASTLE NE1 5PY. TELEPHONE : 0191 230 3600 FAX: 0191 222 0286 EMAIL: INFO@GLOBALHIFICENTRE.COM WWW.GLOBALHIFICENTRE.COM. GLOBAL HI-FI CENTRE FOR THE PERFECT SOLUTION IN HI-FI, HOME THEATRE, HOME AUTOMATION & LIGHTING CONTROL SYSTEMS, THREE SUPERB STATE-OF-THE-ART DEMONSTRATION ROOMS. AUTHORISED DEALER FOR ALL MAJOR MANUFACTURERS, INCLUDING ALL THE LATEST THX SURROUND SYSTEMS. GLOBAL HI-FI CENTRE BRINGING SOUND AND VISION HOME. **CEDIA**

WILTSHIRE

SALISBURY HI-FI, 15 Catherine Street, Salisbury. Tel: 01722 322169/330841. www.movement-audio.co.uk. Arcam, Audio Analogue, B&W, Celestion, Chord Company, Denon, Harmon Kardon, KEF, Marantz, Meridian (inc. Digital theatre), Mission, Michell, Musical Fidelity, NAD, Nordost, Opera, Project, QED, Rotel, REL, Teac, Yamaha. Home Cinema and Hi-Fi specialists, multi room and commercial installation specialists, service dept. on site, high quality used equipment, projection TV and plasma. 2 demo rooms, credit facilities, Visa/Mastercard. Open Mon-Sat 9.30-5.30 **BADA**

YORKSHIRE (EAST)

THE AUDIO ROOM, 2 George Street, Hedon, Hull, HU12 8JH. Tel 01482 891375 or email hifi@audiroom.karoo.co.uk. The North East's premier dealer. We have three stunning showrooms together with a dedicated listening room and are authorised agents for Linn Products, Naim Audio, Cyrus, Sugden, Rega, Rotel, Denon, B&W, Spendor, PMC, Audiophile Base, Quadraspire, Stands Unique, The Chord Company, QED, Townsend, Black Rhodium, Ortofon, Dynavector, Loewe television. Open Mon-Sat, 9am-7pm (later if required). Credit facilities and home demonstrations available. Free and easy car parking as well as a relaxed and comfortable environment assured. The North East's friendliest hi-fi dealer.

ZEN AUDIO, 35 George St, Hull HU1 3BA. Tel: 01482 587397. Hull's best Hi-Fi store! From entry-level systems to high-end exotica. Friendly service, impartial advice, home demonstrations, free installations, car parking, and the best range of quality products including...Audio Analogue, Acoustic Energy, Audio Note, Audion, Densen, Denon, Dynaudio, EAR, Graff, NAD, Naim Audio, Musical Fidelity, Musical Technology, Michell, Pioneer, Pro-Ac, Rega, REL, Ruark, Sugden, Teac, Unison Research, Yamaha and many others. Open Mon-Sat. Instant credit facilities available. Feel free to call for more

YORKSHIRE (SOUTH)

DONCASTER

THE HI-FI STUDIOS, The Long Barn, Wakefield Road, Hampole, Doncaster DN6 7EU. Tel: 01302 727274/ 725550, fax: 01302 727274. Email: info@thehifistudios.freeserve.co.uk. Hi-Fi, home cinema and multi-room experts. Musical Fidelity, Tag McLaren, Electrocompaniet, ProAc, Ruark, Castle, Teac, Unison Research, John Shearpe, Impulse Horns, Monitor Audio, Harbeth, Alchemist, NAD, Michell Turntables, Nottingham Analogue Studios, Audio Analogue, Living Voice, Exposure, Densen, Lynwood Electronics, Celestion (A Series only), Opera, Trichord Research, Nordost, Stands Unique, Stax Electrostatics, Ortofon, Project, Goldring, REL Subwoofers, Yamaha A/V, Proceed Digital Cinema, Tag McLaren & Denon Home Cinema products, plus others. Viewing and demonstration by appointment. Home trials and free installation on hi-fi equipment. Mastercard, Credit card and finance facilities. Phone for more information. 10am-6.30pm Tues-Fri, 10am-5pm Sat. Closed Sunday & Monday. **BADA**

SCOTLAND

LOUD & CLEAR, now in Glasgow and Edinburgh, find out more at www.loud-clear.co.uk. Scotland's finest and friendliest Hi-Fi stores, combining knowledgeable advice with specially selected products and exceptional customer service. Comfortable hi-fi and home cinema demonstration rooms, dedicated multi-room and home cinema installation team, full service and repair facilities. Naim Audio, DNM, Crimson, Primare, Musical Fidelity, Tag McLaren, Rega, NAD, Marantz, Denon, ProAc, Kef Reference, Living Voice, Ruark, Dali, Monitor Audio, Tannoy, JM Labs, VDH, Nordost, Chord Co, Ash Design, Optimum, Quadraspire, etc, etc. Open Tues-Sat 10am-6pm. Thurs till 7pm. 520 St Vincent St, Finnieston, Glasgow. Tel: 0141 221 0221 and 26 Hamilton Place, Stockbridge, Edinburgh. Tel: 0131 226 6500.

DUNDEE

SOUNDS PERFECT. Hi-Fi at it's best. 26 St. Andrews Street, Dundee. Tel: 01382 266592, fax: 01382 229994, E-mail: sales@sounds-perfect.co.uk. Exceptional quality and professional service at Dundee's premier Hi-Fi store. Open 6 days a week. 10 - 7 Mon - Thurs, 10 - 6 Fri & Sat. Demonstrations are available outside of these hours by appointment. Main dealers for Arcam, Rotel, Marantz, Technics, Roksan, Sony, Musical Fidelity, Tannoy, Mission & B&W.

WALES

NORTH WALES

ACOUSTICA, 17 Hoole Rd, Chester CH2 3NH. Tel: 01244 344227. See our main entry under Cheshire.

ACTION GATE AUDIO, 4 Ruabon Rd, Wrexham. Tel: 01978 364500. Demonstration room, installation service. Easy parking and motorway access. Mastercard, Visa etc. See main entry under Cheshire.



INDICATES MEMBERSHIP OF THE BRITISH AUDIO DEALERS ASSOCIATION

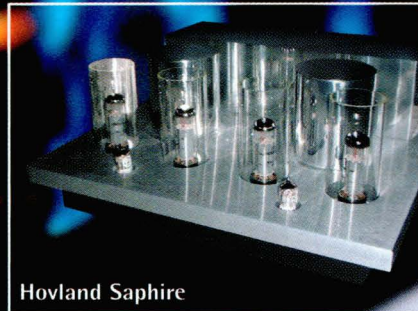
Hovland

The Music Makers

5th
PRODUCT
YEAR



Hovland HP 100



Hovland Sapphire

Metropolis Music

6 London Road, Tunbridge Wells,
Kent TN2 1DQ

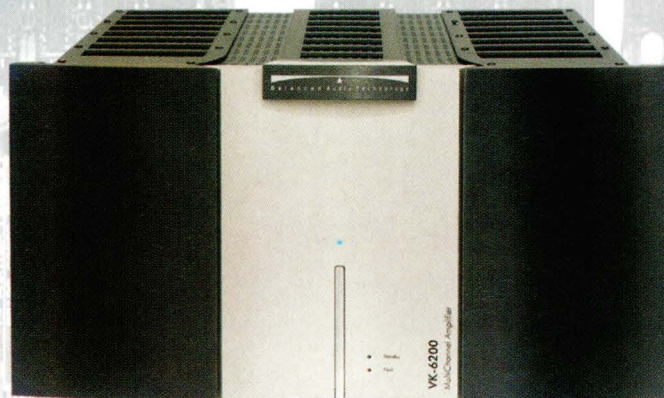
Tel: 01892 539245

Fax: 01892 616383

www.Metropolis-music.co.uk

BALANCED AUDIO TECHNOLOGY

The VK6200, 1, 2, 3, 4, 5 or 6 Channel Amplifier



THE MOST VERSATILE AMPLIFIER EVER

Price for price it is also one of the best sounding two channel amplifiers we have ever heard or buy it in four channel more and bi-amp from one chassis. Call for your nearest dealer

Metropolis Music

Tel: 01892 539245 • Fax: 01892 616383

Advantage • Acoustic Zen • B.A.T. • Boulder • Burmester • Copulare • Hovland • Kharma • Lumley • Pass
Labs • S.A.T. • Sound Lab • Wisdom • Eggleston Works • VTL

**A Product
That Does Absolutely
Nothing - Except
Let The Music
Come Through**

Boulder



METROPOLIS
music

Tunbridge Wells, Kent Tel: 01892 539245 • Fax: 01892 616383

Lumley

LAMPROS

*Designed for the purist,
the music lover and the rest
of the family*

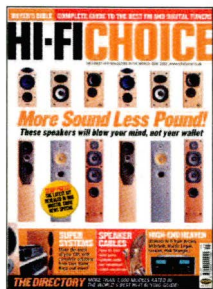
Any colour
and any wood finish



Distributed by: Metropolis Music, 6 London Road, Tunbridge Wells, Kent, TN1 1DQ
Tel: 01892 539245 Fax: 01892 616383

Distributors for Boulder, Passlabs, B.A.T. Advantage, Hovland, Burmester, SAT, VTL, Sound Lab, Kharma, Meadowlark, Copulare, Acoustic Zen

BACK ISSUES



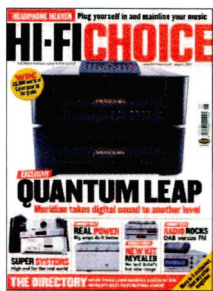
- MAY 2002/ISSUE 227
- Bench test: speakers £300-£600
 - Group test: CD separates systems
 - Round-up: speaker cables
 - Buyer's Bible: FM and digital tuners



- JUNE 2002/ISSUE 228
- Group: DVD-A, V and SACD players
 - Group: stereo amps £800-£2,400
 - Wadia's latest CD player
 - Buyer's Bible: turntables



- JULY 2002/ISSUE 229
- Group test: speakers £1,000-£2,000
 - Group test: multichannel receivers
 - System Solutions feature
 - Marantz DV-1251 DVD-Audio player



- AUGUST 2002/ISSUE 230
- Group test: radio tuners
 - Group test: high-power amplifiers
 - High end, real-world systems pt1
 - Meridian DVD-A/V processor



- SUMMER 2002/ISSUE 231
- Hi-fi that rocked the world feature
 - Group Test: CD players £300-£800
 - Group Test: speakers £500-£1,000
 - Musical Fidelity A308 pre/power



- SEPTEMBER 2002/ISSUE 232
- Group Test: Stereo amps £200-£450
 - Group Test: Multichannel speakers
 - High end, real-world systems pt2
 - B&W Signature 805 loudspeaker

TO ORDER YOUR BACK ISSUES

YOUR DETAILS

Name _____
 Address _____

 _____ Postcode _____
 E-mail address _____
 Card Number _____
 Expiry Date _____
 Signed _____

UK READERS
 Future Publishing Ltd,
 freepost BS4 900, Somerton,
 Somerset TA11 6BR

OVERSEAS READERS
 Future Publishing Ltd,
 freepost BS4 900, Somerton,
 Somerset TA11 6BR, 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)

- CHEQUE
 MASTERCARD
 SWITCH
 VISA
 POSTAL ORDER

HOW MUCH WILL IT COST?

UK £4 (per issue), Overseas £6.95 (per issue)

BACK ISSUES

Back issues from 1999 onwards are available by mail order. They cost £4.00 (UK) or £6.95 (overseas). Both prices include p&p. Order by phone on (01458) 271147 or e-mail: entertainment.subs@futurenet.co.uk. We accept Mastercard and Visa credit, or Switch debit cards. Or send a cheque or PO made out to Future Publishing using the form on the right.

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. Send a written request, enclosing a cheque for £5 made payable to Future Publishing Ltd, to: Hi-Fi Choice Reprint Service, Future Publishing Ltd, 99 Baker Street, London W1U 6FP.

PLEASE NOTE: THIS SERVICE IS ONLY FOR OTHERWISE UNOBTAINABLE REVIEWS.

NEXT MONTH...

WELL CONNECTED

Interconnect cables can make or break a system – they all pass signal but good ones do it so much better than freebies that you'll wonder how you got by without them. We've got a stack of analogue and digital alternatives to test 'til it hurts.

STATEMENTS

Wilson Benesch's new

Chimera speaker offers isobarik loading in a very saucy package.

Why Townshend's supertweeters are crucial even if you're not a bat.

Michell's DC motor upgraded Orbe SE turntable and Lumley Lavros speakers. Plus hot high-end products from Krell and Parasound.

NEXT GENERATION DISC PLAYERS

The latest new format machines joust it out in the high-resolution audio stakes. We've rounded up the best SACD and DVD-Audio players that **Toshiba, Sony, Denon, Philips** and **Pioneer** can muster. There'll be tears but only the best can win.

BUDGET PLUS SPEAKERS

Ready for your next step up the high fidelity ladder? We've gathered a select group of speakers priced between £200 and £400 for your delectation. Exhaustively tested are the latest models from **KEF, Acoustic Energy, B&W** and **Tannoy**.

PLUS

A remarkably diverse range of high quality kit tested including **Sonneteer's** digital amp, a fine collection of phono stages for vinyl fetishists and much more.

AND ALSO

The future of hi-fi revealed in our special hot tech feature!

HFC234 on sale 1 October



Lovely Lumley Lavros

Quantum tweaks

David Vivian discovers the lunatics really have taken over the asylum – but they can help you with your hi-fi.

Which sounds the more implausible? One, our lives almost certainly exist inside a computer simulation developed by a post-human society in what we think of as the future. Or two, you can live a more contented life (and make your hi-fi sound better) if you place two photos of yourself – one taken recently and one as a child – in individual clear plastic bags and pop them in your freezer.

OK, 'one' sounds like the plot synopsis of *The Matrix*. And 'two' sounds like I made it up. But stick with it, this is serious. If you were thumbing through *New Scientist* a couple of months ago, you may have seen an article on the research of Nick Bostrom, a philosopher at Yale University, in which he provides the calculations to postulate that *The Matrix* has got it just about right (except the bit about us being farmed as human Duracells which he thinks is ridiculous).

VIRTUAL INSANITY

Bostrom's premise is this. Assuming, for a moment, that we might just be living in the 'real', pre-simulation world, it's probably inevitable that computers will one day be powerful enough to simulate consciousness. If so, there can logically be only three possible futures. One, we blow ourselves up or get wiped out by an asteroid – in which case relax, this is the real world.

Two, the post-human race becomes so wise and chilled it can't be arsed with sims of its evolutionary history and spends all its time listening to hi-fi. Ditto, it's all real. But if our obsession with computers continues – and, I agree, this seems most likely – then one day we'll simulate consciousness, then go on to create universes for it to live in. You ready for this? If true, our children's children's... (continue for several minutes) have already done so, and we're living in one. Bugger.



“Excessively low temperatures cause the energy patterns to relax, thereby improving your perception of sound.”

WEIRD SCIENCE

Hi-fi wise, this could explain much. Not least the increasingly weird behaviour of Peter Belt, infamous godfather of bizarre and inexplicable hi-fi tweaks and originator of the 'temporal symmetry restoration' technique outlined at the top of the page. Photographs of yourself introduce an asymmetrical pattern on your being, but you can counteract this effect by placing your first ever photograph with a recent one in the deep freeze, where the excessively low temperatures cause the energy patterns to relax, thereby improving your perception of sound along with your general sense of well being. Or something. I reckon Peter has worked it all out and is playing the game.

So who's to say who's barking and who's on the inside track? Commenting on Bostrom's paper, American economist Robin Hanson

said: "If your life is just a computer simulation, you need to do everything possible to make sure you're not deleted", urging that, at all costs (especially if it's an entertainment sim) you need to stay part of the fun. To be safe you should be funny, outrageous, violent, sexy, strange, pathetic and heroic – preferably all at once.

Hi-fi could be the ideal conduit. After all, it can plug you into the whole range of emotions, there is nothing funnier than the sight of someone playing air guitar and putting photographs of yourself in your deep freeze is at best strange, at worst pathetic. Don't feel embarrassed about any of it, though. Your life could depend on it.

You can read Nick Bostrom's research paper at www.simulation-argument.com and the ideas of Peter Belt at www.belt.demon.co.uk. ☐



The Confidence C2 is more than a consequent improvement of the legendary Dynaudio driver technology. The C2 is more than the innovative new Esotar² tweeter. The Confidence series is in itself a wholly revolutionary concept. A unique Dynaudio concept embodying a refined design comprised of a functional background. Uncompromised construction was formed from clear-cut aesthetics to deliver state-of-the-art sonic performance, offering visual beauty and audible perfection. Acoustical expertise. The Confidence C2 by Dynaudio.



ACOUSTICAL EXPERTISE. CONFIDENCE C2.

evolution

Darwin proved right!

Darwin's widely-accepted Theory of Evolution describes how progressive changes benefit a species. The worldwide critical acclaim enjoyed by Cyrus for nearly 20 years substantiates this theory. As we strive to mould the future, each new model builds on the success of the last. Today, as we launch our latest AV developments, the AV8 and DVD7+ we are confident that our new digital, multi-channel pre-amp and DVD player substantially outperform their peers and reinforce Cyrus' position, leading audio on into new realms of possibility.



CYRUS
Advanced Audio and Video Systems

Cyrus Electronics
Huntingdon, Cambridgeshire, PE29 6XY

Tel: +44 (0)1480 435577
Fax: +44 (0)1480 437715
email: info@cyrusaudio.com

www.cyrusaudio.com