

# HI-FI CHOICE

PASSION FOR SOUND JANUARY 2008 £3.99 WWW.HIFICHOICE.CO.UK



## ROYAL WYNDSOR

CREEK'S FIRST-EVER DECK JOINS VINYL'S NOBILITY



**BETTER HI-FI NOW!**

INSIDE: BECOME A SET-UP EXPERT

**IN-DEPTH TESTS INSIDE!**



**UNISON RESEARCH** Italian style and 70 watts of great glass power



**EMM LABS** Why it's one of our favourite disc players of the year



**CAIRN** High value hi-fi: clever CD player and digital preamp in one

**ULTIMATE GROUP TEST SPEAKERS**

Amphion Prio 520 • Ascendo Monitor C5 • Dali Mentor 5 • Monopulse 42A • Neat Momentum 3i • Triangle Genese Quartet



**BUYER'S BIBLE**

The ultimate hi-fi buyer's guide: all of our favourite gear in one great directory



JANUARY 2008 £3.99 0 1 >

9 770955 111090

# marantz®

## PREMIUM

S E R I E S



because music matters

FOR STOCKISTS PLEASE CALL 01753 680868

[www.marantz.com](http://www.marantz.com)

Welcome to the issue...

## HI-FI CHOICE JANUARY 2008 ISSUE 302

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



If ever there was a hi-fi month it's this one: December. It's something to do with the cold days, dark nights and warming glow of valves. Two to try this month include the stunningly beautiful Unison Research P70 (see p42) and for smaller budgets, newcomer Mystere, whose entry-level amp appears on p52.

Speaking of analogue, we have the world's first review of Creek's debut turntable, the Wyndsor, which flies the flag for Blighty this month, in what is a truly international hi-fi line-up.

Elsewhere, HFC's own Paul Messenger makes some very salient points about choosing and buying loudspeakers in our *Ultimate Group Test* this month (p62). The six speakers in our comparative test vary wildly, from compact two-way standmounts to towering three-way floorstanders, each with very different sonic characters, as you might expect. He goes on to suggest that although useful, a dealer's dem-room is no substitute for a home demo, which is spot-on.

Considering the amount of time and energy we audiophiles put in to fine-tuning our systems to perfection, the single most influential item in the reproduction chain, the loudspeaker, is often bought with a minimum of auditioning. So, if you are thinking of buying some new speakers, it's well worth investing the time in finding a dealer who'll allow a home demo – it will pay dividends.

That's it from me, if I don't see you in a dem-room somewhere, have a great Christmas and New Year and we'll see you again in 2008, with a cracking line-up of kit, features and comment.

Dan

Dan George Editor



SUBSCRIBE TO HI-FI CHOICE... THIS MONTH AND YOU'LL RECEIVE A FREE BLIK DAB DIGITAL RADIO CALL 0844 848 2852 OR TURN TO P80 NOW

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

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

The Essential Guide To Audio Excellence In The Home

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

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

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

Wooden it be nice?

Annotated shots show you what's really going on inside

Interviews with designers give you extra background information

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

### THIS ISSUE'S EXPERT WRITERS AND REVIEWERS INCLUDE...



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



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



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



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



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



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



**JASON KENNEDY**  
Jason previously edited *HFC*, but can now be found in the wilds of Sussex indulging himself with the very best hi-fi money can buy. His own system is simply sensational and his love of music knows no bounds.



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

To ensure you get the best information, opinion and advice, *Hi-Fi Choice* employs the most knowledgeable and experienced hi-fi writers in the business.



42



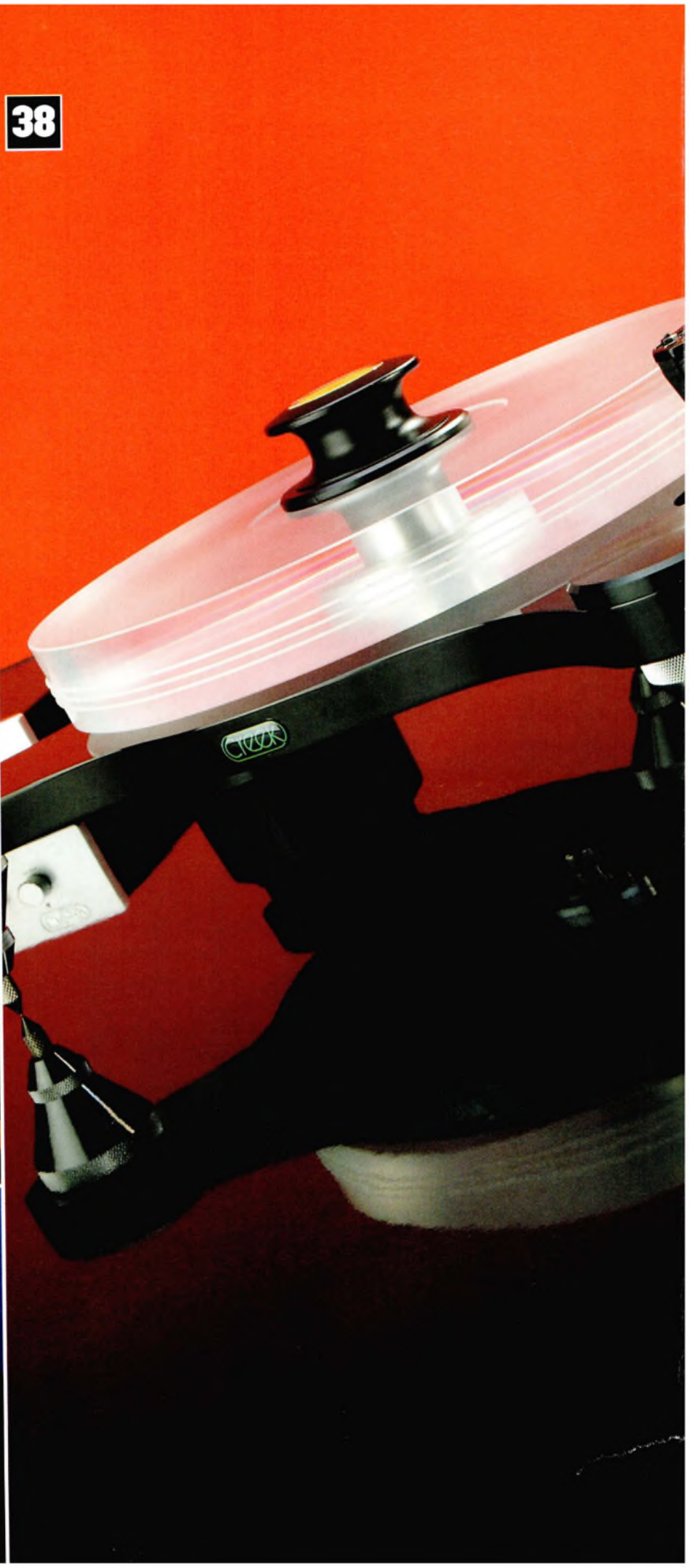
48



52



55



38

# Contents

## NEWS AND FEATURES

### 7 PRODUCT NEWS

The juiciest new fruit from the hi-fi tree

### 12 HAPPENINGS

Hot stories from the latest hi-fi shows

### 14 DISPATCHES

The hi-fi commentators with clout

### 20 INDUSTRY PROFILE

Alan Shaw of Harbeth speaks out

### 25 COMPETITION

Win Opera speakers worth £1,250

### 26 CHOICE CUTS

New music – rated by our experts

### 29 CHOICE MAIL

A selection of your letters and emails

### 32 UNDERSTANDING... ISOLATION

Equipment supports explained

## EQUIPMENT REVIEWS

### IN-DEPTH PRODUCT TESTS

38 Creek Wyndor turntable

42 Unison Research P70 integrated valve amplifier

46 EMM Labs CDSA SACD/CD player

48 Wharfedale Opus2-MI loudspeaker

52 Mystère ia11 integrated valve amplifier

55 Sennheiser PXC450 noise-cancelling headphones

56 Cairn Fog 3 CD player with built-in digital preamplifier

59 Crystal Cable CrystalSpeak Piccolo loudspeaker cable/CrystalPower Piccolo mains cable

## ROUND-UP

### EQUIPMENT SUPPORTS £130-£900

60 Audiophile Base Standard

60 Custom Design Milan

61 Partington Minim

61 Russ Andrews Torlyte Platform

## ULTIMATE GROUP TEST

### LOUDSPEAKERS £1,500-£1,900

65 Amphion Prio 520

67 Ascendo Monitor C5

69 DALI Mentor 5

71 Monopulse 42A

73 Neat Momentum 3i

75 Triangle Genese Quartet

## BUYER'S BIBLE

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

### SOURCE COMPONENTS

86 CD players

88 DVD players

90 Vinyl

93 Radio tuners

95 Digital recorders

### AMPLIFIERS

98 Stereo amps

100 AV amps

### LOUDSPEAKERS

108 Stereo speakers

112 AV speaker packages

### ANCILLARIES

115 Headphones

117 Cables

119 Stands and supports

## PRE-LOVED GEMS

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

126 2nd-hand shootout – this issue, the best CD players for £1,500

129 Readers classifieds

## READER SERVICES

Our regular information service, including our official accessories store and latest subscription offer

78 Choice Bits accessories shop

80 How to subscribe

82 Back issues

114- What's coming up in next month's *Hi-Fi Choice*

120 Dealer Guide

127 Dealer Directory

# “The finest speaker on the planet”

– Ken Kessler, *Hi-Fi News*

## ESL Electrostatic Loudspeakers

A single ‘point-source’ driver, so incredibly linear and cohesive that nothing can prepare you for the revelation that will unfold. No colouration, no distortion, no artefacts – just brilliant, natural, breathtaking detail and realism.

“I know of no other speaker I’d rather own, regardless of price”

– Sam Tellig, *Stereophile magazine*

“One of hi-fi’s true classics redefined: this is the best Quad electrostatic design ever, and a truly world-class speaker”

– *What Hi-Fi Sound and Vision*

“By the highest standards, the 2905s get everything right to a degree that had me shaking my head in awe”

– Noel Keywood, *Hi-Fi World*



# QUAD

*the closest approach to the original sound.*

Quad Electroacoustics Ltd., IAG House, Sovereign Court, Huntingdon PE29 6XU, Tel 0845 4580011, [www.quad-hifi.co.uk](http://www.quad-hifi.co.uk)

## MARTINLOGAN SOURCE ELECTROSTATIC LOUDSPEAKER

▶ MartinLogan, the American high-end hybrid electrostatic panel expert, has always been an aspirational brand with prices to match. But, with the new £1,600 Source loudspeaker, the aspirational sound and high-end appeal are still in full effect, but with a ground breaking price tag.

Designed to work with real world amps up to 200 watts per channel, the Source is the company's new entry-level loudspeaker, featuring a tall, curved electrostatic panel married to a 200mm bass driver. The thin Mylar panel covers all frequencies right down to a claimed 470Hz, where the bass driver

takes over. This gives what many think to be the ideal combination of electrostatic loudspeaker midrange and treble openness with conventional driver power and depth.

*To find out more, see our exclusive in-depth review in the next issue of Hi-Fi Choice*

**PRODUCT** MartinLogan Source

**TYPE** Hybrid electrostatic floorstanding loudspeaker

**PRICE** £1,599

**KEY FEATURES** Electrostatic panel midrange and treble • 200mm bass driver • Sensitivity: 90dB • Impedance: 5 ohms

**CONTACT** ☎ 020 8971 3909  
🌐 www.martinlogan.com

# IsoTek®

IsoTek's new Mira mains filter for TV and home cinema costs just **£150**



## Unrivalled protection, performance & peace of mind

Your hi-fi and home cinema is under constant threat from dirty electricity which is full of noise, interference, and dangerous power surges. IsoTek's new Mira not only cleans the power supply, improving picture and sound quality, but also offers unrivalled protection. Unique surge protection circuits and a 'triple resonant system'® stop 'in-rush' currents, which not only damage but reduce a component's life.

### Mira mains filter for TV and home cinema

Improved picture quality and an extended product lifespan are two of the key benefits delivered by IsoTek's amazing new Mira mains filter. Whether it is used in a full-blown home cinema system or as a simple upgrade for an LCD or plasma TV. Mira's advanced circuitry delivers immediate and significant improvements to the on-screen performance – crisper and more stable images, deeper blacks and more vibrant, natural colours. And it doesn't just work with LCD and plasma screens – it brings the same improvements to video projectors and traditional CRT televisions too. Picture quality isn't the only thing that Mira improves. Plug in a DVD player or set-top box, and sound is brought into focus, improving definition and detail. This isn't surprising as IsoTek's track record is second to none for designing and manufacturing world-class audio power management systems.



### How it Works

The IsoTek Mira is simple to use – first, plug the power cable from your TV or projector into the appropriate socket on the Mira, instead of into the wall socket. Next, if you have a DVD player or set-top box, plug that into MIRA's second socket. If you're using a roof aerial or satellite dish, plug that in too. Finally, plug the Mira into a wall socket using a suitable mains cable... and you're ready to roll!

### Key features:

- Improves picture quality and extends the life of all televisions (LCD, plasma or CRT) and projectors.
- 22,500A of instantaneous current absorption; essential for removing high-voltage spikes.
- Massive surge protection (700 Joules – five times greater than that achieved by typical devices)
- Eliminates mains noise including RFI and EMI which degrade sound and picture quality.

### More about IsoTek

IsoTek is a UK-based company that specialises in power management systems for hi-fi and home cinema applications. Formed in 2001, the company has rapidly become a world leader in mains conditioning and filtration, developing a wide range of innovative, award-winning products that form complete solutions to suit every pocket. Thanks to IsoTek's painstaking attention to detail, its products significantly improve sound and picture quality, while offering protection from spikes and surges.

## Activ Distribution

Tel: 01635 291357 • Fax: 01635 291356

E-Mail: [isotek@activdistribution.com](mailto:isotek@activdistribution.com) • [www.activdistribution.com](http://www.activdistribution.com) • [www.isoteksystems.com](http://www.isoteksystems.com)



## AYON SPIRIT INTEGRATED VALVE AMPLIFIER

▶ Ayon Audio might be a new name to UK audiophiles, but the Austrian company has a vast line-up of valve-based electronics and loudspeakers to match.

The Spirit is Ayon's entry-level integrated amplifier, it features the popular KT88 power output tube, user-switchable between 30-watt triode and 50-watt push-pull pentode operation. A zero-feedback, Class A design, the Spirit features a high degree of audiophile-friendly components. It also sports a warm-up timer to help extend the life of the valves. The four input amplifier is also fully remote controllable.

As Ayon is serious enough to design and build its own custom power valves for its flagship amplifiers, we expect something really special from the Spirit.

*To find out more, see our exclusive in-depth review in the next issue of Hi-Fi Choice*

<b>PRODUCT</b> Ayon Spirit
<b>TYPE</b> Integrated stereo valve amplifier
<b>PRICE</b> £1,745
<b>KEY FEATURES</b> Single-ended, dual-mono design ▶ 50 watts per channel ▶ Four line inputs ▶ Potentiometer volume control ▶ Remote control
<b>CONTACT</b> ▶ 01435 867438 ▶ www.ayonaudio.com



## NEW PRODUCT HIGHLIGHTS



### CYRUS CD8 SE

The new Servo Evolution CD transport mechanism from Cyrus comes with bold claims. It's said to deliver a radical advance in measurable and perceived definition, as well as up to five times fewer data errors and lower system-induced noise when compared to other systems currently available. It also gives Cyrus freedom from reliance upon OEM CD and DVD transports. The first products to feature the slot-loading CD-Servo system include the £700 CD6 SE, the £850 CDxt SE and the range-topping £1,000 CD8 SE. This top-end integrated player features dual mono DACs and multiple power supplies, alongside the revolutionary new Servo Evolution disc spinner technology.

**Price** £1,000 **Due** now ☎ 01480 410900 # www.cyrusaudio.com

### SENNHEISER PXC 350

Hot on the heels of the top PXC 450 noise-cancelling headphones (tested on p55) come the stealth black PXC 350 headphones. A slightly stripped down variation on the NoiseGuard 2.0 passive and active noise cancelling system used in the top cans, the PXC 350 still manages to eliminate 85 per cent of ambient noise and retains the fold-flat swivel headband. The PXC 350 eliminates the silver details and the TalkThrough function, but comes in its own travel case and includes jacks for conventional personal audio and two-jack in-flight use.

**Price** £230

**Due** now

☎ 01494 551 551

# www.sennheiser.co.uk

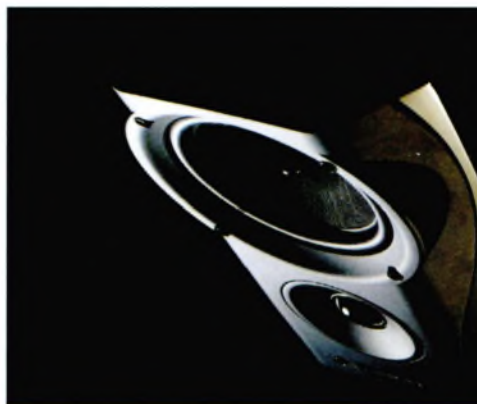


### MISSION 79 SERIES

Mission's 79 Series is a seven-strong speaker range that fits snugly between the company's popular M-Series speaker systems and the high-end Pilastro project. The range consists of two reflex-ported two-way bookshelf speakers (the 790 and 792), two three-way, reflex-ported floorstanding loudspeakers (the 794 and 796, both featuring side-firing bass drivers), a sealed two-way 79c centre channel speaker and matching 79ds dipole surround speaker, plus an active subwoofer. The range bristles with high-tech innovations in cabinet and driver, including a 'Parawave' bass cone drive unit with a phase plug finished in iridium, cast aluminium driver chassis legs and a multi-layer cabinet construction. Final prices are to be confirmed, but expect a review in *Hi-Fi Choice* soon.

**Price** from £300 to £1,000 **Due** January

☎ 0845 4581122 # www.mission.co.uk



### KEF XQ SERIES

Comprising two two-way reflex standmounts, two three-way floorstanders and a three-way sealed-box centre channel speaker, KEF's new XQ Series is aimed squarely at audiophiles. Standing neatly between the Q and the Reference Series, the four new and improved XQ models all feature a unique 'tangerine waveguide' in the acoustic centre of the titanium finished Uni-Q driver array. This now features greater frequency extension than previous models, obviating the need for a 'hypertweeter'. Other changes include an improved crossover, WBT connectors and new, luxury high-gloss wood veneer finishes.

**Price** from £700 (XQ10) to £2,000 (XQ40) **Due** now

☎ 01622 672261 # www.kef.com



## ARCAM SOLO MOVIE 2.1

What do you get when you mix Arcam's popular Solo Music and Solo Movie 5.1 systems together? Arcam's Solo Movie 2.1, that's what! The new 2.1 channel DVD/SACD/DVD-A/CD playing integrated system is designed for those who want good music and movie performance, but cannot (or will not) support a multichannel speaker approach. The amp section uses no pseudo surround processing and delivers 50 watts per channel, while on the video side, the Solo Movie 2.1 sports a 720p/1080i video scaler and 1080p HDMI switching (with a two into one switcher, so you can use a Sky HD or Xbox 360 alongside the Solo Movie). Solo Movie 2.1 also has an iPod dock input, or you can add extra control if you use Arcam's rLead or rDock. You can even use the Solo Movie 2.1 as the ultimate alarm clock, particularly if you have to go downstairs to turn it off!

**Price** £1,450

**Due** now

☎ 01223 203200

🌐 www.arcam.co.uk



## WILSON BENESCH TRINITY

When is a standmount not a standmount? When it's a Trinity.

The two-way-plus-supertweeter Trinity loudspeaker comes with the crossover built into the integral stand to eliminate any possibility of internal resonance undermining the performance of the network. As ever with Wilson Benesch, both cabinet and drivers use unconventional materials, such as its near-indestructible Poly Alloy Carbon Technology, 170mm W.B. One mid/bass drive unit, coupled with a 25mm silk dome tweeter and a gold-plated 'Sphere' supertweeter. The baffle and bracing arrangement is said to give the Trinity point source performance and the loudspeaker is the perfect foil for the Torus bass speaker tested in HFC 290.

**Price** £4,500 **Due** now

☎ 01142 852656

🌐 www.wilson-benesch.com



## ESOTERIC P-05/D-05

Esoteric's VMK-5 version of the VRDS-NEO CD/SACD transport is claimed to deliver high reliability and exceptionally quiet turntable rotation. In combination with the P-05 series shaft-mounted pickup system, the VMK-5 is said to ensure "the ultimate in disc-pit traceability", according to Nigel Crump of Synergy, its distributor. The new CD transport features a solid aluminium disc turntable, suggested to precisely position the laser at the centre of the data track to reduce errors. This is intended to be partnered with the D-05 digital converter. This dual-mono DAC is the first processor to feature the Asahi-Kasei AK4397 Delta-Sigma DAC, with 32-bit processing capability. This highly regarded chip is claimed to be an evolutionary upgrade path from conventional 16 or 24-bit D/A converters.

**Price** £3,995 (P-05); £3,495 (D-05) **Due** now

☎ 0845 130 2511 🌐 www.teac.com/esoteric



## NAIM NAIT 5I AND CD5I

Naim Audio has revised its Naim CD5i and Nait 5i entry-level electronics. Unless you look closely, though, the only difference is the 'i' is now italicised. Under the hood though, the CD5i has been suffused with elements from Naim's top CD555, including a new Wolfson WM8706 DAC and power supply arrangement and star earthing. The 50-watt Nait 5i, meanwhile, now sports a front-mounted iPod/MP3 player mini-jack connection and numerous changes to the chassis, including ceramic heatsinking. The cabling and circuit layout have been improved and overall feedback has been reduced, too. Prices of the two products remain unchanged.

**Price** £850 (CD5i); £725 (Nait 5i) **Due** now ☎ 01722 426600 🌐 www.naim-audio.com



## Soundbites

B&W's Zeppelin iPod dock lives up to the name. The £400 dock features a pair of 25mm metal dome tweeters partnered with two 90mm midrange speakers – all powered by a 25 watts per channel amp and a single 125mm bass unit, driven by its own 50-watt amplifier. All of this, plus extensive DSP, connections for iPods and other MP3 players as well as S-Video and composite video out.

☎ 01903 221500

ONKYO'S DRS 501 is an all-in-one system that sports a universal disc player, with a 1080i HDMI output, a 2x 50 watt output and a AM/FM tuner with 40 presets. The player supports DivX discs, MP3 replay and a 'theatre dimensional' virtual surround sound. The system costs £400 for the receiver on its own, or £600 complete with the matching 2.1 channel LS-V501 loudspeakers.

☎ 01494 681515



PURE'S new Highway DAB tuner is a self-install DAB tuner for the car. It works by rebroadcasting the DAB signal on FM, so your car's radio can tune to that frequency and to the next available FM slot.

Despite costing only £70, the Highway is fully featured and includes ReVu, so you can even pause live radio.

☎ 01923 277488



EVO is a new raft of improvements to the distinctive French Waterfall speaker. The glass loudspeakers still rely on Acoustic Damping Tube technology, but now sport new-generation Atohm drivers; the SD20 tweeter, LD150 mid/bass unit and a down-firing flat UFR210 bass unit. Waterfall's Iguasçu and Victoria models both receive the EVO treatment, priced at £1,700 and £2,200 per pair respectively.

☎ 01623 517000

GENEVA'S M, L and XL iPod docks warrant the attention of hi-fi enthusiasts. Available in red, white or black lacquers, the three docks also sport a top-slot CD drive, an FM tuner, amplifier and speaker system. Top of the range is the giant £1,299 XL, which features a 100-watt amplifier.

☎ 01423 359054



## SHOW REPORT

### Hammersmith 2007



*Jason Kennedy trawls through the gadget wonderland at this year's Hammersmith show*

**1** **Pioneer** now has an SACD player to match its A-A9 amplifier in the form of the PD-D9 (£600). This features twin Wolfson 24-bit/192kHz DACs with built-in DSD decoding. There's also a matching DAB/FM/AM tuner dubbed F-F6 (£600) that shares AIR studio tuning. The company also unveiled the S3-EX floorstanding loudspeaker at £3,000, which looks to be fantastic value for a 1.2 metre high, three-way with a ceramic-graphite tweeter and magnesium midrange unit.

**2** **Mission** unveiled the 79 series, a flagship speaker range priced from £430. Each model features multi-layer cabinets with materials of different densities to absorb resonances produced by the drive units. The main driver cone is constructed with woven aramid fibres in an arrangement called 'Parawave'. The floorstanding 794 (£1,000) and 796 (£1,300) also have side-firing bass drivers in their shiny piano-lacquered cabinets.

**3** **Cyrus** served up the SE range of CD players, not a special edition but a servo evolution that claims to give the players a big advantage. Having developed its own servo control software, Cyrus has taken the opportunity to drive the laser for maximum sound quality rather than high speed data recovery (as found with off-the-shelf units). The results can be heard in the CD6 SE (£700), CD8 SE (£1,000) and CDx-T SE transport (£850), which now have slot-loading mechanisms to differentiate them.

**4** **Myryad** had an intriguing but, unfortunately, unpowered first example of its Mi (music integrated). This is a CD/receiver with DAB and FM radio, 100 watts per channel and both digital and analogue inputs. It also has an M-port that allows full iPod control via the front panel. Price is expected to be around £1,200 at launch.



5

**Tannoy** is going sleeker next year with the Revolution Signature range, consisting of two floorstanders and two standmounts built around four- and six-inch dual concentric drivers. The range has curved cabinets, silver plated wiring and prices that start at £600 for the DC4 standmount. Multichannel enthusiasts will welcome the matching LCR models, too.

6

**Marantz** brought in the SC-11S1 preamplifier and SM-11S1 power amplifier, at £4,500 for the pair. These fully balanced components represent the company's first foray into mid-priced high end for a very long time. They claim to be as close in quality to the top line Legendary amplifiers as could be achieved within budget and certainly have the build quality to back this up. Both units have copper shielding throughout and the power amplifier is rated at 200 watts per channel.

## ➤ New Music

### IN THE STUDIO

ARTISTS RECENTLY ABSENT FROM THE CUT AND THRUST OF SHOWBIZ HYPE DUE TO FINISHING THEIR LATEST ALBUMS



#### KYLIE MINOGUE

**Title:** tbc

**Release date:** now

Recorded in London, Stockholm and Ibiza, fans have been referring to the title of Minogue's new album as 'X' (as in Roman numerals) – and she's now adopted it as the official title. Songs include *Like A Drug*, *Heart Beat Rock*, *Wow*, *Nudity*, and *Cosmic*. She's also being feted to headline next year's Glastonbury, after cancelling in 2005 due to her battle with cancer.



#### BJORK

**Title:** tbc

**Release date:** December

An air of mystery shrouds Bjork's promise of a second album in 2007. On her website the singer says she's recorded "a special live session album" with her touring band at London's Olympic Studios. "We don't have more details," admitted her record company. "But she definitely seems to want it out before the end of the year." Best hurry, then.

#### METALLICA

**Title:** tbc

**Release date:** Feb 2008

Produced by Rick Rubin, the long-awaited follow-up to 2003's *St Anger* is almost finished. The first to feature new bassist Robert Trujillo, it's described as both "more progressive" and "more melodic". Meanwhile, Rubin's next production is whispered to be a new album by Bob Dylan, who was impressed by the producer's work with Johnny Cash. The rumour, however, remains unconfirmed.

#### KAISER CHIEFS

**Title:** tbc

**Release date:** 2008

The Kaisers are preparing a rapid follow-up to 2007's *Yours Truly, Angry Mob*. "We're keen on breaking the cycle of album every two years, tour for 18 months and take six months to write," says drummer Nick Hodgson. "We don't know what we're going to put out, but it will be next year and we're definitely interested in a new sound."

#### ALSO COMING SOON

##### JAZZ/ CLASSICAL

**Eric Mingus Healin'** Howl (Dec), **Louis Armstrong** Live In Zurich (Dec), **David Zinman**/Baltimore SO Tchaikovsky: Symphony No 4 (Dec), **Yolanda Kondonassis** Sky Music (Dec)

##### SACD/ DVD-AUDIO

**Royal Flemish Philharmonic** (Herreweghe) Beethoven: Symphonies Nos 5 and 8 (SACD, now), **Ian Tracey Franck**: Grandes Pieces Symphoniques (SACD, now), **Howard Shore**: The Lord of the Rings: Return of the King (DVD-A, now), **Danish Radio Sinfonietta Mozart**: Symphonies Vol 6 (SACD, now), **Henryk Szeryng/ LSO Paganini**: Violin Concertos Nos 1, 4 (SACD, Dec)



## The ultimate tweak?

*The future of Hi-Fi: An alternative view*

Seems we have some way to go before we can even knock on the door of the ball park that recently saw an Apple enthusiast have his thumbs surgically whittled. The reason for the disenstubbification was to allow him to better operate his newly acquired iPhone with its whizzy touch screen interface. Perhaps he was inspired by the film *Edward Scissorhands* and has subsequently had his name changed to Adrian Applethumbs. Or maybe he knew that the new iPod would have the same touch screen technology and couldn't resist a two-for-one deal.

Either way, fooling around with cables, cones and slabs of concrete doesn't really cut it. If real hi-fi is to survive in an iPod world where people are prepared to have parts of their bodies sliced off to improve the man/machine interface, we need to up the ante when it comes to radical ways of interacting with our passion. A quick trawl of the Internet didn't throw up much that was useful. Even typing 'Peter Belt' – once famous (or possibly

## "Bit of a wait for this but, basically, Sir Richard Branson fires you and your hi-fi system into orbit where...well, no one can hear Axle Rose scream."

infamous) for his perception-enhancing foils, balms and safety pins – into Google failed to unearth anything I hadn't encountered before.

No, I think we need a new direction and, since no one else seems to be making the effort, I've come up with a few ideas of my own. One, stylus-alignment specs (patent pending). It's simple – clear glass (or prescription) spectacles with alignment grids printed on the surface. Just rest your chin on the edge of the turntable plinth, focus on the end of your nose and, via the visual stereo algorithms of Magic Eye 3D imaging, you'll eventually see a pride of lions playfully nibbling each other's ears on the platter.

Two, the cryogenic listening room. A little more involved, this one. Instead of putting CDs, interconnect and, indeed, hi-fi components in the freezer to make them sound better, why not turn your listening room into a cryogenically frozen environment? The benefits will extend to your own listening apparatus (specifically, your ears and your brain) and, what's more, you'll be frozen to the spot, thereby removing the hard-to-kick habit of getting up to perform some minor tweak rather than sitting back and listening to the music.

And three, still greater expenditure required here, I'm afraid, the Max Volume package. No matter how powerful your amplifier or large your speakers, your neighbours will never

complain again. Bit of a wait for this but, basically, Sir Richard Branson fires you and your hi-fi system into orbit where...well, no one can hear Axle Rose scream.

Then again, Sir Richard, the potential benefits of whittled thumbs in zero gravity? I think we should be told.

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



## Wiring it up

*The good connection dynamic*


When installing any new system the decision will have to be made about how to wire it up. Typically, the major choices are between single wire and bi-wire loudspeaker connections and the related decision about the type of bridge used on the

loudspeaker bi-wire black terminal between the bass and treble sections when using the single wired option. Finally there's the question of single ended and balanced signal levels interconnects. The latter is often a simple choice to settle, because in general you'll only be offered the option with high-end equipment, usually of North American origin.

There are various theoretical considerations to bear in mind, although the rule of 'suck it and see' usually takes precedence. In the majority of cases – involving hundreds of components from a wide range of sources – it's my experience that balanced interconnects tend to deliver a better result. The reason for this may not be any fundamental superiority, but simply that the components have probably been designed and voiced for balanced operation, though issues of noise and the rejection of electromagnetic fields are obviously relevant. In some cases the balanced signal is converted to single ended at some point in the circuit, but the best designed examples use fully balanced, mirror image circuits throughout the audio signal chain. Look for improved resolution; lower perceived noise/granularity, better stereo and more consistent musical dynamics.

Often speakers do sound better bi-wired (you're rarely offered a tri-wired option with three-way speakers), but this is not always the case. Some manufacturers are trenchant in their opposition to bi-wiring, perhaps feeling there are too many ways of unbalancing a system. For example, by using different conductor types on the two legs downstream of the amplifier, or making rewiring errors by inadvertently reversing the phase on one or more of the connections.

One other parameter that is nearly always critical, however, is the benefit of avoiding the debilitating effect of the pressed metal connectors. A small number of speaker manufacturers fit hard wired cable sets for this purpose instead and these can produce excellent results, depending on the quality of the cables and the connections used. But this can't be taken for granted. Almost invariably a simple audio taste test will settle the issue one way or the other as far as the pressed metal links are concerned. This is one of the cheapest and easiest parts of any system to upgrade and usually the most effective. Having nothing in their favour, apart from being cheap and nasty, you can expect to eliminate a whole class of low level grunge and grain when replacing them with quality wire links.

*Alvin Gold began writing about hi-fi more than 20 years ago and has since become one of the UK's most internationally renowned reviewers* 

# R

## RETRO

HI-FI REVISITED

JMLAB  
MEZZO UTOPIA



The Mezzo Utopia, was a large, ambitious high-end loudspeaker. And, although, it's now been superseded by the Utopia Be range, it was instrumental in bringing manufacturer JMLab to the attention of the UK loudspeaker-buying public. It also secured the number three spot in the Utopia range during its heyday.

It would be fair to describe the Utopia range generally and the Mezzo, in particular, as precursors to the Be range. Many of the key technical features carry over, though the designs are different in almost every detail. To draw too much of a parallel between them, would be like suggesting that all KEF Uni-Q speakers sound the same because they all feature Uni-Q technology. When nothing could be further from the truth.

One example of cross-fertilization is the construction of the main carcass as three completely separate enclosures. There's one each for the bass, midrange and treble, which are locked together by the two extended side panels and with a visual sight line between the mid and top, and the bass and mid enclosures. Another parallel is that they both use an inverted dome tweeter, though they are marked apart by their construction – a titanium dioxide coated dome for the Utopias and an exotic pure beryllium in the case of the Utopia Bes. However, both use some form of rare earth magnet to provide motive power. Yet another similarity is that the system uses Focal's Focus Time, which angles and positions the three front baffles appropriately to produce a virtual point source at the design listening position. The units have a nominal diameter of 25mm, 150mm and 230mm, with the crossover points at 350Hz and 2.8kHz. Curiously, the crossovers are not bi-wirable.

The two larger drive units use a sandwich construction, which means the cones are extremely light and stiff, and the bass unit is port controlled. The enclosures are heavy and extremely well damped internally and the designers have gone to great lengths in their choice of materials and finishes to ensure the speaker looks the part.



**“Many of the key technical features carry over, though the designs are different in almost every detail.”**

I used a pair of the Mezzo Utopia on an almost daily basis for something like a year, and they didn't outstay their welcome by a minute. The overall balance was never too far from being neutral, though there was less obvious warmth and weight in the sound than with some other comparable speakers. Distortion levels are low and where a frequency imbalance exists it is a gentle tilt in response over an extended bandwidth, favoring in particular the upper midband, rather than any perceptible roughness or edginess. But the current range, with the beryllium tweeters and other refinements that have been introduced in the decade since the Mezzo Utopia, are more neutral and offer a still greater level of refinement. The titanium dioxide tweeter can sound a little harsh and edgy, if provoked strongly enough, though any residual imbalance can usually be laid at the door of the a slightly lean overall midrange balance.

The Mezzo Utopia never sold in large numbers in the UK and there are still some second hand samples looking for good homes. Even today, this speaker doesn't sound in the least obsolete and don't worry about that titanium dome tweeter, it was always one of the best in its class and has been chosen on an OEM basis by some impressive names, including Wilson Audio and Avalon Acoustics. And recommendations don't come much higher than that. **HFC**

*Alvin Gold*



## Communicating

*Does your hi-fi system talk to you?*

**O**ne way of telling if a hi-fi system really delivers the goods musically, is whether or not it persuades you to listen to stuff you might otherwise not enjoy. It's all well and good when a hi-fi system makes your favourite music sound great. After all, that's the main reason for buying better equipment. But, when a hi-fi system enables you to enjoy and understand music that you'd otherwise avoid, clearly it's doing something rather special.

Recently, a friend was telling me about a new CD player he'd been trying out and how impressed he was with its sound quality. He initially talked about the differences in hi-fi terms. But what made me really take notice was when he said that it was encouraging him to listen to (and enjoy) album tracks he'd sort written off as not being that good. Somehow, the new CD player was making every track sound interesting and worth listening to. The

**“...it kind of implies a sea-change in musical taste – like a Thrash Metal fan suddenly discovering the joys of opera.”**

whole listening experience had caused him to re-evaluate quite a few albums.

Now when I spoke a little earlier of a hi-fi system persuading you to listen to music you might not otherwise enjoy, it kind of implies a sea-change in musical taste – like a Thrash Metal fan suddenly discovering the joys of opera. But it's subtler than that. It's about every track communicating something to the listener.

Now if you ask me to define what this is and how or why it happens, I must come clean and say I don't know. It's nothing to do with hi-fi as such – nothing to do with deep bass, sharp transients, or incredible imaging. A hi-fi system can be brilliant in all these aspects and yet still fail to communicate spectacularly.

Equally, it may do all the hi-fi things superbly, and communicate magnificently. Indeed, my friend's initial words were about the fabulous weight and solidity of the sound and how rich and lifelike it was. But his subsequent comments about how he was now enjoying tracks that he hadn't previously liked were more significant.

It's like going to see a live band and really enjoying the gig, then finding the CD a bit of a letdown. Of course the impact and immediacy of the live experience is missing. But it's more than that. Songs that (heard live) had seemed interesting and immersive, now seem shallow and boring.

The communicative aspect of hi-fi is its most important quality. Paradoxically, it's also the most elusive and difficult to define. Of course, it's down to the components that make up the system, but the listening room also has a big influence. A hi-fi system that communicates in one environment may not do so in another. There's a strong element of luck involved – finding the right combination and using it in a sympathetic room. It's a bit like football, and the way a collection of great stars may play brilliantly as individuals, yet function badly as a team.

Anyway, if your hi-fi system 'communicates', think yourself lucky – and don't change or upgrade without very careful evaluation.

*Jimmy Hughes is one of the country's best known hi-fi experts. His knowledge of tweaking and his record collection know no bounds*





Jason Kennedy

## Wither wireless

DAB offers even better quality

**W**hen the new director of BBC Radio 3 shifted *Late Junction* to a really late 11.15pm slot earlier this year, I pretty well stopped listening to the station 'live', opting instead for the *Listen Again* facility. It doesn't sound as good as FM, or even DAB, but then the show's superb selection of non-classical music is not the sort of stuff that one listens to from a critical standpoint. The quality issue doesn't seem to hinder the discovery of new music either, despite the sub 50kbps bit rate that the BBC dedicates to *Listen Again*.

In theory DAB should be able to offer a wide enough range of music and speech to make such a process unnecessary, but DAB coverage is even worse than FM. So much so, that very few companies make affordable in-car DAB radios and with the spectre of DAB+ around the corner you can't blame them. Richard Black has mentioned this new variant of digital radio in the past, but what has now become clear is that in the long term the current DAB format will be replaced making current receivers obsolete. This is due to the fact that the rest of Europe and further afield will be using DAB+ (or AAC+ as it's also known), which is a more efficient system capable of cramming in even more stations or the same amount of programmes with higher quality.

At present there are only a few DAB+ ready receivers on the market; Pure's Siesta and Chronos II radios are upgradeable to the format and Pure claims that 80% of its range will support DAB+ by the end of 2008. On the tuner front only the Onkyo T-4555 FM/AM/DAB receiver has the option of being upgradeable to DAB+, but other brands are likely to follow once the word gets out about the current system's potential lifespan.

All of this may turn out to be a distraction however, if Internet radio takes off. At present there are literally thousands of stations out there and many of them offer bit rates that surpass those of DAB. At present there's no national or even local wi-fi coverage, such as that afforded by traditional radio. And it seems more logical to me to broadcast wireless Internet that can be used by everyone, rather than to limit public broadcasting to radio and TV channels. Wouldn't you rather your



The pantheon of pop wannabes is a large one. But special space needs to be reserved for Laura Nyro. Never pin-up pretty like Joni Mitchell, her voice was a little too strident and lacked the polish of Carole King and it was always others who made hits of her songs – Barbra Streisand with *Stoney End*, Blood, Sweat And Tears with *And When I Die*, and The Fifth Dimension with *Wedding Bell Blues*. Those were just the start, and they all came from her first album, released in 1967 when she was just 19.

Ironically, her fifth long player from 1971 is her only album that doesn't include any of her own songs, and yet it could well be her finest moment. It takes inspiration from the soul and RnB of her youth in New York's Bronx and came together after a chance meeting with singer Patti Labelle (she tagged along with her manager, who was interviewing Nyro for *Melody Maker*).

At that time Labelle (the group) were a rootsy, but fairly traditional singing trio in the style of Martha Reeves And The Vandellas, albeit with cropped Afros and consciousness-raising lyrics. This was also a good three years before they would morph into spangly space supervixens with *Lady Marmalade*.

The album, which marked the beginning of a lifelong friendship between the two singers, includes elements of Motown-style pop (*Jimmy Mack*, *Nowhere To Run*), doo-wop (*Desiree*), the girl group era (*I Met Him On A Sunday*, *It's Gonna Take A Miracle*), Brill Building pop (*Spanish Harlem*) and a clutch of other classics.

Recorded in a hurry, it retains an immediate quality, as if the girls just hooked up in a studio and laid down a few of their favourite tunes. There is very little in the way of studio polish, even though it was produced by the future architects of the lush Philly sound; Kenny Gamble and Leon Huff. Indeed, legend has it that time was short in the studio and Patti Labelle reassured a worried Huff by betting him \$1,000 that they could put all the vocals down in one day. She won the bet as most of the vocals are first takes.

# M

## MUSO

### CLASSIC ALBUMS

#### GO NNA TAKE A MIRACLE LAURA NYRO AND LABELLE



**"...if your speakers can handle all the unfettered power... you know you've made a good investment."**

Not that you'd necessarily know it. The soaring vocal interplay between Patti and Laura on Marvin Gaye's ballad *The Bells*, is quite simply breathtaking and if your speakers can handle all the unfettered power of Laura's voice, especially when she's straining, gloriously, on those high notes, you know you've made a good investment.

They weren't afraid to tackle some sacred cows either, and had the nerve to reinterpret Smokey's *You Really Got A Hold On Me*, with Laura's raw, thoroughly impassioned voice supported by Labelle's gospel-tinged harmony.

None of the tracks are straight covers however, often employing significantly different arrangements to the originals. *Nowhere To Run* starts off straight, but then abruptly shifts into a high-energy driving rhythm, gospel inflections lifting it to the sky, and Curtis Mayfield's *Monkey Time*, which segues into *Dancing In The Street* and manages to be both party anthem and political commentary (the lyrics changed in reference to Detroit's post-riot decline).

After *Miracle*, at the age of just 24, Laura Nyro announced her retirement from music, and became a housewife and mother in rural New England, only emerging sporadically after the break-up of her marriage in the mid-1970s. She died in 1997, aged 49. **HFC**

Dave Oliver

licence fee paid for high quality wi-fi, allowing you to stream the exact audio and video entertainment of preference when and wherever you want?

It's a pity that doing the same thing in the car isn't easier. I can see that with the right piece of software one could capture the *Listen Again* stream and then put it onto an MP3 player, although to get that working in the car's audio system requires a connection with the head unit and these seem to be limited to those tape head converter devices or broadcasting units that you tune into with the car radio. Apparently, the latter actually works quite well, but given that I don't even own an MP3 player then it all seems a bit academic.

*Izson Kennedy began working on Hi-Fi Choice over 15 years ago, eventually rising to the position of Editor. He's currently indulging in his passion as a freelance hi-fi writer*



### Going for a song

*Forget the technicalities and enjoy the music*

Where do you most enjoy listening to live music? I ask this question having just accompanied a young soprano in a small-scale concert in a particularly 'dead' room. It was comfortable enough and free from outside noise, I had a fairly decent grand piano to play and the singer was in good voice, but I can't imagine it sounded to the audience much like a well-behaved song recital 'ought' to sound.

Obviously, that 'ought' depends entirely on expectations born largely of familiarity. In the case of song recital audiences in London, the reference is usually the Wigmore Hall, a hundred-year-old shoebox with a seating capacity of around 500, a high ceiling and a small stage backed by a semicircular wall. It's got a modest reverberation, a slightly warm quality to the sound and good clarity, though deep bass (lower than voices produce – I'm thinking of the bottom octave or so on a piano) is a bit lacking in level sometimes. My pet theory, being that this is at least partly due to the suspended stage. Yet several generations of concert-goers have come to regard it as the *ne plus ultra* of recital halls.



## “Yet several generations of concert-goers have come to regard it as the *ne plus ultra* of recital halls.”

If you love that, you may well have reservations about the Purcell Room, the other side of the river and half the Wigmore's age. It's wider but less deep, with a much bigger stage backed by a flat wall, and the seats are raked up away from the stage (at the Wigmore they're flat and a yard or so below stage level). Not surprisingly, the aural perspective is very different. Bass is stronger and clearer, but there's less of a 'bloom' to midrange and the treble sometimes borders on icy, while the Wigmore's is on the mellow side of sparkling.

And what of larger halls? Many of my first orchestral concerts were heard in the Royal Festival Hall, whose acoustic deficiencies (this is before the recent rebuild) I was never really able to identify. But Sir Simon Rattle famously said that he used to lose the will to live every time he went in there and it certainly doesn't have the generous resonance of the Royal Albert Hall.

I've written before in these pages about how the variables of the recording process mean that there's no 'definitive' reproduction of sound, but in many ways the problem goes even further back, to our ideas of what live sound is like. As a classical musician I've more experience of unamplified music in concert halls than of all-electronic stage rigs, but I have helped rig and mix live sound and it's clear that the variables are at least as great there.

And the thing is, that in absolute terms it's very hard to define any real 'right' or 'wrong' with any of this. Was our little concert really

wrong with its bright, hard but very detailed sound? Is the Wigmore Hall's generosity and warmth necessarily preferable? All the same questions we ask about hi-fi – even the same terminology applies perfectly. All the more reason, I think, to leave aside the agonising and find a system whose sound you like and just enjoy it!

*Richard Black is a professional musician, recording engineer and a highly knowledgeable hi-fi analyst to boot. He writes about hi-fi exclusively for HFC*



### Speaking out

*Building better speakers!*

It has long been my belief that there's a significant flaw in our method for designing speakers. Quite simply, the crossover point between bass/mid or midrange driver and tweeter is nearly always located between 2kHz and 4kHz. Now there may well be historic 'power handling' reasons for this, but other historic factors suggest it's still a bad idea.

According to those famous Fletcher-Munson curves, the zone between 2kHz and 5kHz is

where human hearing has evolved to be most sensitive, presumably to avoid predation and render speech as intelligible as possible. Ergo, this is probably the least sensible place for a crossover network, with its attendant resonances and dispersion discontinuities. I'm sure it's no coincidence that my favourite speaker to date, the JBL K2 S9800, has a mid/treble horn-loaded driver operating from 800Hz to 10kHz. Designs that avoid crossing over in the 2-5kHz 'presence' zone are very rare, so the prospect of two new initiatives, which do just that, is very interesting.

The first of these is from Finnish brand Amphion, whose Prio 520 is part of this month's group test. Amphion's Danish designer, Ole Lund Christiansen, prefers to call this a waveguide and has written a very persuasive paper pointing out a number of advantages. The waveguide is active at the lower end of the tweeter's operating range, where it increases effective sensitivity and hence power handling, allowing the crossover point to be lowered to 1.2kHz.

Other bonuses include the fact that the waveguide expands the effective diameter of the tweeter to a size similar to the bass/mid units, better matching the dispersion of the drivers and improving the crossover integration. And because the depth of the waveguide sets the tweeter back, its voice coil is better time-aligned with the cone-type bass/mid unit. The Amphion is the second waveguide example to come my way recently (the KEF R201/2 reviewed in *HFC* 298 also used a waveguide approach, in this case to smooth the output of the co-axial tweeter).

Another approach to lowering the crossover frequency is a brand new technology called BMR (balanced mode radiation). I previewed this back in *HFC* 278, after visiting NXT and hearing a prototype. Two years on, the first commercial examples are starting to appear. A Q Acoustics AV speaker system with a moulded frame 110mm BMR driver was seen at the 2007 Berlin IFA last summer, and examples from various leading brands are expected in the next few months.

These BMR drivers might have been invented by NXT, but they behave more like conventional piston drivers, with the advantage that the 110mm mid/treble driver's diaphragm doesn't break up and resonate in the normal way as frequency rises. Rather it converts smoothly and mechanically into a much smaller tweeter, so good off-axis dispersion is maintained and no electrical crossover is required. An exciting prospect to be sure.

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

# TECHNO

TECHNOLOGY EXPLORED

## TRANSFORMERS



We thought it might be interesting in this and future Techno columns, to take a closer look at the components that go to make up audio electronics. So, jumping in at the deep end, here's a somewhat brief low-down on one of the most misunderstood electronic components of all time; the transformer. Whole books have been written on transformers so we're obviously not going to cover every aspect and detail of their design and operation, but they are useful devices and have some fascinating properties

A transformer is so called because it 'transforms' electrical impedance – a bit of an arcane concept if you're not a boffin, but it's only another way of saying that it steps voltage up or down. It does this by converting electricity into magnetic power and then back again. A flowing electric current produces a magnetic field. Multiplied in a transformer by coils of wire, all going the same way, this field is focused around a core of magnetic iron. A second coil of wire is also wound on the same iron core, but here the process works in reverse, the magnetic field inducing an electric current.

So we've got a voltage 'in' and a voltage 'out', which doesn't seem to have achieved much. The usefulness arises from two things. First, the ratio between the turns on the input coil ('primary') and those on the output ('secondary') determines the ratio between the two voltages, with current following an inverse ratio. Second, the transformer only responds to AC and there is no direct electrical connection between primary and secondary, so DC is completely blocked. Both of these features are essential to the use of a transformer in one of its most critical applications, at the output of a valve power amplifier, where the primary involves hundreds of volts of both AC and DC, while the secondary requires tens of volts of AC and no DC at all.

The commonest job for a transformer in audio is, of course, converting mains voltage into something suitable for powering audio circuits. A CD player, for example, requires supplies typically at 5V, 12V and plus and minus 15V for various parts of the circuit. You could get all of these from the mains by means of resistors and diodes, but it would mean wasting far more



**“A transformer is so called because it ‘transforms’ electrical impedance...”**

power than is usefully employed and would be unsafe as the output socket's 'ground' voltage could end up delivering a fatal electric shock. The transformer steps down the mains to one or more low AC voltages, with minimal power loss and the added benefit of safe isolation from shock hazard.

The requirements of a mains or signal transformer differs significantly. The former must provide isolation even in the face of mains spikes and surges (which can reach thousands of volts). The latter doesn't usually need much isolation, though high power valve amps can present a challenge. But they do need a bandwidth of at least 20Hz to 20kHz, with comfortable distortion-free headroom across the board. Just like amplifiers, transformers will only handle a certain amount of signal without protest, especially in the bass. Bandwidth is hard to balance nicely because good bass requires lots of turns of wire, but that boosts capacitance, which is the main limiting factor on treble performance. There are tricks to get round this, but they're not always easy to apply.

High quality transformers, for signal or even mains applications, are not at all trivial to design and build and are expensive. That's why they are principally the preserve of high-end kit, but their distinct advantages can be seen in the end result. In a future column we'll look in more detail at what those advantages are. **HFC**

*Richard Black*

The world according to...

# Harbeth

*Zen and the art of making a BBC monitor; Hi-Fi Choice chills out in the company of **Alan Shaw**.*

*Interview: Malcolm Steward*

**M**any years ago, with a remit to pursue excellence, the BBC was effectively at the forefront of loudspeaker development. In order to design the finest monitors for a variety of situations, it employed many distinguished engineers at its world-leading Kingswood Warren research facility, including great names such as D.E. Shorter, Spencer Hughes and Dudley Harwood. When Harwood retired from the BBC he set up the Harbeth company to produce loudspeakers and to continue to investigate the technology that so fascinated him.

Ultimately, Harwood retired fully in 1987 and sold the company to its present owner, Alan Shaw, a man who had long appreciated – and was determined to continue – the BBC design tradition, even after it had become

unfashionable in the UK. For example, the disappearance of the ubiquitous LS3/5a near-field monitor seemed to coincide with the closing down of licensed BBC manufacturers, Rogers, Chartwell and Audiomaster. Harbeth, however, fared better and still provides the BBC with monitors, as well as supplying hi-fi loudspeakers to professional and domestic buyers around the world. The Asian subcontinent being a particularly keen supporter of the BBC 'sound'.

**HFC:** So what did happen to those LS3/5as and the BBC design philosophy: they seemed to disappear almost overnight?

**AS:** The essence of the BBC monitor was the engineering inside the product. The cosmetics were a by-product because the speaker was

designed as capital equipment. It didn't matter what it looked like; all that mattered was what it did. It's really quite remarkable that it ever became a consumer product, because it was certainly never designed to be one. That was its weakness. When styling and, particularly, computer aided design became the norm for consumer product development, it became easier to style something and injection-mould it in plastic than it was to produce it using the long-winded traditional methods.

**HFC:** It's intriguing that you stuck with those old-fashioned methods and found markets for the BBC sound all over the globe?

**AS:** The reason I was attracted to Harbeth was that loudspeakers had interested me since I was a teenager and I had a Saturday job at a local BBC radio station. I went into work one day and spotted this incredible little speaker. The engineer told me that it was the LS3/5a and the concept of what could be squeezed out of a box that small really caught my imagination. Until then, monitors had been the size of wardrobes.

Subsequently, I began working for a Japanese multi-national in semiconductors and when I then met Dudley Harwood, I was amazed to discover that Harbeth was selling primarily to the Japanese. Knowing something about the Japanese mindset, it became evident that his products clearly had virtues that weren't immediately obvious from the exterior, but that made them attractive to the Japanese. So, as a prospective buyer of the business, I wrote to his major customers and asked them how they rated the products. I wanted to know what was important to them and why they were so keen to buy speakers from this one-man-band in Britain. The answer came back: engineering pedigree; engineering excellence; and sound quality. Cosmetics were so far down the list as to be irrelevant. So I bought the company and the first thing I did was to stabilise the quality of the products using more sophisticated test equipment and a more disciplined approach,

**“...the concept of what could be squeezed out of a box that small really caught my imagination.”**



Teenage kicks: Alan caught the speaker bug early, doing a Saturday job for the BBC

and then I started to develop more products using the same philosophies as the existing models. I felt sure there would be a market niche that would absorb them. I didn't want to do anything else because I could see that Harbeth's products could be improved and perfected and that if you could sell them in Japan in their original guise, then I felt fairly confident that with our care and attention lavished on them we could sell a great deal more elsewhere.

**HFC** When you talk of new models, were you reliant upon the BBC to design new loudspeakers that you could license and manufacture?

**AS** At the time I took over there were no BBC designs being manufactured by Harbeth. It was almost three years after buying the company that I fulfilled my personal ambition to become a licensed LS3/5a manufacturer. I approached the BBC and was told, "You've come at exactly the right time. We're working on a new improved version of the 3/5a, because there were quality issues with the Mark 1 version and you could be just the clean slate that we need to put some marketing behind the new model". With that, Harbeth became the launch manufacturers for the second generation 11-ohm LS3/5a. Out of production now for more than a decade, but proving that the manufacture of BBC-designed loudspeakers has always been a very small part of Harbeth's overall business.

**HFC** Do you not, though, still sell a great many monitors to the BBC?

**AS** We do indeed supply loudspeakers to the BBC and to other broadcasters. We have become a specified supplier at the BBC, so that if an engineer needs, say, a speaker the size of an LS3/5a, his book tells him to order a Harbeth Monitor 20. Equally, though, under the current regime, he could nip out to the Tottenham Court Road and buy any speaker that took his fancy. But the cost of buying the wrong gear might not be immediately apparent: it's only when you've recorded a programme or spent hours dubbing something on the wrong speakers and the programme has gone off for technical review where they listen on big Harbeths and say "Did no-one hear that the arc lighting has introduced noise that has been picked up by the capacitor microphones?" That means that the programme cannot be transmitted, and that it might probably need rerecording. That has happened. At that point, somebody invariably asks what the cost saving of buying those other monitors was! 📧





The LS3/5a had never been core business to us in the way that it was to others. We could afford to lose it as it only represented about five or 10 per cent of our sales, even though we didn't because we had the Monitor 20 to replace it.

**HFC** It would be interesting to know how you produce loudspeakers that are simultaneously sufficiently scrupulous for BBC engineers to work with, yet can also produce a sound that is domestically acceptable. That seems a mix that many monitors are incapable of achieving?

**AS** It is incredibly simple if you think about our auditory system, which has developed over about 20,000,000 years. The first musical instrument is thought to have appeared about 35,000 years ago. Music and musical instruments are really new so our hearing is far more sensitive to speech, which we are phenomenally astute at interpreting: even through the limited bandwidth of a telephone connection we can deduce meaning and someone's emotional state. So, if you place at the core of your development, listening and critiquing of loudspeakers the reproduction of speech as naturally and accurately as loudspeaker technology allows then you can very quickly detect artefacts in the reproduced

listen to that recording through a loudspeaker. Regardless of the fact that the loudspeaker fills the room differently to the two of us talking, once you listen to the quality of the voices rather than their dispersion, it really helps keep your feet firmly on the design track. So much about the Harbeth sound is getting speech to sound natural.

**HFC** Does that approach make your speakers less sympathetic to, say, rock and jazz music?

**AS** I'm a great jazz fan so I make sure that they get on with that but if you were to ask about heavy rock, that's another subject. Not only are there no frames of reference to judge correlations between the live and reproduced sound, but the sound pressure levels are far higher than we feel comfortable with. It's not a market in which we have any skill, nor one that our customers find interesting. If someone wants that then there are plenty of other suitably skilled companies who can supply appropriate loudspeakers.

**HFC** Why do you imagine you have so many customers in the Far East?

**AS:** One reason why the BBC-style monitor is so popular in the Far East is that domestic room sizes are close to those of the typical BBC control room and the replay volume levels are about the same. There's also another possible explanation. Look at the spectral content of Western music: full orchestra, quite a lot of bass and a big warm sound. Oriental music tends to be extremely small details, bells and tiny percussive sounds. I think a product that is underpinned by good speech reproduction, which is all about the subtleties in the mid and upper frequencies, probably lends itself unduly well to that type of music. I don't mean that BBC speakers are unsuitable for Western music, obviously, but they do render Eastern music far more sympathetically than, say, a speaker designed by an American. However, if I wanted to listen to rock at 120dB, the American loudspeaker would likely be ideal. Mind you, playing rock 'n' roll at 120dB in an apartment in Beijing is not something you'd really want to do – unless you wanted a visit from the People's Liberation Organisation!

Throughout this enlightening discussion it had been rewarding to note that, despite his intense passion for the BBC design ethos, Shaw recognises that the loudspeakers it produces will not appeal to everybody's tastes. He doesn't, like some manufacturers, try to bully anyone into believing that his way is the only way. Instead, he remains content satisfying the growing audience that truly appreciates Harbeth's traditional craftsmanship, even if – or maybe because – its roots are firmly planted in a bygone era. **HFC**

## “If you care to be sensitive about sound, then most of the problems listening to reproduced sound do jump out as being man-made.”

**HFC** So why did the LS3/5a die?

**AS** The bottom line has to be economics. KEF, who produced the drivers and crossover, was finding life a bit of a challenge and cost accounting was exposing the true price of manufacturing those kits.

The speaker was now essentially a consumer product: by the 1990s the studios had pretty much bought all the 3/5as they needed. The market perception of a box that size capped its retail price: there was definitely a ceiling above which the price couldn't rise. All the while we were facing increasing pressure on the price of the parts and it reached the point where the licensees agreed that there was no way anyone could make any money producing that speaker.

Luckily for us, before the demise of the 3/5a, I'd created the similarly proportioned Monitor 20, which was magnetically shielded in the pre-plasma era when that was a significant advantage. It fitted perfectly with the advent of Nicam stereo, where broadcasters needed to squeeze an additional monitor into their racks alongside their hugely expensive Grade One colour monitors.

sound that simply could not be produced by the human voice box, larynx and chest. The tissue structure that produces speech is wet, soft, fibrous, flexible, and has a blood supply, which make it highly damped. If you listen to most loudspeakers, the problems you hear are sufficiently hard and have a sufficiently high Q that my subconscious immediately says 'reproduced sound'. And let's not forget that electric sound recording has only been around for less than 100 years!

If you care to be sensitive about sound, then most of the problems listening to reproduced sound do jump out as being man-made. Now it must be said that there's a degree to which we cannot synthesise the way a real human fills a room with sound: the dispersion of a body and chest is fundamentally different to that of a loudspeaker.

If you have speech at the core of what you're doing you won't stray too far off the path. Unfortunately, using speech as a test source is not very fashionable now. Recently Derek Hughes and I went into an anechoic chamber and recorded a conversation into a BBC reference microphone. It is fascinating then to

MEGALINE  
EUPHONIA  
- HELICON | 400 MK2  
MENTOR  
IKON  
CONCEPT  
SUBWOOFER



## THE NEW DALI HELICON 400 MK2

Hybrid tweeter module | 2 x 6.5" driver  
Bi-wiring terminal | 42-30,000 Hz  
H1026 x W267 x D501 mm | 32.0 kg

### FEATURES

- 2.5-way floor-stander with optional spikes included
- New terminals
- Matched real wood veneer in high-gloss Rosewood or Cherry finish
- Available as 7.1 system

*"While this speaker's alluring good looks might make even a super model green with envy, its sound is better still."*

| The Absolute Sound



IN ADMIRATION OF MUSIC

DALI UK +44 (0)845 644 3537 ■ DALI USA +1 360 733 4446 ■ DALI Deutschland +49 (0)6028 4390 ■ DALI Denmark +45 9672 1155 ■ [www.dali.dk](http://www.dali.dk)

Everybody loves the iPod, yet its ability to play back music to audiophile standards has never been one of its strengths. As the dominant music carrier of the 21st Century, it's ripe for upgrading ... but you won't access the iPod's magic with the cheap docks or headphones that have proliferated in its wake. They simply cripple the sound of music.

Absolute Sounds, established for 30 years as the reference importer of the highest quality audio equipment, presents the ElectroKID system to iPod users everywhere. It has been assembled from components manufactured by two of the greatest names in high-end audio.

Fortunately for music lovers around the world, Krell recognised the iPod's potential and created a suitable platform to enable true music lovers to enjoy its performance at a level never before achieved. The KID is Krell's take on what an iPod dock should do: retrieve the musical signal, handle it with respect and reproduce it with levels of sound quality that will delight the most critical listener.

But that's not all. Martin Logan - purveyors of the prettiest electrostatic loudspeakers on the market today - were thinking along similar lines, eager to create a turnkey system that would deliver all the joys of high-end audio without the pain. The Purity is the first-ever Martin Logan with built-in amplification. Bye-bye speaker wires!

Take one KID and a pair of Purity speakers, and all-of-a-sudden: 1+1 equals a million dollars! The 'ElektroKID' is the world's simplest, most accessible entry into high-end musical bliss: functional, compact, stylish, affordable. Connect the KID to the Purity, slip in your iPod. No adjustments, no headaches, no weeks with owner's manuals.

A simple system delivering superb sound. Kid's stuff, really.

# ElectroKID

KID'S STUFF

Contact us for the location of your nearest audio installer



**absolute sounds ltd**

58 Durham Road, London SW20 0TW

T: +44 (0)20 89 71 39 09 F: +44 (0)20 88 79 79 62

www.absolutesounds.com info@absolutesounds.com



# WIN!



## Opera Secondas worth £1,250!

Based in Treviso Italy, Opera makes some of the finest looking, finest sounding and finest value loudspeakers around. The excellent Seconda loudspeaker, which received a Best Buy in *HFC* 297, is a two-and-a-half way floorstander. The sealed box speaker offers a level of performance and finish that wouldn't be out of place in a more expensive design.

In our review, we felt the Seconda delivered "an impressively high standard of neutrality, underpinned by a bass that is dry but smooth and well extended." Wow!

For your chance to win, either (a) call **0906 5852156** and follow the instructions, leaving your selected answer (**A, B or C**) and your details where prompted or (b), send the letter of your selected answer (**A, B or C**) by email (with 'Opera' in the subject line), including your name, address and a daytime phone number to [hificomp@futurenet.co.uk](mailto:hificomp@futurenet.co.uk)

### QUESTION:

Where are Opera loudspeakers made?

- A:** Trlafmadore
- B:** Trowbridge
- C:** Treviso

### CONGRATULATIONS...

...to our last two winners; Mr Hawkins of Cheltenham, Glocs, who wins a stunning Yamaha Soavo 2 loudspeaker worth £1,000 and to Mr Ristick of South-East London, who received a pair of excellent Tannoy Glenair 2 loudspeakers worth £3,000.

### TERMS AND CONDITIONS

Answers must be received between 13 December 2007 and 9 Jan 2008. The winner will be selected at random from all correct entries received between the relevant dates and will receive a pair of Opera Seconda loudspeakers free of charge. Each winner will be notified within 28 days of the closing date and will be required to give details of a delivery address in the UK to which the speakers should be sent. Telephone calls will be charged at 60p per minute.

By taking part in a Competition, you agree to be bound by the Competition Rules, which are summarised below but can be viewed in full at [www.futurenet.com/futureonline/competitionrules.asp](http://www.futurenet.com/futureonline/competitionrules.asp). Late or incomplete entries will be disqualified. Proof of posting (if relevant) shall not be deemed proof of delivery. Entries must be submitted by an individual (not via any agency or similar) and, unless otherwise stated, are limited to one per household. The Company reserves the right in its sole discretion to substitute any prize with cash or a prize of comparable value. Unless otherwise stated, the Competition is open to all GB residents of 18 years and over, except employees of Future Publishing and any party involved in the competition or their households. By entering a Competition you give permission to use your name, likeness and personal information in connection with the Competition and for promotional purposes. All entries will become the property of the Company upon receipt and will not be returned. You warrant that the Competition entry is entirely your own work and not copied or adapted from any other source. If you are a winner, you may have to provide additional information. Details of winners will be available on request within three months of the closing date. If you are a winner, receipt by you of any prize is conditional upon you complying with (amongst other things) the Competition Rules. You acknowledge and agree that neither the Company nor any associated third parties shall have any liability to you in connection with your use and/or possession of your prize.



# CHOICE CUTS



This month's varied musical morsels

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

## AUDIOPHILE VINYL



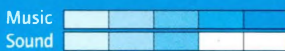
### JOHN FAHEY

The Yellow Princess

Vanguard/Pure Pleasure 180g vinyl

Music: Pure Pleasure has done a superb job with this 1968 recording of one of the world's finest acoustic guitar players. It captures Fahey melting folk, blues and his own obtuse take on the world with deceptive ease. While technically accomplished, this is not his only appeal. Instead, it's the honesty and beauty that is communicated so effortlessly.

Sound: You can hear the vintage in the raw, resonant and energetic sound of the guitar and the occasional band accompaniment, but it's undoubtedly true to the original. **JK**



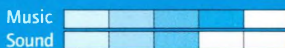
### JANIS JOPLIN

I Got Dem Ol' Kozmic Blues Again Mama!

Columbia/Speakers Corner 180g vinyl

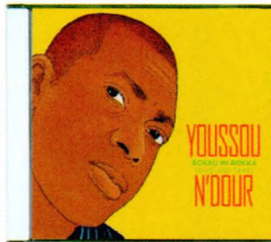
Music: This 1969 album was Joplin's first solo recording and was significantly more funky and soulful than the work that preceded it. With its brass and Hammond organ, it sounds more like a rhythm and soul revue than a rock record. Joplin's was arguably the greatest white voice to ever sing the blues, and what it lacked in finesse it made up for with heart and energy.

Sound: A high-energy and bass-heavy recording, it delivers the power and the funk in full effect, though side two has a bit of tape hiss. **JK**



These LPs were supplied by Pure Pleasure and Naim.  
www.purepleasurerecords.com

## COMPACT DISC & VINYL



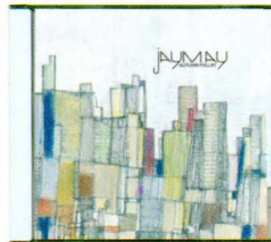
### YOUSSEU N'DOUR

Rokku Mi Rokka (Give and Take)

Nonesuch

Music: Since *7 Seconds*, Youssou N'Dour's 1993 million-selling hit with Neneh Cherry, his releases have been inconsistent and patchy. Now, N'Dour's made an album to remind us why he's West Africa's biggest superstar. For the first time in 14 years he's reunited with Cherry, but for the most part he concentrates on what he does best - singing a range of gloriously melodic and unashamedly authentic songs in his own Wolof language.

Sound: N'Dour's soulful voice is perfectly complemented by a loose-limbed rhythmic backdrop in which African instruments and western guitars mesh seamlessly. **NW**



### JAYMAY

Autumn Fallin' Heavenly

Music: Manoeuvring her way through the standstill seasonal release traffic, comes 26-year-old newcomer Jamie Seerman, shedding her 'L' plates after passing the test on New York's vibrant 'anti-folk' scene. Yet she does so with an impressively bold and fearless tread, as the emotional ebb and flow of her hauntingly sad-eyed songs is echoed in the natural cycle of the seasons with plaintive, bittersweet simplicity.

Sound: An unvarnished production that tempers the acoustic strumming and fluid double bass with baroque, but uncluttered ornamentation from twinkling glockenspiels and a swirling Wurlitzer. **NW**



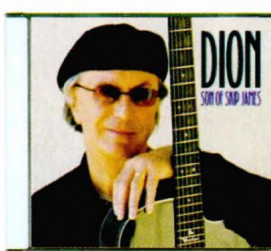
### PINK FLOYD

The Piper At The Gates Of Dawn

EMI

Music: This three-CD, Deluxe Edition of Floyd's classic 1967 debut LP includes mono and stereo mixes and a feast of rarities. Fans have often claimed that the original mono version of the album was superior. Certainly *Interstellar Overdrive* has more whoosh factor with added organs and the record has a more 'antique' feel throughout. Disc three is packed full of Syd Barrett's wonderful early singles plus out-takes and Rick Wright's effervescent *Paintbox*.

Sound: To these ears there's much cramping and distortion on the mono disc. But the beauty of this package is that it's all here. **MP**



### DION

Son Of Skip James SPV Blue Label CD

Music: Even while recording hits like *Runaround Sue* and *The Wanderer*, young pop star Dion wanted more than anything else to sing the blues, the real gutsy from-the-heart stuff. Well 40 years later he's finally done 'got the blues' and his voice is showcased perfectly here on pieces like the breezily deep *My Babe*, and the driving *Drop Down Mama*.

Sound: Most SPV-label discs seem just a touch bass-light, but this one has the right amount of bounce and a stark but strong soundstage. **PS**



### ROBERT WYATT

Comicopera Domino

Music: This three-part concept album pulls together the one-time Soft Machine drummer's main concerns of the moment, namely, his revitalised

relationship with his wife since he stopped drinking, the war in Iraq and the search for redemption, wherever he might find it. His beautifully cracked voice is still a tarnished marvel with an intense, disarming intimacy, even when he refuses to sing in English for the final act in protest at the war (he makes do with Italian and Spanish).

Sound: There are echoes of his past work, notably the quirky rhythms of *A Beautiful War*, but these have the effect of sitting down with an old friend, rather than sounding tired. **DO**





## THIS MONTH'S CLASSIC HI-FI TEST DISC

"A tribute that's funky and dark sounding with weird digital effects."

### WEATHER REPORT Domino Theory CBS

**Music:** As a small tribute to the late Joe Zawinul – probably the most original and influential musician in jazz-rock – I picked out one of Weather Report's less celebrated but nonetheless excellent albums. *Domino Theory* was released in 1984 and features Omar Hakim on drums and

Victor Bailey on bass, alongside co-founder Wayne Shorter (sax) and Jose Rossy (perc). It's a funky and dark sounding album with weird digital effects coming out of Zawinul's synths. The highlight, *Blue Sound-Note 3* is an exploration of tone and space, with explosive drums, heavy bass and all-

enveloping keyboards.

**Sound:** Domino Theory is a weighty sounding slab of vinyl and if you enjoy exploring the lower octaves it's also a real trip. **JK**

Music	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sound	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



### SIGUR RÓS

Hvarf/Heim EMI

**Music:** The latest from the 'Icelandic Radiohead' at least manages to include titles (unlike 2002's effort), but since they're mostly in an invented

language, they still don't tell you much. The music, however, speaks for itself. Spread over two CDs, the first, *Hvarf*, offers some re-recordings of older tracks plus some newbies, while *Heim* features acoustic versions of some of their better-known tunes. A sense of euphoria, tinged with melancholy is very much in evidence. **Sound:** Sigur Rós have always sounded big, and fans of the sonic cathedral won't be disappointed – even the live acoustic material manages to sound massive. **DO**

Music	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sound	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



## HIGH-RES MUSIC

### MICHAEL BLAKE SEXTET

Amore De Cosmos

SACD (stereo/multichannel SACD plus stereo CD)

Songlines

**Music:** Saxophonist Michael Blake is a New York based Canadian who plays in the Lounge Lizards, but here finds himself in the company of keyboard player Chris Gestrin, trumpeter Brad Turner and percussionist Sal Ferreras. Naturally there's a rhythm section too, albeit one that strays into a straightforward rhythm on only one track. Elsewhere the tempo is less obvious and the playing sparse but always interesting. The music is varied, but at its best totally engrossing and while it's not straightforward nor 'difficult', you will need an enquiring musical mind.

**Sound:** Songlines has translated this 24-bit recording into a solid, precise and clear-cut SACD. If any effects have been added you won't hear them, so the result is strong and naturally revealing. **JK**

Music	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sound	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



### HANDEL ORATORIO MESSIAH (DUBLIN VERSION 1742)

Susan Hamilton (soprano),

Dunedin Consort & Players

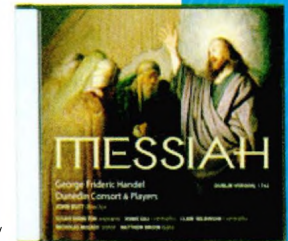
SACD (stereo/multichannel SACD plus stereo CD)

Linn Records CKD285

**Music:** This is probably not the arrangement that many will expect to hear of this popular and well known work, but the Dublin arrangement has the benefit of having very clean articulation, due in part to the small size of the vocal forces deployed. Conversely, though, some may be underwhelmed by the limited scale of the resulting musical architecture.

**Sound:** The recording, made at Greyfriars Kirk, Edinburgh has warmth, grace and freshness, but pacing is generally on the moderate side. Some may criticise the performance for lacking fire and passion, but it's a scholarly account, with the benefit of fine multichannel SACD sound. **AG**

Music	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sound	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



### FRANZ WAXMAN

Oratorio – Joshua

James Sedares (cond), Prague

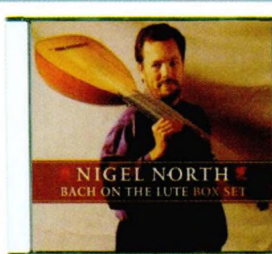
Philharmonic

Deutsche Grammophon 477 5724

**Music:** Franz Waxman was one of many refugees from pre-war Nazi Germany and eventually settled in the US, where he became a noted conductor and prolific composer of film and concert scores. Based on the Biblical book of *Joshua*, this is his most ambitious work and the first time it has been recorded.

**Sound:** It's an evocative work, as well as a lyrical and powerfully committed performance. There's good orchestral quality and some superb singing from the main soloists, including Maximilian Schell's wonderful narration. **AG**

Music	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sound	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



### NIGEL NORTH

Bach On The Lute

Linn Records CKD300

**Music:** These four discs have already been available separately and now come in a box set, including transcriptions for lute from all Bach's Sonatas and Partitas for solo violin and cello. The arrangements are sensitive and largely true to the more familiar versions, however, there are new and valuable insights to be gained. And like so much of Bach's output, the music is surprisingly agnostic about its instrumentation.

**Sound:** The transcriptions and performances are as near definitive as I have heard, which extends to the dance-like rhythms of many of the movements. **AG**

Music	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sound	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### HELGE SUNDE/ NORSKE STORE ORKESTER

Denada

SACD (stereo/multichannel SACD plus stereo CD)

ACT

**Music:** As well as leading this Norwegian big-band, trombonist Sunde also composes contemporary avant garde music. But while there are occasional odd cadences and atonal blasts of brass, for the most part this record is ready to swing hard through the long Nordic nights. A powerful, joy-filled noise that leaps between elements of the last fifty years of big-band jazz and heralds a bright future for the format. There are shades of Mingus, particularly on opener *IO* and of electric Miles on the title track, while the spirit of Ellington is never far away.

**Sound:** One of the great joys of surround sound, is the insight it can offer into densely constructed music and here the SACD mix doesn't disappoint. **DO**

Music	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sound	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



# Totem Arro

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

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



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

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

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

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

London Area	O'Brien Hifi, LONDON, Tel: 020 89461528 Cornflake.co.uk, LONDON, Tel: 0207 6310472 Audio-T, CAMBERLEY, Surrey Tel: 01276 685597 Studio AV, ETON, Berkshire, 01753 631000 Audio-T, READING, Berkshire Tel: 01189 585463
South East	Rayleigh Hi Fi, RAYLEIGH, Essex, Tel: 01268 779762 Rayleigh Hi Fi, CHELMSFORD, Essex, Tel: 01245 265245 Audio-T, TUNBRIDGE WELLS, Kent, Tel: 01892 525666 Rayleigh Hi Fi, SOUTHEAST, Essex, Tel: 01702 435255 Norman Hobbs, HAYWARDS HEATH, West Sussex, Tel: 01444 413353
South	Audio-T, EASTBOURNE, Tel: 01323 731336
South West	Audio-T, PORTSMOUTH, Hampshire, Tel: 023 9266 3604 Audio Destination, TIVERTON, Devon, Tel: 01884 243584 Movement Audio, POOLE, Dorset, Tel: 01202 730865/380018
Midlands	Audio Excellence, BRISTOL, Tel: 01117 926 4975 Leicester Hifi, LEICESTER, Tel: 01162 539753 Audio Excellence, WORCESTER, Tel: 01905 619059
North	Audio Counsel, CHEADLE, Cheshire, Tel: 01614 916090 The Sound Organisation, YORK, Yorkshire, Tel: 01904 627108 Moorgate Acoustic, SHEFFIELD, South Yorkshire, Tel: 0114 275 6048 Practical Hifi, WARRINGTON, Cheshire, Tel: 01925 632179 Practical Hifi, MANCHESTER, Greater Manchester, Tel: 0161 839 8869 Practical Hifi, PRESTON, Lancashire, Tel: 01772 883958 Practical Hifi, LANCASTER, Lancashire, Tel: 01524 39657 Practical Hifi, BLACKPOOL, Lancashire, Tel: 01253 300599 Practical Hifi, BOLTON, Lancashire, Tel: 01204 395789
Scotland	Loud & Clear, EDINBURGH, Tel: 0131 5553963 Loud & Clear, GLASGOW, Tel: 0141 2210221
Wales	Audio Excellence, SWANSEA, Tel: 01792 474608

To receive your free copy of our catalogue, please visit:  
[totemacoustic.eu](http://totemacoustic.eu)  
or call 003215 285585



TotemAcoustic.eu



joenit

United Kingdom Distributor  
[info@totemacoustic.eu](mailto:info@totemacoustic.eu)  
Belgium Tel: 0032 15 285 585

# CHOICE MAIL



The pick of this month's best letters

Write to: Hi-Fi Choice, Future Publishing Ltd, 2 Balcombe Street, London NW1 6NW. Or email your letters to [hifimail@futurenet.co.uk](mailto:hifimail@futurenet.co.uk)

## DACS DA WAY TO DO IT!

I am keen to understand what benefit adding an external DAC would be to my existing system. First off, I scoured the net and found quite a few manufacturers make DACs, including dCS, Cyrus, Storm Audio, Chord, and Audio Note. All claim to vastly improve the quality of an existing CD player. However, prices ranged anywhere from £900 to £14,000, which was an eye-opener for a DAC. Next stop, was trying to find a review or comparison, but I had no success. It appears our hi-fi publications are keen on selling us new CD players, but not upgrading our existing ones. Come on *Hi-Fi Choice*, buck the trend and let's see an article on DACs and whether they really are worth considering as upgrades.

**Matt Whiteley** via email

**HFC** The external DAC was hugely popular some years ago, but fell from grace when

one-box CD players started getting really, really good. We still test them today, but usually in the context of a matching transport; if you reach far enough into the annals of *HFC*, you'll find reviews of Audio Note, Cyrus, Chord and dCS, as well as Stello and Russ Andrews models.

## UN-PC

I cannot agree with Paul Messenger that the future of hi-fi is PCs and PC Servers (*Dispatches*, *HFC Collection 2007*). A DJ acquaintance has all his music stored on a large external hard drive connected to his laptop, but he dare not rely solely on that, as hard drives can and do fail – suddenly and catastrophically. He has to carry his CDs with him as backup. He can't afford to be DJ'ing at a party but unable to play music!

Anyone who relies totally on music files stored on a computer needs to have

**“...the computer you own in 2020 may not play all your 2007 music files.”**

comprehensive backup of the hard drive(s) and a recovery strategy. Many home computer users do not have any backup at all. If I copied all my CDs and LPs to a computer hard drive, I would be foolish not to keep the sources as a backup.

There is also obsolescence to consider. In the computer world things change at a frantic rate; will all the music files we store now always be playable in the future? At least CDs will always be playable as long as you have a CD player. But the computer you own in 2020 may not play all your 2007 music files.

I can see that the music companies would love the 'music files stored on a PC' model; they could make encrypted files uncopyable and playable only for a specific period of time. So instead of owning a CD that we can play as many times as we like, we have to keep buying the same music files again and again.

**Rod Theobald** Rochdale, Lancs



Above: Russ Andrews' DAC

## LETTER OF THE MONTH



### GOING GREEN?

In every other branch of consumer electronics, companies are charging ahead with putting green directives into place. Not so hi-fi – it seems the reverse is true. While everyone else is putting energy-saving light bulbs in the home, hi-fi buffs now have more mains-draining valve amplifiers than ever to play with. Solid-state manufacturers use Class A amplifiers, that give off more heat than a radiator. You are even told to keep your CD player switched on all the time. Surely this cannot continue?

**Dave Bigden** via email

**HFC** The situation in hi-fi is not as bad as it first seems. Manufacturers like Flying Mole are producing cool-running designs and there's a wealth of difference between leaving a TV set in standby and leaving a CD player in the same state.

That's not to trivialise the issue though. Some high-end audio is far from being environmentally chummy, although the comparatively small sales of hi-fi separates means they rarely fall under the purview of green directives. We suspect this will be more of an issue as people become more aware of their own carbon footprint.



**WIN CRYSTAL CABLE PICCOLO INTERCONNECTS!**  
☎ 020 8971 3909 🌐 WWW.CRYSTALCABLE.COM

The author of our letter of the month receives a one-metre pair of Crystal Cable Connect Piccolo interconnects worth £260, featuring a silver/gold conductor with Kapton insulation, plus a transparent Teflon jacket. So get writing! (150 words max please...)

**HFC** Paul didn't mean disposing of your discs, merely that your CDs and LPs become an archive instead of the primary music players in the future. Those who have experienced the joys of having hundreds or even thousands of albums capable of being called up at a nanosecond's notice off the HDD of a computer, find it hard to go back to thumbing through a collection.

In many respects, music companies are moving towards renting music rather than buying it outright. Already companies like Sonos and Napster give you the chance to access millions of tracks for a monthly fee, and other companies are looking on this system as the perfect scenario. That way, you can't lose your collection if your disk crashes, or if someone steals all your discs.

#### PROTECT AND SURVIVE

I have recently purchased an AVI system and am thrilled with it. However, it won't play copy-protected CDs because, as AVI states, they are not Red Book compliant. I have around 1,000 CDs with quite a few having this protection on them. So how can I listen to them? Easy... burn a copy, as the AVI player does play CD-R. It's ironic that the 'protection' record companies place on CDs, to prevent illegal copying, is going to prevent me from buying a legitimate copy of any copy-protected disc in the future.

**Graham Longmuir** via email

**HFC** Hmm, we cannot condone the obtaining of illegitimate copies of recordings. However, the irony that the only legit

way to play copy-protected CDs is to copy them is not lost on us, or the music business. The industry is still keen to find a way around this, that doesn't involve re-writing the Red Book, but so far a solution has yet to be found.

#### BUDGET BREAKAWAY

As a subscriber to *HFC*, I've noticed that it's been a few years since you last did a group test of CD players and amplifiers in the £250-£350 price range. Not all of us can stretch to £500 for hi-fi equipment and as there are plenty of fine examples of budget kit around at the moment (from the likes of Marantz, NAD, Rotel, Pioneer, Cambridge Audio and Denon), surely we deserve to read in-depth analysis of these products in your group tests. The Cambridge 640C V2 was an exception, when it was reviewed alongside players at twice the price. So don't forget about the rest of us on a budget who still want to read in-depth analysis and comparisons but at a budget price level. Hi-fi snobbery? I hope not.

**Lee Taylor** via email

**HFC** It's not snobbery, but analysis of our wider market, that prevents us from running group tests of lower end products. In almost every Reader Survey we've conducted, the vast majority are interested in comparative tests of products priced between £500-£2,000. This is also why we rarely run comparative tests of high-end products.

#### WHAT THE FUNK?

I certainly enjoyed your 300th issue and in particular, the curiously compelling 2007 Awards. One small observation I have concerns your award to the Funk Firm Funk as best turntable under £500.

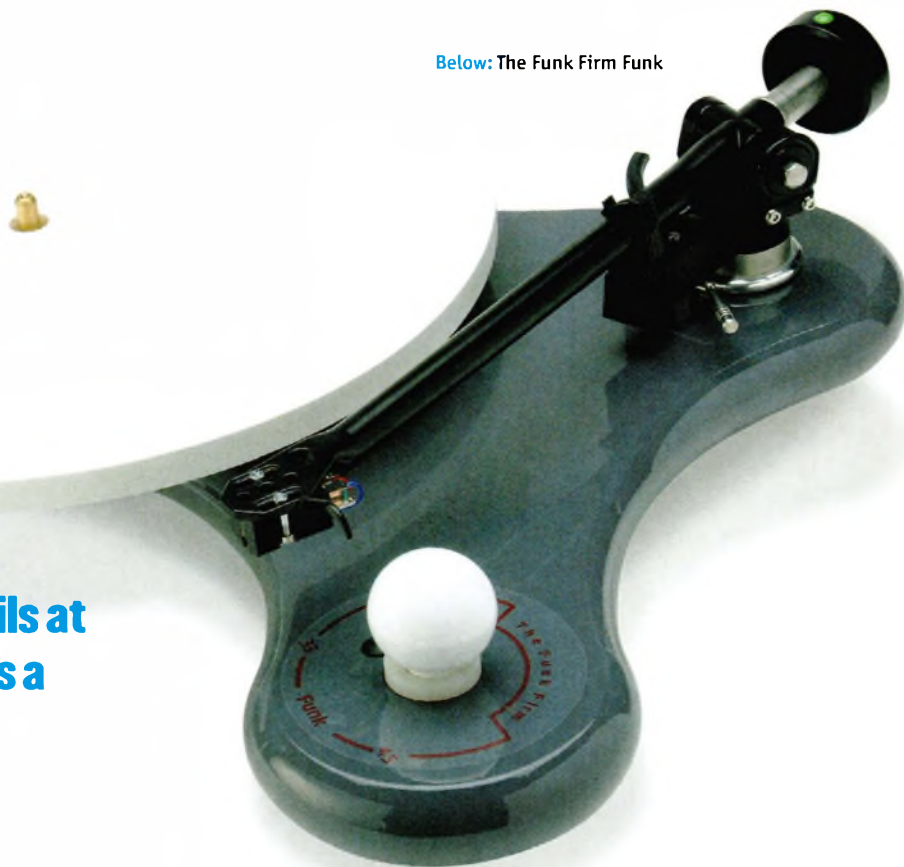
Although this deck retails at £450, this price excludes a tonearm and cartridge. Obviously it would be very difficult to play a record on it without these items, so the essential additional purchases of, at least, a decent tonearm (the Rega RB250) and a modest cartridge for around £50, would push the overall price up to about £625. Indeed, most buyers of this fine TT would almost certainly want to splash out more, on say an RB300 arm and £150-£250 cart. By giving the gold award to this more expensive deck, you have unfairly swept aside more worthy examples that do the business for less than £500, such as the wonderful budget/mid-range spinners by Pro-Ject and Rega.

**Gary Izzard** via email

**HFC** It's a good point, but the key word is 'turntable', not 'turntable package'. This is because of the way most turntables are sold; outside of the sub-£500 category, very few decks are sold ready-to-go. That's not to say the Rega and Pro-Ject offerings are in any way poor, though; the companies having picked up Silver and Bronze awards respectively for their decks and we think they are excellent LP-spinning packages.

Below: The Funk Firm Funk

**“Although this deck retails at £450, this price excludes a tonearm and cartridge.”**



PERSONAL AUDIO

PRO AUDIO

HI-FI & HOME CINEMA

CUSTOM INSTALL



## BACK BY POPULAR DEMAND

In 1987 Acoustic Energy launched its first product: a compact near-field monitor featuring metal diaphragm drivers and a composite lined cabinet. The iconic AE1 was an immediate hit with music broadcast professionals and hi-fi enthusiasts worldwide and many mourned its passing in the late 90s. So many in fact we decided to bring it back...

We believe 20 years later the AE1 Classic is perhaps the only speaker to reach its predecessor's standards.

The AE1 Classic is now available from selected UK dealers and completes the award winning Reference Series.

For your nearest stockist please call 01285 654432 or visit [www.acoustic-energy.co.uk](http://www.acoustic-energy.co.uk)



**(((AE)))**  
ACOUSTIC ENERGY

# Understanding: ISOLATION!

Part Two of our technical series explains how to get the best out of equipment supports

**H**i-fi equipment can't work in complete isolation – at the very least it needs something to sit on. Many decades ago, people realised that in some cases what it sits on can make quite a difference to how it performs. Black disc players (LP and 78s) convert vibration into electrical signals and are therefore invariably sensitive to vibration in their surroundings. In really bad cases, acoustic feedback occurs. However, even when acoustic feedback is not a risk, it's always prudent to isolate your structure from any

unwanted vibrations as best you can. In the 1980s, wall-mounted shelves were popular with many audiophiles, while Linn lovers created a cult following for a certain IKEA coffee table.

Fast forward to 2007 and dedicated hi-fi supports are plentiful and varied. Support systems fashioned from metal and glass, wood, cones, 'shock absorbant' Sorbothane, or any combination of those constructions – are now available and widely considered to be critical in determining a system's success, even when that system doesn't include a

turntable. But is there any logic to this and what are the benefits?

## MICROPHONY

Although turntables are certainly the most microphonic components in audio, to some extent, all devices function as vibration-to-electrical signal converters. Even CD players and amplifiers do this, as do FM tuners. The extent varies from model to model, depending on construction: valve amps are well known for being microphonic as vibration minutely affects the spacing between the internal elements, which in turn affects the gain of the valve. The same effect exists in transistors, but its extent is typically not measurable at audio frequencies. However, resistors and capacitors, and even the circuit board material, can all

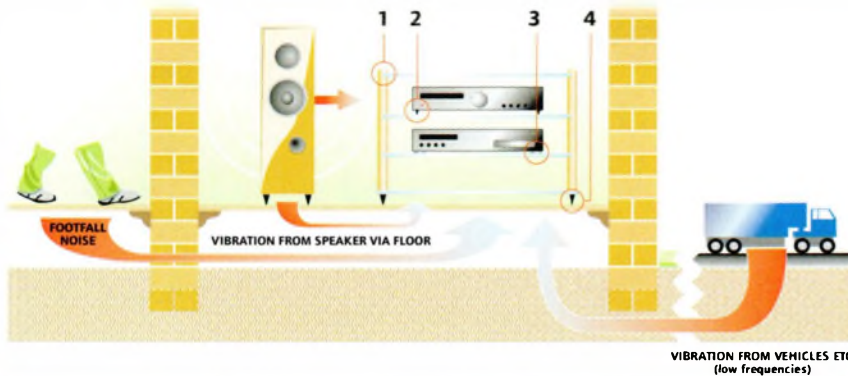




## Bad vibrations

Vibrations have an effect on the sound of your system. They take two basic forms: airborne vibrations – particularly the sound emanating from your speakers – and mechanical, which include

vibrations created by traffic. Turntables are overtly affected components, but vibrations can have an influence on other equipment too – particularly through 'sympathetic resonance'.



## It's all in the join

**1. Materials in shelves and pillars, and the method of joining them, all affect resonance levels.**

**2. Spikes between equipment and shelf give the bare minimum damping of resonances in both components.**

**3. Squidgy feet give some damping of resonances – trouble is, we often like resonances!**

**4. Spiked feet pierce carpet and aid stability, but they do transmit vibration through the floor.**

**“Assuming the spikes are adjusted correctly the business of stability is hard to argue against, but vibration is more complex.”**

contribute to microphonic behaviour due to various factors. These include mechanical modulation of capacitance, piezoelectric effects and even, on occasion, such arcane anomalies as triboelectricity which is the generating of voltage by friction – similar to charging a balloon by rubbing it on a woollen pullover.

Within CD players, the stable running of the master oscillator, which keeps everything going on at a constant rate and ideally jitter-free, can also be upset by vibration. All these effects are minor, but they can add up to significant sources of unwanted signal in modern low-noise recordings and equipment.

And where does the vibration come from? Principally, of course, from the loudspeakers (delayed both by the speed of sound and by resonances in the air, the building and the equipment itself) as well as from traffic noise carried through the ground. The equipment

itself can generate vibration through moving parts (CD players etc.) and mechanically vibrating mains transformers. Even components vibrating due to the signal passing through them present a problem that also plagues most power amplifiers.

### AND THE ANSWER IS...

Ideally, a good support prevents vibration in the floor from reaching the equipment, and also resists picking up any vibration from the air. At the same time, it will divert vibration originating within the equipment to the ground, or convert it swiftly to harmless heat. Manufacturers have adopted various tactics to achieve this, and it seems simplest to examine them one by one.

### SPIKES

Historically, one of the first support measures in widespread use, using spikes to contact the

## AN ALTERNATIVE VIEW

While most modern equipment is measurable and not very microphonic, there is still the issue of mechanical vibration, delayed due to resonance and re-radiated, by the stand itself. In many cases, this may have more effect on performance than any movement-to-electricity conversion. Particularly with metal-and-glass stands, their mere presence in the listening room (with the equipment standing on something else) can be audible.

Putting equipment on such stands often reduces their contribution to a system and the overall result is surely a combination of this and the other factors discussed in this article.

underside of a shelf or the floor, is claimed to confer stability while resisting the passage of vibration. Assuming the spikes are adjusted correctly the business of stability is hard to argue against, but vibration is more complex. Due to the 'acoustic impedance mismatch' between spikes and whatever they rest against, high frequency vibrations are indeed substantially attenuated. But at lower frequencies, they pass through (the threshold between high and low frequency being typically in the high hundreds of hertz: the midrange, basically). On the other hand, spikes offer rather limited damping of vibrations and so are not much help against resonance in whatever they support.

### MASS

Currently out of fashion, the use of sheer mass in the form of anything from lead sheet to concrete to old newspapers, used to be popular in controlling vibration. Opponents of this technique retort that mass simply 'stores energy' (meaning vibrational energy), which is a bad thing; but it entirely depends what the mass is made up of. 100kg of old newspapers is one of the best ways of damping vibration, but 100kg of steel could be highly resonant. However, neither is a very attractive proposition.

### LIGHT, RIGID MATERIALS

Probably the best-known example of this is 'Torlyte', the material keenly advocated by Russ Andrews. A bit like spikes, it is rigid at low-frequencies and hence passes vibration, but at high-frequencies its internal damping is very effective, and its low mass certainly prevents

## Understanding ISOLATION! [Feature]

☉ low-frequency resonance, which by its very nature, hangs around for a long time. Damping at most frequencies is generally better than with spikes, but there's little or no isolation at low-frequencies and additional measures are likely to be required for turntables.

### SPRINGS

Regular coil springs, leaf springs, air springs or bellows and rubber mounts all do much the same thing, isolating one end from the other. In the UK, Townshend is the name most often

exacerbates this. Both conduct vibrations well, so can, in principle, 'ground' components efficiently, at least at low-frequencies. Probably the ultimate statement of the glass and steel principle is the Mana Acoustics range, which adds ultra-sharp spikes resulting in ultra-resonant supports that many users swear by.

**“As regards vibration generated in the equipment, springs isolate both ways and will neither damp nor ground.”**

associated with sprung supports, the firm's various 'Seismic Sink' products offering very high levels of isolation from the environment and also illustrating the main drawback of sprung supports – they tend to be wobbly. That's not necessarily a problem, but can be a bit unsettling for the user. As regards vibration generated in the equipment, springs isolate both ways and they will typically neither 'damp' nor 'ground' such vibration.

### PLATE GLASS AND STEEL

Very much the favourite look at present, neither material has any inherent qualities that help isolation or damping of vibrations. On the contrary, both are typically highly resonant, and the addition of spikes to the combination only

**Below:** Custom Design's RS300 speaker stands



**Pictured:** Townshend Audio's VSSS equipment support

### MASS LOADING

Hollow metal supports can often be filled with sand or other particulate material to damp vibrations. This works well and in addition, the added mass lowers the resonant frequency of the support as a whole, which may or may not be a good thing depending on what's on the support at the time.

### DAMPING MATERIALS

Sorbothane, special composites and natural rubber are all sometimes used to damp vibrations. Again, these can be very successful but don't necessarily improve the isolation, as such, of the support.

On the whole, the ultimate support would probably be that 100kg of newspaper, we mentioned earlier, stacked on a base that in turn is supported by springs, but few users will want to countenance it – never mind the fire risk!

### AND FINALLY....

We haven't specifically mentioned loudspeaker stands. Obviously they are a special case, as lots of vibration is intentionally generated in the equipment standing on them (such as speakers), while vibration getting in from outside is less of an issue. But most of the above holds true in terms of construction. It's often suggested that they should principally aim to 'ground' vibrations to the floor, but the floor isn't infinitely rigid either and may end up resonating itself and adding 'shout' to the sound. Indeed, many users have reported good results with sprung loudspeaker mounts. The ultimate is dangling them from bungee straps – it can work surprisingly well.

On the face of it, one would think that a loudspeaker should be held steady but in reality it's well-nigh impossible to find a real mechanical 'ground' that is itself steady enough. Or, relying on the loudspeaker's mass alone, at least avoids adding unpredictable extra resonances to the mix.

More than most things in audio, equipment support is a subtle blend of science, experience, luck and black art – hence the variety of supports on offer.

In this very issue, we examine four quite different approaches to support and isolation: see *Round-up* on p60 for the full story. **HFC**

*Richard Black*

## RESONANCE

Resonance is familiar enough – tap a wine glass and it resonates at an audible frequency. Resonance occurs whenever a mass is restrained by a spring and the frequency depends on how much mass and how much springiness – less mass, or a stiffer spring and the frequency will be higher. This can occur within a single structure like the wine glass, or between two items linked by a spring – and almost any solid material behaves like a spring to some extent. Possibly even more important than the resonant frequency is the damping, which determines how fast the resonance dies. High frequency resonances are often easier to damp quickly than low frequency ones, but on the other hand may be in the ear's most sensitive region. Balancing all this is tricky!

· M · E · Z · Z · O ·

40  
1947  
2007  
MORDAUNT-SHORT  
40 Years of Acoustic Innovation

## Mezzo – An object lesson in acoustic science

Mezzo is an entirely new family of Mordaunt-Short loudspeakers which offer staggering performance and earth-shattering design at incredible price points.

Mezzo features a host of high-end audiophile innovations including the now legendary Aspirated Tweeter Technology (ATT™) and Sound Deadening Steel treatment to eliminate resonance and deliver a crystal clear midrange. And now, after a lengthy research process, Mordaunt-Short has rewritten the rule book taking its Continuous Profile Cone (CPC™) bass drivers to the next level.

Mezzo's elegant curved cabinets are the ultimate fusion of function and form. Their design inherently discourages the build-up of standing waves for a cleaner and more realistic sound yet their timeless looks are at one in any setting.

To find out why Mezzo truly stands out from the crowd, visit your Mordaunt-Short specialist or [www.mordaunt-short.com](http://www.mordaunt-short.com)

# MORDAUNT-SHORT



“This is one of the most impressive hi-fi products I’ve heard this year”

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



THE ANTILA CD PLAYER WITH ITS UNIQUE MID<sup>2</sup> ACTIVE DIFFERENTIAL MULTI-DAC CONVERTER TECHNOLOGY PROVIDES BREATHTAKING REALISM AND A TACTILE PANORAMIC IMAGE. LIPS ENSURES THE ULTIMATE SIMPLICITY IN USE AND FLEXIBILITY FOR THE FUTURE.

ONLY THROUGH HEARING WILL YOU TRULY BELIEVE. TO LOCATE YOUR NEAREST DEALER CALL LEEMA ACOUSTICS ON 01938 811900 OR LOG ON TO [WWW.LEEMA-ACOUSTICS.COM](http://WWW.LEEMA-ACOUSTICS.COM)



To locate your nearest dealer  
 Visit: [www.leema-acoustics.com](http://www.leema-acoustics.com)  
 Phone: +44 (0)1938 811900  
 Email: [info@leema-acoustics.com](mailto:info@leema-acoustics.com)

BEAUTIFULLY ENGINEERED SOUND

# REVIEWS

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



## EQUIPMENT REVIEWS

- 38** Creek WyndSOR turntable
- 42** Unison Research P70 integrated valve amplifier
- 46** Emm Labs CDSA SACD/CD player
- 48** Wharfedale Opus2-MI loudspeaker
- 52** Mystère ia11 integrated valve amplifier
- 55** Sennheiser PXC450 headphones
- 56** Cairn Fog 3 CD player/digital preamplifier
- 59** Crystal Cable loudspeaker and mains cables



## ROUND-UP

### EQUIPMENT SUPPORTS

#### £130-£900

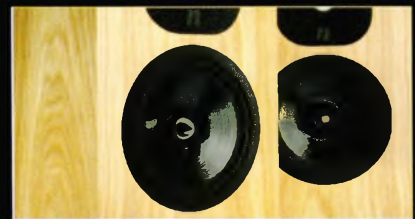
- 60** Audiophile Base Standard
- 60** Custom Design Milan
- 61** Partington Minim
- 61** Russ Andrews Torlyte Platform

## ULTIMATE GROUP TEST

### LOUDSPEAKERS

#### £1,500-£1,900

- 65** Amphion Prio 520
- 67** Ascendo Monitor C5
- 69** DALI Mentor 5
- 71** Monopulse 42A
- 73** Neat Momentum 3i
- 75** Triangle Genese Quartet



## OUR RATINGS EXPLAINED

Percentage ratings for various different criteria, like sound quality and value for money

...nor an... we liked... point here is... to the job of... recommend you... date this with... 17 MkII M, which has excellent build and... e a very good impression in HFC 243. At... same price there's also the Cyrus 7, a... ng all-rounder in a compact case... 'ser trying the Heart with the standard... s we switched over to the Siemens... rade, a comparison somewhat muddied by... e fact that it was a cold for hot swap – the... (source: heart-beats.com, see five.com) all d ys with the...

Our overall conclusion

...after a livelier... w tubes shone... though. The Siemens-equipped player has an... n snappier sound with better timing that... es with dense material with remarkable... fidence and ease. It even seems to be

...fuller and more civilised players for the... money. But few combine dynamics with fine... timing skills as effectively as this. HFC... Jason Kennedy

**VERDICT**

**SOUND** >> 83%

**FEATURES** >> 85%

**BUILD** >> 85%

**VALUE** >> 85%

**HI-FI CHOICE OVERALL SCORE >> 84%**

The things we like most about the product

The things we think could be better

The product's final score. All criteria are taken into account but the emphasis is on performance. Components scoring more than 85% may qualify for an HFC Award Badge

## OUR AWARD BADGES EXPLAINED



### Best Buy

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



### Editor's Choice

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

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



# Like father like son

*Mike Creek's first-ever turntable resurrects a family tradition*

**PRODUCT** Creek Wyndsor

**TYPE** Turntable

**PRICE** £1,750

**KEY FEATURES** Size (WxHxD): 48x13.2x34.5cm

⊙ Weight: 10kg ⊙ External PSU with fine speed adjust  
⊙ Acrylic platter and plinth ⊙ Clamp with built-in spirit level

**CONTACT** ☎ 01442 260146 🌐 www.creekaudio.com

Creek has long been a stalwart of affordable and compact electronics, so it was something of a surprise to come across a turntable in the company's booth at the Munich show in May. This wasn't just an entry-level job either, but an acrylic beauty with multiple drive belts and an outboard power supply. Mike Creek has dubbed the deck, Wyndsor, in honour of his father's audio business where Mike got his start in the industry (you can read more about this in our interview over the page).

The Wyndsor, it turns out, was inspired by a number of factors, not least the fact that Creek's Chinese factory has the ability to turn out high-quality components with relative ease. Some of the ideas come from an equipment rack that the company makes, while others are Mike's engineering solutions.

The Wyndsor is based around a slab of black acrylic which has three substantial turned feet with spikes bolted in. These chunky feet from the AR4 equipment rack have rubber washers to provide some isolation, they also offer height adjustment for levelling the turntable – but this changes the relative angle of platter and motor pulley, so you are better off levelling the supporting surface.

The motor sits in a free standing housing that is very nicely finished in anodised aluminium, it has rubber feet to reduce energy transmission into the equipment rack and an acrylic spindle to drive the three belts. There is also an on/off switch on top, plus you can also stop and start the motor from the separate power supply box, although it's certainly more convenient to have a switch on the turntable itself.

The motor is an AC synchronous type running at 24 volts and the power supply has an oscillator which allows fine tuning of the turntable speed via separate knobs for 33.3 and 45rpm. These seem a little on the accessible side considering how often they are likely to be tweaked. There is also plenty of

potential for accidentally turning one, but given that Creek supplies a strobe disc (and all you need is a focused mains lamp to read it) fine tuning the speed is pretty straightforward. The motor has a fixed cable that plugs into the supply and this lead is long enough to make PSU placement easier. If you use the same

older version as it didn't have the cut-outs that distinguish the current model.

The Wyndsor's arm base allows easy adjustment of VTA (vertical tracking angle), you just lock in the arm and turn a large knurled adjuster to change height. Ours was a little stiff, but didn't create a problem.

**“A built-in spirit level helps with setting up the turntable, the most fiddly bit being fitting the three belts.”**

RPM speed there's no real need to have access to the PSU at all, but it does look nice.

The platter is a 38mm-thick slab of acrylic that's supported by an unusual bearing, (for more detail see box on p41). The turntable also comes with a clamp, not the screw-on variety, but a simple weight to suppress resonance in the vinyl. It doesn't offer the same degree of damping as a threaded clamp, however, but it makes changing records a lot easier. A built-in spirit level helps with setting up the turntable – the most fiddly bit being fitting the three belts.

Creek is in the process of making its own (relatively inexpensive) tonearm, but for this review it supplied a version of the Rega-based Michell Tecno arm, which presumably, was an

## PERFORMANCE

We started out using the Wyndsor with the Michell Tecno pick-up arm. This is a Rega RB300 with silver litz wire arm cable and silver plugs as well as the so-called Tecno weight that is heavier than the standard item and sits underneath the main beam. This combined with a Reson Aciore moving coil cartridge delivers a calm and smooth output that seemed to tame our vinyl rather too effectively.

The contrast provided by the relaxed top end of the Aciore has quite a significant influence on the overall presentation compared to our usual van den Hul Condor reference cartridge. It nonetheless reveals that the Wyndsor is capable of a steady pace and attractively three-dimensional stereo imaging. The bass is ▶



## Q&A

We spoke to company founder and MD Mike Creek about his new turntable.



**HFC** What are the origins behind the name Wyndor?

**MC** In 1948 my father started a company making tape recorders and called it Wyndor. He spelt it in the old fashioned style to give the impression that the brand was British and of regal background. All his reel-to-reel recorders had names like Dauphin, Regent and other names that inferred royalty. In the late sixties he went into making record players and when I left school I went to work with him. We made plinths for Garrard SP25s with a lid, amplifier and loudspeakers built in. My early experience of turntables was using my father's Garrard 301 with a twelve-inch SME arm and Ortofon SPU.

**Why has it taken you so long to build the first Creek turntable?**

We just produced the new Destiny phono stage which prompted me to do something better. I was using an old Linn turntable and whilst developing the Destiny I thought, "this sounds really good but there's something missing". I also had a Michell and even a Transcriptor turntable, but they all suffered from problems. Also, now that we make more attractive components with machined aluminium and plastic parts, it was not a great leap to making a turntable. It was our German distributor's continued requests that finally provided an impetus.

**Where did the idea for the magnetic bearing come from?**

We make an equipment rack out of extruded aluminium which has large tapered spiked feet and this is where the turntable feet come from. It also has a rubber bush in it that acts to isolate both rack and turntable. We experimented with magnetically opposed suspension for the rack but it turned out to be too wobbly. This proved, however, to be a good way of supporting the platter on the bearing.

**Why so many small belts?**

To give more stability on a fixed speed pulley. Even though take up at 'switch on' is possible with one belt, three makes it easier.



also rather chewy and enjoyable especially with Felix Laband's *Dark Days Exit*. This is not an audiophile album and has lots of deliberate distortion, alongside some of the meatiest bass on vinyl. The turntable manages to deliver the girth, however, without making too big a deal of the midrange nasties.

The switch to a Funk V with standard RB300 and van den Hul Condor, produces an unsurprising increase in treble extension and shine alongside extra energy – the cheaper priced turntable obviously benefiting from the addition of a more expensive cartridge. Swapping this arm/cartridge pairing over to the Creek brings forth a more precise and calm sound with more power in the nether regions than we had encountered earlier, even with the relatively sophisticated orchestral manoeuvres of Rachmaninov's wonderful *Symphonic Dances*. This classic disc reveals that the Creek is adept at rendering convincing string tone and produced a good deep soundstage for the orchestra to work within.

For a change of perspective, we took the turntable, motor and power supply into an alternative listening room and partnered it with a Russ Andrews HP-1 preamp and ATC SCM150A active loudspeakers. In this context,

the sound it produces is fulsome, slick and substantial, particularly with a recent 45rpm cut from Burnt Friedman delivering holographic imaging and deep, luxurious bass. The Wyndor seems to be very composed and relaxed for an acrylic-plattered turntable, and one has to suspect that the magnetic bearing has something to do with this. In some other respects, it is not unlike many other designs from the likes of Clearaudio, for instance. The way that Creek has implemented the power supply will have also a bearing, of course, but the way that Mike described it did not suggest that anything radical had been tried in this department.

One thing we particularly like about this turntable, is the way that the clamp can be removed and the vinyl changed without having to stop and start the motor. Threaded clamps don't allow this, so changing records is a bit of a kerfuffle. Whether the relatively lightweight clamp supplied makes the same difference as a threaded design is hard to say but it certainly helps keep the vinyl spinning.

We also put the Wyndor on a highly isolating Townshend Audio rack – and given the minimal resistance to vibration offered by the turntable – this would be a





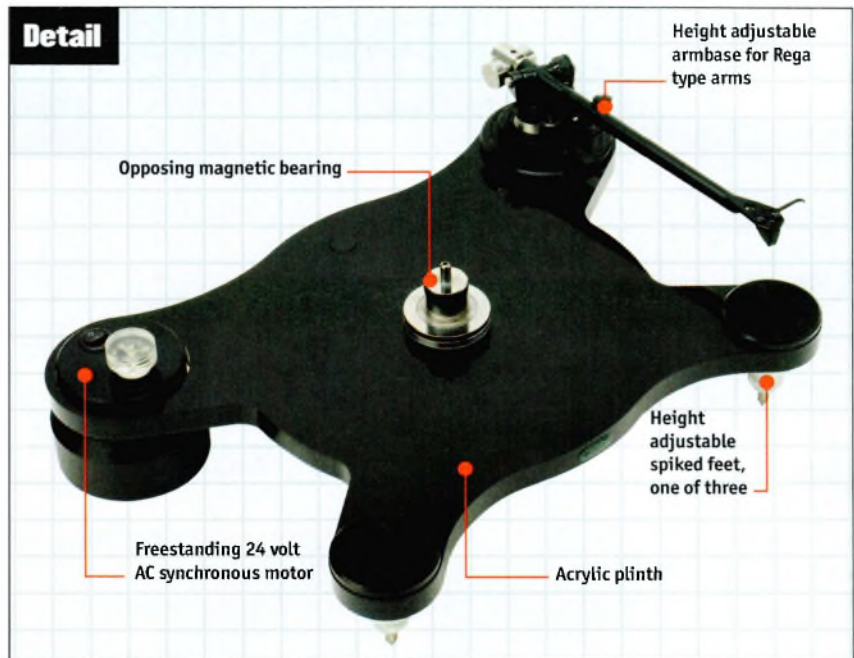
**MAGNETIC BEARING**

Last year, we reviewed the EAR Disc Master, which had magnetic drive between motor and platter. This year, Creek has taken a different, though not unique approach and used opposing magnets to support the weight of the platter. Most turntable bearings have what's called a thrust bearing – usually a tungsten ball, but sometimes a ruby, which takes the weight of the platter. If the thrust bearing and pad are not well lubricated, however, this pressure point has the potential to be a source of friction. By using opposing magnets to eliminate this interface, Creek only has the shaft bearing to worry about which is relatively low in friction. Lower friction bearings generally translate into lower noise at the stylus/groove interface and that's all to the good ■

recommendation when large speakers are nearby. In this respect it may not compete with challengers from the Michell stable, for instance, unless you can put it on a solid wall-shelf away from the speakers.

Under these circumstances, the Creek responds in revealing fashion to a whole stack of albums, placing them in the appropriate era and making no bones about the style and degree of compression used. Keith Jarrett's *Changes* may not have had quite the compulsion that it achieves with other decks, but it did bring to light one shortfall, which is that the timing isn't quite on-the-money.

As it was to hand, we also slipped in the dps250: another revamped Rega arm, this time



**“The turntable managed to deliver the girth, however, without making too big a deal of the midrange nasties.”**

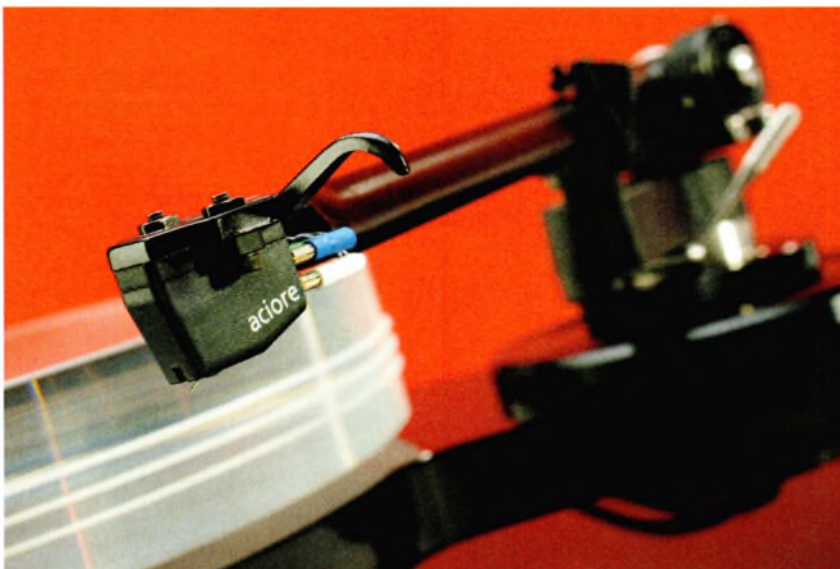
based on the RB250. We noticed that the resonance that could be felt on the motor body could also be detected in the arm and armbase, suggesting that energy was travelling across the MDF surface of the rack and up through the spiked feet and acrylic plinth. Reducing the belt tension seemed to help, and we're confident final production units will differ from our early sample.

Whilst this turntable is revealing in many respects, it's perhaps not best described as engaging. It takes quite a while for this to become apparent and it can feel as if music lacks thrill power – it is possibly down to a

shortfall in the timing department.

The calm presentation is good for detail freaks, however, and if this floats your boat it's worth taking a closer look at. **HFC**

*Jason Kennedy*



**VERDICT**

**SOUND >> 75%**



**FEATURES >> 88%**



**BUILD >> 88%**



**VALUE >> 78%**



**PRO**  
Appealingly calm and well detailed with good build quality, solid imaging and an easy to use clamp.

**CON**  
Not as musically satisfying as some others and there are moments when unwanted energy is transmitted from motor to arm via the support surface.

**CONCLUSION**

It took a while to figure out this deck. Whilst it might not be the most thrilling deck on the market, it does a lot of things well. Build quality is very good and so is the finish – all that's needed is an injection of pizzazz.

**HI-FI CHOICE OVERALL SCORE >> 77%**

EDITOR'S CHOICE

HI-FI CHOICE  
magazine



# A touch of glass

*Unison's first push-pull design for a decade, the new P70 also features a Murano glass fascia*

**PRODUCT** Unison Research P70

**TYPE** Integrated valve amplifier

**PRICE** £3,495

**KEY FEATURES** Size (WxHxD): 46 x 20 x 45 cms  
• Weight: 35kg • 70 watts per channel • Four line inputs, duplicated as balanced XLRs and single-ended phonos • Remote control over input and volume  
• Murano glass and hardwood fascia

**CONTACT** ☎ 01753 652669 • www.unisonresearch.com

Over the past two decades, Unison Research has built itself an impressive reputation as a maker of fine quality valve amplification at realistic prices. Electronics lecturer Professor Gianni Sacchetti, a valve/hi-fi enthusiast who is still the main man behind the valve amp designs, originally started the Unison operation. Subsequently, the business has been expanded by Giovanni Nasta, who is responsible for adding the Opera

loudspeaker brand to the operation. Nasta also been busy extending the electronics activity with solid state and hybrid products under the Unico banner.

This £3,495 P70 integrated line-level stereo amplifier joins an already extensive range of more than a dozen different valve amps, but its addition to the collection is clearly justified on both styling and engineering grounds. For a power output of 70 watts per channel, it's a quite compact affair, though undeniably hefty thanks to the generously rated mains and output transformers.

While the lower portion of the fascia is made from an elegant piece of hardwood in the Unison tradition, the top half is a thick piece of shaped and coloured semi-transparent Murano glass. It's a clever styling solution that not only looks very attractive but also emphasises the company's geographical proximity to Venice

and its offshore island Murano, famous for high-class glassmaking since medieval times.

Very much a purist designer, Sacchetti has concentrated exclusively on single-ended designs for the past decade, but his latest creation, the P70, marks a break with that tradition by adopting the more popular push-pull approach.

The differences between the single-ended and push-pull approaches to valve amp design have long been the subject of debate and some controversy amongst valve amp cognoscenti. Without getting too deeply into the technicalities, although it's often claimed that the single-ended approach gives the sweeter sound, a push-pull design offers greater power output and superior efficiency from similar ingredients. Compare this amp with Unison's single-ended Performance that *HFC* reviewed just over a year ago (*HFC* 287).



## “The P70 integrated line-level stereo amplifier joins an already extensive range of more than a dozen different valve amps...”

The P70 delivers 2x 70 watts from four KT88 output valves, in a package weighing 35kg and costing £3,495, whereas the much larger Performance delivers just 40 watts per channel from six KT88s, weighs 50kg and costs £5,500.

Furthermore, as Sacchetti points out in his interview (see page 44), the symmetry of a push-pull arrangement allows for fully balanced operation, which is not possible with a single-ended design. Whether that makes the P70 more desirable is debatable and beyond the scope of this review.

The short version is that balanced operation is almost universal in professional audio applications, because it avoids hum and noise problems with the long cable runs that are often found in complex studio applications. However, purist audio critics point out that balanced operation represents an unnecessary complication. While it has yet to become a popular mode of operation for hi-fi applications here in Britain, balanced connections are widely found and used in American high-end hi-fi equipment.

Reflecting the company's new enthusiasm for balanced operation, the four line-level inputs and record output are available with either balanced XLR sockets or single-ended phonos. The remaining feature count is rather limited, omitting potentially useful options like mono switching, muting and balance adjustment, or indeed any form of tone control.

Happily, however (in theory at least, though not for some reason on our pre-production sample), remote control is available for volume and input selection via a classy wooden 'system' handset that can conveniently be stood upright on its 'heel' for easy one-hand access and operation. Happily too, the three metal knobs that adorn the front (which will be rather smaller in production models) cover these key basic functions.

A single pair of speaker output terminals serves each channel, optimised for six ohm loads. A special rear panel socket can supply the requisite power for Unison's matching PhonoOne or Simply Phono outboard vinyl stages (not supplied).

Internally constructed as a double-mono amplifier throughout, the input stage for each channel features two ECC83 double triodes and one ECC82 double triode, prior to the twin KT88 power output. Unison's custom designed output transformers are claimed to be able to deliver full power at 30kHz, while proprietary circuitry holds harmonic distortion below 0.2 per cent. Output valve bias is automatically and accurately controlled and stabilised under all conditions, even from cold or if the valves are changed.

### SOUND QUALITY

The most impressive thing about Unison's Performance amplifier was that it managed to provide the advantages of valve operation without the usual corresponding drawbacks. Much the same was true for this rather more powerful and compact but less costly P70.

The characteristic strength of any valve amplifier usually lies in the sweetness, transparency and dynamic expression of its midband, and that was immediately apparent here, adding previously unsuspected depth perspectives to familiar recordings, and emphasising the precision of the wide dynamic window through very superior rendition of low level ambience and instrumental decay and sustain. ▀

Q&A

Professor Gianni Sacchetti talks to Hi-Fi Choice about his latest valve amplifier design



**HFC** I know the push-pull approach offers more power and efficiency, but can you explain any other advantages?

**GS** The possibility to carry out a totally balanced circuit is most important. In a single-ended amplifier the output stage is not symmetrical, so only the pre-amplification stages can be fully balanced. Unison Research intends to produce a new series of push-pull amplifiers with fully balanced topologies.

**What are the drawbacks of push-pull over single-ended operation? Is sound quality significantly compromised?**

The only drawback in push-pull over single-ended designs is the risk of high odd harmonic distortions, which give an unnatural sound. Particular care must be taken over the output transformer so that the 3rd harmonic is lower than the 2nd.

**Did you introduce any new circuit techniques compared to your earlier push-pull designs?**

For our new push-pull line, we have come up with an electronic circuit to give the right polarisation of the output valves, which we want to patent because it is an original solution. With this bias circuit, the current flowing in the output valves remains constant, so the amplifier produces a good sound only few minutes after switch on and new or old valves give the same good sound.

**Is there a particular reason you choose to use KT88s, rather than the KT90s that Graaf uses in its GM50 model?**

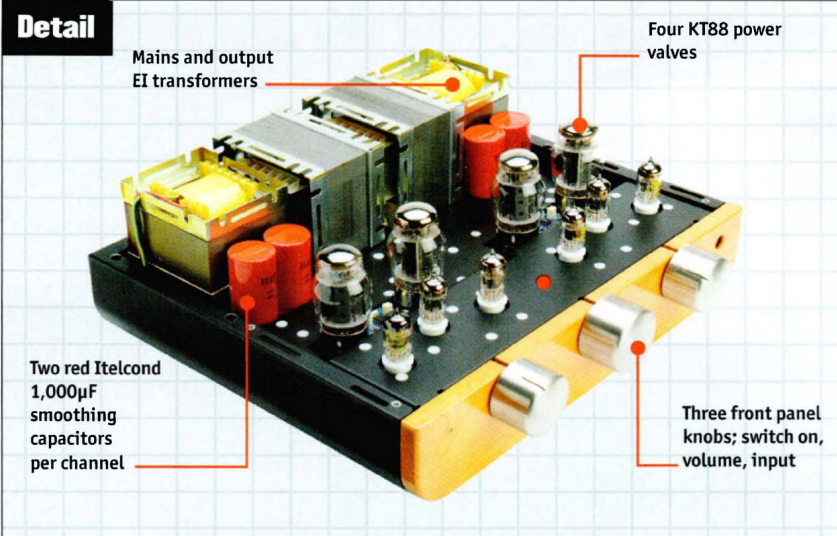
We decided to use the KT88 because it is very easy to buy everywhere in the world and sounds very good. It is possible to use the KT90 in our P70 with a little modification.

**How critical is valve (tube) matching/pairing in the P70 design?**

The selection is very important in all valve amplifiers, particularly in a balanced amplifier.

**What is your estimate of the working lives of the P70's various valves?**

The average life of valves, in my experience, is about 3,000 hours for the ECC series and 1,500 – 2,000 hours for the power tubes. We use the P70 valves in such a way as to maximise their life, helped by our new bias circuit.



Recorded voices sounded particularly persuasive and human, with notably delicate phrasing and inflexion, but poor quality sources were also laid bare. Unfamiliar coloration seemed audible at one point when listening to speech from Radio 4, but when the programme changed it quickly became apparent that the source of the coloration had been at the broadcast studio end of things, rather than in the reproduction chain.

If Radio 4 sometimes proved to be disappointing, Radio 3 was usually very satisfactory (in part because of the skill and sensitivity with which BBC engineers place microphones when recording orchestral music) and because a good quality valve amplifier is particularly well suited to replaying the natural instruments of a symphony orchestra – with its complex and subtle textures. Since my Magnum Dynalab MD106T tuner is the only source I use with balanced outputs, this was an opportunity to check the balanced connection and while it worked perfectly well, it didn't seem in any way superior to the alternative single-ended connection.

Even when used in combination with B&W's highly analytical diamond tweeter and Rega's similarly transparent Apheta phono cartridge, both of which are on the bright, but extra clean side of neutral, the top end sounds

notably sweet, delicate and open. There's no apparent roll off or loss of air and the sweetness of the source and the tweeters is fully maintained, despite the insertion of a solid state phono stage in the chain.

The bass end is often a weakness of valve amplifiers and the P70 does fall a little short of the best solid state models in terms of tautness, tightness and consistency. But across a wide range of material it's only caught out by the occasional track. For the most part the bass is clean, quick, lively and informative, just the way it ought to be, but in 'valve land' often isn't.

That's probably the most serious criticism of an otherwise impressively neutral and transparent valve amp. The styling is attractive and quirkily original, the unit is reasonably compact and there's enough power to satisfy the majority of users and systems. **HFC**

Paul Messenger



**VERDICT**

<b>SOUND &gt;&gt; 89%</b>	<b>PRO</b> Lovely valve delicacy, sweetness and transparency especially through midband and into the treble. Fine neutrality and ample power for most purposes.
<b>FEATURES &gt;&gt; 70%</b>	<b>CON</b> Can lack a little tautness with deep synthesiser bass. Amplifier is heavy especially along the back section, so needs solid support.
<b>BUILD &gt;&gt; 86%</b>	
<b>VALUE &gt;&gt; 85%</b>	

**CONCLUSION**  
Delightful sounding valve amplifier with notably delicate and transparent midband, a sweet, open and well extended top end, and impressive general neutrality, though the bottom end could be tauter and tighter.

**HI-FI CHOICE OVERALL SCORE >> 85%**

# A World's First in Hi-Fi Enclosures.

A never before seen blend of stainless steel and acrylic comes together to form something of pure beauty. Capable of holding Hi-Fi upto 440mm wide, it is designed to show your equipment to it's full potential. Gone are the days of the glass shelves, now is the time for the Pod.



The Pod.

Which do you prefer?  
Black? Or White?



You get both, with  
Si Designs Uk.

## The Bolus.

The finest materials, crisp clean lines and smooth curves. The bolus evolved from the pod, designed to handle larger equipment. Each piece is hand made with precision and passion, to produce the perfect product every time. Dare to be different. What are you waiting for?



[www.SiDesignsUK.com](http://www.SiDesignsUK.com)

[Info@SiDesignsUK.com](mailto:Info@SiDesignsUK.com)

Unit 11, Burma Drive, Hull, HU9 5SD

01482 787835

EDITOR'S CHOICE

HI-FI CHOICE  
magazine

# Labs test

*A purist SACD/CD player from a pioneer of DSD signal processing*

**PRODUCT** EMM Labs CDSA

**TYPE** SACD/CD player (stereo only)

**PRICE** £6,995

**KEY FEATURES** Size (WxHxD): 43.5x14x40cm

● Weight: 12kg ● Compatible with SACD, CD and MP3

● Balanced (XLR) and single ended (RCA phono)

● Finish: satin black or white ● Custom install support

**CONTACT** ☎ 01273 700759 ● www.musicology.co.uk

**E**MM Labs is not a big name in the UK, but it does have a strong reputation in its native Canada and across North America for its domestic and professional SACD players. The company's CEO, Ed Meitner, also enjoys near-legendary status amongst hi-fi cognoscenti, not least for his personal contributions to the science of DSD signal processing, the core component of the high-resolution SACD format.

Meitner's players are individualistic, verging on idiosyncratic. There are just two key models at present – a two-box D/A converter and transport flagship, which also functions as an audiophile preamplifier. And then there's the CDSA, the subject of this review. A single-box, stereo-only CD/SACD player which is an

uncompromising beast by any standards, and certainly no raving beauty. Indeed, there are some clear compromises that will seem puzzling at first sight, including the counter-intuitive behaviour of the absolute phase switching and a track numbering system that requires three digits to be entered (for example- 012 for 'track 12' of an SACD)

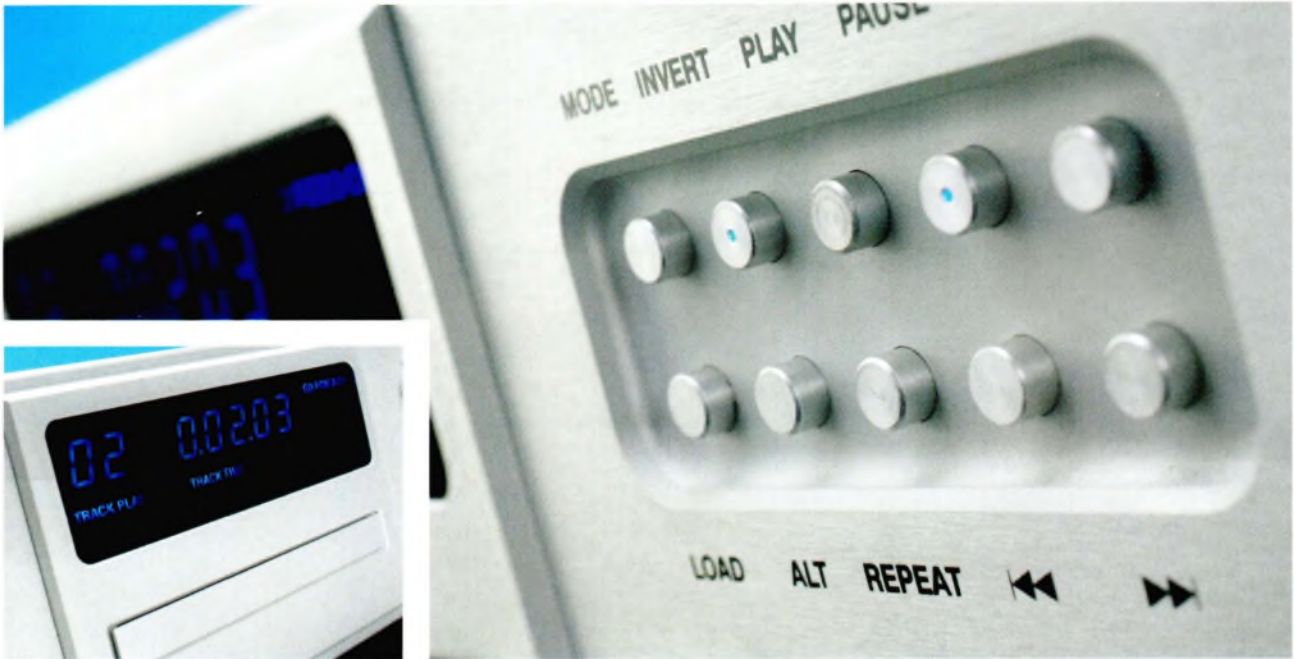
Okay, nuts and bolts time. The CDSA (sometimes known, for no apparent reason, as the CDSA SE) is a single-box dual format player that's compatible with SACD and Red Book CD discs, and MP3 discs. However, the SACD element in this case is stereo-only. More specifically, it can play the stereo channels on the multichannel layer of SACDs, but it chooses to default to the stereo layer. There are relatively few bells and whistles on what is, above all, a very functional player, although you do get single-ended and balanced operation, and there's an electrical digital output for CD using an XLR connector. The USB and RS232 connections facilitate custom installations and firmware updating.

The internal clockwork is the most unusual and interesting part of the design. First, this is

an upsampling player, though there is no user choice of sample rates. DSD data from SACDs is upsampled to twice the normal data rate, and any PCM data also goes through a similar chain, using a proprietary upsampler to double the sample rate.

Other technical highlights include a proprietary dual differential DAC circuit (not based on any commercial design) and proprietary PCBs with the tracks polished to a high level of smoothness, to avoid skin effects. The signal voltage from the XLR output is nominally twice that of the single-ended output, but both can be switched between low and high voltage settings, which means up to 7.2 volts from the balanced output, and four volts from the single-ended output, which may not always suit all preamplifiers.

When asked about the future of SACD, EMM Labs's sales director, Shahin Al Rashid, describes the company's line in terms that equate with vinyl. Rashid confirms that there is a general shortage of mastering capacity for SACD and that, if anything, this situation will get worse as the growth in small specialist companies (such as the San Francisco



**“... the result is an engaging, enjoyable sound...that somehow manages to elude many otherwise worthy players.”**

Orchestra, the London Symphony house, and the M&A label) increases demand.

**SOUND QUALITY**

The CDSA is an exceptionally good CD player, and crucially, is one which goes further than most to closing the gap between CD and SACD performance.

Many SACD players offer a degree of softness – a lack of presence and focus in the very highest octaves. The CDSA, however, is quite a different story. Vocal quality is both sweet and pure, and with material that has real depth and substance (for example, Madeleine Peyroux's *Dance Me to the End of Love*, with its elements of Billie Holiday that sound anything but slavish) the player offers real depth and gravitas when required. In addition to this, the CDSA also boasts a lightness of touch that helps the player express something meaningful about the music. Nothing about the sound could be described as heavy-handed or clumsy, and it does this without sounding obviously euphonic or soft.

Stereo behaviour is also unusual, with real precision laterally and more than a hint of image depth and a large image space that presents itself in a way that suits the musical material of the moment.

Dynamics are also first-class, and the result is an engaging, enjoyable sound, one that

has musical credibility and strength, along with the kind of range and variety, the ebb and flow, and the sense of detail that somehow manages to elude many otherwise worthy high-resolution players.

While there is a clear demarcation between CD-style PCM, and DSD from SACD – the later is clearly superior under almost all circumstances – CD sound quality is very impressive and although the sense of detail and presence is not in quite the same class, the quality of separation between voices and instruments is very well handled.

Intriguingly, SACDs made from PCM masters, of which some of the best examples are on the M&A label, are not noticeably inferior to DSD recordings. But M&A is a wholly exceptional label from the sound quality viewpoint and there are some particularly fine short piano excerpts on this disc, with unusually expressive fingering and a tonal purity, extreme treble quality and refinement that are simply beyond criticism.

The CDSA is not quite the smoothest or most refined player in either of its two main disc formats. The Marantz SA-7S1 (tested in *HFC* 297), and the Esoteric X-01 (tested in *The Collection '07*), are unusually fine CD players, in addition to their very impressive credentials

as SACD players, but clearly lose out to EMM Labs' player when reproducing

CD material. In truth, both sound smoother and more refined than the CDSA, but the latter is actually lighter and offers greater resolution, as well as greater stereo focus.

While the CDSA is clearly at its best with SACD, there is greater consistency between the two formats with this player. The test player from EMM Labs is less euphonic than the other two (though in fairness the time gap between the three review timetables meant it was not possible to compare the three players side by side, except by referring to contemporaneous listening notes), but the CDSA player seemed unusually true to the musical intentions and structure of the various test pieces, using Moon Andromeda amplification, Nordost Valhalla cables and Monitor Audio PL300 speakers. **HFC**

*Alvin Gold*



**VERDICT**

**SOUND >> 88%**  
 >> SUB RATINGS  
 CD 87% SACD 89%

**BUILD >> 87%**

**FEATURES >> 86%**

**VALUE >> 88%**

**PRO**  
 Although slightly creaky externally, this is an unusually refined and sophisticated unit internally, with a light, agile sound quality in all main formats (PCM and DSD).

**CON**  
 Slow disc handling, along with some minor user interface quirks makes this a less polished player than some in day to day operation

**CONCLUSION**  
 Successful engineering conception of high-performance disc replay, stripped bare of superfluous bells and whistles, gives consistent performance with CD and SACD replay alike. A player that closes the gap between the formats, too.

**HI-FI CHOICE OVERALL SCORE >> 89%**

BEST BUY

HI-FI CHOICE  
magazine



# Speaker's Corner

*Wharfedale is once again establishing itself as a force to be reckoned with*

**PRODUCT** Wharfedale Opus2-M1

**TYPE** Standmount loudspeaker

**PRICE** £1,000 per pair (optional stand £300 per pair)

**KEY FEATURES** Size (WxHxD): 23x51x36cm

● Weight: 12kg ● Frequency response 42Hz – 43kHz

● Impedance: 6 ohms (nominal)

● Twin rear vented three-way system

**CONTACT** ☎ 01480 431767 🌐 www.wharfedale.co.uk

**N**ot long ago, we published a review of Wharfedale's retro-flavoured Airedale Neo speaker (*HFC* 296). Even with its tried and tested technology (some of which is pre-WW2) we didn't expect it to become a best seller. It does have a strong appeal in China, however, (where it's built) and all points East: markets in which JBL and Tannoy's wardrobe-sized speakers usually hold sway.

Now, specifically for the European (and eventually US) markets, Wharfedale has engineered a new range of speakers called Opus2. During a recent press trip to the factory, the company demonstrated early preproduction samples to us, driven exclusively by Quad electronics and their performance was notably good. So much so, that we were quick to put our names down for a test pair.





The Opus2 M1 is the entry-level model in the range, but still costs £1,000 plus an additional £300 for the (optional) column stands. Unlike the miniature speakers often sold as satellites with a separate subwoofer, the Opus2 M1 is a generously proportioned compact with enough bass to cope in a full bandwidth system with or without a sub. It is partnered by a full range of home cinema/multichannel audio related models – centre, surround and subwoofer – and there are scaled-up models for those looking for comparable designs with commensurately greater bass and maximum volume potential.

Some of the key features of this speaker will be familiar to Wharfedale enthusiasts, indeed some are from the book of contemporary loudspeaker design. For example, the teardrop enclosure cross section in a twin vented enclosure. Made from Australian eucalyptus and pine blended with synthetic resins, it forms a series of curved walls and non-parallel internal surfaces to help disperse back radiation from the larger drive units.

Nor is it completely unprecedented to take as much care as Wharfedale's engineers clearly have over the quality of the exterior surface finish. The test pair, for example, came in real wood veneers with ten or more layers of a truly exceptional deep gloss. This impressive attention to detail was apparent in the solidly built optional pedestal stands. The only criticism being that the gold plated biwire terminals are fitted with pressed metal links. These are clearly inferior to links made from stranded cable stock.

Most of the other key features are not at all conventional. First, the Opus2-M1 is not a two-way speaker, despite its compact size and limited frequency coverage. Instead it perpetuates Wharfedale's long-standing preference for large midrange domes by sandwiching one with a 75mm soft dome

which is partially horn-loaded to control dispersion near the top of its frequency coverage between a dedicated bass driver and tweeter. The midrange dome is equipped with a 75mm voice coil on a hard aluminium former which helps ensure geometric concentricity during assembly and to encourage heat dissipation. The unit is pressure equalized by a closely coupled underside perforated dome

dead as some when subjected to the rap knuckle test.

Don't look for the kind of muscularity in the bass that you would expect from a full size floor stander, or even from a moderately compact powered subwoofer. But there is a rightness about what the M1 delivers. There is an ease and naturalness that is unusual. The bass sounds full, but completely

## “Most impressive of all, however, is the homogeneity of the sound higher up the frequency spectrum.”

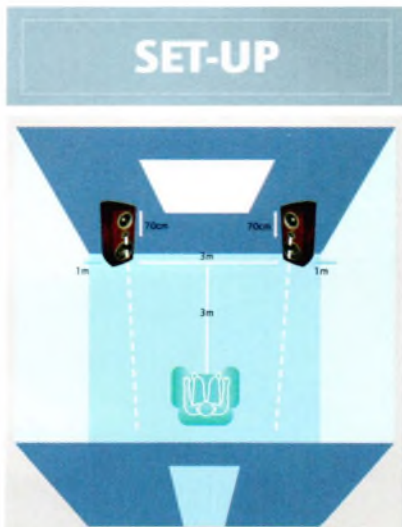
baffle and a finned alloy diecast rear cover. The unit operates between 700Hz – 4kHz, which is virtually the whole of the human vocal band, with dispersion tailored to mimic the tweeter. The other units are a bass driver fitted with a 170mm cone and a 25mm textile dome tweeter. The bass driver has a tri-laminate glass/carbon/glass cone optimised to reject internal reflections from the small enclosure. At the opposite end of the spectrum, the tweeter's soft dome covers up to an impressive 50kHz. All this is knitted together by a relatively simple crossover with low insertion loss inductors and low loss, low-ECR polypropylene or reversible electrolytic Wharfedale Super Audio branded capacitors.

### SOUND QUALITY

We partnered the Opus2-M1 with a system comprising a Denon DCD-SA1 SACD player and PMA-SA1 amplifier and it was clear right from the off that it had a facile ease and naturalness. It doesn't have much of what might be described as overt character to call its own, but it is absolutely, unequivocally and completely musical. It achieves this with no sense of strain, though the enclosure is not as

at one with the midrange which acts as a wellspring from which the bass emerges in a natural, organic way. Cellos sound ripe and double basses lack a little of the weight and power of the genuine article. But they don't sound lightweight or merge into the cellos despite the clear overlap between these instruments. Best of all, the bass and midband clearly belong together. They have much the same weight and are similarly proportioned.

Most impressive of all, however, is the homogeneity of the sound higher up the frequency spectrum. Without straying into the rarified worlds of diamond (B&W) or beryllium (Focal JMLab) tipped exotica, or electrostatics or ribbon based treble from the likes of MartinLogan and Monitor Audio, the Wharfedale top end, which comes from what at first sight looks like a perfectly conventional 25mm dome tweeter, is truly exceptional. There is no hint of harshness or aggression, which is probably attributable to two factors: the unusually extended high frequency limit which, according to Wharfedale, extends to 45kHz (-10dB), with the first HF resonance probably somewhere around 22-25kHz. ▶



### POSITIONING

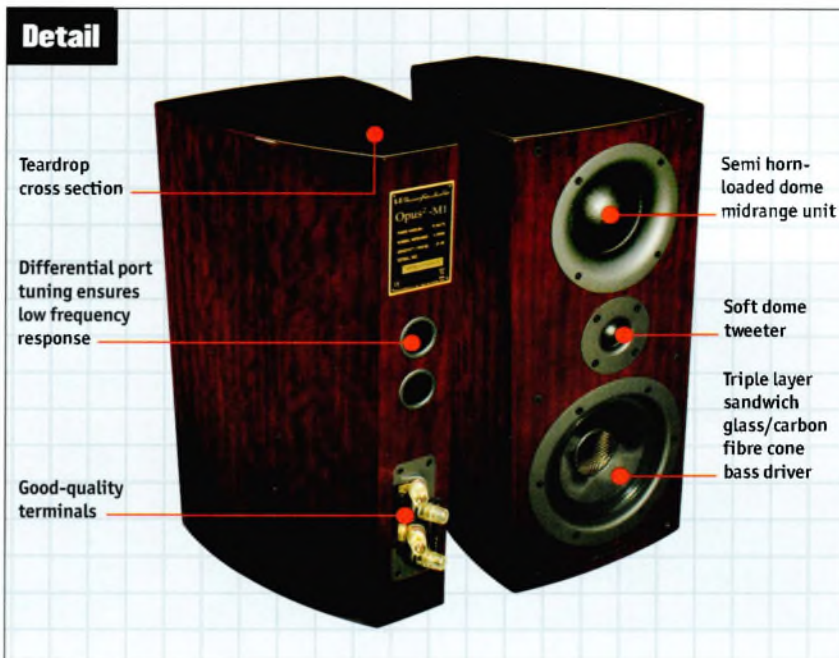
Reviewers often breathe a sigh of relief when presented with compact stand mount speakers such as the Opus2-M1. For starters, they're easy to place in the listening room and reasonably unfazed about where they end up. This is especially true of rear ported designs like this one, as the amplitude of the rear wall interaction is scaled back.

The speaker must be allowed to remain forward of the back wall to breathe, of course. But in most cases, this means that a distance of 30 – 70cm between the back of the speaker and the rear wall usually works well and this is certainly the case here.

Another key factor is that the smallish panel sides of the enclosures tends to draw the acoustic output around in the lateral plane and to some extent, even vertically. They are, in fact, nearly omnidirectional compared to physically larger speakers and this means that orientation ceases to be a major factor. Of course some symmetry between the two speakers in a pair always helps. A little space behind the speakers and you're cooking with gas!

### SYSTEM MATCHING

The limited low frequency output of speakers of this type makes life reasonably simple. Bass output is not that powerful and although the limited size of the speaker contributes to a moderate sensitivity figure (nominally 87dB), the speaker appears to be a benign load and can be driven hard by any reasonably powerful amplifier. It certainly doesn't demand the heavyweight attention of the flagship Denon amplifier used for this test. And that's really the point here. You can use any decent amplifier, without actually demanding masses of power, but this is a high-resolution speaker that definitely benefits from the use of smooth-sounding high-quality, high-resolution electronics and cables.



And, perhaps, more importantly, is the unusually uniform polar responses (horizontal and vertical), which are documented in the Wharfedale literature. It is not possible to be completely definitive about this, however, as the scaling of the plots leaves something to be desired, but it is obvious from the listening that the response falls away smoothly towards the limits of the useful soundstage.

The geometry of the midrange dome – which is similar to a scaled version of the tweeter – must also play a contributory role here. The system is rated to deliver up to 90 degrees horizontally at 14kHz and 70 degrees vertically at 12kHz, which impressively reinforces the points already made.

Other design parameters help satisfy the ease of use equation. Nominal impedance is 6 Ohms, which won't cause any hardship for modern amplifiers; and harmonic distortion levels are low (<1% 600Hz – 50kHz). The Opus2-M1 is relatively insensitive to partnering equipment,

too but is a high-resolution speaker that won't couple well to ancillaries of indifferent quality, but what loudspeaker of any real merit does? Above all, it is a personable, human scale transducer with a winning combination of high resolution, excellent tonality and stereo imagery. It also looks great and is palpably well made. The matching column stands are also highly recommended, by the way. **HFC**

*Alvin Gold*



### VERDICT

**SOUND >> 93%**



#### PRO

Detailed, dynamically consistent sounding system, with well integrated bass, smooth, well extended treble and consistent, three dimensional imaging.

**EASE OF DRIVE >> 89%**



#### CON

There is some mid/high frequency noise from the enclosure, which is ultimately not quite as stiff as some, though it is well damped.

**BUILD >> 92%**



**VALUE >> 88%**



#### CONCLUSION

Here is a very impressive compact that breaks the mould for a brand not previously associated with elegant sounding and sophisticated design of the kind on offer here. It's also well made and looks stylish when anchored to the optional stand

**HI-FI CHOICE** >> **90%**  
OVERALL SCORE

Designed and built in Britain



### The Master Series

In a nutshell. A stunning new AV system delivering captivating images and astonishing audio quality.

→ the essence of musical luxury, defined by Cyrus

**WHAT HI-FI?**  
SOUND AND VISION  
**AWARDS 2007**  
CD PLAYER  
BEST CD PLAYER £750-£1500  
**CYRUS CDRx**

**WHAT HI-FI?**  
SOUND AND VISION  
**AWARDS 2007**  
STEREO AMPLIFIERS  
BEST STEREO AMPLIFIER £1500+  
**CYRUS PRE v2/8 POWER/PSX-R**

**WHAT HI-FI?**  
SOUND AND VISION  
**AWARDS 2007**  
STEREO AMPLIFIERS  
BEST STEREO AMPLIFIER £750-£1500  
**CYRUS Bvs2**

**CYRUS**  
Sound and Vision for life

For latest news on products or to download a brochure, please visit [www.cyrusaudio.com](http://www.cyrusaudio.com)

BEST BUY

HI-FI CHOICE  
magazine



# Mystère right

*It's hard not to fall for the new valve amp from the Prima Luna people*

**PRODUCT** Mystère ia11

**TYPE** Integrated stereo valve amplifier

**PRICE** £1,250

**KEY FEATURES** Size (WxHxD): 37x20x32cm

- Weight: 20.5kg
- 40 watts per channel
- Pentode push-pull valve design
- Four line-level phono inputs
- Outputs for four and eight ohm loudspeakers

**CONTACT** ☎ 020 8971 3909 🌐 www.pistolmusic.co.uk

**M**ystère is an entirely new brand that stems from the same team that makes Prima Luna electronics. Thus far, there are two integrated valve amps: the ia11 (tested here) and the beefier ia21.

Although there are strong similarities between the two brands (same Dutch design, same Chinese build, both valve-based, and both distributed by the Pistol Music arm of Absolute Sounds) the Mystère ia11 is no clone amp. On paper at least, it's a rudimentary design though, just four line inputs (no phono

stage, record loop or preamp outputs), no chance of a remote control and ultra-minimalist in look and intent. The silver knob on the left selects the source, the one on the right adjusts the volume and just round the corner on the side flank, is a little black plastic on-off switch. A power LED seals the deal (although this is academic, because the glowing valves and the heat they give off, are a pretty sure sign that the amp is in operation).

The two smaller squared-off black output cans at the back of the amplifier (either side of the big power transformer can) give some clue to the Mystère ia11's nature. It's a dual-mono design, using a pair of EL34 output pentode valves in push-pull mode per side. These deliver 40 watts per channel – a conservative output as these valves can return up to 50 watts in this configuration (as they do in the bigger ia21). This extra power would, however, require far bigger and heavier output transformers or overdrive the valves, so the

conservative approach is well appreciated.

Alongside the four power pentodes sit four 6SN7 double triodes in the input stages. This is a larger and altogether more audiophile-friendly preamp tube than the more common ECC86, which has been more freely available thanks to its regular and continued appearance in guitar amps.

One criticism of valve amps is their inability to cope with modernity. While fair comment that no solid-state integrated amp at this price would stand much chance of success with just four line inputs and no remote control, the Mystère ia11 is not a 1950s throwback. The circuit features an adaptive autobias, so no fiddling with screwdrivers every month or so to keep the valves working at the same rate. It uses a high quality 24-step volume attenuator, in place of a blah volume potentiometer. And the hard-wired components are loaded with audiophile cred – double layer polypropylene coupling capacitors, high purity copper

conductors, funky low-noise resistors – the works, in fact.

The circuit is claimed to extend far into the high-frequencies, delivering a suggested frequency response of 4Hz-80kHz within 3dB limits at one watt and a similarly healthy 20Hz-52kHz within a decibel at full output. That makes it do what has become the almost unthinkable in audiophile circles – you can actually couple an SACD player to a valve amp.

The chassis is remarkably small and deceptively heavy (although nowhere near as heavy as its ia11 bigger brother). Most of the weight is distributed to the rear of the amplifier, where those three black boxes hide a central power transformer and two output transformers, with taps for four and eight ohm speakers. The overall look is richly fabulous, especially with the valve protector in place: the piano gloss finish with two frontal slats to dissipate heat look businesslike and cool. Only



**“Part of the joy of a valve amplifier is the way it distorts when the wick is turned up; at full tilt, upwards of one per cent distortion.”**

‘look’ cool, though... the top plate of that valve protector quickly rises to egg-frying temperature (more so than its bigger brother) and one can't help wondering if that protector only serves to heat the tubes too greatly. Still, it's easy to remove.

**SOUND QUALITY**

The Mystère is lighter, brighter and more temporally upbeat than its peers. In that respect, it's almost like the Naim amp of valve designs. It's got an exceptionally fast attack on the music – attack in the musical, not military, sense – with leading edges of music delivered cleanly, crisply and accurately. This gives a sense of reality to transient-led, percussive instruments and an infectious sense of foot-tapping rhythm to anything with a beat. This is something that's exceptionally rare in valve designs, as most seem to blunt the leading edges in favour of a more mellifluous, beautiful overall presentation. As the Prima Luna designs were very much in this 'traditional valve sound' camp, the Mystère deserves all the more praise.

Where the valve sound is used to full effect is in the midrange. The Mystère ia11 goes for the deep but not wide, exceptionally open midband that can make the speaker seem to disappear – a very valvey trait and one that is thoroughly beneficial to the overall sound.



This is almost the perfect compromise, almost solid-state attack coupled with a valve smoothness. The 'almost' bit kicks in because there is a trade-off. The amp – refined and open in the midrange, extended and lively in the treble – is not as well sorted at the bottom end. Bass notes are less precisely defined and appear almost curtailed. This is not an aggressive truncation of the sound, in fact the roll-off appears mild and well-controlled, but this is not an amp for those with desires upon big bass reproduction.

Elsewhere, though, the sound is big and very, very powerful. That 40 watt output figure is deceptive – coupled with a pair of efficient speakers with plenty of headroom, it will blow your socks off. Part of the joy of a valve amplifier is the way it distorts when the wick is turned up: at full tilt, this amp delivers upwards of one per cent distortion, which would be totally unacceptable in a transistor amp. However, most of this distortion on an amp like the ia11 appears to be even-order harmonic distortion, which serves to make the sound more 'creamy'. It's still ultimately distortion, but at high volumes, the ia11 still

sounds smooth and exciting – if anything, its character changes to make it seem all the more smooth at high volumes, which is a real boon. Curiously, the amplifier sounds

fractionally better with the valve protector in place. Sounds are minutely sweeter and the treble is a notch gentler. This isn't a big difference at all – it was more of a dawning that the listening sessions with the protector in place lasted longer than those where the valves were out in the wild. Nevertheless, placing the lid on the tubes does seem to have a mild improvement to the sound – but what does it do to the valves' life expectancy?

Like the Pure Sound A30 tested in HFC 298, the Mystère ia11 brings much needed energy to valve amps. The combination of that forward, exciting sound with a wonderfully open midrange is hard to beat. **HFC**

*Alan Sircom*



**VERDICT**

**SOUND >> 86%**



**PRO**

Lovely looking valve amp that sounds crisp and taut and deceptively un-valvey. Don't let those 40 watts deceive you... it's a powerhouse, too

**FEATURES >> 85%**



**CON**

Bass could be deeper and fuller. Lack of inputs and remote could be a problem. And we question that egg-frying valve heat when the protector's in place

**BUILD >> 75%**



**VALUE >> 85%**



**CONCLUSION**

If you want valve power but don't like rose-tinted designs, give the Mystère ia11 a go. Despite the lack of inputs, it wins out because it looks superb and combines modern day thwack and grunt with old school sweetness.

**HI-FI CHOICE OVERALL SCORE >> 86%**

# How the new 550K Supercharger from Musical Fidelity turns most hi-fi systems into 550w dynamic power houses.

The new 550K Supercharger is a low gain power amp that is connected to the system just before the loudspeakers.

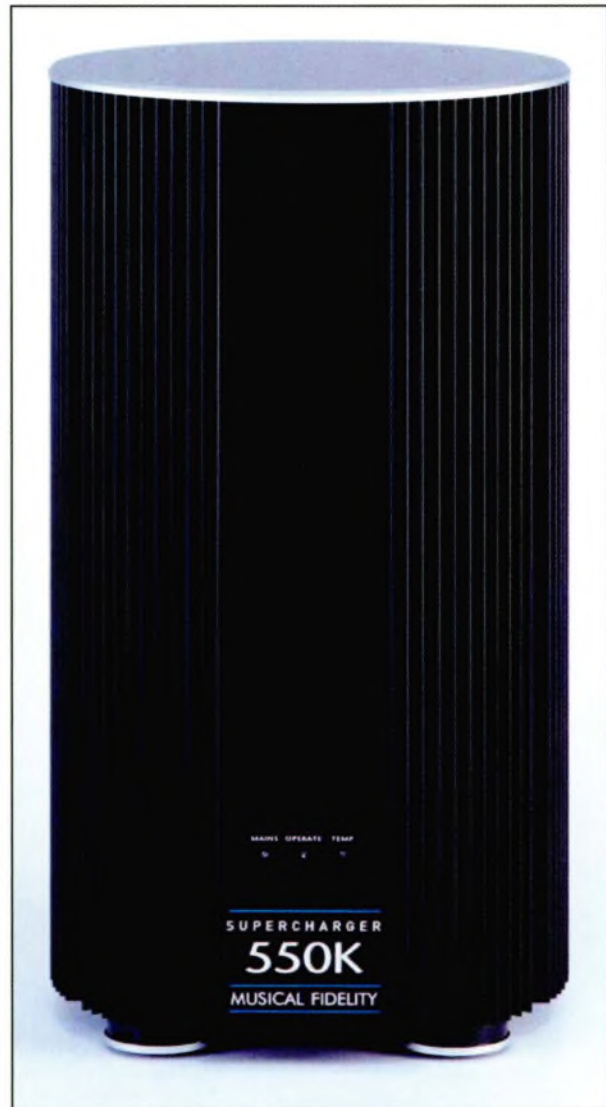
Used in a system with an amp rated between 50 and 200 watts, it will increase its power to 550 watts, and improve the system almost beyond recognition.

It dramatically increases dynamic range and enables the amplifier already in the system to function perfectly.

The 550K turns even a modest integrated amp into a state-of-the-art amplification system.

It works with any make of amp, and it works with valve amps, transistor amps and hybrids.

Visit [musicalfidelity.com](http://musicalfidelity.com) to find out more about the 550K Supercharger, or contact your audio dealer for an audition.



MUSICAL FIDELITY

Hearing is believing.

BEST BUY

HI-FI CHOICE  
magazine

# Noise annoys

Enjoy the quiet life with Sennheiser's latest noise-cancelling headphones

**PRODUCT** Sennheiser PXC450

**TYPE** Headphones

**PRICE** £299

**CONTACT** ☎ 01494 551551 🌐 www.sennheiser.co.uk

**B**ackground noise is arguably the biggest single problem affecting music on the move. One can simply try to block it, of course, but active electronic noise cancelling looks the most attractive option. So we were more than a little intrigued when Sennheiser offered us a pair of its newest noise-cancellers. There are several reasons for this. First, we've had some excellent results from Sennheiser's conventional (passive) headphones and second, with a strong background in aviation headsets, the company has proved its capability to deal with high noise-level environments.

Sennheiser sensibly relies on a combination of noise blocking and noise cancelling to achieve good results. The literature for the PXC450 headphones claims up to 32dB blocking and up to 23dB cancelling, but what it doesn't say is that while these certainly don't add up (55dB at any frequency would be impressive indeed) they do complement each other

There's plenty to recommend this model ergonomically, too. First, it works perfectly well as a passive headphone. Simply slide a little switch and the electronics are bypassed, useful when the battery runs out (a single AAA battery lasts for up to 25 hours) or you're in a quiet environment. And a 'talkthrough' button, easily located by feel on the right earcup, allows comfortable conversation over the (semi-muted) music, with low-frequency noise still blocked, while volume is adjustable on adjacent buttons

## SOUND QUALITY

We've yet to hear a closed-back headphone that can match the best open models for neutrality, but this one is certainly one of the closest. It's a little coloured in the midrange, but to such a small extent that one can pretty quickly adapt. The drive units also have a very high level of resolution which makes the sound all the more appealing. In fact, we have to agree with Sennheiser that this is a model which, in passive mode, works superbly when connected to a hi-fi system. Bass is excellent and high treble on a par with models such as Sennheiser's excellent HD650. Detail is a little behind such exalted transducers, but good enough to embarrass loudspeakers up to a few thousand pounds in price.

In the acid test, competing with buses, trains and general 'hubbub' this model really scores. Not only is outside noise reduced, the overall effect is astonishingly natural and you'll be genuinely surprised on removing the PXC450's at just how loud the surroundings are.

Taking into consideration these headphones' intrinsic high quality, as well as all other aspects of their performance, then the PXC450s would definitely be our choice for music on the move. **HFC**

*Richard Black*

## VERDICT

**SOUND >>> 86%**



**PRO**

In passive mode, sound is genuinely hi-fi, while 'NoiseGard' cancelling of unwanted background noise is very significant.

**FEATURES >>> 90%**



**CON**

His level is not inaudible and there's some coloration in the midrange. The headphones will also require an extension cable for home use.

**BUILD >>> 90%**



**VALUE >>> 88%**



### CONCLUSION

As far as we're aware, this is currently as good as it gets for making the most of listening in planes, trains and automobiles and is a fitting match to the best of today's portable music players.

**HI-FI CHOICE** >>> **88%**  
**OVERALL SCORE**

BEST BUY

HI-FI CHOICE  
magazine



# Fog belle

*Cairn's CD player/digital preamp has a distinctively Gallic flavour*

**PRODUCT** Cairn Fog 3

**TYPE** CD player/digital preamplifier

**PRICE** £1,995

**KEY FEATURES** Size (WxHxD): 43.2x10.2x31.2cm

● Weight: 10kg ● Digital volume control ● Digital inputs: 2x coax, 1x optical ● Digital outputs: coaxial, optical ● Analogue outputs: single ended, balanced

**CONTACT** ☎ 01422 372110 🌐 www.hifibrokers.co.uk

Impressed by the Cairn electronics setup in *Beautiful Systems* a few months ago (*HFC* 297), we thought that it would be a good idea to take a closer look at the heart of the system, the bizarrely named Fog 3.

Just to recap, Gilles B elot started Cairn in 1994, when he left speaker maker Triangle. Six years later, he teamed up with Benoit Rabozzi to form Ezo designs, which manufactures the Cairn range. This includes a more affordable CD player, alongside

integrated and pre/power amplifiers that share a theme of modularity. The company is also big on software as well as wireless systems, its latest products being transmitters and receivers for wireless audio systems.

This is, therefore, not one of your run-of-the-mill hi-fi companies, a fact that's evident in the Fog 3, Cairn's top-ranking integrated player. As well as being a disc spinner, it is also a digital preamplifier, with three digital inputs and analogue outputs in both single ended and balanced forms. The latter, reflects the balanced digital to analogue converter inside the machine, rather than being a pair of XLR sockets for the sake of market appeal.

The Fog 3 is very nicely made, too, the aluminium front panel is 12mm-thick and the steel chassis has square perforations, which suggest the influence of Philippe Starck. It is finished in grey Nextel as per Meridians of yore. The remote is a system type and rather confusingly, has big volume control buttons,

which do nothing for the kudos of the player. If you want to change the output level, look for the smaller level plus/minus buttons: these allow direct connection to a power amp, which is an attractive option if you don't have analogue sources to hook up.

Operationally, this is the most idiosyncratic player we've come across in quite a while. There are no legends on the front panel, so that switching the player on requires a double push of one of the buttons. To activate the disc drawer, you also have to press the right button for a little longer than average. It's worth persevering with the controls, however, as the Fog 3 is a cracking player. Just make sure that other members of the household use the remote instead, which functions in a far more conventional way.

The largest button on the fascia gives access to the various set up options available, most importantly the alternative filter settings which make a small, but significant difference



to the player's sound. There are two variables that modify the anti-aliasing digital filter: group delay can be set as 'long', in which, "most of the time sound is precise but can be unnatural" or 'short', described as "a specific filtering method to avoid harshness at high frequencies". It's not hard to tell which one Cairn prefers. The other choice given to users is whether to optimize frequency or time domain performance. Here, Cairn's preference is clearly for the latter, because it describes frequency optimisation as 'seeing the music', but the time optimisation as being 'in the music'. You can change these settings but it's a rather slow process, using the large fascia-mounted button, or the filter button on the remote – the only drawback being that the display merely shows filter numbers for each of the four settings available.

Cairn's designers have selected four Crystal CS4398 D/A converters in the Fog 3, which are 24-bit/192kHz devices that are fixed at these bit rates and sample rates (despite the alternative settings for these features as shown in the specifications).

**“The way it puts the music into the room is also very impressive and makes for high levels of detail and realism.”**

#### SOUND QUALITY

In its preferred F3 filter setting, the Fog 3 produces an uncanny all-enveloping sound. It allows listeners to get immersed in the music, such is its physicality and presence in the room. It's as if you are sitting beside Keith Jarrett's piano, rather than gazing at it from afar. It's a realistic audio experience, but one that probably owes more to microphone placement during the actual recording, than any affectation in the player. Unfortunately, the coughs and sounds of the audience are also enhanced, to the extent that you can easily sympathise with the musician's well-documented intolerance of such things!

Tonally, the Fog 3 not as sophisticated as our admittedly more expensive comparison player, the Resolution Audio Opus 21 (£2,850). The treble, in particular, is a little more splashy and forward, although this only proves an issue with less impressive recordings. Elsewhere, it has a sparkle and openness which seems highly convincing, as well as the fact that the extra 50 per cent asking price of the Resolution player could be put to better use.



Both players are very capable in the dynamics department, but the presentation differs significantly. The Fog 3 is not the player for those after a smooth, laid back performance. It's not aggressive either, but it

does put the sound right there in the room with you. And we love the way it does this, bringing the soundstage alive in an almost holographic form and getting up close and personal with all your favourite discs. Timing is one of the keys to its appeal, but while not as rock-solid as say, the similarly priced Bryston BCD-1 at £2,050 (HFC 300), it's very much on the money for a player with the rather more fluid presentation given here.

It works extremely well with less busy pieces such as the voice and guitars on Gillian Welch's (*Time*) *The Revelator*. You can hear the way the voice is doubled to produce harmonies with absolute precision, drawing you right into the centre of the mix and making a well-worn test track seem interesting once again. This suggests that the Fog 3 is doing something subtle with the balance, by emphasising parts of the mix which are usually less obvious, but this is probably more to do with the way Cairn approaches digital filtering, rather than a variation in frequency response. Either way, it makes for engrossing sound from all manner of discs and at proper replay levels,

too. And when you connect the player directly to a power amp (with balanced cables) it becomes even more addictive!

Grace Jones' *The Collection* delivers a kick, weight and girth that you just don't get with a preamp and interconnect in the signal. The Fog 3's unconventional configuration also lends itself well to other recordings and this reviewer could easily get sucked-in to a preamp-free set-up – albeit keeping a pre on hand to swop in for analogue sources like vinyl.

The Fog 3 easily makes up for its operational peccadilloes by delivering a truly exciting and involving sound. The way it puts the music into the room is also very impressive and makes for high levels of detail and realism. Those looking for a smoother sound may not be so impressed, but if you prefer to be 'at one' with your music you'll find this player extremely rewarding.

Although it's not an established brand name here in the UK, if Cairn's other products are as good as the Fog 3, then that situation that will change pretty quickly. **HFC**

Jason Kennedy



VERDICT	
<b>SOUND &gt;&gt; 91%</b> 	<b>PRO</b> Highly engaging and revealing sound combined with useful features and good build quality.  <b>CON</b> Operationally challenging via the front panel and, for that matter, so is the manual. Thankfully, the remote is relatively straightforward, with easy to navigate controls saving the day.
<b>FEATURES &gt;&gt; 92%</b> 	
<b>BUILD &gt;&gt; 90%</b> 	
<b>VALUE &gt;&gt; 88%</b> 	
<b>CONCLUSION</b> For a device that has very high transparency and one of the most engaging sounds you'll find in digital audio, calling the player a Fog 3 is about as inappropriate as we can imagine. Don't let the name put you off, it's a belter.	
<b>HI-FI CHOICE OVERALL SCORE &gt;&gt; 90%</b>	



## S p r e z z a t u r a

Famous for his 'Il Libro Del Cortegiano' (The Book of the Courtier, 1528), Renaissance humanist Baldesar Castiglione coined the word 'sprezzatura' to describe the ideal for courtly behaviour. He insisted that in order to be worthy, exceptional virtuosity should be conveyed with an unaffected, effortless dignity. In essence, sprezzatura is the art of making something difficult look easy.

Created from the finest materials and complex technologies, our superlative Platinum loudspeakers are a sophisticated blend of craftsmanship and science, making music so gracefully that it sounds naturally effortless.



[platinumseries.co.uk](http://platinumseries.co.uk) | 0800 0353 032 | [info@monitoraudio.co.uk](mailto:info@monitoraudio.co.uk)

# Crystalise

Crystal's versatile Piccolo cable does it all

**PRODUCT** CrystalSpeak and CrystalPower Piccolo  
**TYPE** Loudspeaker cable/mains cable  
**PRICE** £1,043 (C'Speak, 3m pair); £434 (C'Power, 1.7m)  
**CONTACT** 020 8971 3909 www.crystalcable.com

Crystal Cable first appeared on these pages with a favourable review for the company's Piccolo interconnect (HFC 294). The Piccolo range also includes a mains cable (CrystalPower) and some speaker cable (CrystalSpeak). All of these leads – along with the iPod cable set – share the same ultra-thin conductors. Although visually reminiscent of DNM cables, Crystal is not a solid-core design and turns out to be nothing like as delicate or as fragile as it looks. We've plugged Piccolo cable sets in and out many times in a single day and they've never shown any signs of wear over an extended period.

There is something charmingly jewel-like about the construction of the Piccolo cables, whose main feature is the use of gold on silver annealed conductors. While the mains cable is a single-piece assembly, with a 13-amp plug and a three-pin IEC socket at the far ends, the speaker cable is different. The main part consists of a length of cable terminated in miniature locking in-line four-pin plugs. Included also are two short sections, with matching four-pin connectors and each cable ending in stacking plugs. These allow biwiring or biamping, and can be interchanged for spades terminals. The test cable was configured for biwire use, but it can grow with your system for full biampification, or like the mains cable it can be specified with a longer central core section to suit your system. With all the Piccolo product a metal collar not only acts as an identification, it can also be used to unscramble knots in the cable.

## SOUND QUALITY

As suggested above, the various Piccolo cables have a consistent look and feel, as well as a more or less common house sound. The interconnect reviewed previously has a characteristically sharply focused and highly articulate sound. The bass is lean and agile, while tonally, it's surprisingly rich and colourful, though not as warm and as full as many thicker cables. And so it is with CrystalSpeak Piccolo speaker cable too, which has the same lean quality, the same agility and

much the same outstanding detail and resolution. There's nothing overblown about this cable as you will sometimes find with thicker audiophile cables, but there is instead a strong sense of fluency and homogeneity from a cable design that gives the impression of an ultra-fast rise and decay time. It's all about subtlety, about quality rather than quantity.

What we did not expect was to hear anything comparable from CrystalPower Piccolo mains cable, but in the event it turns out to have a similar house sound. It's fast, finely detailed, free of grain and its airy and open. Nevertheless, we worry slightly about this cable. Strictly speaking, we wouldn't want to use a power lead with such a limited cross section for high drain, large current power amplifiers. We'd hesitate to hook up a big Krell, for example. That said, CrystalPower Piccolo appears to be a very good match for quality disc players, notably the Denon DCD-SA1 and Marantz SA7-S1 SACD players that were used for this test. We also found that it did give good results with a medium power, high-resolution, Denon PMA-SA1 integrated amplifier. Once again, the mains lead has the same lean, analytical yet exquisitely subtle quality of the Piccolo interconnect and the speaker cable seems to work particularly well with acoustic instruments and vocals.

The three types of Crystal Piccolo cables we've looked at so far have a consistent sound that works well together in complete systems. Although not as full-blooded as some bigger cables, they major on clarity, agility and fine detail, and it is this consistency and subtlety that carries them along. Our only reservation; the use of a mains cable with such a limited cross section in high current applications. **HFC**

Alvin Gold



## VERDICT - CRYSTALSPEAK

SOUND >> 88%

FEATURES >> 93%

BUILD >> 85%

VALUE >> 83%

### CONCLUSION

A chip off the old block for those familiar with Piccolo interconnect, this speaker cable has a similarly fast, fluid and subtle sound.

**HI-FI CHOICE**  
 >> 85%

## VERDICT - CRYSTALPOWER

SOUND >> 85%

FEATURES >> 83%

BUILD >> 84%

VALUE >> 82%

### CONCLUSION

Another Piccolo cable with a similar light, agile sound to the audio cables, but the small gauge may not be good for high power components.

**HI-FI CHOICE**  
 >> 83%

# Audiophile Base Standard Support

**TYPE** Equipment support

**PRICE** £900 (three-shelf version)

**CONTACT** ☎ 01892 619319 # www.audiophilebase.com

Like many modern racks, this is a modular system and variations are many. The key element, though, is the patented Base. It may look like just any MDF shelf, but employs some clever thinking to make a stable, damped support surface. Each Base rests on a shelf of the overall support structure, the shelves also being MDF and assembled very simply, but rigidly to the metal legs – three for stability. Different lengths of leg section are available to accommodate anything from slimline CD players to big valve amps, while more upmarket models are also available which take the intrinsic ideas to a much higher level.

The Base's isolation is provided by a combination of metal and viscoelastic damping, carefully selected to provide rapid attenuation of audio-band vibrations. Both it and the frame are available in silver (a superb finish on the review samples) and black.

We tried the Base system with various components, from simple budget amps and CD players to some quite upmarket valve amps and

LP players and found its performance to be strong on neutrality and detail, compared with the others in the group and also familiar references. Bass is steady and extended but midrange is the most striking area, much less affected by overhang than we're used to hearing. Isolation for turntables is moderate: suspended subchassis models are fine but we'd probably prefer something fully spring-decoupled for solid vinyl spinners.

For CD players and electronics, though, especially refined models with high resolution, this is a rack that can help extract the most **HFC**



## VERDICT

### CONCLUSION

It's not cheap and the central rear leg occasionally gets in the way, but sound is resonance-free.

## HI-FI CHOICE

>> 89%

# Custom Design Milan

**TYPE** Equipment support

**PRICE** £449

**CONTACT** ☎ 0191 262 4646 # www.customdesign.co.uk

Custom Design's range has expanded recently to include several inventive approaches to the problem of balancing performance with good looks. This one is completely new on us, but we immediately took to it. Those side cheeks are big chunks of solid oak, very neatly sawn, chamfered and finished, with a slot just wide enough to accommodate a glass shelf. Two screws drop down through the wood and glass and when nipped up clamp the whole assembly together. Spikes mount directly under the screws and each assembly of shelf and two cheeks is free-standing on the one below, with spikes engaged in screw-heads. Simple, secure, stable and very smart. The 6mm-thick toughened glass should support a healthy weight, especially if (as is usual) the feet are near the edges. Different heights of cheek are available, with the maximum number of shelves only limited by the reach of your arm. A narrow, Cyrus-sized, version is also available.

Given that there is almost no isolation built into the rack we wouldn't strongly recommend it for supporting a turntable, but with digital sources and amps we had pretty good results. Not as detailed, perhaps, as the relatively 'take-no-prisoners' Audiophile Base, it very slightly muddies the low midrange while the bass seems a touch less secure than some. On the other hand, higher frequencies are very clear and open. You could always add some 'iRAP' damping plates (£100 each) to cut shelf resonance, but even as it stands this is a decent rack that looks, to our jaded eyes, like one of the most attractive bits of hi-fi furniture out there. **HFC**



## VERDICT

### CONCLUSION

Ultimate performance isn't what the Milan is about. Nevertheless, it deserves some serious respect.

## HI-FI CHOICE

>> 86%

# Partington Minim

**TYPE** Equipment support

**PRICE** £420

**CONTACT** ☎ 01474 709299 # www.partingtonandco.co.uk

In many ways, this is a classic British dedicated hi-fi rack. It's more attractive than many models of yesteryear, yet it shares many of their features, including the metal-and-glass construction, that's available in both black and gunmetal grey. Usefully, it's almost infinitely adjustable by the user, thanks to shelf supports that slide up and down the inner verticals and lock with a grub screw. You'll need a spirit level and a little patience to do this accurately, but it's a highly practical arrangement and makes the rack particularly well suited to the inveterate upgrader. Construction is based on tubular vertical members and U-section horizontals, variously welded and bolted together. Shelves are made of toughened glass resting on rubber feet, which affords some welcome damping to the overall structure.

Even with that, this is a relatively resonant assembly and it's no surprise that it has some effect on the sound. The good side of this is that there's great rhythm and attack, especially

in energetic music like rock'n'roll. The less good side is that detail isn't always the clearest. Due to the rack's quite highly tuned nature, there's also some coloration in the midrange and a slight haze of resonance that affects the vocals range and also many melody instruments. We found this a little perturbing in some classical tracks, but most noticeable in jazz, particularly 'unplugged' tracks with naturally microphoned voices and saxophone. You might find it little more than a glow in some music, but it does limit the resolution of some tracks. Try as we might, though, we couldn't find it a drawback in rock and pop. **HFC**



## VERDICT

### CONCLUSION

This rack adds its own character to the benefit of rock, but slightly to the detriment of acoustic sounds.

**HI-FI CHOICE**  
 >> **84%**

# Russ Andrews Torlyte Platform

**TYPE** Isolation platform

**PRICE** £130

**CONTACT** ☎ 0845 345 1550 # www.russandrews.com

Asked simply to send us something under the general heading of 'equipment support', Russ Andrews elected to supply this simple platform, and we're glad it did. Racks are useful components (and Russ does indeed offer whole Torlyte assemblies), but they aren't always necessary or appropriate. This simple component looks like the world's most expensive breadboard, even though it weighs remarkably little thanks to the intricate construction of Torlyte. There's also some form of internal ribbing that supports the outer layers, so it's surprisingly strong. But its real point is to provide high stiffness and low mass, so that high-frequency resonances are efficiently damped internally. On its underside are three oak cones; Russ sent us a set of three Oak Cone Feet to fit to equipment in place of regular plastic or metal feet (£21 per set of three).

The Russ Andrews website suggests using



**BEST BUY**

**HI-FI CHOICE**  
 magazine



this as an accessory on your existing rack to improve CD replay. And we were most taken with its performance under two very different LP players, sitting atop a custom spring-supported isolation base. The effect on each turntable was similar, though more obvious for the solid chassis one, with a markedly clearer midrange and a touch more sparkle to the treble, as well as little change in the bass. Something of the same magic was worked between turntable and solid rack, though even Torlyte can't make up for a lack of low-frequency isolation. CD players and

amps, however, aren't much prone to LF microphony and a Torlyte under such components can clearly give insight. **HFC**

*Richard Black*

## VERDICT

### CONCLUSION

This unassuming platform can be a godsend, cleaning away mid/treble muddle from the sound.

**HI-FI CHOICE**  
 >> **88%**

GROUP TEST & LAB REPORTS: PAUL MESSENGER

# LOUDSPEAKERS

*A serious selection of speakers with an appearance as diverse as their performance*

This month's *Ultimate Group Test* covers a relatively serious and upmarket group of speakers. Our six candidates cost between £1,500 and £1,900 per pair, comprise four floorstanders and two standmounts and show no obvious relationship between size, complexity and price.

The largest model with the most drive units (the Triangle) is also one of the most expensive, but it also seems to offer the best perceived value in terms of bulk, weight, engineering and features. But if bulk can offer some performance advantages, many potential customers will instead regard it as a disadvantage, simply because they prefer to look at something smaller and neater.

In an unusually cosmopolitan mix, just two of our six speakers are British, two are Scandinavian (one Danish, one Finnish), one German and one French. Perhaps surprisingly, no fewer than four of them are two-way designs, though none could be said to follow the standard stereotype. The MonoPulse has a unusually large main driver; the Neat

uses two 'standard' size drivers in an isobaric configuration; the Ascendo's solitary main driver has a co-axial tweeter; and the Amphion uses two small main drivers in a d'Appolito arrangement, above and below the central tweeter.

Of the other two, the DALI has twin main drivers, but rolls off the lower one well below the mid-to-treble crossover point, so it only reinforces the bass end of things – the so-called two-and-a-half-way configuration. And Triangle goes the whole hog, with separate and unique specialist drivers of its own manufacture for bass, midrange and treble.

All these designs have very different characters, both physically and sonically, so trying to compare them is a little like trying to describe the difference between apples and bananas. Our reviews will try to identify the particular strengths of the various models, but it should be pointed out that the alignment and balance at the bass end of things is as much a function of the listening room as the loudspeaker.

A dealer's demo room will provide the clues, but is no substitute for trying out a speaker in your own home. **HFC**

## EQUIPMENT USED

- ⊕ Naim CDS 3/555 PS CD player
- ⊕ Burmester 001 CD players
- ⊕ Linn Sondek LP12 turntable
- ⊕ Rega RB1000 turntable and tonearm
- ⊕ Roksan Xerxes.20 turntable and arm / Artemiz 2 turntable and arm
- ⊕ Rega Apheta cartridge
- ⊕ Magnum Dynalab MD 106T tuner
- ⊕ Naim NAC552 preamp
- ⊕ Naim NAP500 power amp
- ⊕ Cables from Chord Company, Vertex AQ, and Naim.

## MUSIC USED

- ⊕ Rodrigo Y Gabriela *Live in Manchester and Dublin*/Cesaria Evora *La Diva aux Pieds Nus*
- ⊕ Laurie Anderson *Strange Angels*
- ⊕ Tom Waits *Orphans*
- ⊕ Be Good Tanyas *Hello Love*
- ⊕ BPO: Wagner *Tannhauser Overture*
- ⊕ BBC Radios 3 and 4 were also used throughout the tests

## ON TEST



Amphion Prio 520  
£1,600



Ascendo Monitor C5  
£1,499



DALI Mentor 5  
£1,899



MonoPulse 42A  
£1,495



Neat Momentum 3i  
£1,745



Triangle Genese Quartet  
£1,895

## LISTENING TESTS

Loudspeaker listening poses more complex problems than those involved in assessing other hi-fi components. Loudspeakers vary greatly and interact strongly and often unpredictably with the room. The difficulty facing sequential unsighted loudspeaker presentations is the strong tendency to judge each example according to how its balance differs from the model that preceded it. Accordingly, extended hands-on listening sessions were adopted, giving scope to adjust to changes in balance and to experiment with positioning.

## LAB TESTS

The speakers were tested under in-room conditions, to best represent real world conditions. The test equipment used included a Neutrik Audiograph analogue signal generator with synchronised pen recorder, used to plot the far-field in-room averaged response traces and impedance plots. Pair-matching was also checked at one metre.

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

## LAB REPORTS: THE BAR GRAPH

Our 3D bar graphs are a simple way of showing how the loudspeakers compare across quantitative and qualitative measurements. Individual parameters are assessed and shown as better or worse than the group average.

**1) Sensitivity:** Sensitivity is a measure of how loud a speaker will go for a given voltage from the amplifier. It's scaled to 2.83V at 1m (1 watt of power for an 8 Ohm load). This figure can be misleading, as sensitivity varies significantly and because lower-impedance speakers extract more current and hence more power from an amplifier than higher-impedance ones.

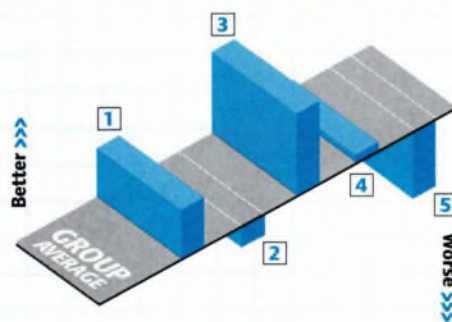
**2) Bass extension:** The bass behaviour of loudspeakers is heavily modified by the room. To replicate 'real world' conditions, our figure represents the averaged bass roll-off frequency at -6dB ref the broad midband, measured across the far field for a stereo pair in a 4.3x2.6x5.5m room.

**3) Ease of drive:** The lower the impedance, the more current it will extract from the driving amp for a given volume. Lower impedance designs have higher sensitivities, reducing voltage requirement for a given loudness levels.

**4) Overall frequency balance:** Overall broad frequency response trends do much to define the character of a speaker, although true neutrality is the obvious goal.

**5) Response smoothness:** The small scale smoothness much to do with the delicacy of the sound, and its ability to deliver subtle harmonic shading.

## OUR BAR GRAPHS: AN EXAMPLE



amphion

Ayre

vinyl revival...

Enjoy your vinyl collection as never before. The Ayre P-5xe phono preamplifier uncovers the astounding musicality in your favourite records. Music flows from a pure black background, thanks to ultra-low noise circuitry in a zero-feedback configuration. Fully adjustable gain and loading options provide complete compatibility with the widest possible range of cartridges. Our proprietary two-stage passive RIAA equalization ensures unparalleled tonal realism. Bring your records to life with the Ayre P-5xe.

**Hi-Fi News, July 2006 — David Allcock**

*"... this phono stage delivered one of the finest analogue sounds I've ever heard ..."*

*"The bass is sublime ... vocals are so rich as to be luxurious ... reminiscent of classic valve phono stages ... but with massively improved definition and speed."*

*"Dynamic range was stunning, having the ability to switch from the most subtle expression to full power in a heartbeat."*

**The Critical Ear, February 2006 — Shane Buettner**

*"... as much openness and inner detail as I've heard from vinyl playback. And yet it reveals all its transparency in a way that's non-mechanical, very natural and very relaxed."*

*"The bass of the P-5xe is remarkable not only for its weight and authority, but for its extraordinary articulation and resolution of low level details."*

*"The P-5xe is a highly recommended, reference quality component in every way ..."*

 symmetry

t: 01727 865488

e: [info@symmetry-systems.co.uk](mailto:info@symmetry-systems.co.uk)

w: [www.symmetry-systems.co.uk](http://www.symmetry-systems.co.uk)



£1,600 per pair ☎ 01623 517000 🌐 www.amphion.fi

# AMPHION PRIO 520

Floorstander represents the HFC debut for this Finnish brand

**A**mphion is a Finnish brand that has been in existence for about a decade. Its speakers have tended to be relatively upmarket as well as notably stylish affairs. But recent additions like the £1,600 Prio 520 are more affordable, while still maintaining those super-clean Scandinavian lines. Our Prio 520s came beautifully finished in a classy birch wood veneer, but that's a relatively costly option at £300 extra. A pair of Prio 520s are also available for just £1,300, provided you settle for a graphite black or white painted finish.

Twin bass/mid drivers are mounted above and below the tweeter, in a configuration named after developer Joseph d'Appolito. And, because these are relatively small units, the speakers are remarkably slim. Both these diaphragm main drivers operate in parallel, so their combined acoustic centre effectively coincides with the location of the tweeter.

In fact, the *piece de resistance* is the tweeter. Although at heart a conventional 25mm metal dome affair, its 'waveguide' mounting is anything but. A species of horn, but with a very wide flare, its ultimate core function is to allow the crossover point to be lowered by about an octave, from the 3kHz norm down to 1.6kHz, so moving it below the zone where the ears are most sensitive. Because it also recesses the tweeter, this improves its potential time alignment with the two cone units.

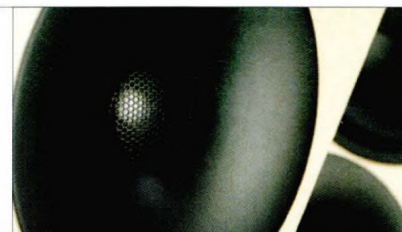
The enclosure comes complete with a proper plinth to improve the stability footprint, but the spikes put cosmetics ahead of function, with short shafts and no locknuts. This not only prevents the spikes being properly secured, it also makes it difficult to tilt the speaker slightly backwards, which is worth doing if you're tall or sit quite high off the ground. Because the two main drivers of a d'Appolito arrangement operate in parallel – effectively simulating a single driver – best focus will be obtained when the two are precisely equidistant from the listeners, with the ears precisely on the tweeter's vertical axis. A single pair of high-quality terminals is fitted close to the floor, just below the generous rear port.

## SOUND QUALITY

Delicious and delicate, are the adjectives that first spring to mind. Best suited to free space siting, well clear of walls, the Prio 520 doesn't 'do' really deep bass. But that's a sensible choice in view of its lively disposition through the rest of the bass region.

Tonally it has a warm, rich and essentially neutral character that's very easy on the ears, with impressively clean voice reproduction, albeit with a slight tendency to exaggerate chestiness. Throughout the listening work it became apparent that the Prio 520 is very sensitive to both positioning and orientation. Although results are never unsatisfactory, once both speakers and the listener are positioned exactly right, the whole image snaps sharply into focus. At its best this speaker is capable of fine focus and very superior imaging, with good depth perspectives and precise soundstaging.

While it is a trifle laid back, voices in no way sound 'shut in' here. Rather, the voice band has an engaging openness, yet also sufficient restraint to avoid becoming unpleasantly fierce or aggressive – a persuasive combination that makes this speaker particularly inviting for long term listening. **HFC**



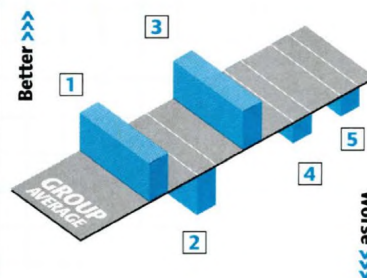
## LAB REPORT

The sheer precision of this speaker led to some inconsistencies when repeating the in-room measurements: simply because they 'read' the room modes so accurately, small variations in the speaker positions led to significant response differences.

Our high 90dB sensitivity rating is close to the 91dB claimed and although there's little bass output below 40Hz, the impedance is not unduly difficult to drive, staying above four ohms throughout. However, the curves did reveal some pair matching discrepancies at low frequencies, and a resonance at 180Hz.

Best kept clear of walls, the in-room far-field averaged responses show some unevenness through the bass and lower mid, alongside a smooth and well integrated upper mid and treble. Clearly the waveguide is doing a good job through the crossover region, though the ultimate rolloff above 10kHz is, perhaps, a shade premature.

## HOW IT COMPARES



- 1] Sensitivity >> +20%
- 2] Bass extension >> -20%
- 3] Ease of drive >> +20%
- 4] Overall frequency balance >> -10%
- 5] Response smoothness >> -10%

## SPECIFICATIONS

Measurement	Rated	Actual
Sensitivity @ 1m/2.83V	91 dB	90dB
Impedance (nominal/minimum)	4 ohms	6/4.5 ohms
Estimated bass extension (-6dB)	-	40Hz

## VERDICT

**SOUND >> 86%**

**PRACTICALITY >> 86%**

**BUILD >> 85%**

**VALUE >> 84%**

**OVERALL SCORE 85%**

This exceptionally elegant floorstander uses a waveguide to reduce the crossover frequency and improve voice integrity. The result is lively, with a sweet top end and fine coherence when carefully sited.

**HI-FI CHOICE OVERALL SCORE 85%**

## High End Cable

[www.highendcable.co.uk](http://www.highendcable.co.uk)

For the best prices telephone Dave Jackson on **01775 761880**  
Free P&P worldwide on all interconnects

Analysis Plus  
Audience  
Chord Company  
Ecosse  
Furutech  
Hovland  
Nordost  
MIT  
Oehlbach  
Purist Audio Design  
Stereovox  
Townshend  
True Colour Industries  
van den Hul  
Wyrewizard  
IsoTek

Bel Canto  
Project Turntables  
Audio Physic Speakers  
STAX headphones  
Tannoy  
Echo Busters  
Arye CD - IsoTek CD  
Lyra Moving Coil  
Sumiko Moving Coil

Cable Tower  
Clearlight Audio Cones  
Oehlbach Accessories

Sub woofer cables  
Media cables  
Chord iPod cables  
Nordost iPod cables  
XLR cables  
Pulsar Points  
Component cables  
Digital cables  
DIN cables  
Firewire  
HDMI 1080 cables  
DVI cables  
Jumpers  
Optical cables  
Mains & Power cables  
SCART  
S video



NORDOST



Purist Audio



audience



van den Hul  
A Sound Connection

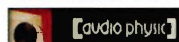
ISOteK



FURUTECH  
PURE TRANSMISSION  
DeSat and DeMag



TRUE COLOURS  
INDUSTRIES  
MUSIC WITHOUT COMPROMISE



Up to 25% Trade in allowance on your old cables

Please visit [www.high-end-hifi.co.uk](http://www.high-end-hifi.co.uk)

Previously owned cables. Reference cables include free Burn In.

You won't want to miss out on this sale!!! Massive savings to be had on a wide selection of Ex-dem & Used items. See web site for details...



### Audio Destination

Tiverton, Devon  
01884 243 584

### Brighton Hi-fi

Flimwell, East Sussex  
01580 878 101

### Divine Audio

Market Harborough, Leicestershire  
01858 432999

### Doug Brady Hi-fi

Warrington, Cheshire  
01925 828009

### Loud & Clear

Bonnington Mill, Edinburgh  
0131 555 3963

### Loud & Clear

Finnieston, Glasgow  
0141 221 0221

### Mike Manning Audio

Yeovil, Somerset  
01935 479 361

### Music Matters

Solihull, Birmingham  
0121 742 0254

### O'Brien Hi-fi

Wimbledon, London  
0208 946 0331

### Progressive Audio

Rainham, Kent  
01634 389004

# sound proof

Moon Electronics by Sim Audio, manufacturers of high end audio since 1980.

Multi award winning CD Players, Integrated Amplifiers, Pre-amplifiers, Power Amplifiers available only from specially selected dealers.



redline



Distributed in the UK by Redline T: 0131 555 3922 E: [info@red-line.co.uk](mailto:info@red-line.co.uk) [www.red-line.co.uk](http://www.red-line.co.uk)

**£1,499 per pair** ☎ 01435 867438 🌐 www.ascendo.de

## ASCENDO MONITOR C5

*Ascendo speakers benefit from a little bit of R&D*

**A** new brand in the UK, Ascendo is a German operation that has been in existence for less than a decade. According to its website, it was only founded in 1999, as a Research and Development Corporation with backing from Germany's Ministry of Education and Research. But its activities are wider than those of a straightforward speaker manufacturer, encompassing room acoustics analysis, measurement and associated digital processing. And a key presence at the 2007 Munich High End Show in May certainly gave the impression it has quickly become a major operator.

Most of Ascendo's speaker systems are large, massive and costly floorstanders, with elaborate and complex mass-loaded techniques for time-aligning the ribbon tweeters with the midrange drivers. But the C-series models, including this £1,500 C5 Monitor, are much simpler and more modest affairs, based on a solitary port-loaded 165mm co-axial driver.

It's a good size standmount, deeper than most and finished in black or white high gloss as standard, with nicely radiused edges, but there's no grille provision. Other high-gloss automotive finishes are available and as the paints come from the same catalogue, you can also order a pair to match the Porsche parked in your drive! The drive unit is a combination affair, with a transparent moulded-XP-plastic bass/mid cone operating around a centrally mounted 25mm neodymium/fabric dome tweeter.

On the rear, alongside a single terminal pair, is an offset port and a switch that adjusts the crossover to compensate for either free space or close-to-wall siting. The effect of the switch is to reduce the impedance in the upper midband (500Hz – 2.5kHz), boosting output level slightly and again above 12kHz.

### SOUND QUALITY

Despite the room boundary compensation feature – and somewhat ironically, Ascendo's claimed expertise in room-acoustic measurement and analysis – the in-room tonal balance turned out to be this speaker's achilles heel, wherever it was positioned.

In free space and with the switch appropriately positioned, the effects of the elevated midband were clearly audible as a mid-forward sound with significant attendant coloration. This proved rather more intrusive with classical instrumentation than with more popular vocal material and was found more difficult to ignore.

But coloration isn't the only important factor in loudspeaker performance – indeed, it can be modified by changing either location or listening room. Leave the Monitor C5 on for half an hour to give the ear/brain time to compensate and its undoubted charm in other respects comes to the fore.

The really big strength of this speaker is its wonderful coherence through the crossover zone, bringing great realism to voice reproduction – Joni Mitchell's delicate phrasing has rarely sounded more convincing. Combine that superb crossover integration with the geometric accuracy of a co-axial drive unit, and it's easy to understand why this speaker also delivers pin-point image focus.

The alternative close-to-wall setting and positioning proved rather more effective in reducing the midband coloration. Unfortunately, this was accompanied by a decidedly 'fat' bass, which rather spoiled the overall effect. Although port blocking is not an approved option here, it did provide interesting results that could be well worth exploring. **HFC**

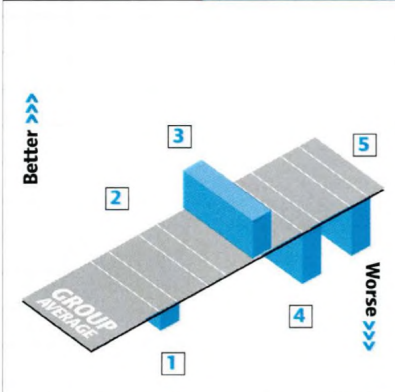


### LAB REPORT

Our 87dB sensitivity rating is marginally below average, but corresponds very closely to the manufacturer's claim. It's also accompanied by a relatively easy amplifier load, which only dips below six ohms at very high frequencies (above 12kHz). The equalisation switch for matching room siting slightly lowers the impedance (and so boosts output) between 500Hz and 2.5kHz, and again above 12kHz.

The overall far-field averaged room response is decidedly uneven, especially with free space siting, showing excessive output 40-60Hz (close to the port tuning frequency of 47Hz), and again in the midband between 250Hz and 800Hz. The balance was altogether smoother and flatter above 100Hz, when the speakers were located close to a wall (with the appropriate switch selection), but the 40-80Hz octave was altogether too strong for the rest of the band. Port-blocking experiments gave promising results, however.

### HOW IT COMPARES



- 1] Sensitivity >> -10%
- 2] Bass extension >> 0%
- 3] Ease of drive >> +20%
- 4] Overall frequency balance >> -30%
- 5] Response smoothness >> -30%

### SPECIFICATIONS

Measurement	Rated	Actual
Sensitivity @ 1m/2.83V	87.5dB	87 dB
Impedance (nominal/minimum)	6 ohms	8/6 ohms
Estimated bass extension (-6dB)	-	30Hz

### VERDICT

**SOUND >> 79%**



**PRACTICALITY >> 86%**



**BUILD >> 87%**



**VALUE >> 78%**



This stylish standmount has a crossover network that gives fabulous voice band coherence and pin-point imaging. Overall, however, the sound is let down by coloration anomalies under our listening conditions.

**HI-FI CHOICE**  
OVERALL SCORE **80%**



Merry Christmas & Happy New Year

You won't want to miss out on this sale! Massive savings to be had on a wide selection of specialist hi-fi products (Ex-dem & Used items). Visit [www.sounds-of-music.co.uk](http://www.sounds-of-music.co.uk) for more details...

**BIG JANUARY SALE**  
1st - 31st  
January 2008  
[www.sounds-of-music.co.uk](http://www.sounds-of-music.co.uk)  
+44 (0)1435 865 212  
sounds of music



Krell



Edgar



Furutech



Martin Logan



Coda



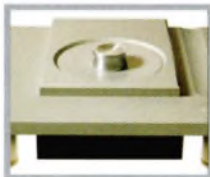
LSA



Musictools



Vitus



Ypsilon



Ayon Audio



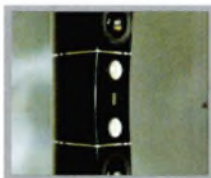
HRS



Sonus Faber



DCS



Eben



Lumley



Hovland



Boulder



Audio Research



Quad



McIntosh



Ascendo

- 8 Demonstration Studios  
- Understanding and hugely knowledgeable staff  
- The largest range of the best hi-end hi-fi in the south  
- Unique One-Month Home Trial Scheme  
- No pressure selling, decide at your leisure at home  
- Large list of used bargains  
- Exclusive 75% Upgrade Trade-in System  
- Generous part exchange prices

£1,899 per pair ☎ 0845 644 3537 🌐 www.dali.dk

# DALI MENTOR 5

*This very compact and pretty floorstander ticks all the right boxes*

**D**anish Audiophile Loudspeaker Industries (DALI for short) has a number of different speaker ranges and the relatively new Mentors slot neatly into the price gap between the near-budget vinyl-finished Ikons and the more costly Helicon and Euphonia ranges.

The Mentor range has gradually expanded since we first encountered the large floorstanding Mentor 6 a little more than a year ago (*HFC* 290), and if that model proved a little too large and bassy for our 4.3x2.6x5.5m listening room, there's a good chance this smaller Mentor 5 pair will fit the bill rather better.

It's certainly one of the prettiest and most compact floorstanders around, standing just 88 cms off the deck and also looking slim from any angle, thanks to the use of relatively small 130mm bass/mid and bass drivers. High-quality real wood veneered enclosures are available in either cherry or black, too.

All the Mentors use variations on DALI's proprietary dome/ribbon treble module theme, above a range of different size enclosures and

bass/mid drivers. In this middle model, the smallest of three floorstanders, the two 130mm drivers have 95mm dish-shaped doped paper diaphragms. Loaded by a rear-port, the upper main driver operates all the way up to the main 3kHz crossover point, while the lower one is just used to reinforce the bass and lower midband and starts rolling off above 800Hz. The treble module combines a 28mm soft dome and a 17x45mm ribbon on a single chassis, the ribbon just operating above 10kHz, partly to extend the bandwidth and partly to ensure consistently wide lateral distribution.

The enclosure has slightly convex front and back panels, presumably to increase stiffness and marginally reduce standing wave focusing. The whole thing feels very solid too, with a total weight of 13.5kg. The drivers themselves are mounted on an extra silver-grey flat baffle panel. A neat separate plinth improves the stability footprint, and if thumbwheels lock the spikes, they seemed more effective than usual. Twin terminal pairs apply the signal input, permitting bi-wiring/bi-amping options.

## SOUND QUALITY

Clearly intended for free space siting, the very compact dimensions tend to place the ribbon tweeter a little below seated ear height. It may, therefore, be worth adjusting the spikes slightly, so that those at the front are slightly longer than those at the rear, giving the speaker a slight backward tilt.

While there's no denying the good overall tonal balance and fundamental neutrality of this speaker, it also has to be acknowledged that in other respects its communication skills are unimpressive. Over a period of several days it behaved itself impeccably, but failed to excite much enthusiasm on the part of the listeners, as both dynamic expression and all-round coherence seemed rather weak.

Some midband boxiness was audible on speech, perhaps as a consequence of that slight upper mid-prominence. The rather strong treble noted in the measurements was also obvious enough, but it's inherently sweet, rarely seemed intrusive and should be easily handled with a little care in system matching.

It's always frustrating to find a speaker that seems to tick all the right boxes in terms of ingredients and measurements, shows no obvious signs of weakness, and yet somehow lacks the vital spark that breaks down the barrier between musician and listener. In the case of the Mentor 5, the whole seems rather less than the sum of its parts, musically speaking. **HFC**

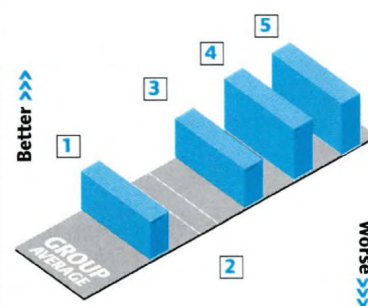


## LAB REPORT

The Mentor 5 comfortably meets – indeed marginally exceeds – its 88dB sensitivity rating, our figure just reaching an above average 89dB. Furthermore, it does so without compromising the amplifier load, as the impedance trace stays at, or above, six ohms throughout and demonstrates good pair-matching to boot.

With the speakers sited well clear of walls, the overall in-room far-field averaged response trace looks very well ordered, holding within +/-3dB right across the band, apart from a slight excess around 50Hz, where the 47Hz port tuning frequency coincides with the major standing wave modes in the room used for measurement. There's some unevenness along the way, most notably in a slight forwardness between 900Hz and 1.3kHz, and the treble looks a shade strong, even though it's also obviously flat and smooth, but in truth these are more in the nature of observations than complaints.

## HOW IT COMPARES



- 1] Sensitivity >> +20%
- 2] Bass extension >> 0%
- 3] Ease of drive >> +20%
- 4] Overall frequency balance >> +30%
- 5] Response smoothness >> +30%

## SPECIFICATIONS

Measurement	Rated	Actual
Sensitivity @ 1m/2.83V	88dB	89dB
Impedance (nominal/minimum)	6 ohms	8/6 ohms
Estimated bass extension (-6dB)	42Hz	30Hz

## VERDICT

**SOUND >> 77%**

**PRACTICALITY >> 85%**

**BUILD >> 87%**

**VALUE >> 80%**

**HI-FI CHOICE 80%**

**OVERALL SCORE 80%**

This unusually compact floorstander has all the right ingredients and delivers a good performance. However, the sound quality lacks the dynamic enthusiasm and coherence to inspire listener involvement

**HI-FI CHOICE 80%**

# Why not treat yourself this Christmas?

Used Product Listing - Remember !! List is updated on our web site daily!

## DIGITAL

Accuphase DP-500 (£3950) £3495  
 AudioNet ART V2 (£2400) £1395  
 McIntosh MCD201, CD/SACD (£3400) £2795  
 Meridian 508.24 CD player £995  
 Moon Nova CDP CD player (£3000) £1395  
 Musical Fidelity KW 250S (£4999) £3795  
 Resolution Audio Opus 21, 2 box (£2950) £2395  
 Shanling CDT300 Omega Drive (£4000) £2295  
 Sony SCD-1 SACD player (£5000) £1995  
 Theta Chroma DAC £295  
 Vincent CD 3 CD player (£800) £649

## AMPLIFIERS

Accuphase E408 Integrated (£5000) £3995  
 Audio Zone AMP 1 dual mono integrated (£1595) £1295  
 Audiolab 8000C and 8000P pre power combo £399  
 Bel Canto S300i Integrated (£1799) £1495  
 Cairn 4810 Integrated (£2700) £1795  
 Cyrus 8 amplifier and PSXR onboard power supply £849  
 DK Design VS-1 Reference (£2500) £1995  
 Eastern Electric Minimix Power Amp (£995) £649  
 Exposure 3010 Integrated (£1000) £595  
 Flying Mole PA-51 Digital Pre (£999) £795  
 Krell KAV 400xi (£3000) £2250  
 Krell FPB 300 Poweramp £2995  
 Krell KAV 250P pre amplifier (£2495) £1095  
 Manley Labs NeoClassic 300b Monoblocks £2995  
 Mark Levinson 380 Pre (£4500) £2695  
 McIntosh C2200 pre-amplifier (£4850) £3695  
 Musical Fidelity A5 Integrated (£1495) £995  
 Musical Fidelity A5 Pre (£1495) £995  
 Musical Fidelity A308 integrated amplifier (£2000) £949  
 Musical Fidelity KWS50 Integrated (£5000) £3995  
 Qinpu A1 0x Integrated (£300) £230  
 Qinpu A-8000 MK II Integrated (£1295) £795  
 TacT SDAi 2175 (£1245) £749

## LOUDSPEAKERS

Acoustic Energy AE1 Classic (£845) £650  
 ART Emotion Monitor, Cherry (£4000) £3250  
 ATC SCM20SL (£2400) £1395  
 ATC SCM19 (£1499) £1195  
 Hyperion 938 (£3750) £2795  
 JAS Orio (£2300) £1495  
 JAS Audio Orsa (£1399) £1095  
 JAS Audio Supertweeters (£649) £449  
 Leema Acoustics Xone (£2245) £1695  
 Monitor Audio GR10, (£800) £595  
 Opera Callas Mini (£650) £450  
 PMC FB1+ (£1695) £1295  
 Soundlab Millenium M3 Electrostatics (£8995) £2795  
 Waterfall Iguascu Loudspeakers (£1500) £600  
 Wilson Bengsch Arc (£2600) £1795

## ANALOGUE

Clearaudio Performance Turntable £1199  
 Eastern Electric Minimix Phonostage (£1099) £795  
 Graham Slee Elevator (£510) £295  
 SME 20/2A (£6300) £4495

## MISC

Hovland Reference Speaker Cable (£1200) £795  
 Isotek Gill Minisub (£545) £399  
 Isotek Nova, only 5 months old (£1700) £1295  
 Nordost Blue Heaven Speaker Cable (£489) £349  
 PS Audio Powerplant 300 (£1750) £695  
 PS Audio Ultimate Outlet (£400) £295

You can receive our  
 Used Product List and  
 e-newsletter by email  
 each week for free!  
 visit [www.shadowaudio.co.uk](http://www.shadowaudio.co.uk)  
 and sign up today - simple!

# shadow audio

0844 800 0073 or 74 : [www.shadowaudio.co.uk](http://www.shadowaudio.co.uk)

Specialist Brands include:

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

£1,495 per pair ☎ 07785 558238 🌐 www.monopulse.co.uk

## MONOPULSE 42A

*Unconventional loudspeaker design is the name of the game*

It's less than five years since we first encountered MonoPulse, as a relatively new brand with a number of interesting and unconventional ideas about loudspeaker design. Patron and hi-fi enthusiast Allan Hendry, worked for many years on pulsed, phased-array radar and after his retirement, applied his appreciation of the importance of phase relationships to loudspeaker design. These applied especially to the relative positioning of the drive units and their integration through the crossover network, in order to achieve genuine wavefront time-alignment through the entire region.

We actually reviewed the original version of the 42A back in 2005, when it was the top model in the range and priced at £995 a pair. Now it returns, similar in outline but somewhat different in detail, and carrying an altogether heftier £1,495 pricetag (£1,595 with external damping bar as tested).

The styling is very original and striking, with a wide steel wrap in the shape of a tall inverted-U forming the sides and top and firmly bolted onto the outside of a fabric-

covered wood-composite enclosure. This is also wide enough to accommodate the relatively large diameter 218mm Audax paper-cone bass/mid driver, while a reflex port is fitted into the base of the enclosure, firing downwards and held about 4-5 cm off the floor by some purposeful and well-seated spikes. The enclosure is roughly the same depth as its width, so the footprint is quite modest, but the hefty 28kg weight guarantees good physical stability.

As part of the time alignment, the two drivers are mounted on separate baffles, so the bass/mid driver fixing is slightly nearer listeners than the Morel-sourced 28mm soft dome tweeter. This also provides some mechanical and acoustic isolation between the drivers. Although our samples came in a sober combination of metallic gunmetal and slate, the steel wrap and the two separate grille cloths are also available in a variety of colours. The lower part of the front panel was fitted with an offset metal damping strip that adds £100 to the price. Signal connection is made via twin terminal pairs, allowing for adventures in bi-wiring or bi-amping.

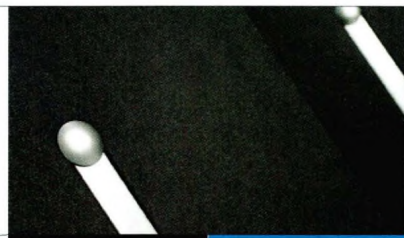
### SOUND QUALITY

The 42A requires free space siting to deliver the best bass alignment, with the time-aligned crossover and precise drive unit spacing responsible for the remarkably impressive coherence, especially through the voice band, which seems to be MonoPulse's particular stock in trade. This in turn helps to sharpen the image focus and precision, more accurately and convincingly defining the position of a performer in space.

That's by no means the 42A's only strength. The large main driver helps deliver fine performance through the bass and midband, with good overall balance and ultimate bass extension. Best of all is dynamic expression, which is comfortably ahead of the pack and further enhanced by the superior timing and across-the-band time coherence.

The down side, is a degree of boxy coloration. While some listeners may find this unpleasant, others might well see it as an acceptable trade-off for the tight time coherence.

The original 42A was criticised for a rather too restrained top end and that is one factor that has received attention here. The top end is certainly better balanced, possibly as result of the change in tweeter, but it's still lacks some sweetness when compared with the better examples in this test group. **HFC**



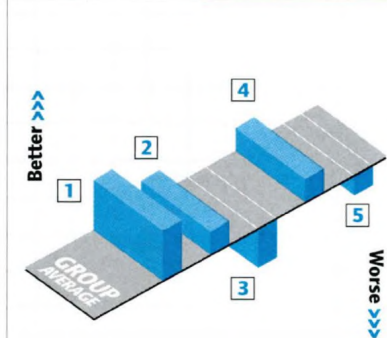
### LAB REPORT

Even though the two versions still have plenty in common, comparing the current 42A with its 2005 predecessor reveals quite a number of positive changes.

Sensitivity is down a couple of decibels, but it's still a pretty generous 90dB, and the overall in-room far field tonal balance is significantly improved.

Two significant criticisms remain, however. Whereas the original provided an easy amplifier load that never fell below eight ohms, this current version looks altogether less kind through the treble region, dropping below six ohms around 3kHz and reaching a low three ohm minimum at 4kHz. That 4kHz dip corresponds to a peak in the room-averaged response and a further peak is seen at 12kHz, again corresponding to a (rather milder) impedance dip. One has to wonder whether the tweeter change is entirely beneficial.

### HOW IT COMPARES



- 1] Sensitivity >> +30%
- 2] Bass extension >> +10%
- 3] Ease of drive >> -20%
- 4] Overall frequency balance >> +10%
- 5] Response smoothness >> -10%

### SPECIFICATIONS

Measurement	Rated	Actual
Sensitivity @ 1m/2.83V	92dB	90dB
Impedance (nominal/minimum)	8 ohms	5/3 ohms
Estimated bass extension (-6dB)	28Hz	25Hz

### VERDICT

**SOUND >> 89%**

Improved performance justifies the 42A's price increase. Impressive overall balance through bass and midband. Some coloration, but splendid dynamic expression and wonderful time coherence

**PRACTICALITY >> 85%**

**BUILD >> 83%**

**VALUE >> 85%**

Improved performance justifies the 42A's price increase. Impressive overall balance through bass and midband. Some coloration, but splendid dynamic expression and wonderful time coherence

**HI-FI CHOICE**  
OVERALL SCORE **88%**



# Want the best?



## Atlas Equator MkII – the best just got better.

Winner of two consecutive What HiFi Best Buy Awards, the original Atlas Equator was tough to beat. But, we did it. Meet the Equator MkII - What HiFi Best Stereo Interconnect 2007.

The use of superior materials in the Equator MkII allows an improved signal path that lets more information through, while ensuring that unwanted frequencies are kept well under control.

Listen for yourself at one of our carefully selected retailers, visit our website or call 01563 572666 for more information.

**Plug in, sit back and enjoy the experience.**

**ATLAS** | Cables  
atlasables.com

## AWARDS



## ATLAS RETAILERS

### London & South East England

- **Ashford (Kent)** Soundcraft Hi-Fi  
01233 624441 [www.soundcraft-hifi.com](http://www.soundcraft-hifi.com)
- **Aylesbury** Noteworthy Audio  
01296 422224 [www.noteworthyaudio.co.uk](http://www.noteworthyaudio.co.uk)
- **Harrow** Harrow Audio  
020 8863 0938 [www.harrowaudio.com](http://www.harrowaudio.com)
- **Hitchin** Orton Audio Visual  
01462 452248 [www.ortonaudiovisual.co.uk](http://www.ortonaudiovisual.co.uk)
- **London N7** Bartletts Hi-Fi  
020 7607 2148 [www.bartletts-hifi.co.uk](http://www.bartletts-hifi.co.uk)
- **London SW11** 1st Stop Audio Visual  
020 7978 6262 [www.1ststopav.com](http://www.1ststopav.com)
- **London W1** Hi-Fi Care at Shasonic  
0845 634 0340
- **Sevenoaks** Sound Seduction  
01732 456573 [www.soundseduction.co.uk](http://www.soundseduction.co.uk)

### South West England

- **Bournemouth** Suttons Hi-Fi  
01202 555512 [www.suttonshifi.co.uk](http://www.suttonshifi.co.uk)
- **Bournemouth** Movement Audio  
01202 529988 [www.movement-audio.co.uk](http://www.movement-audio.co.uk)
- **Poole** Movement Audio  
01202 730865 [www.movement-audio.co.uk](http://www.movement-audio.co.uk)
- **Salisbury** Salisbury Hi-Fi  
01722 322169 [www.salisburyhifi.co.uk](http://www.salisburyhifi.co.uk)
- **Weymouth** Weymouth Hi-Fi  
01305 785729 [www.weymouthhifi.co.uk](http://www.weymouthhifi.co.uk)
- **Wrexham** Acton Gate Audio  
01978 364500 [www.acton-gate.com](http://www.acton-gate.com)

### Central England

- **Banbury** Overture  
01295 272158 [www.overture.co.uk](http://www.overture.co.uk)
- **Birmingham** Music Matters  
0121 429 2811 [www.musicmatters.co.uk](http://www.musicmatters.co.uk)
- **Solihull** Music Matters  
0121 742 0254 [www.musicmatters.co.uk](http://www.musicmatters.co.uk)
- **Stourbridge** Music Matters  
01384 444184 [www.musicmatters.co.uk](http://www.musicmatters.co.uk)
- **Sutton Coldfield** Music Matters  
0121 354 2311 [www.musicmatters.co.uk](http://www.musicmatters.co.uk)
- **Wilstead** British Audio Products  
01234 741152 [www.britishaudio.co.uk](http://www.britishaudio.co.uk)
- **Market Harborough** Divine Audio  
01858 432999 [www.divineaudio.co.uk](http://www.divineaudio.co.uk)

### North England

- **Huddersfield** Huddersfield Hi-Fi  
01484 544668 [www.huddersfieldhifi.co.uk](http://www.huddersfieldhifi.co.uk)
- **Hull** A. Fanthorpe Ltd.  
01482 223096 [www.fanthorpes.co.uk](http://www.fanthorpes.co.uk)
- **Gateshead** Lintone Audio  
0191 477 4167 [www.lintone.co.uk](http://www.lintone.co.uk)
- **Gateshead (Metro)** Lintone Audio  
0191 460 0999 [www.lintone.co.uk](http://www.lintone.co.uk)
- **Sheffield** Moorgate Acoustics  
0114 275 6048 [www.morgateacoustics.co.uk](http://www.morgateacoustics.co.uk)

### Scotland

- **Aberdeen** Holburn Hi-Fi  
01224 585713 [www.holburnhifi.co.uk](http://www.holburnhifi.co.uk)
- **Glasgow** Glasgow Audio  
0141 332 4707 [www.glasgowaudio.com](http://www.glasgowaudio.com)

- Apollo
- Atacama
- Acoustic Energy
- Aesthetix
- Audio Analogue
- AVI
- Avid
- Ayre Acoustics
- Chord Cable
- Chord Electronics
- Clearaudio
- Consonance
- Creaktiv
- Custom Design
- Decent Audio
- Dynavector
- Esoteric
- Golding
- Grado
- Graham
- Graham Slee
- Hadcock
- Isotek
- Koetsu
- Kudos
- Lyra
- Martin Logan
- Michell
- Monitor Audio
- Moth
- Naim

# hifisound and turntableworld

## £500,000 Relocation Clearance Now On!

30b Larchfield St, Darlington, County Durham DL3 7TE.  
Tel: 01325 241888 Email: [choice@hifisound.co.uk](mailto:choice@hifisound.co.uk)

- Neat
- Nottingham Analogue
- Opera
- Origin Live
- Ortofon
- Pathos
- Primare
- Project
- Pure
- Resolution Audio
- Revolver
- Roksan
- Rothwell
- Shanling
- Shure
- SME
- Standesign
- Sugden
- Sumiko
- System Audio
- TEAC
- Transfiguration
- Triangle
- Trichord
- Unison Research
- Usher Audio
- Van den Hul
- VPI
- Wadia
- Whest Audio
- Wilson Benesch



£1,745 per pair ☎ 01833 631021 🌐 www.neat.co.uk

## NEAT MOMENTUM 3i

Neat's classy standmount has an extra hidden bass/mid driver

County Durham's speaker maker for more than two decades, Neat Acoustics has been exploring isobaric loading for some years. The Ultimatum MFS, reviewed by *HFC* back in 2003, is very much the inspiration for this new, simpler and much cheaper Momentum 3i, originally reviewed in *HFC* 299. It's still costly for a standmount at £1,745 per pair, but does include isobaric loading within a high-quality wood-veneered enclosure.

The term isobaric requires some explanation. Here it involves mounting a second bass/mid driver on a separate baffle inside the enclosure, separated by a cavity from the visible driver on the front and operating in acoustic series and electrical parallel. Exactly how this operates is not entirely clear. Simplistically, it effectively doubles both the moving mass of the diaphragm (lowering the fundamental resonance of the combination) and its electromotive 'shove' and should, therefore, deliver good extension from a relatively compact enclosure. At the same time, the internal driver should act as a 'shield' between the effects of the enclosure and the visible driver on the front.

The Momentum 3i is an average sized standmount with an internal volume of around 14 litres. The enclosure is nicely done in a choice of four matt-finished real wood veneers. Our example came in oak, but maple, cherry or rosenut options are also available.



Despite the extra internal main driver, this is essentially a two-way design. The main drivers are Neat's familiar high-class 168mm units with a 120mm diameter doped and flared paper cone. The tweeter is Neat's own concave 25mm alloy dome device, in place of the no longer available Focal tweeters the company used to use. The drivers are nicely rebated, while a grille is an optional extra.

### SOUND QUALITY

As the Lab Report opposite indicates, this speaker should certainly be positioned well clear of walls to avoid unwanted mid-bass excess. Even without wall reinforcement, the bass end is quite full and the top end is also quite strong, bringing a slight 'loudness contour' character to the proceedings.

Although the speaker remains fundamentally neutral, this factor also adds a little extra sense of weight and scale. This is actually quite welcome when playing the system quietly, though it can become a little unruly when the volume is turned up high. Indeed, this standmount often sounds more like a floorstander, in terms of the weight it delivers, yet it also has the agility and lightness of touch of a high-quality standmount.

Perhaps its biggest plus point lies in the low coloration and freedom from boxiness that's clearly well ahead of the pack and very likely associated with the isobaric configuration. The strong treble probably contributes to the superior detail and fine vocal intelligibility, though the overall impression is quite restrained and understated and the midband could perhaps be a little more expressive.

However, the overall dynamic range is very wide, images are precise and the whole thing sounds very clean and coherent, as well as rather larger than its physical dimensions lead one to expect. **HFC**



### LAB REPORT

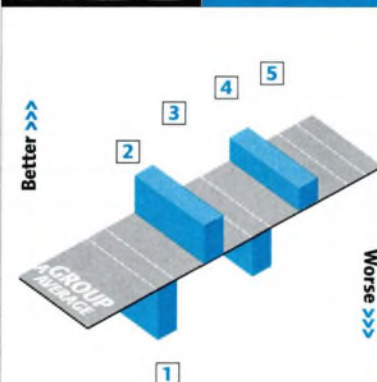
The isobaric loading delivers unusually good bass extension for a standmount design. A port tuned to a relatively low 40Hz gives genuinely deep in-room bass down to a low 25Hz.

One consequence, however, is a relatively modest sensitivity of around 86dB and because of the twin bass units, the load is a quite demanding four ohms, through much of the bass region. Pair-matching was adequate enough.

The overall in-room tonal balance is a little uneven, but stays within +/-3dB limits from 100Hz upwards. The sub-100Hz bass is just a shade on the strong side, indicating that the Momentum 3i should be positioned well clear of walls.

Across the rest of the audio band, the most obvious features are a dip around 1.2kHz, a modicum of restraint in the presence zone (2-3.5kHz), plus a top end that is rather strong and a little uneven.

### HOW IT COMPARES



- 1] Sensitivity >> -30%
- 2] Bass extension >> +20%
- 3] Ease of drive >> -20%
- 4] Overall frequency balance >> +10%
- 5] Response smoothness >> 0%

### SPECIFICATIONS

Measurement	Rated	Actual
Sensitivity @ 1m/2.83V	88dB	90dB
Impedance (nominal/minimum)	6/4 ohms	6/4 ohms
Estimated bass extension (-6dB)	-	23Hz

### VERDICT

**SOUND >> 87%**

□ □ □ □ □ □ □ □ □ □

**PRACTICALITY >> 86%**

□ □ □ □ □ □ □ □ □ □

**BUILD >> 87%**

□ □ □ □ □ □ □ □ □ □

**VALUE >> 84%**

□ □ □ □ □ □ □ □ □ □

Superior standmount delivers much more weight than its compact dimensions imply, with a freedom from coloration. Sound is a little strong in bass and treble, midband a little laid back and sensitivity modest.

**HI-FI CHOICE**  
OVERALL SCORE **85%**

# Home of the finest hi-fi

Don't forget to visit our new web site

tel : 01753 652 669 | email : info@ukd.co.uk | web : www.ukd.co.uk



£1,895 per pair ☎ 01753 652669 🌐 www.triangle-fr.com

## TRIANGLE GENESE QUARTET

New Genese range is exceptionally good value for money

Leading French company Triangle (pronounced Tree-ongle) has been through some major changes recently.

The company's founder and guiding light, Renaud de Vergnette recently sold a majority shareholding in the operation to Olivier Decelle, a one time hi-fi dealer who first met Renaud when Triangle was making its debut. Olivier's business success actually came in frozen foods, but his love for music and hi-fi has brought him back as a major investor in Triangle's future expansion, allowing Renaud to focus on product development.

After a successful track record with its vinyl-covered budget Esprit models, Triangle expanded its upmarket Magellan series and has now filled the gap by introducing a brand new mid-market Genese range, which replaces the previous Stratos series.

This £1,895 per pair Quartet is the middle of the three Genese models introduced at the time of writing. It's a three-way with twin bass drivers and, as such, it shares the same configuration

as the cheaper Celius Esw (HFC 277) and the more costly Magellan Cello (*The Collection* 2007). And although it shares a similar pricetag with the former, physically, it more closely resembles the latter.

Though expensive, the Quartet is certainly a whole lot of speaker for the money, with a selection of ingredients that put the rest of this test group in the shade. The tall floorstanding enclosure is elegantly finished in mahogany-stained real wood veneer and has curved sides for extra strength and superior internal standing wave and reflection control.

The three-way line-up combines twin 160mm bass units with fibreglass/carbon fibre cones and high excursion rubber roll surround, a 160mm paper cone, pleated surround midrange driver, and a horn-loaded titanium dome tweeter mounted high up and half-out of the enclosure, thanks to a semicircular bulge in the top surface. Each driver has its own separate sub-enclosure, the two bass units loaded by a clever Siamesed double-port arrangement, and the whole thing sits on a steel plinth which ensures fine stability.

### SOUND QUALITY

Intended to be kept clear of walls, the Quartet was noteworthy for the sense of true authority that it brought to the party. The sheer height of the speaker was partly responsible, with the midrange and the tweeter comfortably seated above head height. The other key factor is fine dynamic expression, which further contributes to the vividness and realism of its musical performance.

The bass end is clean, dry and even, if not perhaps quite as weighty as the size of the speakers might suggest. While it shows decent speed and freedom from overhang, the tonality seemed a trifle detached from the whole. Voices are very communicative, but the midband also suffers from a degree of boxy coloration. Likewise the top end is clean, incisive and detailed, but not particularly sweet or smooth. Imaging and coherence are both thoroughly competent, but fall a little short of the best.

The Quartet delivers a fully competitive all round sound quality, but in one notable respect is streets ahead of the pack. Provided the partnering amplifier has good current capability, this speaker has a substantial advantage in loudness. Not only through its higher sensitivity, but also the substantial power handling advantage of its three-way multi-driver array. **HFC**

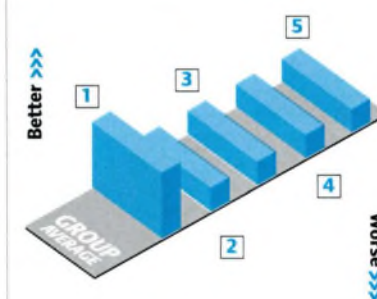


### LAB REPORT

All those drive units contribute to a sensitivity rating that's considerably higher than average, and indeed than any other in this test group. Our tests comfortably confirming the manufacturer's claim for a generous 92dB. The down side (there's usually a down side) is a load that's decidedly demanding, hitting a three ohm minimum in the bass region.

The far-field averaged frequency response holds within impressive +/-4dB limits right across the band, from 25Hz up to the limits of audibility under in-room conditions. This is an impressive result, even though there's some unevenness along the way. But a couple of mild midband peaks, at around 730Hz and 1.3kHz, may well be responsible for the observed coloration and the treble output does look a little too hot at 7-13kHz. Pair matching looked pretty good with just a slight variation at high frequencies.

### HOW IT COMPARES



- 1] Sensitivity >> +40%
- 2] Bass extension >> +10%
- 3] Ease of drive >> +10%
- 4] Overall frequency balance >> +10%
- 5] Response smoothness >> +10%

### SPECIFICATIONS

Measurement	Rated	Actual
Sensitivity @ 1m / 2.83V	92dB	92dB
Impedance (nominal / minimum)	8 / 3.2 ohms	5 / 3.3 ohms
Estimated bass extension (-6dB)	35Hz	25Hz

### VERDICT

SOUND >> 90%

PRACTICALITY >> 80%

BUILD >> 85%

VALUE >> 86%

Fine material value for money, very superior loudness capability and a fine overall tonal balance right across the band. Height of speaker helps image spaciousness and scale, though the top end might be sweeter.

**HI-FI CHOICE** 90%  
OVERALL SCORE

At last, visual sophistication meets high end audio performance.



Piega loudspeakers redefine the audio rule book when it comes to visual sophistication and sheer musical performance.

Piega's implementation of aluminum cabinets with the use of ribbon technology further elevate the listening experience of these stunning speakers.

Whether your criteria be multi-channel for theatre, or 2 channel stereo, you can be sure that your time with Piega loudspeakers will be an unforgettable one.

For further information and your nearest Piega stockist contact us on the details below.

# CONCLUSIONS

*Superb performance levels, but do these speakers have feet of clay?*

**A** year ago, when covering a similarly upmarket group of speakers, I commented that, 'all four of the floorstanders came with inadequate floor spike provisions, which is disappointing. This is disappointing because it's not a difficult task to rectify, but also because it's a failing that these reviews have highlighted numerous times in the past.'

Twelve months on, examining a completely different set of speakers with just one brand in common, nothing at all seems to have changed. This time, both Triangle and Amphion failed to supply any

means of locking their spikes once adjusted, while both MonoPulse and DALI rely on feeble little thumbwheels that all too easily work loose.

This is depressing, given the price of these speakers. Perhaps worse, it is indicative of the low priority designers seem to give to the relatively simple job of adequately securing properly lockable spikes. Instead, the money that could have gone towards effectively secure sockets and lock-nuts has been frittered away on unnecessarily elaborate chrome-plated spikes, most of which will remain invisible.

Rant over. Floor-coupling apart, this was a generally impressive group of speakers, though as usual, each model possesses its own individual character. Working up the price ladder, two of the least costly models – the Ascendo (£1,499) and the MonoPulse (£1,495) – claim superior phase coherence through the crossover region and both demonstrated this superiority very effectively by showing remarkably impressive coherence and focus through the voice band.

Two of the most stylish floorstanders this reviewer has ever

seen are the Amphion and DALI models. Both of these elegant designs incorporate their own unique tweeter arrangements, and fully uphold Scandinavia's reputation for superior design expertise and innovation.

Outwardly perhaps more conventional, Neat Acoustics clearly demonstrates the advantages of isobaric loading, even in a standmount, while the Triangle puts the other test subjects to shame with the sheer quantity of classy engineering content it offers at a highly competitive price. **HFC**

## TRY THEM WITH THESE

### CD PLAYERS

**MERIDIAN G06** £1,695

A great combination of all round performance with superb build.

**REGA SATURN** £1,298

Top-end sweetness and transparency are its greatest strength, a stunning player.

### AMPLIFIERS

**SUGDEN A21AL SERIES 2** £1,299

Not the most powerful, but the revival of a classic, with sweet Class A sound.

**NAIM NAC 122X/NAP 150X** £1,575

A sophisticated and musically rewarding amp with outstanding grip and insight.

## HINTS AND TIPS

»» Floor-coupling spikes should have tight lock-nuts, but don't over-tighten these or you'll strip the socket threads.

»» Finding the right place to put the loudspeakers acoustically is very important. Take the time and trouble to experiment.

»» Moving a speaker from a free space location until it's close to a wall will substantially boost the mid-bass.

»» Expect speakers to improve steadily over the first 100 hours or so.  
»» Use decent speaker cable, if you want your system to perform at its best.

## LOUDSPEAKERS AT A GLANCE



MAKE MODEL	Amphion Prio 520	Ascendo Monitor C5	DALI Mentor 5	MonoPulse 42A	Neat Momentum 3i	Triangle Genese Quartet
<b>PRICE</b>	£1,600	£1,499	£1,899	£1,495	£1,745	£1,895
<b>SOUND</b>						
<b>PRACTICALITY</b>						
<b>BUILD</b>						
<b>VALUE</b>						
<b>OVERALL</b>						
<b>CONCLUSION</b>	Gorgeous floorstander with superb styling and a lively sound with good voice band and a sweet top end.	Problematic in-room tonal balance, but sonic performance is rescued by wonderful voice focus and coherence.	Pretty and unusually compact floorstander, balance is smooth but dynamic expression is modest.	Oddball styling, fine bass-to-mid balance and dynamics. Superb voice coherence, but untidy treble.	Sounds a lot bigger than it looks, with good coherence and an impressively wide dynamic range.	Great material value and a solid all round sonic performance with great loudness potential
<b>KEY FEATURES</b>						
<b>SIZE (WxHxD)</b>	16x104x22	22x34x33	16x88x25	26x110x25	22x38x27	23x117x37
<b>DRIVER CONFIG</b>	2-way	2-way	2+2x0.5-way	2-way	2.5-way	3-way
<b>MAIN DRIVER SIZE(S)</b>	2x130mm	1x170mm	2x130mm	1x210mm	2x165mm	3x165mm
<b>STAND/ FLOOR?</b>	Floor	Stand	Floor	Floor	Stand	Floor
<b>CABINET FINISH</b>	Real wood	Lacquer	Real wood	Metal/laminate	Real wood	real wood
<b>BI-WIRE?</b>	No	No	Yes	Yes	Yes	Yes
<b>LAB CONCLUSIONS</b> E = EXCELLENT · G = GOOD · A = AVERAGE · P = POOR						
<b>SENSITIVITY</b>	90dB <sup>G</sup>	87dB <sup>A</sup>	89dB <sup>G</sup>	90dB <sup>G</sup>	90dB <sup>G</sup>	92dB <sup>G</sup>
<b>EST. BASS EXTENSION</b>	40Hz <sup>P</sup>	30Hz <sup>A</sup>	30Hz <sup>A</sup>	25Hz <sup>G</sup>	23Hz <sup>G</sup>	25Hz <sup>G</sup>
<b>IMPEDANCE (NOM/ MIN)</b>	6/4 5ohms <sup>A</sup>	8/6ohms <sup>G</sup>	8/6ohms <sup>G</sup>	5/3ohms <sup>P</sup>	6/4ohms <sup>A</sup>	5/3.3ohms <sup>P</sup>
<b>OVERALL FREQ. BALANCE</b>	-10% <sup>A</sup>	30% <sup>P</sup>	+30% <sup>G</sup>	+10% <sup>A</sup>	+10% <sup>A</sup>	+10% <sup>A</sup>
<b>RESPONSE SMOOTHNESS</b>	-10% <sup>A</sup>	30% <sup>P</sup>	+30% <sup>G</sup>	-10% <sup>A</sup>	0% <sup>A</sup>	+70% <sup>A</sup>

Choice Bits is the easy way to buy the best audio accessories available today. Simply pick up the phone, order online, drop us an email or fill out the order form opposite and pop it in the post. It couldn't be simpler!

**W**elcome to our new, expanded Choice Bits accessories shop. Every month, our highly trained audio experts trawl the world of hi-fi for the freshest goodies and the finest accessories, all designed to help get the most out of your system and each one ready to be delivered straight to your door.

This issue, it's time to help your LPs like never before. Vinyl-Zyme Gold doesn't just clean your record collection, its enzymes actually eat the nasties that live on your precious vinyl (or even shellac) discs. Kiss goodbye to LP rot today!

For our full product selection, visit our dedicated website: [www.choicebits.co.uk](http://www.choicebits.co.uk)



### BUGGTUSSEL'S VINYL-ZYME GOLD

Buggtussel's Vinyl-Zyme Gold is definitely a new take on record cleaning fluids. Kevin Blair of Buggtussel explains why his record cleaner does more than just alcohol and

purified water: "Most conventional record cleaners are based on alcohol. These solutions may effectively dissolve most oily and fatty contaminants, but seldom will they break and remove microbial attachment sites, even with aggressive scrubbing."

Vinyl-Zyme Gold is an aqueous solution of preformed, natural enzymes. It leaves your grooves cleansed, non-attractive to dust and non-supportive of microbial growth. Vinyl-Zyme Gold contains no alcohol, detergents or other man-made chemicals. It is also safe to use on all vinyl and shellac discs. A single 2oz bottle will clean 50-60 records.

**ONLY: £12.95 (2oz BOTTLE)**

## Best Buy Accessories



### Clearaudio Deluxe Bubble Level

Use Clearaudio's high-quality stainless steel bubble level to ensure your turntable is lined up.

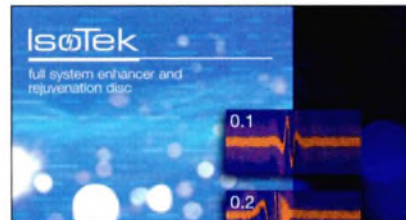
**Price: £22.95**



### IsoTek Sigmas Mains Conditioner

Your mains supply is polluted and that is ruining your hi-fi's performance. This is the cure.

**Price: £995.95**



### IsoTek Full System Enhancer Disc

Our top-selling burn-in and demagnetisation disc is a must-have for any CD or DVD-based system.

**Price: £14.95**



### L'Art du Son Record Cleaning Liquid

Alcohol-free record cleaning fluid. This biodegradable solution will clean 500 records.

**Price: £27.95**



### Shure Stylus Force Gauge

This classic balance-style gauge is remarkably effective and accurate. An vinyl must-buy!

**Price: £24.95**



### Krost! Disco Antistat Record Cleaner

Transform your dusty LPs with this classic wet cleaning system. Highly recommended.

**Price: £44.95**



### Nagaoka Anti-Static Record Sleeves

Quite simply, the best LP inner sleeves made. The audiophile's choice. Sold in packs of 50.

**Price: £14.95 (pack of 50)**



### Furutech PC-2 Disc Treatment

Clean away the dirt, grease and goo that covers the pits and lands of your CD and DVD discs.

**Price: £24.95**



### LAST Stylus Cleaner

Discs sound better and are less likely to be damaged if your stylus is completely clean.

**Price: £19.95**

## ANALOGUE ACCESSORIES

Art Vinyl LP display mount (single)	£29.95	☐
Art Vinyl LP display mount (pack of three)	£69.95	☐
Cardas 180g Frequency Sweep LP	£21.95	☐
Clearaudio Diamond Stylus Brush	£9.95	☐
Clearaudio Harmo-Nicer LP Mat	£34.95	☐
Clearaudio Stroboscopic Test Record	£29.95	☐
Clearaudio Stroboscopic Light	£81.95	☐
<b>Clearaudio Deluxe Bubble Level</b>	<b>£22.95</b>	☐
Clearaudio Clever Record Clamp	£12.95	☐
Clearaudio Quadro Record Clamp	£73.95	☐
KAB Strobe Disc & Light	£79.95	☐
Katli Audio Stylus Pressure Gauge	£74.95	☐
Loricraft Record Mat	£49.95	☐
Michael Fremer Turntable Setup DVD	£29.95	☐
Michell Engineering Record Clamp	£23.95	☐
Michell Universal Dust Cover	£46.95	☐
Michell Techno Weight	£67.95	☐
Milty Zerostat	£39.50	☐
Mobile Fidelity GeoDisca	£44.95	☐
Ortofon T Force Tracking Force Gauge	£7.95	☐
Polaris Plus Stylus Alignment Gauge	£5.95	☐
Project Bubble Level	£14.95	☐
Project Record Puck	£39.95	☐
Ringmat's How to Set Up A Turntable	£7.50	☐
Ringmat Developments The Ringmat	£49.95	☐
Ringmat Anniversary Ringmat	£69.95	☐
<b>Shure Stylus Force Gauge</b>	<b>£24.95</b>	☐
'The Producer's Cut' Test LP	£24.95	☐

## AUDIO BOOKS

The Complete Guide To High-End Audio	£24.95	☐
How To Set Up And Fine Tune A Turntable	£7.50	☐
The LP is Back	£9.95	☐
Home theatre For Everyone	£19.95	☐

## DIGITAL ACCESSORIES

Allsop DVD Optimiser/Laser Lens Cleaner	£19.95	☐
AudioPrism CD Stoptlight	£19.95	☐
AVIA Home Theatre Set-Up & Calibration	£39.95	☐
Bedini Hand Held Clarifier MkII	£69.95	☐
Compact Dynamics CD Plus	£14.95	☐
Compact Dynamics CD UpGrade	£14.95	☐
Densen DeMagic CD	£12.95	☐
Digital Video Essentials (PAL) DVD Set-Up Disc	£19.95	☐

Lasertrack CD2000 Set-Up Disc	£19.95	☐
Marigo 3D CD/DVD Mat	£59.95	☐
Mobile Fidelity ULTRADISC CD-R (Qty 5)	£14.95	☐
Richard Black's U.S.H.E.R. CD	£14.95	☐
<b>IsoTek System Enhancer, DeMag &amp; Burn-In CD</b>	<b>£14.95</b>	☐
Order both the above discs for only	£21.00	☐
Ringmat The Statmat MkII	£19.95	☐
Sound Improvement Disc (Model 14/15)	£17.95	☐
Ultra Burn-In CD3000	£24.95	☐
Walker Audio ERS Paper (8" x5")	£14.95	☐
Walker Audio ERS Paper Self Adhesive (8" x5")	£19.95	☐
XLO Reference Test & Burn-In CD	£24.95	☐

## CARE/CLEANING PRODUCTS

Allsop Carbon Edge Laser Lens Cleaner	£14.95	☐
Allsop CD & DVD Fast Wipes	£4.95	☐
Allsop CD Scratch Repair Kit	£12.95	☐
Allsop Radial CD Cleaner	£10.95	☐
<b>Buggtusel Vinyl-Zyme Gold (2oz)</b>	<b>£12.95</b>	☐
Clearaudio Stylus Tip Brush	£9.95	☐
Clearaudio Carbon Fibre Record Brush	£13.95	☐
DeoxIT Contact Cleaner (200ml)	£13.95	☐
<b>Furutech PC-2 CD/DVD cleaning agent</b>	<b>£24.95</b>	☐
Goldring Exstatic Deluxe Record Brush	£14.95	☐
Goldring Exstatic Record Sleeves	£11.95	☐
<b>Knosti Disco Antistat Record Cleaner</b>	<b>£44.95</b>	☐
Knosti Disco Replacement Brushes (pr)	£7.50	☐
<b>L'Art du Son Record Cleaner (5Litre)</b>	<b>£27.95</b>	☐
L'Art du Son CD/DVD Cleaner	£39.95	☐
Last All-Purpose Record Cleaner	£39.95	☐
Last CD/DVD cleaner	£19.95	☐
Last Record Preservative	£39.95	☐
<b>Last Stylus Cleaner</b>	<b>£19.95</b>	☐
Last Stylast Stylus Treatment	£29.95	☐
Lyra SPT Stylus Cleaner	£29.95	☐
<b>Nagaoka Antistatic Record Sleeves (50)</b>	<b>£14.95</b>	☐
Nordost Eco 3 Static Inhibitor Spray	£24.95	☐
Onzow Zerodust Stylus Tip Cleaner	£34.95	☐
Optrix CD Cleaner & Clarifier	£16.95	☐
ProGold Contact Enhancer (ProGold 20ml)	£13.95	☐
Unbranded Inner Sleeves (Qty 100)	£24.95	☐
VPI HW16.5 Record Cleaning Machine	£475.00	☐
Walker Audio Super Silver Treatment	£59.95	☐
Walker Audio Ultra Vivid CD/DVD Enhancer	£119.95	☐

## ISOLATION RACKS AND CONES

IXOS Sorbothane Feet (Qty 4)	£19.95	☐
Nordost Pulsar Points (Aluminium) (Qty 4)	£69.95	☐
Nordost Titanium Pulsar Points	£249.95	☐
Nordost Quasar Points	£119.95	☐
Project T/ Table Wall Mount	£74.95	☐
Project T/ Table Platform	£224.95	☐
Spectral Foculpods Support Systems (Qty 4)	£14.95	☐
Spectral Polipods Support Systems (Qty 8)	£14.95	☐
Stillpoints Cones (Qty 3)	£244.95	☐
Stillpoints Risers (Qty 3)	£84.95	☐

## MAINS CABLES AND CONDITIONERS

24ct Gold Plated UK Plug	£19.95	☐
Furutech FIUK G	£54.95	☐
Furutech Silver Rhodium 13A Fuse	£39.95	☐
Hi-Fi Tuning Silver/Gold 13A Fuse	£19.95	☐
IEC - Figure 8 Adaptor	£9.95	☐
IsoTek 24ct Gold IEC Connector	£49.95	☐
IsoTek Premium Mains Cable (1.5M)	£59.95	☐
IsoTek Elite Mains Cable (1.5M)	£89.95	☐
IsoTek Optimum Mains Cable (1.5M)	£149.95	☐
Nordost Shiva Mains Cable (2.0M)	£220.00	☐
Nordost Vishnu Mains Cable (2.0M)	£450.00	☐
Nordost Brahma Reference Mains Cable (2.0M)	£949.95	☐
Nordost Valhalla Reference Mains Cable (2.0M)	£1924.95	☐
IsoTek IsoPlug	£29.95	☐
IsoTek NeoPlug	£49.95	☐
IsoTek GII Solus	£349.95	☐
IsoTek GII Multi-4-Way	£199.95	☐
IsoTek GII Multi-6-Way	£224.95	☐
IsoTek GII Multi-8-Way	£259.95	☐
IsoTek GII Gemini-6-Way (distribution strip)	£299.95	☐
IsoTek GII Mini Sub/Vision	£594.95	☐
<b>IsoTek Sigmas</b>	<b>£999.95</b>	☐
IsoTek GII Titan	£1649.95	☐
IsoTek GII Nova	£1749.95	☐
Kemp Electronics Power Strip 4-Way	£324.95	☐
Kemp Electronics Power Strip 6-Way	£375.95	☐
Kemp Electronics Power Strip 8-Way	£424.95	☐
Nordost THOR by IsoTek	£1649.95	☐
V.D.H. Polarity Tester	£17.50	☐
WattGate 320 IEC Connector (Black)	£18.95	☐
WattGate 320I HC (16Amp)	£28.95	☐
Wyrewizard Magus 1.5m	£124.95	☐



**0870 240 7228**



**www.choicebits.co.uk**

## ORDER FORM

Orders can also be placed online: [www.choicebits.co.uk](http://www.choicebits.co.uk)

Name: \_\_\_\_\_

Address: \_\_\_\_\_

Postcode: \_\_\_\_\_ Tel: \_\_\_\_\_

Cheque/postal order enclosed for £ \_\_\_\_\_ made payable to Choice Bits.

Or please charge my Visa/Mastercard/Amex/Switch Card number:

□□□□ □□□□ □□□□ □□□□ □□□□ Signature \_\_\_\_\_

Valid From \_\_\_\_\_ Expires \_\_\_\_\_ Issue number (Switch) \_\_\_\_\_

### How to order:

Simply complete this order form, fill in your details and send it to: PO. Box 5996, Newbury RG20 4XH

Alternatively: Give us a call on 0870 240 7228

email: [orders@choicebits.co.uk](mailto:orders@choicebits.co.uk)

Order online: [www.choicebits.co.uk](http://www.choicebits.co.uk)

### UK postage:

Postage is £2.00 for the first item and £1.00 thereafter. All Prices include VAT at 17.5%

### European/ International sales:

Overseas sales are welcome - please call for a postage quotation. Sales outside the EU are VAT exclusive.

This service is operated by Hififorsale.com Ltd (registered address) trading as Choice Bits under license from Future Publishing Ltd. Your order will be fulfilled by Hififorsale.



# FREE DAB/FM DIGITAL RADIO!

Subscribe to **HI-FI CHOICE** for just **£3.37** a month and get a **BLIK DAB** digital radio from **Revo** completely

# FREE!



**"If there's a DAB or FM signal to pick up, it'll pick it up; it doubles up as an alarm clock and it can even play music from your iPod. What's not to love about this little ingot of DABby goodness?" – Alan Sircom, *Hi-Fi Choice***

Revo's BLIK DAB Digital Radio is available exclusively at

The electronics specialist

## maplin

# John Lewis

### Key BLIK features:

- \* Stunning contemporary design
- \* High-sensitivity DAB digital radio
- \* Digital alarm clock functionality
- \* M-Port sound system support for iPod and other MP3 devices

## REVO

**Order online at...**

**[www.myfavouritemagazines.co.uk/hfc/p039](http://www.myfavouritemagazines.co.uk/hfc/p039)**





# SUBSCRIBE TODAY!

## WHY SUBSCRIBE TO HI-FI CHOICE?

- > Pay just £3.37 per issue
- > 24 issues a year delivered direct to your door
- > Save money compared to the shop price
- > You'll never miss an issue
- > Ordering is easy and only takes a minute
- > **PLUS!** Subscribe to Hi-Fi Choice this month and you'll also receive a free BLIK DAB digital radio

## HOW TO SUBSCRIBE

- > Call 0844 848 2852 (quote offer code p039)
- > Or visit: [www.myfavouritemagazines.co.uk/hfc/p039](http://www.myfavouritemagazines.co.uk/hfc/p039)
- > Or complete the priority order form (right) and pop it the post



## OVERSEAS SUBSCRIPTIONS

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

# PRIORITY ORDER FORM

## UK PRICING

I would like a two-year subscription (24 issues) to HI-FI CHOICE for £80.93 AND RECEIVE A FREE BLIK DAB DIGITAL RADIO

## PERSONAL DETAILS

Title ..... Forename .....

Surname .....

Address .....

Postcode .....

Telephone .....

If you'd like to receive emails and SMS from HI-FI CHOICE and Future Publishing and its group of companies containing news, special offers and product and service information, please include your email and mobile number below

Email .....

Mobile no. ....

Please tick here if you are happy for us to pass your details to carefully selected companies so they can send you relevant information about their products or services by email  or SMS

## PAYMENT DETAILS

I would like to pay £80.96 by cheque (to be made payable to Future Publishing Ltd. Sterling cheques drawn on a UK account)

I would like to pay £80.96 by Credit/ Debit card  
 Visa  Mastercard  American Express  Switch/ Maestro

ISSUE NUMBER  (SWITCH/MAESTRO ONLY)

CARD NUMBER

VALID FROM DATE  /  EXPIRY DATE  /

SECURITY CODE  (FOR ADDED SECURITY PLEASE FILL IN THE LAST THREE DIGITS FROM THE SIGNATURE STRIP ON THE REVERSE OF YOUR CARD)

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

## POST YOUR ORDER

### RETURN THIS FORM FREEPOST TO:

HI-FI CHOICE  
Subscriptions,  
Freepost RLSC-SXSE-SKKT,  
Unit 4  
Tower House  
Sovereign Park,  
Market Harborough  
Leicestershire,  
LE16 9EF

**OFFER CODE P039**

**OFFER ENDS  
14 JANUARY 2008**

**TERMS AND CONDITIONS:** Minimum subscription term is 24 months. This is a UK only offer. Your subscription will start with the next available issue. No refunds will be given. Please tick here if you do NOT wish to receive relevant information about products or services from Future Publishing or any of its group companies by post  or telephone . Please tick here if you do NOT wish us to pass your details to carefully selected companies to enable them to contact you about their products or services by post  or telephone.

# HI-FI CHOICE

# HI-FI CHOICE BACK ISSUES



ISSUE 284



ISSUE 285



ISSUE 286



ISSUE 287



ISSUE 288



ISSUE 289



ISSUE 290



ISSUE 291



ISSUE 292



ISSUE 293



ISSUE 294



ISSUE 295



ISSUE 296



ISSUE 297



ISSUE 298



ISSUE 299



ISSUE 300



ISSUE 301

## YOUR DETAILS

Name \_\_\_\_\_  
 Address \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 Email address \_\_\_\_\_  
 Card number \_\_\_\_\_  
 Expiry date \_\_\_\_\_  
 Signature \_\_\_\_\_

## SEND YOUR ORDER TO

UK READERS:  
 Hi-Fi Choice back issues,  
 FREEPOST BS4900, Somerton,  
 Somerset, TA11 6BR

OVERSEAS READERS:  
 Hi-Fi Choice back issues,  
 Cary Court, Somerton,  
 Somerset, TA11 6TB, UK

## WHICH ISSUE(S) DO YOU REQUIRE?

MONTH & YEAR	ISSUE NUMBER	AMOUNT

## HOW WILL YOU BE PAYING?

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

CHEQUE   
 MASTERCARD   
 MAESTRO   
 VISA   
 POSTAL ORDER

## HOW MUCH WILL IT COST?

UK £5.95, EU €6.95, Outside EU £7.95 (per issue)

## BACK ISSUES

Back issues are available by mail order (as long as stocks remain). They cost £5.95 (UK), £6.95 (Europe) or £7.95 (rest of the world). All prices include p&p. You can order by phone on 0870 837 4773 – we accept Mastercard and Visa credit cards, and Maestro debit cards. Alternatively, send a cheque or PO made payable to Future Publishing Ltd. Please fill in your details on the left of this form.

## ORDER A REVIEW REPRINT

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

Please send a written request, enclosing a cheque for £5 made payable to Future Publishing Ltd, to:  
 Hi-Fi Choice Reprint Service,  
 Future Publishing, 2 Balcombe Street,  
 London, NW1 6NW.

PLEASE NOTE: THIS SERVICE IS ONLY FOR OTHERWISE UNOBTAINABLE REVIEWS

## Why not subscribe to Hi-Fi Choice?



See page 80  
 for more details...

# DEFINITIVE AUDIO



**Main image:** KSL Kondo Gakuon valve amplifiers.



**L to R:** 1. Kuzma Stabi XL 2. Art Audio Concerto Stereo Amplifier (GE) 3. Living Voice IBX R2 (Burr Oak) 4. SME 10 / SME V  
5. Living Voice OBX RW (Santos) 6. KSL Kondo Ongaku Integrated Amplifier 7. Magnum Dynalab 106T Valve Tuner  
8. KSL Kondo Gakuoh Mono Amplifiers 9. Resolution Audio Opus 21 CD Player 10. KSL Kondo V-z (1m) Interconnect

# RETAIL VICTIMS OF THE WORLD UNITE

Must you put your faith in price comparison sites that may be ruled by powerful retailers? No, for at PriceRunner.co.uk we have shed the shackles of retailer oppression. We are **impartial** and we are free. We fight to bring you the greatest savings by checking more prices than anyone else. Go now to **PriceRunner.co.uk/truth** for your TVs, cameras, sat nav's and all the things you desire. And rejoice in **truth, honesty and the PriceRunner way.**



GET THE PRICE COMPARISON TRUTH ONLY AT



THE PRICE COMPARISON PEOPLE

# 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 multichannel gear you can buy. Here, you'll find our favourite current products listed under easy to use categories, plus useful information on what to look for and how to get the most from your components.

#### Reviews you can trust

Our test results are the most reliable in the business. We employ the most experienced reviewers and use the most stringent techniques to ensure our ratings are the ones you can trust. All the equipment we rate most highly is contained within these pages, from CD and vinyl to the latest multichannel disc players. Whether hi-fi stereo or high performance surround and vision, these components will take you a step closer to reality.

#### How to use this guide

The *Hi-Fi Choice Buyer's Bible* is the best way to make a shortlist of components for your system. Pick the ones that best suit your taste and budget, then use our *Dealer Classified* section to find specialist outlets where you can audition these components with your favourite discs.

Products that score more than 80 per cent overall are automatically considered for inclusion in the *Hi-Fi Choice Buyer's Bible*. Any Best Buy or Editor's Choice Badges awarded are also displayed.

#### SOURCE COMPONENTS

- 86 CD PLAYERS
- 88 DVD PLAYERS
- 90 VINYL
- 93 RADIO TUNERS
- 95 DIGITAL RECORDERS

#### AMPLIFIERS

- 98 STEREO AMPS
- 100 MULTICHANNEL AV AMPS

#### LOUDSPEAKERS

- 108 STEREO SPEAKERS
- 112 MULTICHANNEL SPEAKER PACKAGES

#### ANCILLARIES

- 115 HEADPHONES
- 117 CABLES
- 119 STANDS AND SUPPORTS

#### DEALER CLASSIFIED

- 120 DEALER GUIDE
- 125 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 surround sound using up to six channels, and most new discs take advantage of this. SACD discs are usually hybrids and will play on normal CD players, but you won't be able to appreciate their highest quality or their multichannel capability without an SACD-compatible player. Some SACD players also play DVD and even DVD-Audio – these are listed in our DVD section.



## 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 75ohms impedance are useful when connecting the player to a digital recorder or DAC.

### WHAT IS OVERSAMPLING/UPSAMPLING?

Oversampling involves multiplying the sampling frequency by a whole number, usually between four and 32, but sometimes higher, and is designed to 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



### Rega Apollo £498

Rega's latest entry-level player is a splendidly musical performer, given its modest price. Bass is good, midrange is great and high frequencies are truly exceptional.



### Cambridge Audio Azur 840C £750

Sitting at the top of Cambridge Audio's Azur range, the 840C is a technically innovative player with a sound that belies its sub-£1,000 price – open, subtle and refined.

## Our favourite CD PLAYERS

BEST BUY EDITOR'S CHOICE

### Audio-only CD and SACD players

BADGE?	PRODUCT	PRICE	COMMENTS	SPECIFICATIONS							ISSUE NUMBER
				SACD COMPATIBLE	ELEC DIG OUTPUT	OPT DIG OUTPUT	CD-RW COMPATIBLE	CD TEXT	BAL ANALOGUE OUT	HEADPHONE SOCKET	
<b>UP TO £1,000</b>											
	Arcam DIVA CD73	450	Neatly built and well presented player that's especially good at bass and timing, with detail hardly less assured	●	●	●	●	●	●	●	301
	Audio Analogue Rossini	850	Valve-sporting player delivers a warm, engaging sound, but mediocre remote and no optical out may limit appeal	●	●	●	●	●	●	●	299
	Cambridge Audio Azur 640C	250	If you value the effortless flow of musical information, you should certainly hear this player	●	●	●	●	●	●	●	285
	Cambridge Audio Azur 740C	500	Very flexible, this innovative upsampling player sounds exceptionally neutral and highly informative	●	●	●	●	●	●	●	293
	Cambridge Audio Azur 840C	750	Purposefully undemonstrative, combining neutrality, detail and timing, enhanced by flexibility as a DAC	●	●	●	●	●	●	●	291
	Creek Evo	495	A minute treble lift, otherwise this is a very capable player that offers fine value	●	●	●	●	●	●	●	285
	Denon DCD-500AE	160	Cheap, well built and good, if slightly soft-edged sound quality	●	●	●	●	●	●	●	296
	Denon DCD-700AE	250	Excellent entry level quality CD player lacks for nothing. Musicians please note: even has variable speed replay	●	●	●	●	●	●	●	284
	Marantz CD6002	280	A hint of treble unevenness is the only specific flaw, performance is class-leading in most areas	●	●	●	●	●	●	●	301
	Naim CD5i	825	Bass has great extension but lacks control, slightly. Tonal neutrality higher up is excellent, however	●	●	●	●	●	●	●	291
	Quad 99CD-S	650	Revels in big music thanks to fearless presentation: smaller-scale works can lack focus	●	●	●	●	●	●	●	291
	Rega Apollo	498	Unless you can't abide top-loaders, check this out: musically it's a highly praiseworthy performer	●	●	●	●	●	●	●	285
	Sony SCD-XA3000ES	800	A good, if not truly great, all-rounder with CD and fine multi-channel SACD performance	●	●	●	●	●	●	●	276
	Vincent CD-S6 MkII	999	With its tube output stage, a beguiling midrange, sweet highs and attractively figured lows plus fine dynamics	●	●	●	●	●	●	●	287
<b>ABOVE £1,000</b>											
	Ayre CX-7e	2,195	If you want a clean-sounding, revealing and entertaining player with fabulous build this is a strong contender	●	●	●	●	●	●	●	281
	Bryston BCD-1	2,050	Not as open as some but rather more timely than most, it sounds a lot more gripping than it looks	●	●	●	●	●	●	●	300
	Chord Red Reference CD	13,345	The definitive statement in Red Book CD playing, this player's look and sound places it at the top of the tree	●	●	●	●	●	●	●	299
	Classé CDP-102	3,000	Rich, dynamic CD/DVD player with a full bottom end, impressive dynamics and a luxurious yet revealing balanced	●	●	●	●	●	●	●	286
	Classé CDP-202	4,750	CD/DVD-A player with brilliant sound, if sophistication is your bag. Includes S-video and composite outputs	●	●	●	●	●	●	●	284
	Copland CDA823	1,750	Don't let the laid-back character fool you - this player has plenty of insight too	●	●	●	●	●	●	●	280
	Cyrus CDBx/PSX-R	1,400	Lightness of touch is the key here, but there is also good bass and some very fine detail on offer too	●	●	●	●	●	●	●	295
	Esoteric X-03SE	4,995	Resolution and musicality close to the top of the game. For out and out transparency and build quality it's hard to beat	●	●	●	●	●	●	●	285
	Gamut CD3	3,500	Superb resolve of fine detail combined with a perfectly judged balance and an ability to draw you into the music	●	●	●	●	●	●	●	289
	Krell Evolution 505 SACD	8,777	Brilliant replacement for SACD Standard, superb musical discrimination. No high-res digital output	●	●	●	●	●	●	●	289
	Leema Antlia	2,495	Musically engaging player that will have you going through your CDs afresh. Balanced connection is best	●	●	●	●	●	●	●	291
	Linn Majik	1,950	Compact and capable of most CD formats, it's musically communicative with fine pace and enthusiasm	●	●	●	●	●	●	●	283
	Marantz SA-7S1	5,000	Something of a bargain even at this price, the SA-7S1 sets the benchmark for CD/SACD players of its ilk	●	●	●	●	●	●	●	297
	McIntosh MCD201	3,400	Superb CD performance and even better with SACD which has its own output level control.	●	●	●	●	●	●	●	284
	Meridian G06	1,695	Highly refined player with a combination of analysis and self-effacing response to musical demands	●	●	●	●	●	●	●	295
	Moon Supernova	4,500	Refined, high-performance player offers tremendous transparency and includes coaxial digital input	●	●	●	●	●	●	●	296
	Musical Fidelity X-RAY v8	1,098	Accurate, yet musical performer. £799, but requires £299 TRIPLE-X power supply outside of X-T100 system	●	●	●	●	●	●	●	288
	Naim CD5x	1,450	Unique design nicely complements a sophisticated and highly capable performance	●	●	●	●	●	●	●	280
	Rega Saturn	1,298	Good detail, lively natural bass, and good integration of musical strands without losing their individual character	●	●	●	●	●	●	●	295
	Unison Research Unico CD	1,495	Strong timing and rhythm, this player is well equipped for more melodic music, with good detail resolution	●	●	●	●	●	●	●	295

**SPECS KEY** **SACD COMPATIBLE** Plays high-resolution SACD discs in multichannel and/or two-channel mode. **ELEC DIGITAL OUTPUT** Electrical coaxial output for digital connection to a DAC or digital recorder. **OPT DIGITAL OUTPUT** Optical Toslink output for digital connection to a DAC or digital recorder. **CD-RW 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.



**Copland CDA823 £1,750**  
This distinguished, yet minimalist Scandinavian CD player combines a real ear for detail with full-scale dynamics and an effortless musical style. A genuine hi-fi star.



**Esoteric X-03SE £4,995**  
Esoteric's entry-level CD/SACD player delivers astonishing sonic detail and precision, coupled with a gorgeous sense of musical structure. Truly, it's brilliant.

# DVD PLAYERS

*Disc players for audio and video*



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 tackle it. Nowadays, most DVD players are competent CD players and a few are very good – often as not they are the ones that play DVD-Audio discs as well.

The great advantage of DVD is that it offers sufficient capacity to hold a feature length movie or music concert *and* discrete multichannel sound on a disc the size of a CD. In the case of plain DVD-Video discs, the audio is encoded in either the Dolby Digital or DTS format, both of which use 'lossy' compression to fit the audio 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 sound 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 music and movie soundtracks in multichannel surround. DVD players can be used with stereo amps and just two speakers to great effect, but you'll only get stereo, not surround sound.

### DO I NEED PROGRESSIVE SCAN VIDEO?

It's worthwhile for the very best picture quality, but make sure your DVD player and display device support PAL progressive.

## DVD-AUDIO

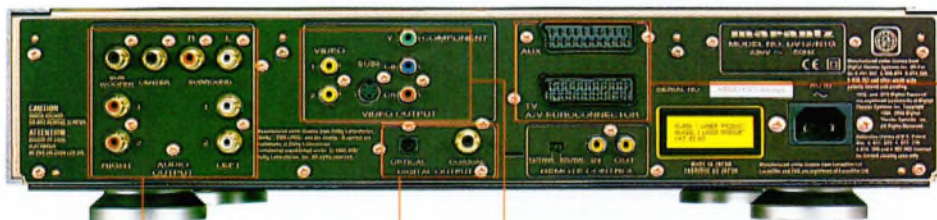
DVD-Audio is a high-resolution format that offers multichannel, stereo and Dolby Digital tracks on dedicated DVD-A discs. The discs can be played on any DVD player, but the CD-beating high-fidelity sound can only be appreciated with a DVD-A player.



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, alongside CD and DVD-Video – a neat and relatively future proof route into high-resolution multichannel music. Higher-end models featuring high-bandwidth compatible digital audio links are now also appearing, enhancing DVD-A/SACD sound when used with similarly equipped amps.

## CONNECTIONS



**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 multipin 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 BEST BUY EDITOR'S CHOICE DVD PLAYERS

### Audio/Video disc players

BADGE?	PRODUCT	£	COMMENTS	SPECIFICATIONS					ISSUE NUMBER
				DVD-A COMPATIBLE	SACD COMPATIBLE	ELEC DIG OUT	OPT DIG OUT	HEADPHONE SOCKET	
<b>UP TO £1,000</b>									
	Arcam DiVA DV135	900	Unchanged looks and stereo-only DVD-A/SACD, but the overall performance is great across all formats. Stunning picture, too	●	●	●	●	●	296
	Denon DVD-1920	250	Respectable (if unexciting) and flexible audio player, but something of a star from its HDMI equipped upsampling video subsystem	●	●	●	●	●	276
	Marantz DV7001	600	Enhanced model based on DV6001, but with various improvements, including superior CD replay capabilities	●	●	●	●	●	296
	Marantz DV7600	600	A mid-market cracker, with sound and picture quality that generally exceeds expectation	●	●	●	●	●	274
	NAD T585	800	Easy to live with universal player that shows clear signs of rejuvenation of the Classic range	●	●	●	●	●	294
	Onkyo DV-SP503E	300	Budget Onkyo universal player is a straightforward Pioneer based implementation, which performs well with audio and video	●	●	●	●	●	275
	Philips DVP9000S	400	Philips proves it hasn't lost its touch with mid market DVD players. Includes SACD and HDMI for quality video, and it's a star	●	●	●	●	●	274
	Yamaha DVD-S2500	700	Universal player, slightly stronger with video than audio, but well turned out with a wide range of analogue and digital in and outputs	●	●	●	●	●	280
<b>ABOVE £1,000</b>									
<span style="border: 1px solid black; padding: 2px;">EC</span>	Accoustic Arts Surr Player 1	4,495	A very high-quality Pioneer-based machine, excellent sound from both hi-res and regular formats	●	●	●	●	●	299
	Arcam DiVA DV137	1,250	Good overall audio performance and excellent upscaling HDMI DVD-Video player, but stereo-only SACD playback at time of writing	●	●	●	●	●	285
	Denon DVD-3930	1,100	Well engineered universal player, with useful bypass facilities for pure audio, and unusually powerful video image processing	●	●	●	●	●	287
<span style="border: 1px solid black; padding: 2px;">EC</span>	Linn Akurate CD	3,985	This highly engaging multiformat non-video player doesn't have huge transparency or a fancy box, but is musically addictive	●	●	●	●	●	299
	Marantz DV9600	1,500	With excellent, next-generation picture and impressive sound quality on CD and SACD, this sets a very high standard to beat	●	●	●	●	●	280
<span style="border: 1px solid black; padding: 2px;">EC</span>	Meridian G98AH	3,625	Meridian's most widely compatible G-Series DVD player – groundbreaking DVD-Audio replay and a fine CD player too	●	●	●	●	●	265
<span style="border: 1px solid black; padding: 2px;">EC</span>	Naim DVD5	2,565	Naim's first DVD player is a real success, notable for its class-leading sound with CD and (optional) multichannel DVD-Audio	●	●	●	●	●	263
	T+A SACD 1245 R	2,000	Dedicated stereo only/SACD/CD player avoids the usual compromises. It does a limited job, but it does it with fine fidelity	●	●	●	●	●	279
<span style="border: 1px solid black; padding: 2px;">EC</span>	Townshend TA 565 CD	3,000	A universal machine that excels with music and is quite exceptional with good of stereo CD	●	●	●	●	●	270

**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



**Marantz DV7600** £600  
A universal player that's strong with all formats, including music on CD/SACD/DVD-A.



**NAD T585** £800  
This universal player borrows from NAD's Masters Series to make a cracking all-rounder.



**Arcam DiVA DV135** £900  
Stereo-only SACD and DVD-A, but excellent performance with audio and video.



**Meridian G98AH** £3,625  
A digital *tour de force* – as exceptional with both audio and video as you'd expect.

## ONE CATALOGUE . . .

So how do you get your hands on this catalogue?  
Simply give us a call on **0870 241 2469**, it's yours **FREE!**

What's more you'll join our database and get our free quarterly newsletters featuring product reviews, offers, group tests, etc... absolutely free. It is the best way to keep up-to-date with the latest and greatest audiophile accessories and latest industry news.

Visit [www.hiforsale.com](http://www.hiforsale.com) to advertise online **totally FREE of charge**. After a few simple steps your advert will be posted online. Users can also change and update their listing in real time. Each month [www.hiforsale.com](http://www.hiforsale.com) has **over 50,000 visitors**, and to date over **100,000** adverts have been placed online!



**. . . 1000s of answers!**

# VINYL

*Turntables, cartridges and phono stages*

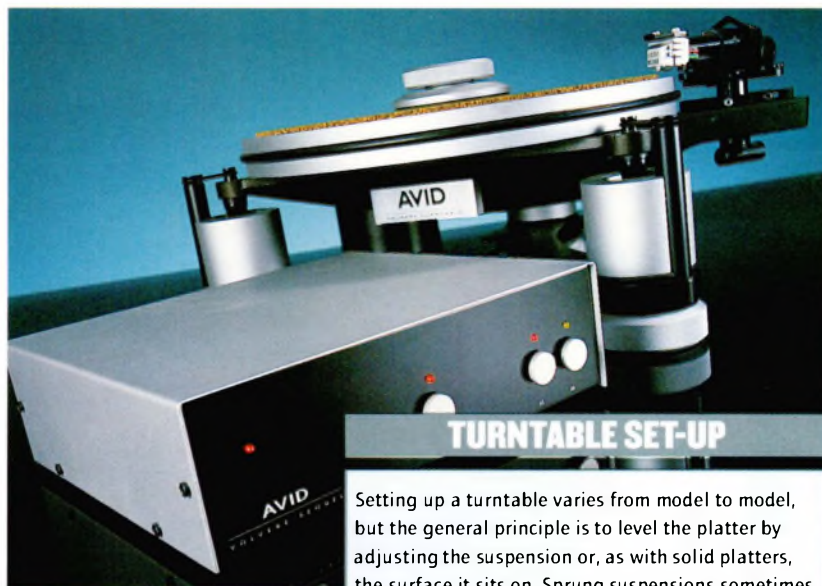


Record players or turntables offer the digital revolution serious competition when it comes to sound quality. Even a modest model can turn musical tricks that most CD players struggle with. Some call it vinyl warmth, but in reality it's a lack of digital hardness that makes the format so engaging. True, the software requires a bit more care, but even a knackered LP is more playable than a scratched CD.

Record players are made of three, perhaps four, fundamental parts. The turntable is the plinth and platter, usually also containing the motor and any suspension system. A tonearm sits on the plinth and allows the cartridge to trace the vinyl groove by pivoting or parallel tracking over the record. The cartridge contains the means of turning the mechanical movement of the groove wall into an electrical signal.

A fourth element is an amp dedicated to the delicate job of amplifying and equalising the cartridge's insubstantial output. This is called a phono stage and can be found in some integrated amplifiers and preamps, but is increasingly purchased separately for use with line-only amps.

There are two types of phono



**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.

cartridge: moving magnet (MM) and moving coil (MC), and with a few exceptions the latter outperforms the former. But MCs produce a lower output and require better-quality amplification to be heard at their best. As a general rule, MCs offer a broader bandwidth, greater dynamics and more detail, but the better moving magnets do most things well enough to distract you from your CD collection.

## TOP BUYS



**Pro-Ject**  
 RPM 5 £400

Pro-Ject's entry-level RPM deck is a good-looking, great-sounding package that delivers terrific value for money. A class act and no mistake.



**The Funk Firm**  
 Funk V £760

The more costly of two turntables from The Funk Firm, the Funk V builds on its sibling's virtues to deliver a sound of sheer class – dynamic, detailed and refined.



**Clearaudio**  
 Champion £1,475

Current king of acrylic, the Clearaudio deck, arm and cartridge combination turns in a beautifully well-balanced delivery, but choose your support wisely.



**Avid**  
 Volvere Sequel £3,500

Avid has been one of the most impressive exponents of the vinyl arts in recent years, and this mid-range deck is a stunning example of analogue engineering.

## Our favourite BEST BUY EC EDITOR'S CHOICE

# TURNTABLES

### Record players

BADGE?	PRODUCT	£	COMMENTS	SPECIFICATIONS				ISSUE NUMBER
				SPEEDS	SUSP SUBCHASSIS	SWITCHABLE SPEED CHANGE	SUPPLIED WITH ARM	
<span>EC</span>	Avid Volvere	2,750	A combination of a heavy platter with a sprung suspension that makes the vinyl it spins sound powerful and solid	33/45	●	●	●	298
<span>EC</span>	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
<span>BB</span>	Clearaudio Champion	1,365	Smart, practical and good-sounding, with impressively 'dead' arm. Isolation recommended	33/45	●	●	●	268
<span>BB</span>	Clearaudio Performance	1,670	Ceramic-magnetic bearing spells a surprisingly uncoloured performance. Good arm and cartridge	33/45	●	●	●	295
<span>EC</span>	Clearaudio Ambient	4,220	Innovative use of materials leads to a fast, precise and thrilling sound (tonearm extra)	33/45	●	●	●	271
<span>EC</span>	EAR Disc Master	7,695	Combines new 'no contact' drive technology and high quality materials to bring state of the art resolution	33/45/78	●	●	opt	276
<span>BB</span>	The Funk Firm Funk	450	You won't find another turntable at the price that can touch the Funk for dynamics, tone colour or detail	33/45	●	●	opt	279
<span>BB</span>	The Funk Firm Funk V	750	Vector drive brings a refinement to the standard Funk that increases resolution. For high-class analogue sound, it's a killer	33/45	●	●	opt	284
<span>BB</span>	Goldring GR2	265	Nicely finished Rega-manufactured deck with RB250 arm and an open, engaging sound quality	33/45	●	●	●	266
<span>BB</span>	Michell Technodec	767	Simple and smartly understated, performs above expectations – full-bodied and highly detailed	33/45	●	●	●	268
<span>EC</span>	Michell Orbe SE	2,015	A superb turntable, able to mix it with the best at virtually any price. Now features new DC motor	33/45	●	●	●	235
<span>BB</span>	Pro-Ject Expression II	250	A smooth and engaging turntable with the ability to revel in the glory of vinyl, with upgradable arm cable	33/45	●	●	●	289
<span>BB</span>	Pro-Ject RPM 5	400	Great looks plus an on the ball, engaging sound that puts it in the serious league. Needs good isolation for best results	33/45	●	●	●	279
<span>BB</span>	Pro-Ject RPM 6 1	550	With its minimal chassis and huge platter this is a steady design that's capable of fine results with a decent cartridge	33/45/78	●	●	●	294
<span>BB</span>	Pro-Ject RPM 9 X	1,000	A gorgeous turntable that sounds as good as it looks – vital and transparent! Price includes carbon-fibre arm	33/45	●	●	●	268
<span>BB</span>	Rega P3-24	398	Very competent, uncoloured and musical, much improved by £148 outboard electronic power supply	33/45	●	●	opt	298
<span>BB</span>	Rega P5/RB700	698	Combines a great sense of timing with market-leading resolution and a phenomenal tonearm – a hard act to beat	33/45	●	●	opt	257
<span>BB</span>	Rega P7/RB700	1,298	A highly capable player that could hold its own in the most exalted company – a vivid and natural performer	33/45	●	●	opt	257
<span>EC</span>	Rega P9/RB1000	2,498	Exceptionally elegant hi-tech player with complex outboard supply, ceramic platter and wonderful RB1000 tonearm	33/45	●	●	●	228
<span>BB</span>	Roksan Radius 5/Nima	850	Sophisticated design with accomplished sound quality, excellent imagery and good isolation (acrylic version tested)	33/45	●	●	●	248
<span>EC</span>	SME Model 10A	3,411	Elegant and extremely capable design, tested here with Series V/309 hybrid arm	33/45	●	●	●	195
<span>EC</span>	SME 20/12A	11,133	Brings a calmness and precision to vinyl replay that we have rarely encountered, build quality is second to none	33/45/78	●	●	●	293
<span>EC</span>	Townshend Rock Anniversary	4,900	If you want to get to the meat and bones of the music this is a great tool for the job (price inc. Excalibur arm)	33/45	●	●	●	259

## Our favourite BEST BUY EC EDITOR'S CHOICE

# PHONO CARTRIDGES

### MM and MC cartridges

BADGE?	PRODUCT	£	COMMENTS	SPECIFICATIONS			ISSUE NUMBER
				MM	MC	REPLACEABLE STYLUS	
<span>BB</span>	Cartridge Man MM III	625	The MM III challenges MCs at twice the price, it produces detail, space and energy and has stunning resolve in the right arm	●	●	●	266
<span>BB</span>	Denon DL-103R	200	Adds refinement to basic DL-103, at a price. One of the best rock'n'roll cartridges around	●	●	●	285
<span>BB</span>	Grado Prestige Gold	110	Produces rich, open and expansive music with the minimum of fuss	●	●	●	235
<span>EC</span>	Lyra Helikon	1,095	Highly capable and highly neutral, this is a cartridge for all seasons, albeit fussy about vinyl quality	●	●	●	215
<span>BB</span>	Ortofon Salsa	200	Despite a touch of midrange coloration, this cartridge really involves the listener with good extension and a clean, agile sound	●	●	●	290
<span>BB</span>	Sumiko Blue Point Spec Evo III	239	High output MC with refinement at high frequencies and a nimble, articulate and revealing sound	●	●	●	270
<span>BB</span>	van den Hul MC One Special	699	A gorgeous cartridge that's worth the price every time you hear a familiar track in a whole new light	●	●	●	235
<span>EC</span>	van den Hul Condor XCM	2,400	A stunning cartridge with stereo imaging, dynamics and detail resolution to die for	●	●	●	265
<span>EC</span>	Wilson Benesch Naked Analog	1,450	With its smooth clean highs, transparent midband and nimble bass, this is a lot of performance for the money	●	●	●	253

## Our favourite BEST BUY EC EDITOR'S CHOICE

# PHONO STAGES

### Phono stages

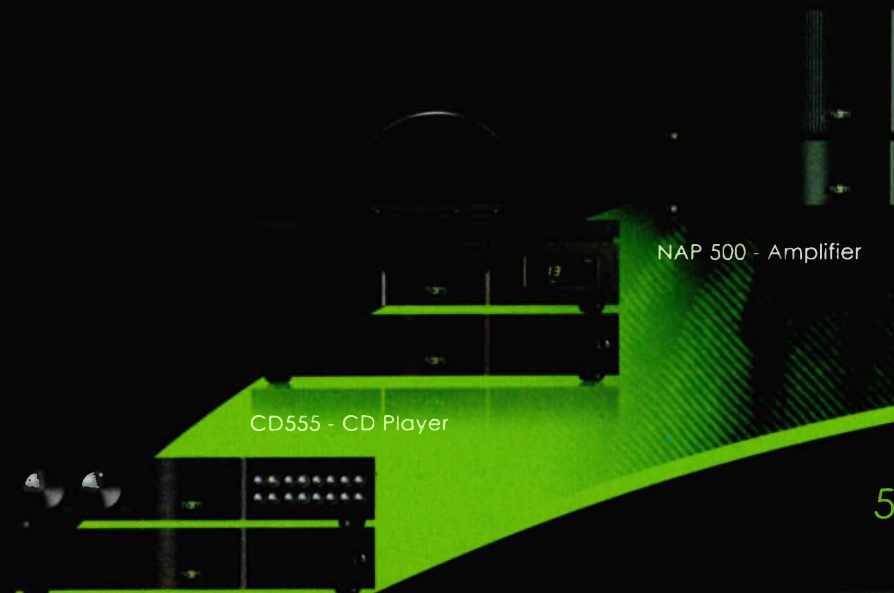
BADGE?	PRODUCT	£	COMMENTS	SPECIFICATIONS				ISSUE NUMBER
				MM/PHONO INPUTS	MC/PHONO INPUTS	AU/GAIN	AU/IMPEDANCE	
<span>BB</span>	Cambridge Audio 640P	60	Tested with the almost-as-good £40 540P, this remarkable phono stage brings refinement and bass weight to budget vinyl	●	●	●	●	277
<span>BB</span>	Clearaudio Smart-Phono	250	Minute and very practical unit with slightly bright, but very detailed and low-noise, sound	●	●	●	●	268
<span>BB</span>	NAD PP2 phono stage	50	A fine buy for turntable users on a tight budget – open tonality and clarity is distinctly impressive for the money	●	●	●	●	245
<span>BB</span>	Tom Evans Microgroove	400	For dynamics and real bass extension with good tonal colour this is the one to beat. The Plus version (£700) is even better!	●	●	●	●	234
<span>EC</span>	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
<span>BB</span>	Trichord Dino/Dino+	498	Relaxed yet resolute with very good image depth and natural balance, not to mention great flexibility	●	●	●	●	234

**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.

# 500 SERIES

Serious sound from serious retailers...



NAP 500 - Amplifier

CD555 - CD Player

NAC 552 - Preamplifier

...experience the  
500 series for yourself

## THE RETAILERS

**LONDON**  
Audio Venue Ltd  
020 8567 8703  
Billy Vee  
Sound Systems  
020 8318 5755  
Grahams Hi-Fi  
020 7226 5500  
Oranges and Lemons  
020 7924 2040

**SOUTH EAST**  
PJ Hi-Fi  
01483 304 756  
Soundcraft Hi-Fi  
01233 624 441

**EAST**  
Signals  
01473 655 171  
Tom Tom Audio  
01727 893 928

**SOUTH CENTRAL**  
HiFi Cinema  
0118 982 0402  
Overture  
01295 272 158

**MIDLANDS**  
Cymbiosis  
0116 262 3754  
Honeydale Audio  
01694 771 351

**WEST**  
Audience  
01225 333 310  
Gulliford Hi Fi  
01392 491 194  
Mike Manning Audio  
01935 479 361  
Ultimate Home  
Entertainment  
Solutions  
0845 6780 787

**NORTH EAST**  
Audio Republic  
0113 2177 294  
Audio Room  
01482 891 375

**The Sound  
Organisation**  
01904 627 108

**NORTH WEST**  
Acoustica  
01244 344 227  
Adventures In Hi-Fi  
01244 345 576  
Audio Counsel  
0161 4916 090  
Fortissimo  
0161 8325 060

**SCOTLAND**  
Loud & Clear Ltd  
0141 2210 221  
Robert Ritchie  
01674 673 765

**AUDIO EXCELLENCE GROUP**  
01179 264 975

**AUDIO T GROUP**  
01372 748 888



world class sound...

[www.naim500.com](http://www.naim500.com)

# RADIO TUNERS

FM and DAB hi-fi separates



Radio is a fantastic musical resource that's in danger of being taken for granted, but whatever your tastes there's someone out there catering for it. If you haven't got a decent tuner hooked up to your hi-fi already, you're missing out!

### DAB or FM?

Digital Audio Broadcasting (DAB) is now said to be available to more than 80 per cent of the population and the long-term plan is to switch public broadcasting over to digital entirely, but hardware prices have yet to come down to a point where this would be acceptable. Its advantages over FM include hiss-free reception, the potential for a wider range of stations and the ability to display comprehensive programming information. FM's RDS system means that station name and occasionally track titles are displayed, but the range of information is fairly limited.

Where FM scores over DAB is in the lower cost of hardware and the greater reception


area. It can also provide higher sound quality if reception conditions are favourable. Absolute sound quality judgements are 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 that aren't available on FM. So if it's variety of programming you're after, they have a lot to offer.

### RECEPTION

The quality of signal you feed a tuner will dictate its sound quality. So serious FM listeners should get a decent external aerial and connect it with as few junctions and splits as possible. Every time you split the cable (ie take a feed for another tuner) you halve signal strength! With DAB the same applies but get a DAB-specific aerial. See [www.bbc.co.uk/digitalradio](http://www.bbc.co.uk/digitalradio) for details.

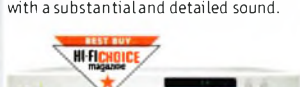
TOP BUYS



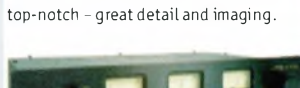
**Denon TU-1800DAB £250**  
Combines DAB with FM/AM reception and good all-round design at a tempting price.



**Creek T50 £550**  
A thoroughly accomplished AM/FM tuner with a substantial and detailed sound.



**T+A T1210R £1,000**  
This FM tuner looks, feels and sounds top-notch – great detail and imaging.



**Magnum Dynalab MD 90T £1,195**  
FM tuner with valves – 'affordable' for an MD, but still streets ahead of most radios.

## Our favourite TUNERS

### FM & DAB HI-FI SEPARATES

BADGE?	PRODUCT	£	COMMENTS	WAVEBANDS	PRESETS	RDS	REMOTE CONTROL	SIG. STRENGTH METER	ROT. TUNING KNOB	SCALE NUMBER
<b>FM TUNERS</b>										
	Creek T50	550	Very fine results indeed with precision, polish and insight added to excellent basics	FM,M,L	128					251
	Cyrus FM-X	500	A classic no-nonsense FM tuner that achieves gratifying sonic results. Upgradable with PSX-R power supply	FM	7					283
	Denon TU-1500AE	130	Well attuned to the crowded modern FM band, this tuner produces clear, detailed sound with plenty of gusto	FM,M,L	100					281
	Denon TU-1800DAB	250	There's a little grain on FM, but the decent performance on both bands makes this a great dual-band choice	DAB,FM,M	200					283
EC	Magnum Dynalab MD 90T	1,195	No remote or presets as standard, manual everything and valves... but its sound is simply sublime	FM	opt		opt			257
EC	Marantz ST7001	300	FM reception could offer a little more detail and insight. DAB is fine, but near-identical Denon 1800 is cheaper!	FM	200					283
	NAD C422	180	Admirably free of roughness or other obvious nasties, with just a slight lack of clarity	FM,M	30					250
	Primare T21	600	A very fine tuner – bass and treble are both well extended and detail is excellent	FM	30					230
	Pure DRX-702ES	210	Apparently good value is restricted by persistent veiling on FM: 'PAC' on DAB mellows sound a little	DAB,FM,M	99					283
	Rega Radio 3	398	Strong bass, clear treble and a high enjoyment factor make this an appealing FM performer	FM,M	20					283
	Rotel RT-02	279	A highly competent tuner which always sounds appealing and fuss-free	FM,M	30					242
	T+A T1210R	1,000	High-end looks are matched by the sound, which is detailed and sophisticated, with useful features too	FM	100					283
<b>DAB TUNERS</b>										
	Arcam DVA DT91	450	Some grain at low levels, but sound is lively, large in scale and tonally very natural. Very smart!	DAB,FM	16					299
	Cambridge Audio DAB500	150	Very good sound, plus optional response tweaks, and slickest operation yet	DAB	10					248
	Denon TU-1800DAB	200	Very good detail and a highly believable impression of real musicians playing. Imaging can be a little constricted	DAB,FM,M	200					299
	Marantz ST7001	250	Midband detailed and precise: treble can be thick but bass is extended, and sound generally energetic	DAB,FM,M	200					299
	NAD C445	300	FM is laid-back despite bright balance, but has good detail. DAB slightly livelier than most	DAB,FM	30					299
	Onkyo T-4555DAB	350	Admirably free of grain or obvious tonal blemishes, this tuner achieves a high standard in all areas on	DAB,FM	40					299

**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.

The home entertainment

# sale

Fri 28th & Sat 29th December only



	Was £	Sale £
• Linn Ninka Speakers (Ex Demo)	1100	500
• B&W 804s Speakers (Ex Demo)	2700	1600
• Linn Unidisk 1.1 Disc Player (Ex Demo)	6830	3300
• Linn Komri Speakers (Ex Demo)	27500	13000
• Panasonic TH42PX700B 42" Plasma (Ex Demo)	1304	990
• Naim SL2 Speakers (Ex Demo)	5843	2900
• Arcam DV137 (Ex Demo)	1300	800
• Tag McLaren DVD 32R (Ex Demo)	4795	800
• Tag McLaren AV32R (Ex Demo)	2995	800
• Naim Allae Speakers (Ex Demo)	2345	990

...plus **10%** off selected stock and many, many more amazing sale bargains!

## MartinKleiser

consultdesignsupplyinstallsupport

For Home Entertainment & Control

109 Chiswick High Road • London W4 2ED Tel: 020 8400 5555

9 London End • Beaconsfield • Bucks HP9 2HN Tel: 01494 681 300

[www.martin-kleiser.com](http://www.martin-kleiser.com)

# DIGITAL AUDIO RECORDERS

CD, MiniDisc and hard drive recorders



### MiniDisc

MD's strength is versatility. You can record and then 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; and 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 might 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 drive

The latest contender on the digital recording scene is also the most flexible. Some HDD (hard disk drive) recorders can store whole music collections if you use a compression format such as MP3. HDD recorders are taking over from multidisc CD changers as sound servers in multiroom installations, where their ability to play more than one piece of music at a time is a great boon. HDD also offers impressive editing facilities on a par with 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 HDD recorder in fidelity terms.

TOP BUYS



**Yamaha**  
CDR-HD1500 £599

Combining hard disk with CD-R adds flexibility to digital audio recording.

---



**Cambridge Audio**  
Azur 640H £600

Rip and store CD tracks on hard disk, create playlists, connect to a PC and more.

---



**Hermstedt**  
Hifidelio Pro £850

160GB hard disk and CD-R/RW drive in a box – as music servers go, this is a cracker.

---



**Imerge**  
S3000 £2,800

A flexible audio server that's well designed, easy to use and sounds great too!

## Our favourite

# DIGITAL RECORDERS

CD-R/RW, MD and HDD recorders

BADGE?	PRODUCT	£	COMMENTS	DRIVES	HD CAPACITY (GB)	OPTICAL IN/OUTS	ELEC IN/OUTS	ISSUE NUMBER
<b>CD-R/RW RECORDERS</b>								
	Denon CDR-1000	400	A respectable player and recorder, though some midband congestion was noted when recording	1				218
	Marantz DR6000	400	No frills, but in its fundamentals this is one of the finest CD recorders on the market	1				233
	NAD C660	500	Audiophile twin deck offering high-speed copying, HDDC replay and notably fine recording from analogue	2				243
	Philips CDR802	300	Tacky looks and build notwithstanding, this is a well-equipped and technically sound 3-to-1 autochanger/recorder at a good price	2				233
	Philips CDR951	380	An improvement on previous models, it delivers the musical goods in some style	1				205
	Pioneer PDR-609	270	Classic CD recorder with outstandingly good sound for the money on both record and replay	1				243
	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
<b>MD RECORDERS</b>								
	Pioneer MJ-D508	200	Well equipped, but musically sleep-inducing that receives its recommendation owing to the price	1				205
	Sony MDS-JE480	130	Straightforward and effective, but the three real killer features are price, price and price	1				233
<b>HDD RECORDERS</b>								
	Cambridge Audio Azur 640H	600	Not so much a HDD recorder, more a complete audio computer and nerve centre in one useful box. Complex, but worth it	1	160			276
	Hermstedt Hifidelio Pro	850	Can be used as a CD player, but also as a recorder, and can encode MP3, play AAC and form the heart of a distributed audio system	1	160			280
	Imerge S3000	2,800	Thought-out solution to the problem of storing, sorting and accessing a music collection. Sound wouldn't shame a good midrange CD player	1	160			291
	Yamaha CDR-HD1500	599	Great for archiving a music collection or making compilations without compromising on flexibility or sound quality	1	250			278

**SPECS KEY** **DRIVES** 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.

# richer **SOUNDS SALE!**

THE UK'S HI-FI, HOME CINEMA & FLAT PANEL TV SPECIALISTS!

## AWARD-WINNING HI-FI SUPER SYSTEM

CAMBRIDGE AUDIO AZUR 540A v.2 & AZUR 640C v.2 & MORDAUNT-SHORT 902i

**DEAL!**



BUY THIS CD & AMP TOGETHER AND GET THESE MORDAUNT SHORT 902i SPEAKERS WORTH £150 FREE

### CD PLAYER

Cambridge Audio Azur 640C v2

"Does most things extremely well and has a remarkably good sense of poise for the money."

- Hi-Fi Choice magazine

Usual Price £249.95



### AMPLIFIER

Cambridge Audio Azur 540A v2

"Amazing solidity and focus; excellent rhythmic ability; sounds natural and realistic."

- WHF? S&V magazine

100 WPC. Usual Price £249.95



### BOOKSHELF SPEAKERS

Mordaunt-Short 902i

"They sound remarkable: their clear and spacious sound opens music up"

- WHF? S&V magazine

65 WPC. Usual Price £149.95



SYSTEM USUALLY £649.85

Cambridge Audio units are available in silver & black

SAVE £150

£499.95

5YR Supercare Only £49.95

### CD PLAYER

Cambridge Audio Azur 740C

"Very flexible, this innovative upsampling player sounds exceptionally neutral and highly informative."

- Hi-Fi Choice magazine

Usual Price £499.95



### AMPLIFIER

Cambridge Audio Azur 740A

"Excellent treble, very good imaging and a real sense of musical involvement are all well above the class average."

- Hi-Fi Choice magazine

100 WPC. Usual Price £499.95



### FLOORSTANDERS

KEF iQ7

KEF speakers are world renowned for their quality and innovation and, with speakers like the IQ7, it's easy to see why.

150 WPC. Usual Price £499.95



WERE £999.85

Cambridge Audio units are available in silver & black

SAVE £100

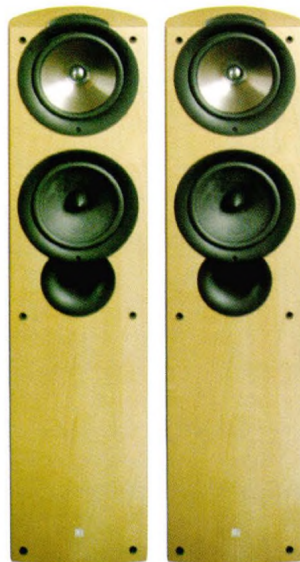
£899.95

5YR Supercare Only £89.95

## HI-FI SYSTEM MEGA-BARGAIN

CAMBRIDGE AUDIO AZUR 740A & AZUR 740C & KEF IQ7

**SALE!**



BUY THIS CD & AMP TOGETHER AND GET THESE KEF IQ7 FLOORSTANDER SPEAKERS WORTH £500 FREE



**WE'LL BEAT ANY COMPETITOR'S PRICE 'TIL IT HURTS & GIVE YOU UP TO £100**

ASK IN-STORE FOR DETAILS

**SEE OUR WEBSITE FOR SPECIAL CHRISTMAS OPENING TIMES**

**WE WILL PAY YOUR PARKING!**

SIMPLY ASK IN-STORE

Some of these offers are exclusive to Hi-Fi Choice Magazine readers. Please quote this ad when calling. While stocks last. Available from 6TH DECEMBER 2007 - 17TH JANUARY 2008. All trademarks are acknowledged. E&OE Some offers may be for in-store callers only. All stock is brand new in sealed containers and fully guaranteed for one year unless clearly stated otherwise. 1000s MORE BARGAINS IN-STORE!

TSP = Typical Selling Price [TSPs are based on information supplied by WHF? S&V magazine, manufacturers, Hi-Fi Choice, Home Cinema Choice, T3, What Video, What DVD, Digital Home, Total DVD and DVD Buyer. Further information available on request.]



**WELCOME TO THE RICHER SOUNDS SALE PREVIEW EXCLUSIVELY FOR HI-FI CHOICE READERS, THESE ARE JUST A FEW OF THE DEALS THAT ARE AVAILABLE AT THESE PRICES FROM 6TH DECEMBER 2007 TO 17TH JANUARY 2008**

Two cracking system deals based around the Hi-Fi Choice Best Buy Cambridge Audio separates still lead the way, followed by 2 amazing offers from Marantz in the shape of the PM4001 amp and CD5001 CD at truly fantastic prices.

Denon's DM35 mini hifi system and Tannoy's highly reviewed F1 custom bookshelf speakers represent great value for money in their categories and Kef's iconic iQ5's continue to impress us in the "performance for your pound" stakes, so there's no excuse to not rush on down to your nearest Richer Sounds shop and pick up a bargain...

With our main sale starting on Boxing day at 10am with hundreds of bargains in-store these are just a taster of the great deals to come.

**SEE YOU SOON**

**PORTABLE DAB**

PURE EVOKE 1XT PRESTIGE

**SALE!**



Key to the Evoke 1XT Prestige's appeal is the tri-band station facility. Twin DAB sections (Band III and L-Band) means that more DAB radio stations can be picked up than ever before. In addition to this, the luxury real-wood finish has Christmas present written all over it.

WERE £79.95

WHAT HI-FI? SOUND AND VISION ★★★★★

Also available in maple

AMAZING VALUE

£69.95

**BOOKSHELF SPEAKERS**

TANNOY F1

**DEAL!**



"A great budget speaker - whether on the end of a micro system or budget separates." WHF? S&V magazine. For a top quality, compact speaker that will suit a wide variety of components, the Tannoy Custom F1 comes highly recommended. TSP £109.95

WHAT HI-FI? SOUND AND VISION ★★★★★

AMAZING VALUE

£89.95

5Yr Supercare Only £89.95

**CD PLAYER**

MARANTZ CD5001

**SALE!**



WHAT HI-FI? SOUND AND VISION ★★★★★

"A lively and fun player; works with all types of music" - WHF? S&V magazine.

For a high quality, highly equipped player, check out the Marantz CD5001 at your nearest store today. WERE £119.95

Pic Approx

SAVE £30

£89.95

5Yr Supercare Only £99.99

**AMPLIFIER**

MARANTZ PM4001

**SALE!**



WHAT HI-FI? SOUND AND VISION ★★★★★

"Musically, this amplifier doesn't give a hoot what genre you ask it to drive." - WHF? S&V magazine.

With a commitment to stereo separates, Marantz have once again proven their knack of making a damn fine amp. WERE £119.95

Pic Approx 30 WPC

SAVE £30

£89.95

5Yr Supercare Only £99.99

**CD PLAYER**

CAMBRIDGE AUDIO AZUR 340C

**DEAL!**



WHAT HI-FI? SOUND AND VISION ★★★★★

"A fun filled and insightful sound for the money, excellent build; nice remote. It does what the best budget kit does: gets the message correct. If your budget tops out at £150, buy the 340C with confidence"

- WHF? S&V magazine

AMAZING VALUE

£149.95

5Yr Supercare Only £114.95

**AMPLIFIER**

CAMBRIDGE AUDIO AZUR 340ASE

**DEAL!**



WHAT HI-FI? SOUND AND VISION ★★★★★

"When it comes to getting to the heart of the music, its terrific." WHF? S&V magazine

With an unmatched level of audio engineering at its price, first class build quality, and all the features you're likely to need, the Cambridge Audio Azur 340A SE looks set to take the market by storm.

45 WPC

AMAZING VALUE

£179.95

5Yr Supercare Only £17.95

**MINI STEREO SYSTEM**

DENON DM35DAB

**DEAL!**



Add in first rate build quality, with aluminium front panel and volume knob, and it's clear to see that the Denon DM35DAB is a cut above the rest. TSP £299.95

WHAT HI-FI? SOUND AND VISION ★★★★★

SAVE £70

£229.95

5Yr Supercare Only £22.95

**FLOORSTANDER SPEAKERS**

MORDAUNT-SHORT 906i

**DEAL!**



"The Avant 906i is a very decent performer overall, especially in view of its very modest price... Well balanced overall, with the sort of top end restraint entirely appropriate for the equipment the speaker is likely to be partnered with. The bass end has impressive weight, boxiness is pretty well controlled and imaging is very effective." said Hi-Fi Choice magazine when reviewing the 906i at a price of £350. TSP £349.95

BEST BUY HI-FI CHOICE magazine

150 Watts

SAVE £100

£249.95

5Yr Supercare Only £24.95

**FLOORSTANDER SPEAKERS**

KEF iQ5

**DEAL!**



"The Kets are among the tidiest floorstanding designs we've seen... The standard of build and finish is well up to KEF levels and the Uni-Q tweeter arrangement makes for intriguing looks. As welcome as this aesthetic tastefulness is, it counts for nothing if speakers don't perform - and these perform in spades." - WHF? S&V magazine. TSP £399.95

WHAT HI-FI? SOUND AND VISION ★★★★★

150 Watts

SAVE £120

£279.95

5Yr Supercare Only £27.95

**FLOORSTANDER SPEAKERS**

TANNOY EYRIS

**SALE!**



"Fine buy, combining refined sound, solid build and excellent finish." - What Hi-Fi Sound and Vision magazine.

The Eyriss is a very special speaker, even for a company as exalted as Tannoy. If you're serious about your music and appreciate the finer aspects of sound, then the Tannoy Eyriss 2 will be bound to impress. WERE £499.95

150 Watts

SAVE £100

£399.95

5Yr Supercare Only £39.95

**VIP CLUB**

IF YOU WOULD LIKE TO BECOME A MEMBER OF OUR VIP CLUB FOR FREE AND TAKE ADVANTAGE OF OUR EXCLUSIVE MEGA-BARGAINS, VISIT OUR WEBSITE AND REGISTER YOUR DETAILS.

**www.richersounds.com**

VISIT OUR WEBSITE OR CALL FOR NATIONWIDE STORE DETAILS ON: **0845 900 1230**

# STEREO AMPLIFIERS

*Integrated and pre/power amps*



Amplifiers come in two basic forms: integrated and preamplifier (pre) plus power amp combinations. Integrated simply means that both pre and power sections are in one box. There are definite advantages to separating the low level, delicate signals in the preamp from the radiations of a power amp, so the more ambitious designs come in two or more cases. In some cases, each channel has its own power amp called a monoblock.

Amplifiers use two basic technologies: transistors or valves. Transistors are popular because of their practical and technical advantages, but valves – aka tubes – live on owing to aspects of sound quality that transistors can't replicate. If you want to play your music 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 200W behemoth to get the best out of speakers which present a difficult load. As a rule, you can't have too much power.

## How to choose an amp

The main areas in which amps vary are: timing, dynamics, stereo imaging and transparency. Timing is the ability to present the attack and decay of each note precisely; amps with strong timing have a snap and coherence that is very appealing.



Dynamics is a general term for the ability to portray variations in level between individual notes and is different to dynamic range (the difference between the loudest and softest notes). Dynamically strong amps tend to have more life and energy.

Stereo imaging is how solid or three dimensional an instrument or voice sounds. The point of having two rather than one speaker is to make it possible to recreate the soundstage of the original recording, thus amps that have strong imaging skills can create a sonic space that seems to extend the room.

Transparency of detail is the most obvious difference between amps. One amp will present more subtlety than another, but the drawback with using this as your main criterion is that a forward or 'bright' sounding amplifier will emphasise detail at the expense of overall musical coherence.

## HOME CINEMA STEREO

Stereo amps can be used in home cinema set-ups as well. You don't get the surround and centre channels, but well set-up stereo speakers do a remarkably good job of creating atmosphere for movies. Stereo amps

tend to be better at reproducing music as they don't have the (electrical) noise-inducing digital processing of AV amps. AV amps cost three to four times as much as stereo models of a similar quality.

## 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-AMPING?

Bi-wiring is when you run separate cables to the treble and bass/mid terminals on the speaker. In most instances, this improves sound quality so long as identical cables are used. Bi-amping is using two stereo amps to drive one pair of speakers, using one amp to drive the treble and the other for the bass/mid sections of the speakers.

### WHY DO VALVE AMPS HAVE SO LITTLE POWER?

Valve amps are inherently low powered in absolute terms – at least when you compare them to their transistor-based cousins. But when partnered with high-sensitivity loudspeakers, they are quite capable of producing perfectly adequate head-banging levels.

## TOP BUYS



### Marantz PM7001 £350

If you thought the PM7200 was a great budget amp, just wait until you hear this! Its sound is so detailed and involving, you'll think it costs twice the price.



### Cyrus 6vs2 £600

The latest 'singing shoebox' from Cyrus is an absolute peach! Strong rhythmic flow, tunefully extended bass and excellent stereo imaging are among the highlights.



### Primare I30 £1,500

Are you looking for an amp that combines weight and musical gravitas with rhythm, detail and subtlety, with gorgeous build quality to boot? In that case... here it is!



### Copland CTA405 £2,498

This amp's massively enjoyable musicality is hard to beat: all the effusiveness of a great valve amp and none of the stereotypical softness. Brilliant!

## Our favourite EC BEST BUY EC EDITOR'S CHOICE

# STEREO AMPLIFIERS

### Integrated amplifiers

BADGE?	PRODUCT	£	COMMENTS	LINE INPUTS	PHONO INPUT	REMOTE CONTROL	HEADPHONE SOCKET	POWER OUTPUT (W)	ISSUE NUMBER
<b>UP TO £1,000</b>									
<span>EC</span>	Arcam DIVA A70	500	A smart and practical amp offering good snap and pace, with natural dynamics and good detail	6	MM			60	289
	Adv Acoustic MAP305DA II	600	A lot of amplifier for the money and capable of revealing and exciting sound in the right company. Includes 4 digital inputs	5				100	300
	Arcam DIVA A90	850	Well-featured amp with little character of its own - highly informative sound	6	opt			90	286
	Cambridge Audio 640A v2	300	Slightly cheap-feeling controls are the only real downside to this powerful and lively little amp	6				75	279
	Cambridge Audio Azur 740A	500	Ticks all the boxes for bass, clarity, imaging etc and invites the listener into the music with uncommon grace	6				100	294
	Cambridge Audio 840A v2	750	The biggest differences between this and most amps at twice its price are in looks and show-off factor. Powerful and detailed	8				120	299
	Creek Evo	500	Not the most accurate, strictly, but its lively, energetic musical presentation is entirely lovable	5	opt			85	283
	Cyrus 6vs2	600	Spunky little amp that reproduces instrumental timbres and acoustic spaces well, with real musical involvement	7				40	293
	Denon PMA-700AE	250	One of a growing number of new low cost amps, it offers good timing and analysis at up to moderately high volume levels	4	MM			50	284
	Flying Mole CA-S10	1,000	The Mole makes a mountain of detailed sound from its digital circuitry, if you choose your speakers well it's a short-cut to hi-fi nirvana	3				100	291
	Marantz PM7001KI	550	A self-effacing amplifier which serves the music admirably with fine bass, sweet treble and unforced detail	5	MM			70	289
	Musical Fidelity X-T100	899	By separating amp and TRIPLE-X power supply, this deceptively powerful valve-sporting amplifier is both enticing and musical	3				70	288
	Onkyo A-933	500	Puts the music first, with sound that delivers the basics correctly but above all involves the listener	5				80	278
	Pioneer A-A9	600	Takes on the mantle of the legendary A400. Not as cuddly, but very resolute and revealing for the money. Has USB input	4				80	296
	Unison Research Unico P	795	Sound belies indifferent measured performance with good detail, balance and flowing melodic quality	5	MM			50	293
	Vincent SV-236	999	Valve hybrid whose sound is as idiosyncratic as its styling, short on neutrality but high on sparkle	6				100	295
<b>ABOVE £1,000</b>									
<span>EC</span>	AMR AM-77	4,400	A thrilling amplifier that brings you the dynamics of valves with the power of transistors in a substantial but well-featured design	6				180	299
<span>EC</span>	Audia Flight TWO	2,500	Quirky, but musically highly effective model which is expressive and analytical, with some minor operational quirks	8				100	280
<span>EC</span>	Bryston B100-SST DAC	3,850	A remarkable amplifier which is greatly enhanced by the inclusion of an impressive onboard DAC	6				100	275
<span>EC</span>	Chapter Précis	3,995	Tight, nimble and dynamic across the board and unusually articulate in the bass, but the ergonomics could be refined	6				130	281
	Copland CTA405	2,498	Avoids pitfalls of many valve amps, yet retains the euphony typical of the best of breed	6	MM			50	286
	Creek Destiny	1,100	A highly assured performer that doesn't superimpose its personality on the music	6				100	286
	Densen Beat B110	1,200	Great bass provides firm underpinning for involving and enjoyable listening - real 'smile factor'	6	opt			60	292
	Densen Beat B150	3,000	Gorgeous bass: slight treble dryness detracts only a little. Good sense of scale and rock-steady rhythms appeal too!	6	opt	opt		100	277
<span>EC</span>	Gamut DI 150	5,700	Serious contender for the best integrated amp ever. The DI 150 takes on pre/power combos on their own terms	6				180	275
<span>EC</span>	Lyngdorf TDA 2200	3,875	Sophisticated modular all-digital amp with room EQ, capable of adapting to the listening environment	4				200	289
<span>EC</span>	Moon Evolution i-7	4,750	Sophisticated, with an elegant build and sound quality, very limited features, even by high-end standards	5				150	288
<span>EC</span>	Musical Fidelity A1008	2,999	With DAC, phono stage and built-in valve buffer, this powerhouse amp can really grab hold of a loudspeaker	4				250	295
	NAD M3	1,899	Massive and flexible, it goes very loud with fine authority and dynamic range, but lacks some sparkle	7				180	285
<span>EC</span>	Naim SuperNait	2,350	Serious communicative ability meets convenience in this sophisticated and powerful integrated design	6				80	294
	Primare I30	1,500	A smooth, sophisticated yet agile performer, and beautifully built too	6				100	267
<span>EC</span>	Pure Sound A30	1,100	Valve integrated, with the accent on music rather than rhythm. Needs more inputs, though	3				30	298
	Sugden A21aL Series 2	1,299	Lovely solid-state Class A amplifier, sweet as a nut and more powerful than its predecessor	5	opt			21	296
	Unison Res. Unico Secondo	1,200	Very good detail and coherence. Tonality is natural, imaging precise and deep, and dynamics are wide and unforced	6	opt			110	297
<span>EC</span>	Unison Res. Performance	5,500	Massive and bulky valve amp sounds brilliant, with good power for a single-ended design, wide bandwidth and fine neutrality	5				40	287

## Our favourite EC BEST BUY EC EDITOR'S CHOICE

# STEREO AMPLIFIERS

### Pre/power amplifiers

BADGE?	PRODUCT	£	COMMENTS	PREAMPLIFIER	POWER AMPLIFIER	LINE INPUTS	PHONO INPUT	REMOTE CONTROL	POWER OUTPUT (W)	ISSUE NUMBER
<b>UP TO £2,000</b>										
	Croft Precession I/Polestar I	1,400	Compact pre/power combo with battery preamp and hybrid power, with freedom from timesmear, bass could be firmer			6			25	290
	Cyrus Pre Vs2/6 Power	1,000	Pre offers stunning resolution and feature count for the money and power is subtle, open and musical						50	290
<span>EC</span>	Cyrus DAC XP	2,200	A knockout DAC/pre with naturalness and resolution to die for and six digital inputs for signals up to 96kHz			2				266
<span>EC</span>	Densen Beat B-250/B-350	8,200	Upgradeable to surround, with sweet preamp and slightly coloured power amp, but sound is big and assured			6			125	270
	Exposure 2010 S Integrated/Power	1,098	Bi-amping with the additional power amp increases the musical communication of an already fine integrated			6			75	264
	Naim NAC 122x/NAP 150x	1,575	Musically rewarding with outstanding sophistication, grip and insight for such a modestly priced design			6	opt		50	287
	Quad 99/909	1,650	Well thought out and well executed, with a strong, engaging sound and just a little veiling			5			136	256
	Rotel RC-06/RB-06	598	A capable and surprisingly powerful-sounding combination which offers real value			5			70	285
<span>EC</span>	Russ Andrews HP-1/PA-1	1,198	A highly enjoyable pre/power combination with fine levels of detail, good rhythm, stable and precise imaging			2			50	297

**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 EDITOR'S CHOICE  
**STEREO AMPLIFIERS** *continued*

Pre/power amplifiers

BADGE?	PRODUCT	£	COMMENTS	SPECIFICATIONS		
				PRE-AMPLIFIER	POWER AMPLIFIER	ISSUE NUMBER
	Arcam FMJ C31	1,200	Professionally presented, beautifully built and exceptionally revealing, this preamp achieves much by doing little	5	opt	273
EC	Border Patrol Control Unit	2,995	Bluff looking valve preamp, with one of the most neutral yet dynamic sounds around	5	opt	277
EC	Bryston BP26 DA/2B SST	5,550	Bryston's top preamp is now a serious competitor. The power amp reveals a lot of signal and delivers serious grunt	6	opt	278
EC	Chapter Preface/II+	9,800	Among the finest amps available, the resolution of this preamp and power amp challenges the best at any price	6		249
EC	Chord Prima/Mezzo 140	6,100	Small, muscular, beautifully made and styled and sounds like a dream	5		269
EC	Classé CP-700/CA-M400	13,350	Pre-plus mono power combo with superb build, huge power and enormous flexibility. Sounds stunning, too	6	opt	293
	Densen Beat B-200/B310	2,300	Lively, energetic combination that bring a great sense of scale to familiar recordings	8	opt	276
EC	ECS EA-1	6,000	Understated monoblocks with real transparency to the fine detail, passion and energy in your record collection			253
EC	Gamut D3	3,430	Creamy smooth, yet lets you hear all the fine detail that goes to making a tonally rich, dynamically strong sound	5	opt	265
EC	Gamut D200 Mk3	3,950	A great power amp that's now even better – one of the best regardless of price			247
EC	Hovland HP-100/RADIA	12,745	Uncommonly musical valve/transistor hybrid transcends stereotypes, one of the genuine high achievers	9	opt	250
EC	Krell FPB 700cx	14,998	Reference class amplifier may represent overkill in many systems, but when no compromise is called for, this is it			234
EC	Linn Klimax Kontrol	6,000	Beautifully executed example of Scots audio art, sounds as clean as it looks and is a lot more transparent than most	4		238
EC	Naim NAP 500	11,875	Wonderful neutrality, bandwidth and dynamic range, plus Naim's traditional leading-edge definition			208
EC	Naim NAC 552	12,100	Extremely expensive preamp, but still solid value. Magnificent sound with fine flexibility and convenience	6		233
	Primare PPRE30/A30.2	2,400	Smart kit that lives up to the visual promise with gorgeous sound – a really musical performer	7		256

# AV AMPLIFIERS

*Surround sound amps for music and movies*



The multichannel, surround sound or AV amplifier is a popular option, thanks to the success of the DVD player and home cinema. Now you can buy five channels or more of amplification for the price of two. Now that multichannel music is also on the agenda, there's a lot to be said for a good AV amp or receiver (an amp with a radio tuner built in).

So if you fancy hearing what DVD-Audio, SACD or even music DVD-Video can do, then check out a multichannel amp and speaker set-up – they're stunning with movies and none too shabby with music.

AV amps are usually designed primarily for movies and come with digital processing for the various soundtrack formats – Dolby Pro-Logic (analogue), Dolby Digital and DTS, which offer discrete surround sound in 5.1 and 7.1 channel formats. More ambitious designs also offer THX post processing, designed to emulate the sound of the mixing theatre at home.

Processing in AV amps is needed because the surround formats on DVD-Vs are compressed, limiting their high-fidelity



potential. This is why new formats SACD and DVD-A, which don't use 'lossy' compression, were created for music.

All this processing power can take its toll on analogue formats. The best multichannel amps for music are often the simplest, but any that offer a complete bypass option with six-channel input are suitable. It's also worth looking at real power – five or seven channels of amplification are not easy to produce with a feeble power supply, and the cheaper amps in particular often fail to live up to the claims.

## Q&A

### HOW MANY CHANNELS?

Depends on how many speakers you want. Multichannel music discs come with six or 5.1 channels, but for new movies, 7.1 is where it's at. 7.1 set-ups also mean you have speakers directly behind you – preferable for music discs.

### WHAT'S THE DIFFERENCE BETWEEN A PROCESSOR AND AN AV AMP?

Processors don't have built-in amplification and you need separate power amps. AV amps and receivers have processing and amps in the same box.

### WHAT DOES THE .1 IN 5.1 STAND FOR?

This is the LFE (low frequency effects) or bass channel that is reproduced by a subwoofer.

## HI-FI MEETS SURROUND SOUND

With DVD-Audio and SACD offering 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 as well as their movie

DVDs justice, and the number of AV products delivering sufficient quality is on the increase. But most aren't cheap – building a top-quality system with five or more channels is inevitably more expensive than sticking with stereo. There

are some very decent integrated options below £1,000, though the best (and most costly) route is to buy a separate processor and power amp(s). Or you can add AV amplification to a stereo model you can't bear to part with.

## TOP BUYS



**Yamaha**  
**DSP-AX759SE** £550  
 If you're looking for an affordable multichannel amp that's good with music as well as home cinema, this is a top buy.



**Arcam**  
**DiVA AVR350** £1,500  
 Arcam's latest receiver offers a good helping of processing and connection options, with exceptionally musical sound.



**Denon**  
**AVC-A11XVA** £2,500  
 A splendid 7.1-channel amp that packs in the latest digital links and processing formats without sacrificing sound quality.



**Classé**  
**SSP-600/CA-5200** £11,900  
 Anyone seeking a high-end multichannel solution that's equally adept with music and movies should park their ears here.

## Our favourite BEST BUY EDITOR'S CHOICE **AV AMPLIFIERS**

### Multichannel amplifiers

BADGE?	PRODUCT	PRICE	COMMENTS	RECEIVER	LINE INPUTS	7.1 COMPATIBLE	5-CHANNEL POWER (W)	ISSUE NUMBER
<b>MULTICHANNEL INTEGRATED AMPS</b>								
	Arcam DiVA AVR350	1,500	Sets the standard for music and movie performance at the price, although features count low and HDMI limited	7	100	284		
	Cambridge Audio Azur 640R	600	Simple and elegant receiver. Attributes that reflect in good sound quality without the distracting toys you'll find elsewhere	7	100	292		
EC	Denon AVC-A11XV	2,500	Sensible, real world derivative of AVC-A1XV, but still immensely flexible, and well endowed with digital i/o	11	140	273		
EC	Denon AVC-A1XV	4,000	Inelegant, but powerful and effective tool with excellent auto set-up and capable of driving two 5.1 systems simultaneously			170	266	
EC	Lexicon RV-8	5,000	Classy multi-zone receiver lacks high tech digital attributes (HDMI etc) but majors on very effective audio engineering	10	140	267		
	Marantz SR-12S1	3,000	A multichannel amp that can be taken seriously in stereo too. Resources are in the engineering rather than the gimmickry	3	160	255		
EC	Pathos Cinema-X	4,750	No processing, just sexy Italian style, a sextet of valves and the chance of 450 watts in stereo! Cultured sound, too	5	110	270		
EC	Pioneer VSA-AX10AI	3,000	State of the art one-box amplifier with enhanced sound quality, auto set-up and other enhancements	10	150	260		
	Sony STR-DB798	250	Cheap but effective, and passably good with pure audio sources, but control system messy	7	100	273		
	Sony STR-DB795	300	A superb value little amplifier, well appointed technically and successfully tuned for UK ears	7	100	260		
	Yamaha DSP-AX759SE	500	More a stereo amp with basic multichannel thrown in, but a great performer with music at this price	6	100	287		
<b>MULTICHANNEL PREAMPS/PROCESSORS AND POWER AMPS</b>								
	Arcam A90+7.1 mod, P90/3	1,920	Add Arcam's multichannel module and a P90/3 power amp to the A90 stereo integrated and you've got got superb purist 5.1	8	90	250		
	Arcam AVP700/P1000	3,000	Cutting-edge processor/tuner with HDMI sounds great, but the matching Class H power amp lacks finesse to match its power	8	135	275		
EC	Arcam FMJ AV8/P7	5,750	High-quality preamp/processor (£3,150) and seven-channel power amp (£2,600). An excellent fusion of stereo and surround sound	7	180	235		
EC	Classé SSP-600/CA-5200	11,900	Subtle, exacting sound, tremendous flexibility and high power audiophile standard amplifier - lacks hi-tech digital interfaces	11	200	278		
EC	Copland CVA306/CVA535	3,748	Tube analogue six-channel pre transforms multichannel audio from a novelty into a genuine advance for the high fidelity art	5	125	236		
	Linn Exotik	1,750	Is hi-fi ready to make the jump to multichannel music? Linn think so with this musical preamplifier	4		260		
EC	Linn Exotik + DA	3,245	Good analogue preamplifier with multichannel in/out up to 7.1 and a home cinema processor of quality combine to make a tempting package	8		291		
EC	Meridian 861	9,833	Powerful surround processor with flexible modular construction, marvellous versatility to drive any speaker configuration	6		230		
	Naim AV2/NAPV175/NAP150	4,175	First truly credible multichannel system from Naim is idiosyncratic but offers excellent basic sound with modest spatial steering	5	50	238		
EC	Parasound Halo C1/A51	7,500	Powerful and flexible processor/power amp combo with impressive sound. Excellent value - processor includes onboard screen	11	250	243		
EC	Primare SP31.7/A30.5	4,200	Great all-round system which brings the qualities of good stereo high fidelity to a multichannel world	5	120	238		

**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



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

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

## Trichord Research

Tel: +44 (0)1684 311600  
 sales@trichordresearch.com

Fax: +44 (0)1684 311928  
 www.trichordresearch.com

## Dino Phono Amplifier



**BEST BUY**  
**HI-FI CHOICE**  
 magazine

# Specialist items at great prices with

**Atacama**

**£ CALL NOW**



SPEAKER STAND  
Nexus 10

**INFORMATION**

Atacama has always been known for offering customers outstanding value for money and the Nexus is no exception. The complete stand is manufactured from heavy gauge steel and the assembly is made using upgraded high tensile fixings to maintain optimum rigidity.

**Pro-ject**

**CHECK ONLINE**



TURNTABLE  
RPM1 Genie

**INFORMATION**

The Pro-ject Genie turntable offers exceptional sound and exceptional quality. This award winning manual turntable is fitted with a Ortofon OM 3E cartridge and with it's stunning design will without a doubt be the envy of your friends.

**TEAC**

**£ CALL NOW**



REFERENCE  
300DABMK3 SYSTEM  
REF300DABMK3

**INFORMATION**

This unique reference system combines the A-H300MK3 Remote Amplifier, the T-H300DAB MK3 300 DAB Digital Tuner and the PD-H300 MK3 32-Track Music Memory CD Player to create a sensational arrangement.

> Products, technology and irresistible prices

**FREE DELIVERY**

BUY NOW-PAY  
**2008**



**PRE-AMPLIFIER WITH POWER AMPLIFIER**

The PRE30 employs a Class A coupled, discrete fully balanced circuit topology utilised for the best possible signal-to-noise ratio and audio fidelity. This combined with the A30.2 Dual Mono Power Amplifier produces music and movie sound as vibrantly as at the moment it was recorded.

PRE30/A30.2

Primare

**CHECK ONLINE**



**INTEGRATED AMPLIFIER**

The new L.I.II Kandy integrated benefits from totally revised amplifier internals. The mains transformer and the AC circuitry are now moved to one side away from the amplifier main circuits thus dramatically reducing AC noise interference. After rectification circuitry, the power supply layout, distribution and tracking to different sections of the amplifier have been greatly improved.

Kandy L.I.II Integrated Amplifier MkIII

Roksan

5.1 HOME CINEMA SPEAKER PACKAGE  
M-Cube 5.1

IKON AV SPEAKER PACKAGE  
Ikon AV Speaker Package

HOME CINEMA SPEAKER PACKAGE  
ELS1 5.1

5.1 SPEAKER SYSTEM  
Xeno

**£ CALL FOR PRICE**

**£ CALL FOR PRICE**

**£ CALL FOR PRICE**

**£ CALL FOR PRICE**



BUY NOW-PAY  
**2008**

**MISSION**

**INFORMATION**

Mission's Stunning M-Cube consists of an active 250W subwoofer with 2x200mm (8") bass driver, magnetically shielded centre and satellite speakers and 5 Wall brackets.



**DALI**

**INFORMATION**

This five star What Hifi award winning speaker package comprises of 2 Ikon 6 floor standing speakers, 1 Ikon Vokal 2 centre, 2 on wall rear speakers and the Dali Ikon subwoofer. All of which are also available individually with free OED speaker cable.



**epos**

**INFORMATION**

This speaker package integrates two pairs of ELS3 speakers, one ELS 3C centre channel and the powerful new ELS subwoofer in order to create this fantastic new system. These full range of high end, high quality Epos speakers are available either individually or as part of this 5.1 package.



**MJ Acoustics**

**INFORMATION**

This amazing new XENO system features High Grade crossover, ability to be fed with a full range signal, Bass driver technology, Tweeter employing soft dome technology and Boundary effect rear ports to enhance the refraction effects from the lower frequencies.

**CHECK ONLINE FOR MORE PRODUCTS & PRICES**

Pioneer

CREEK  
AUDIO LIMITED

MONITOR AUDIO

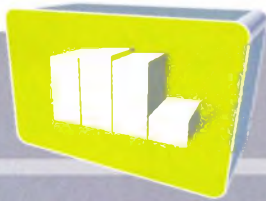
polkaudio  
THE SPEAKER SPECIALISTS

Wharfedale

audio pro

Terms and Conditions of sale: prices are only an estimate to guide you. All goods remain the property of HiFi Biz until paid in full. In line with the Distance selling regulations 2000 you may cancel your order within seven working days. This must be done in the form of a letter, fax or email; a telephone call does not constitute cancellation. All goods accepted for return under this regulation must be in their original box and packaging and returned through your own courier. We expect such goods to be brand new with all accessories in pristine condition. Goods that are not kept in this manner will be subject to a handling fee of 25% of the purchase price. We deliver in the mainland UK only.

free delivery



HiFiBitz

> **Cutting-edge HiFi Specialists with thousands of high-end products available**

With over 130 brands offering awe-inspiring products from hard-to-find to more popular items, few can match our experience, range and stockholding.

Free delivery, excellent after-sales support and tempting finance options ensure you will come back for more.

WWW.HiFiBitz.CO.UK **0870 027 6888**

£ CALL FOR PRICE

CHECK ONLINE

£ CALL FOR PRICE

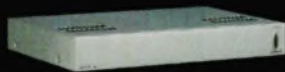
CHECK ONLINE



**INTEGRATED AMPLIFIER**

The Destiny integrated amplifier produces world beating audio performance with its use of discrete analogue MOS-FET, its new mains transformer which produces up to 100 Watts into 8 Ohm operation and its 3Hz - 80KHz Frequency Response

Destiny Series  
Creek



**STEREO POWER AMPLIFIER**

The 8000P is a classic two channel power amplifier, delivering over 100W per channel and featuring a frequency response of 0.1 Hz - 75 kHz

8000P  
Audiolab



**INTEGRATED AMPLIFIER**

Integrated Amplifier with 75 watts per channel into 8 ohms, 200VA custom-made toroidal power transformer, power supply capacitors and separate pre-amp output with class A buffer stage.

2010s  
Exposure



**7.1 AV AMPLIFIER**

With the TX-SR505E HDMI transport enabling pass-through sources up to 1080p and component video supporting 720p and 1080i sources, this A/V receiver is a fine investment for those who want the best of what is available today and tomorrow.

TX-SR505  
Onkyo

**Quad**



**BUY NOW-PAY 2008**

**AMAZING REDUCED SPEAKER PACKAGE**

**FOR MORE 5 STAR DEALS VISIT WWW.HiFiBitz.CO.UK**

**L-ITE AV PACKAGE**

The L-ite system is conceived as a complete 5.1 speaker system capable of delivering outstanding performance from unbelievably small speakers. Finished to the same high standard as the rest of the L-series range of speakers, the system sold complete includes four satellite speakers, a dedicated centre channel and a 300Wrms 10" powered subwoofer.

**Tangent**

**CHECK ONLINE**

Wi-Fi RADIO  
Quattro



**INFORMATION**

Tangent Quattro is the first internet-capable member of the Tangent audio family. Connecting to several thousands of internet radio stations is as simple as it is pleasurable. Reproduction of the digital signals sent through cyberspace fully lives up to your expectations, with the powerful 3" up-firing driver unit performing to perfection.

**Fatman**

**£ CALL FOR PRICE**

VALVE AMPLIFIER  
iTUBE



**INFORMATION**

The entry-level Fatman product for use with iPod and any other audio device (e.g. CD). Utilising a hybrid-tube design platform, the iTube provides superb audio reproduction and attractive design at an affordable price. The performance of the amplifier and dock has been scrutinised by the world's press and they have awarded it the best accolades possible.

**Infocus**

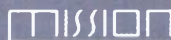
**CHECK ONLINE**

DIGITAL PROJECTOR  
IN82



**INFORMATION**

Brand new from Infocus, the flagship IN82 DLP projector is their first Full-HD 1080p home cinema projector. The projector utilises the DarkSet 3 DLP chip from Texas Instruments, technology which guarantees amazing viewing. Deep black, pure white and subtle greyscales offers an experience which is unsurpassed across the home cinema projector industry.



Finance options available through V12 Finance

Full terms and conditions of the sale are available at [www.hifibitz.co.uk/terms.asp](http://www.hifibitz.co.uk/terms.asp). The terms of sale do not affect your statutory rights. Finance options are available on all items priced over £390 e.g. Buy Now Pay May 2008. All calls are recorded for training purposes.

SEVENOAKS

# SALE

Starts Saturday, 15th December. Massive savings in-store

## HOME CINEMA PLASMA AND LCD TV



**Pioneer KURO** 42/50" PLASMA TV • HD READY • FREEVIEW

Featuring Pioneer's new ultra black panel technology and an amazing contrast ratio of 16000:1, these 8th generation plasma screens produce ever deeper blacks than before. Visit your local store and see the difference.



**Samsung** LE32R87BD • 32" LCD TV • HD READY • FREEVIEW

This HD ready 32" model features all the latest technology and is guaranteed to deliver an amazing home cinema experience into your home. Key features include a built-in digital tuner for access to Freeview channels, picture-in-picture, SRS TruSurround and a gaming mode.



**Panasonic** TH-3742PX70

37/42" PLASMA TV • HD READY • FREEVIEW

Finished in a classy gloss black finish the PX70 screens will blend into any room. With a built-in Freeview tuner and excellent connectivity, they effortlessly handle motion and produce vibrant, natural colours. A choice of mounting options and screen sizes are available.



**Loewe Individual**

32" LCD TV • HD READY • FREEVIEW

With a choice of five different front colours and interchangeable side panels in nine different colours, these screens will match any decor. A wide range of mounting options are available.



**Sony Bravia** KDL-40W2000

40" LCD TV • FULL HD READY • FREEVIEW

With a super wide viewing angle giving you a great picture from almost anywhere and a fast response time, this award-winning LCD TV includes a built-in Freeview tuner, 1920 x 1080 resolution and two HDMI inputs.

# 5 YEAR WARRANTY

included with all Plasma and LCD televisions purchased at our normal selling price\*

CHOOSE MODELS FROM

**LOEWE • PANASONIC • PIONEER • SAMSUNG • SHARP • SONY**  
WITH A 26" SCREEN OR LARGER

Not in conjunction with any other offer or promotion. E&OE. \*SRP (Sevenoaks Retail Price)



Visit the **NEW** website for additional **SALE** offers. [www.ssav.com](http://www.ssav.com)

**SEVENOAKS**  
SOUND & VISION

## DLP PROJECTION



**Sim2**  
**GRAND CINEMA HT380**  
**1080P FULL HD READY**

Sim2 Multimedia is a world-leading manufacturer at the forefront of home cinema technology and a name synonymous with high-end home cinema projection.

**InFocus IN81/IN82**  
**1080P FULL HD READY**

Two outstanding projectors from InFocus. The IN81 produces a terrific picture with HD content while the IN82 has all the strengths of the IN81 but with an even better picture.



**WHAT HI-FI? SOUND AND VISION AWARDS 2007**  
PRODUCTS  
BEST PROJECTOR  
IN82 NOVEMBER 2007

## ONKYO AV RECEIVERS



**TX-SR875 AV RECEIVER**  
Exceeding even the highest expectations, the TX-SR875 features on-board decoding for all the latest key sound formats.

**TX-SR605 AV RECEIVER**  
"With a surfeit of talent, especially where movie sound is concerned, this is a must-hear unit"



**WHAT HI-FI? SOUND AND VISION AWARDS 2007**  
PRODUCT OF THE YEAR  
BEST AV RECEIVER  
ONKYO TX-SR605

## ARCAM SOLO

### MOVIE 5.1 ALL-IN-ONE DVD SYSTEM

Solo Movie 5.1 represents a new dimension in experiencing music and movies. An all-in-one home cinema system that delivers the most advanced sound ... ever.

- 5.1 Surround • 50 Watts Per Channel RMS
- Universal disc playback • HDMI digital output
- FM Radio & DAB digital radio
- Integrated iPod control via r-Lead/rDock
- Black Finish



"Image quality is simply gorgeous: it's sharp, vivid and packed with detail... The Movie 5.1 is something to get excited about."

WHAT HI-FI? SOUND AND VISION (FIRST TESTS) • JULY 2007

**WHAT HI-FI? SOUND AND VISION AWARDS 2007**  
ALL-IN-ONE SYSTEMS  
BEST ALL-IN-ONE SYSTEM  
ARCAM SOLO MOVIE 5.1

## HOME CINEMA SEPARATES AND SPEAKERS



**Arcam Diva**  
**DV137 DVD PLAYER**  
**AVR280 AV RECEIVER**

Delivering 80w across all of its 7 channels, Arcam's new AVR280 produces terrific sound with both movies and music. It is an ideal partner for Arcam's DV137 universal disc player. Compatible with DVD-Audio and SACD discs along with standard DVDs, the '137 impresses with its crisp, vivid images.



**Denon**  
**DVD1940 DVD PLAYER**  
**AVR2808 AV RECEIVER**

Featuring 1080p upscaling, this award-winning DVD player provides first-class picture and sound quality and is also compatible with both MP3 and WMA audio discs. The New AVR2808 receiver features industrial quality and power, 110 watts, for all 7 channels, HDMI inputs/outputs and auto set-up and room EQ.



**Sony**  
**RDR-HXD970 HDD/DVD RECORDER**  
**STR-DA5200ES AV RECEIVER**

Building on the abilities of Sony's award-winning 'HXD860, this recorder features both analogue and digital tuners, an HDMI output, a 250GB hard disk plus a USB input. When partnered with the STR-DA5200ES 7 channel receiver the combination delivers excellent sound and vision performance.



**Yamaha**  
**DVD-S1700 DVD PLAYER**  
**RX-V1800 AV RECEIVER**

Designed for top-notch sound quality, the new Yamaha RX-V1800 has 4 HDMI inputs and can decode HD audio formats. A host of impressive features hides behind its fascia. The multi-format DVD-S1700 disc player is an ideal partner, complementing the 'V1800 with both its looks and performance.

## KEF KHT3005SE 5.1 SPEAKER PACKAGE

This revised version of KEF's EISA award-winning KHT3005 backs-up its impressive looks with superb surround-sound. Powerful enough to fill even the largest of rooms, this SE version is a must audition speaker package.

"The new KHT3005SE is sensational!"



**WHAT HI-FI? SOUND AND VISION AWARDS 2007**  
PRODUCT OF THE YEAR  
BEST 5.1 SPEAKER PACKAGE  
KEF KHT3005SE

## Pioneer BDP-LX70A BLU-RAY DISC PLAYER

Enjoy outstanding high definition images with this award-winning Blu-ray disc player.



**WHAT HI-FI? SOUND AND VISION AWARDS 2007**  
DVD & HD PLAYERS  
BEST DVD & HD PLAYER  
PIONEER BDP-LX70A



## B&W Mini Theatre MT-30 • 5.1 SPEAKER PACKAGE

With a combination of the latest R&D techniques and a passion for music, B&W produces a diverse range of products befitting the largest audio manufacturer in the UK.

The Mini Theatre MT-30 delivers excellent performance and is ideal for both home cinema and hi-fi applications.

## REL R Series SUBWOOFERS

The R-Series is designed to augment the performance of "full range" speaker systems and to provide linear response down to below 20Hz. The R series comprises the 205, 305 and 505. All models feature class D amplification and are available in a piano black lacquer finish.



**WHAT HI-FI? SOUND AND VISION AWARDS 2007**  
STYLE SPEAKER PACKAGES  
BEST SUBWOOFER PACKAGE  
REL R750

**WHAT HI-FI? SOUND AND VISION AWARDS 2007**  
PRODUCT OF THE YEAR  
BEST SUBWOOFER  
B&W PVL

## Don't forget! Accessories make the difference

The quality of sound and vision a system produces is determined as much by its accessories as its main components. At Sevenoaks, accessories are not an afterthought - our staff can demonstrate the difference the right accessories can make to your home entertainment experience.



**WHAT HI-FI? SOUND AND VISION AWARDS 2007**  
ACCESSORIES  
BEST CABLES  
GRADO SR80

**WHAT HI-FI? SOUND AND VISION AWARDS 2007**  
PRODUCT OF THE YEAR  
BEST CABLE  
QED SILVER ANNIVERSARY 1.1

**SOUNDSTYLE**  
**GRADO**  
**QED**

### PLEASE NOTE

Some products/brands are not available at all stores. Please confirm before travelling. Any published prices were correct at time of going to press. Special or added value offers are not in conjunction with any other offer or promotion (NICWAO).  
ADVERT VALID UNTIL 10/01/2008, E&OE.

### MORE COMPETITIVE THAN YOU THINK

We always try to ensure our prices are highly competitive. In the event you can find the same products and excellent service at a lower price, please bring it to the store manager's attention.

### FLEXIBLE FINANCE OPTIONS\*

Spread the cost of buying.  
Flexible finance options\* are available on the majority of products we stock.  
\*Written details on request.  
Licensed credit brokers. Minimum balance £400. Subject to status.

## ROKSAN

**KANDY L.III INTEGRATED AMPLIFIER MKIII**  
Kandy integrated is now refined way beyond what would be expected of amplifiers approaching almost twice its price! The new Kandy sounds delicate yet powerful, far more dynamic yet so musical and easy to listen to and sets a new standard for affordable hi-end amplifiers in its class.



"The new Kandy sounds spectacular...we sweated buckets of blood trying to make the Kandy L.III uncomfortable, but without success - it's a true all-rounder, excelling with every type of music you play through it!"

## HI-FI SEPARATES AND SYSTEMS



### Onkyo CR-515DAB CD RECEIVER

This award-winning CD system is a rare thing: a truly musical micro system. It delivers a great performance even when compared with budget hi-fi separates. (Excludes Speakers)

### Teac REFERENCE 300DAB MKIII MUSIC SYSTEM

Comprising three classy looking units, this CD player, DAB/FM/AM radio and amplifier system combines style with outstanding sound quality. Simply choose speakers from our extensive range in-store.



### Arcam SOLID MUSIC SYSTEM Monitor Audio RS1 SPEAKERS

A great package coupling Arcam's award-winning all-in-one hi-fi system with the excellent RS1 speakers

Ask in-store about our recommended cables and stands.



## Monitor Audio

Across a speaker range rich in its choice of style, shape and application, Monitor Audio's thirty year heritage of technical expertise guarantees great sound with tonal accuracy that is shared by every speaker. From on-wall, in-wall, ceiling and floor, Monitor Audio gives you the freedom to enjoy high-quality sound in every room of your home.



Ranges include Bronze Reference, Silver RS, Gold Signature and Radius

## Spendor S Series

Each Spendor 'S' series speaker delivers a balanced energy output to guarantee a consistent sound and a seamless sound stage in a diversity of living environments. Each model features:-

- Hand-made 'e' generation bass-midrange drive units
- Dynamically damped cabinets which reduce energy re-radiation to inaudible levels.



Designed for on-wall installations, the SR5 (above) delivers exceptional sound quality and is ideal for hi-fi and home cinema applications.

## KEF iQ Series

From the second you spot the soft sheen of titanium on the main driver cones, you know you're in for something special. And you won't be disappointed.

Utilising KEF's trademark Uni-Q technology, the iQ series delivers consistently detailed imaging and unrivalled off-axis response so everyone in the room gets the full benefit, wherever they sit.



### iQ5SE

"These SEs are far more entertaining than the originals, yet leave the old speakers' fuss-free nature in tact"

### "A new class-leader: a true all-rounder"

MARANTZ CD602 • WHAT HI-FI? SOUND AND VISION • OCTOBER 2007



## Marantz

Marantz products range from high-end hi-fi to HD-ready DVD players and AV receivers. Its hi-fi range includes the CD50010SE and new CD602 CD players and the PM40010SE amplifier, offering a taste of high-end audio at an incredibly competitive price.

### Rotel RA04 AMPLIFIER & RCD06 CD Bowers & Wilkins 685 SPEAKERS

Excellent performance and exceptional value for money. This combination creates a sound that, the more you hear it, the better it gets



## Primare

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

## Cyrus

If you've enjoyed listening to music before, try listening to it through a Cyrus system. With every product tuned by ear, Cyrus represents a quality of sound, which is rare at any price.

- High-definition audio and video performance
- Wide choice of both hi-fi and AV components
- Uniquely broad upgrade options
- **NEW** CD6 SE, CD8 SE CD players and CDX t SE transport

## NEW Pro-ject

Revive your record collection with Pro-ject turntables. The range includes the new award-winning RPM1 Genie. This belt drive, two speed player comes complete with Ortofon cartridge and combines style with excellent sound quality



## MULTI-ROOM AUDIO



## Sonos

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

Visit the NEW website for additional  
**SALE** offers. [www.ssav.com](http://www.ssav.com)

**SEVENOAKS**  
SOUND & VISION



OUTSTANDING  
**SALE offers**

**5 YEAR WARRANTY**

included with all Plasma and LCD televisions purchased at our normal selling price\*

**CHOOSE MODELS FROM**  
**LOEWE • PANASONIC • PIONEER • SAMSUNG • SHARP • SONY**  
**WITH A 26" SCREEN OR LARGER**

Not in conjunction with any other offer or promotion. E&OE. \*SRP (Sevenoaks Retail Price)

**10% OFF**

**RRP/SRP ON ALL**

- All-in-One Hi-Fi Systems
- All-in-One AV Systems
- Projectors

**15% OFF**

**RRP ON ALL**

- Hi-Fi and AV Separates
- CD PLAYERS, AMPLIFIERS, DVD, AV RECEIVERS
- Subwoofers

Excludes Arcam FMJ, Cyrus, Onkyo, Project, Roksan and Sonos - but please ask and find out what we can do!

**25% OFF**

**RRP ON ALL**

- Hi-Fi Speakers
- AV Speaker Packages

Excludes B&W, KEF (SE/Reference), Monitor Audio (Gold/Platinum) and Spendor - but please ask and find out what we can do!

**35% OFF**

**ORIGINAL SELLING PRICE ON END-OF-LINE**

- Amps, CD, Receivers
- DVD and more...

We have a huge range of end-of-line products available with massive savings. See our website or separate adverts to find out more!

**50% OFF**

**ORIGINAL SELLING PRICE ON END-OF-LINE**

- Flat Screen TVs
- Speakers and more...

We have a huge range of end-of-line products available with massive savings. See our website or separate adverts to find out more!

**SEVENOAKS SALE PLEASE NOTE**

Only the brands featured in these adverts form part of the sale unless stated otherwise and are not in conjunction with any other offer or promotion (NICWAOO), E&OE

**ABERDEEN**  
57 Crown St  
01224 252797

**BEDFORD**  
29-31 St Peters St  
01234 272779

**BRIGHTON (HOVE)**  
57 Western Rd  
01273 733338

**BRISTOL**  
92b Whiteladies Rd, Clifton  
0117 974 3727

**BROMLEY**  
39a East St  
020 8290 1988

**CAMBRIDGE**  
17 Burleigh St  
01223 304770

**CHELSEA**  
403 King's Rd  
020 7352 9466

**CHELTENHAM**  
14 Pittville St  
01242 241171

**EALING**  
24 The Green  
020 8579 8777

**EDINBURGH**  
5 The Grassmarket  
0131 229 7267

**EPSOM**  
12 Upper High St  
01372 720720

**EXETER**  
26 Cowick St  
01392 218895

**GLASGOW**  
88 Great Western Rd  
0141 332 9655

**GUILDFORD**  
73b North St  
01483 536666

**HOLBORN**  
144-148 Grays Inn Rd  
020 7837 7540

**HULL**  
1 Savile Row, Savile St  
01482 587171

**KINGSTON**  
43 File Rd  
020 8547 0717

**LEEDS** ▶ RELOCATING TO WETHERBY  
62 North St IN EARLY JANUARY  
01113 245 2775

**LEEDS (WETHERBY)** ▶ DUE TO OPEN  
15 The Horsefair Centre MID-DECEMBER  
01937 586886

**LEICESTER**  
10 Loseby Lane  
0116 253 6567

**LINCOLN**  
20-22 Corporation St (Off High St)  
01522 527397

**LOUGHTON**  
7-9 Goldings Hill  
020 8532 0770

**MAIDSTONE**  
96 Week St  
01622 686366

**MANCHESTER**  
69 High Street, City Centre  
0161 831 7969

**NORWICH**  
29-29a St Giles St  
01603 767605

**NOTTINGHAM (SHERWOOD)**  
597-599 Mansfield Rd  
0115 911 2121

**OXFORD**  
41 St Clements St  
01865 241773

**PETERBOROUGH**  
36-38 Park Rd  
01733 897697

**PLYMOUTH**  
107 Cornwall St  
01752 226011

**POOLE**  
Latimer House, 44-46 High St  
01202 671677

**PRESTON**  
40-41 Lune St  
01772 825777

**READING**  
3-4 The Walk, King St  
0118 959 7768

**SEVENOAKS**  
109-113 London Rd  
01732 459555

**SHEFFIELD**  
635 Queens Rd, Heeley  
0114 255 5861

**SOUTHAMPTON**  
33 London Rd  
023 8033 7770

**SOUTHGATE**  
77 Chase Side  
020 8886 2777

**STAINES**  
41 Thames St  
01784 460777

**SWINDON**  
8-9 Commercial Rd  
01793 610992

**SWISS COTTAGE**  
21 Northways Parade, Finchley Rd  
020 7722 9777

**TUNBRIDGE WELLS**  
28-30 St Johns Rd  
01892 531543

**WATFORD**  
478 St Albans Rd  
01923 213533

**WEYBRIDGE**  
43 Church St, The Quadrant  
01932 828525

**WITHAM (ESSEX)**  
1 The Grove Centre  
01376 501733

**WOLVERHAMPTON**  
29-30 Cleveland St  
01902 312225

**YEovil**  
14 Silver St  
01935 700078

■ Custom Installation Centre  
■ Cedia Member

**Christmas Opening Hours**

Opening hours and days vary between stores during December and January.  
Please visit our website or call your local store for details.

**PLEASE NOTE**

Some products/brands are not available at all stores. Please confirm before travelling. Any published prices were correct at time of going to press. Special or added value offers are not in conjunction with any other offer or promotion (NICWAOO).  
ADVERT VALID UNTIL 10/01/2008, E&OE.

**MORE COMPETITIVE THAN YOU THINK**

We always try to ensure our prices are highly competitive. In the event you can find the same products and excellent service at a lower price, please bring it to the store manager's attention.

**FLEXIBLE FINANCE OPTIONS\***

Spread the cost of buying.  
Flexible finance options\* are available on the majority of products we stock.  
\*Written details on request.  
Licensed credit brokers. Minimum balance £400. Subject to status.

# 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 shelfmounts). Floorstanders have greater internal volume which can translate into greater efficiency and/or bass extension, but less substantial designs also introduce cabinet resonance and thus distortion. But they don't need stands and therefore have the aesthetic edge. Standmounts have less cabinet to vibrate and often score in terms of imaging and timing, but need good stands to work well.

## Positioning

The closer the speaker is to a wall, the greater the reinforcement of bass. As all rooms differ, there's no simple formula for placement and experimentation will yield the best results. Altering the angle at which the speakers face the listener can also make a difference to balance and stereo image.

## Going multichannel

Many stereo speakers can be augmented with centre and surround channels from the same brand to create a multichannel system. The most important element is a centre channel, which needs to match the stereo pair as closely as possible. For the best musical results, surrounds should be as per the front left and right channels, but if space or funds don't permit, smaller designs can be used quite effectively.



## Choosing speakers

Because speakers and the rooms they are used in vary so much, choosing a pair tends to be quite subjective. To find some that will suit you, try to listen to a good variety to hear how they differ, and if possible, audition some at home. Tonal balance tends to vary the most, but is less important than more subtle factors such as timing and dynamics. Finally, listen with your ears not your eyes – great-looking speakers aren't necessarily great sounding.

## Spikes

Floorstanding speakers and stands have threaded inserts for spikes that allow rigid coupling with the floor. These have the advantage of draining resonance from the speaker and giving tighter bass, but can result in more vibration getting back to the electronics and often cause the floor to resonate as well.

## 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 25W plus, while an average (A) speaker will need 50W or more, and a below average (A-) speaker could require 100W plus to sound its best. These are guidelines rather than rules.

## 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



**Tannoy**  
Mercury F4 £350

Tannoy's Mercury speakers have a long history of 'quality' sound at low prices, and the latest range is no exception – this floorstander is thoroughly engaging.



**DALI**  
Ikon 6 £899

Complete with a ribbon super-tweeter, this is an exceptionally capable floorstander for the money, delivering a highly detailed and truly engrossing sound.



**B&W**  
805S £1,600

A superbly well-engineered standmount that's capable of delivering magnificent musical communication, alongside superior subtlety and delicacy.



**Mordaunt-Short**  
Performance 6 £3,500

This extraordinary speaker stands at the pinnacle of Mordaunt-Short's current range. State of the art resolution and imaging are among its many attributes.

## Our favourite BEST BUY EDITOR'S CHOICE STEREO SPEAKERS

### Stereo speakers

BADGE*	PRODUCT	PRICE	COMMENTS	SIZE (WxDxH) (CM)	FLOORSTANDER	EASE OF DRIVE	BASS FROM (Hz)	FREE SPACE	CLOSE TO WALL	ISSUE NUMBER
	<b>UP TO £1,000</b>									
	Acoustic Energy Linear 1	250	Not at its best with classical but a well integrated, involving, timed aligned speaker nevertheless	19,36,26	A+	50			277	
	Acoustic Energy Aegis Neo 3	370	Pretty, neutral floorstander sounds open with wide dynamic range and good bass weight	20,90,5,24	A	24			294	
	Acoustic Energy Aelite 3	750	Wood-veneered all-rounder has exceptional neutrality with deep smooth bass	20,103,39	A	22			292	
	Acoustic Energy AE1 Classic	845	Sharply priced classic replica has a beautifully balanced midband, wide dynamic range and little boxiness	18,29,5,25,5	A-	45			283	
	ALR Jordan Entry L	500	Not the most pretty speaker but a sonic triumph, with a beautifully judged balance and impressive transparency	20,86,29	A	23			279	
	ALR Jordan Note 3	1,350	Costly but clever; adjustable ABR gives much of the weight of a floorstander with the agility of a standmount	24,53,7,31,5	A	26			288	
	ATC SCM11	849	A very fine little speaker that's at its best with good, natural recordings where it adds little and reveals much	21,38,25	A-	55			293	
	Aurousal A1	450	Single-driver system is coloured but wonderfully coherent and very effective at communicating emotions	20,5,36,27	A	40			299	
	AVI Neutron IV	499	A great example of what can be done with a genuinely small speaker, but the warts-and-all balance won't suit all	15,27,21	A-	65			260	
	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	
	B&W CM1	500	Luxury miniature has neutral, laid back sound, with low coloration, fine imaging but weak dynamics	16,5,28,28	A-	40			279	
	B&W 683	899	We have not come across this level of transparency in a sub-£1,000 speaker before, killer bass is sublime	19,8,98,5,34	A	38			297	
	B&W 705	900	Deft, delicate and delightful, if a little bass light, with clever enclosure and driver engineering	22,42,29	A	35			253	
	DALI Ikon 6	899	Needs care with setup, but rewards you with impressively transparent and almost obsessively detailed sound	19,100,33	A	37			271	
	DALI Ikon 7	999	Bulky vinyl floorstander has high sensitivity and a bright sound with superior coherence, delicacy and transparency	20,114,34	A+	22			275	
	DALI Monitor 1	1,000	Beautiful miniature with advanced drivers sounds marvellously coherent with fine vocal expression	16,32,24	A	40			296	
	Dynaudio DM 2/10	775	Unfashionably bulky standmount has fine dynamics, grip, bass and headroom and is delicate and well mannered	27,5,45,35	A	22			299	
	Epos ELS 303	399	Midband is impressively smooth, even and coherent, but the sound lacks some dynamic grip and top end detail	18,85,20	A-	28			273	
	Epos M5	349	Gorgeous miniature works well close to wall. Could be smoother but communicates with authority	18,33,21	A-	40			269	
	Epos M12.2	449	A true classic stand-mount with lovely presentation, fine sound balance, superior coherence and low coloration	20,37,25	A-	40			265	
	Epos M22	949	Very classy floorstander has a tricky bass and an edgy top, but a very smooth and even midband	20,88,25	A-	25			275	
	Focal Chorus 816 V	1,000	Fine, warm balance, superior dynamics, and a sweet top end, but could be smoother	28,100,37,5	A+	20			288	
	Heco Celan 300	595	Does tone colour, dynamics and detail with aplomb and communicates superbly in its +2dB mode. Sensitive, too	23,36,33	A+	40			301	
	JBL Studio L880	700	Good value floorstander with neutrality, massive headroom and plenty of punch. Could be more transparent	22,99,37	A	25			275	
	KEF iQ3	280	Shapely, vinyl-covered stand mount has lively dynamics and fine imaging, but could be smoother and sweeter	22,37,33	A+	40			284	
	KEF iQ9	800	Shapely and solid floorstander has wide bandwidth and dynamic range with superior neutrality and sensitivity	22,94,33	A	25			273	
	Mission élan e34	400	A return to form for Mission with a pacy, vibrant sound matched to good looks	35,96,34	A+	48			298	
	Monopulse 42A	995	Uniquely different in style and sound, midband time-coherence is magnificent but treble is too restrained	26,110,25	A+	28			271	
	Monitor Audio BR2	200	Good looking standmount has a muscular sound with superior coherence	18,5,35,25	A-	30			294	
	Monitor Audio BR5	400	Not the best dressed in its class, but detailed, bold sounding, good value and an easy electrical load	17,85,25	A-	36			293	
	Monitor Audio GS10	800	More neutral tonally than some recent MAs. Quality stereo design which takes its up little room and is easy to drive	20,36,27	A-	40			284	
	Monitor Audio Silver RS8	800	Bold, dynamic sound marks it out from the crowd, and it's an easy load that works well in larger rooms	90,18,27	A	33			276	

**SPECS KEY** SIZE WxHxD (CM) Width, height and depth of one cabinet in centimetres. **FLOORSTANDER** Speakers that don't require stands **EASE OF DRIVE** How much power the amplifier needs (approximately) to drive the loudspeaker effectively **A+** 25 watts plus **A** 50 watts plus **A-** 100 watts 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 walls) **CLOSE TO WALL** The speakers will work best when up against a wall (but avoid corners)

# SEVENOAKS

SOUND & VISION

VISIT THE  
NEW  
SEVENOAKS  
WEBSITE  
[www.ssav.com](http://www.ssav.com)

## A perfect combination

WHAT HI-FI?  
SOUND AND VISION  
AWARDS 2007

BEST STEREO AMPLIFIERS  
£1000-£2000  
Cyrus 8v2

WHAT HI-FI?  
SOUND AND VISION  
AWARDS 2004

BEST STEREO SPEAKERS  
£1000-£2000  
Spendor S5e

Sevenoaks has over 35 years' experience in the world of sound and vision and has selected this combination of outstanding products from three of the UK's finest - Cyrus, Spendor and QED.

Take some of your favourite CDs along to one of our stores nationwide and hear them at their best.

### FEATURED SYSTEM

Cyrus CD8 SE CD Player **NEW**  
Cyrus 8vs2 Integrated Amplifier  
Spendor S5e Floorstanding Speakers

### DON'T FORGET! ACCESSORIES MAKE THE DIFFERENCE

The quality of sound and vision a system produces is determined as much by its accessories as its main components. At Sevenoaks, accessories are not an afterthought - our staff can demonstrate the difference the right accessories can make to your home entertainment experience.

Try them with the  
award-winning QED  
Silver Anniversary XT  
speaker cables

WHAT HI-FI?  
AWARDS 2007  
PRODUCT OF THE YEAR  
2007  
100 SILVER ANNIVERSARY BY



## Hear them together

at these SEVENOAKS stores

ABERDEEN	01224 252797	MAIDSTONE	01622 686366
BEDFORD	01234 272779	MANCHESTER	0161 831 7969
BRIGHTON	01273 733338	NORWICH	01603 767605
BRISTOL	0117 974 3727	NOTTINGHAM	0115 911 2121
BROMLEY	020 8290 1988	PETERBOROUGH	01733 897697
CAMBRIDGE	01223 304770	PLYMOUTH	01752 226011
CHELSEA	020 7352 9466	POOLE	01202 671677
CHELTHAM	01242 241171	PRESTON	01772 825777
EALING	020 8579 8777	READING	0118 959 7768
EXETER	01392 218895	SEVENOAKS	01732 459555
GLASGOW	0141 332 9655	SHEFFIELD	0114 255 5861
GUILDFORD	01483 536666	SOUTHAMPTON	023 8033 7770
HOLBORN	020 7837 7540	STAINES	01784 460777
HULL	01482 587171	TUNBRIDGE WELLS	01892 531543
KINGSTON	020 8547 0717	WATFORD	01923 213533
LEEDS*	0113 245 2775	WITHAM	01376 501733
LEEDS (WETHERBY)*	01937 586886	YEOVIL	01935 700078
LINCOLN	01522 527397		

\*RELOCATES TO WETHERBY IN EARLY JANUARY  
WETHERBY DUE TO OPEN IN MID-DECEMBER

#### PLEASE NOTE

All brands may not be available at all the stores listed. Please confirm before travelling. Any published prices were correct at time of going to press. Special or added value offers are not in conjunction with any other offer or promotion (NIC/WAD0).

ADVERT VALID UNTIL 10/01/2008, E.O.E.

CYRUS

spendor

QED

Our favourite

BEST BUY EDITOR'S CHOICE

# STEREO SPEAKERS continued

## Stereo speakers

BADGE?	PRODUCT	£	COMMENTS	SPECIFICATIONS					
				SIZE (WxHxD) (CM)	FLOORSTANDER	EDGE OF DOME	BASS FROM (Hz)	FREE SPACE	CLOSE TO WALL
	Mordaunt-Short Avant 906i	350	The generous, well balanced sound shows good enclosure control, could do with more grip and better spikes!	165,85,295		A	40		281
	PMC TB2+	795	Classy transmission line stand-mount has superior midband, restrained presence and a bright clean top end	20,40,30		A	28		275
	ProAc Tablette Ref Eight	699	Stunning standmount with electrostatic-like imagery. Its Signature brother costs £200 more and is even better!	15,27,23		A+	40		267
	Q Acoustics 10i0	99	Neatly styled miniature has limited bass and power handling but fine midband voicing at a very sharp price	15,21,5,19,5		A	48		286
	Q Acoustics 1050	330	Great value, the sound lacks smoothness but has fine dynamics and impressive transparency	19,5,97,5,30		A+	28		284
	Quadral Pico	849	Could be more muscular, but neutral and open with spacious imaging and little coloration	19,34,26		A-	30		292
	Rega R1	298	Cute baby sounds busy, coherent and involving, if a touch thin. Sweet and delicate treble with even bass	15,32,24		A	50		269
	Rega R3	448	Discreet, pretty and fine value. A little lightweight but impressively open, it delivers music with great agility	20,76,28		A	40		265
	Revel Concerta F12	900	Massive multi-driver floorstander is not pretty, but has great headroom, bass weight and impressive neutrality	25,108,36		A	22		296
	Ruark Sabre III	799	Straightforward engineering combined with high finish quality that delivers a beautifully timed and engaging sound	20,33,5,27		A-	50		289
	Tannoy Mercury F4	350	Floorstander has an engrossing sound with good dynamics and a warm, restrained output	20,5,97,29		A+	24		294
	Totem Rainmaker	795	Standmount has a big sound, with a smooth midband and bright top. Could have more punch and warmth	17,35,5,23		A	25		291
	Triangle Antal Esw	995	Smoother than its predecessors, with a beautifully balanced bass and midband, though the top end is uneven	20,108,34		A	20		288
	Triangle Titus ES	370	Not pretty but busy, coherent and involving, if a little thin. Sweet and delicate treble with even bass	18,37,30		A-	40		269
	Triangle Comete ES	500	Bulky standmount lacks style but delivers engrossing musical coherence and vivid dynamics	20,42,34		A	40		265
<b>ABOVE £1,000</b>									
	A2T Mezzo	2,000	Seamless overall coherence, with persuasive monitoring capabilities. Sounds a little mid-forward. Top could be sweeter	27,5,40,26		A+	40		281
	Acoustic Energy AE1 MkIII	1,900	Luxury miniature has a laid back but bouncy sound, fine dynamic range and very superior imaging	18,5,31,25		A-	30		281
	ALR Jordan Classic 5	1,200	Slim, laid back floorstander has sweet sound with fine coherence, imaging and dynamic range	17,99,26		A	28		275
	ATC SCM16A	2,203	Makes a great case for the active speaker. Good value, including built-in amps, and fuss-free	27,45,33		ACT	42		300
	ATC SCM19	1,499	Super linear motor system, heavy weight construction and fabulous veneer that makes the ATC a pro favourite	22,44,31,5		A-	54		285
	Audio Physic Spark 3	1,499	Classy and discreetly laid back floorstander has delightfully neutral balance and surprising bass weight	15,98,22		A+	27		271
	AVI ADM9	1,000	Active mini-monitors that are exceptionally accurate and dynamic, and they give good iPod, too	20,30,26		ACT	60		301
	AVI Duo	1,299	Sophisticated floorstander, a natural partner for AVI's electronics. Unusually clean and honest musical presentation	19,77,28		A	50		280
	B&W 802D	8,000	Great timing, superior dynamics and a sweet top end all enhance musical communication. Makes sweet music	37,115,56		A	<20		267
	B&W 805S	1,600	Classy standmount with excellent coherence and imaging. Can sound laid back but otherwise a real delight	24,39,33		A	25		271
	B&W 703	2,000	Bass is immensely powerful and even, and the overall sound is lively and dynamic, though not overly smooth	23,101,36		A-	20		260
	Dali Helicon 400	2,999	Advanced drivers and enclosure give a generous sound with wide dynamic range and no boxiness	22,103,46		A	20		264
	Dynaudio Focus 220	1,850	Cleverly tapered floorstander has a brilliantly smooth, neutral balance and very sweet treble. Could be more dynamic	20,5,98,29,5		A-	<20		281
	Eclipse TD510	1,200	Replacement for the TD512 does astonishing things with musical timing. £600 floor stands also recommended	24,36,26		A	45		277
	Focal Chorus 826 V	1,250	Times nicely, goes loud with ease and will produce precise imaging if appropriately set up.	28,104,37,5		A	45		287
	Focal Chorus 836V	1,549	Bulky, sharply priced three-way could be prettier. Has good bass with genuine grip, but top could be sweeter	28,115,38		A	28		290
	Focal Electra 1027 Be	4,000	Outstanding mid and top with fine delicacy and low coloration, but lacks some bass grip and drive	26,5,111,35		A-	25		276
	Focal Diva Utopia Be	7,599	Lovely slimline speaker combines remarkable transparency with fine dynamics and gorgeous bass	25,110,53		A+	30		255
	Free FS1	3,000	An elegant active design for anyone after the minimum of wiring. Wireless with Sonos or Airport Express	16,87,27		ACT	35		301
	Gamut L5	5,900	Impressive build and sophisticated driver design make the L5 a stunning speaker with rare transparency levels	20,116,43		A-	32		271
	Jamo Reference R909	7,500	Top model (in a class of one) is open, full and easy on the ear, and surely a classic in the making	48,127,54		A-	25		280
	KEF Reference Model 2012	3,500	Very classy but costly three-way stand-mount with much improved Uni-Q; could be more transparent	25x42x41		A	30		298
	Krell Resolution 2	6,497	Large but good looking, with Sonus Faber type elasticated front. Musically a great full bandwidth all-rounder	122,29,61		B	28		273
	Meridian M3100	1,850	Attractive and capable active (125w) with great imaging and strong bass. High neutrality and good power handling	19,39,25		ACT	45		opt 280

**Russ Andrews**  
Solutions for better music & movies™

Request a  
**FREE**  
catalogue  
pack

go to  
[www.russandrews.com/catalogue](http://www.russandrews.com/catalogue)  
or phone us on **0845 345 1550**



*"It did that famous 'removing veils' thing in a manner one could reasonably expect of upgrading a CD player by a model or two..."*

**Richard Black,**  
Hi-Fi Choice magazine,  
November 2007

**HI-FI CHOICE**  
88%

**WHAT HI-FI?**  
★★★★★

Nov '06

**Russ Andrews**  
Signature PowerKord™  
1m £275

Exclusive UK Retailer for

**KIMBER KABLE**

Mail Order Direct • 60 Day Cable Home Trial • Cable Upgrade Scheme • Free Delivery (orders over £100 within UK Mainland)

# Our favourite BEST BUY EDITOR'S CHOICE STEREO SPEAKERS continued

## Stereo speakers

BADGE?	PRODUCT	£	COMMENTS
	Opera Seconda	1,295	Classy cabinetwork plus beautifully judged neutrality with crisp, clean and deep bass
	Monopulse 82	2,495	Could be more neutral, but excellent coherence, lively dynamics, fine imaging and a wide dynamic range
EC	Monitor Audio PL300	5,000	Completely new level of sophistication from a brand best known for mainstream, cost effective designs
EC	Mordaunt-Short Perf 6	3,500	Revolutionary enclosure design and aspirated tweeter make for a fast, hi-res ride
	Neat Elite SE	1,499	Smooth and natural performer with notably expressive midband. Fine voice articulation and unusual sweetness
	Neat Motive 1	1,200	Beautifully neutral balance sounds open without aggression. Fine midband but could be more authoritative
	Neat Momentum 3i	1,745	Classy isobaric standmount sounds surprisingly big, with exceptional coherence and impressive dynamic range
	PMC Wafer 2	1,650	Clever 'hang-on-wall' speaker has minimal sonic compromises. Smooth midband delivers impressive stereo imaging
	PMC FB1+	1,695	Nicely proportioned floorstander has a sweet top and a beautifully natural, open and restrained midband
EC	PMC EB1	5,950	The best argument for large speakers that we've heard in a long time
EC	Quad ESL 2805	4,500	Uniquely wonderful natural realism, exceptional imaging, coherence and low level detailing
	Pega R7	1,498	Super-slim and super-smooth floorstander has fine agility with a slightly bright overall character
EC	Revel F32	3,200	Meticulously balanced, tonally neutral design makes for a taut, well disciplined sound
EC	Revel M22	1,800	A remarkably clean and revealing speaker with superb tonal and microdynamic capabilities
	Roksan Caspian FR-5	2,000	Sharp looking speaker sounds exceptionally open and lively without aggression. Could be warmer and richer
	Ruark Talisman III	1,499	No bass demon, but a sophisticated and agile speaker epitomising Ruark's design ideals
	Sonus Faber Concerto D	1,799	The Concerto Domus performs significantly above its price level, especially with acoustic material
EC	Sonus Faber Grand Piano D	2,498	The Grand Piano Domus has a fabulous physical appearance and delivers a clean, refined sound
	Tannoy Glenair 10	2,999	With a 250mm dual concentric driver this is a generously proportioned, highly engaging speaker for a good price
	Totem Model 1 Signature	1,595	Expensive, but very seductive miniature delivers a beautifully smooth and balanced midband
	Triangle Celius Esw	1,395	Not the smoothest sound around, but has great vigour and enthusiasm, plus good scale and weight
EC	Triangle Magellan Concerto	14,750	New 'sw2' version is less immediate than its predecessor, but it's easier to live with and remains highly entertaining
	Usher Compass CP-6381	2,500	Lots of speaker for your money, with plenty of deep bass, unusual styling and massive build
EC	Vivid Audio B1	7,750	Impressive cabinet design combined with hi-tech drivers to make truly world class speaker
EC	Wharfedale Airedale Neo	9,000	Expansive yet relaxed sounding, the Neo is a coloured but surprisingly musical and enjoyable speaker
	Yamaha Soavo 2	1,200	Cunningly crafted stand-mount with a beautiful balance that always sounds lively, open and involving

SPECIFICATIONS						
SIZE (W x H x D) (mm)	FLOORSTANDER	LARGE-OR-DRIVE	BASS FROM (mm)	FREE SPACE	CLOSE TO WALL	ISSUE NUMBER
24,102x5,315		A-	20			297
27,110x25		A-	<20			281
41,111x47		A-	28			301
24,121x37		A-	35			264
20,90x18		A	25			267
16,92x5,20		A-	20			276
22,38x27		A-	25			299
33,5x75x10		A+	45			285
20,100x30		A	20			260
29,120x46.5		A-	19			292
70,107x38.5		A-	45			294
27,98x35		A	25			271
22,105x39		A	30			265
22,37x30		A-	48			274
20,100x25		A	22			290
22,84x31		A	22			259
21,99x31		A	35			270
21,106x31		A-	32			283
36,100x35		A+	38			295
17,31x23		A	35			277
20,117x34		A	22			277
60,160x45		A-	32			290
35,127x65		A	20			270
27,110x38		A-	40			261
52,115x45		A-	25			296
22,38x35		A	28			296

# 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 vs movies

High-resolution SACD and DVD-A music recordings tend to be mastered with

surround 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 floorstanding or wallmounted, 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 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



**B&W**  
600 S3 package £900  
Incorporates 602s, 601s and an LCR 600 centre speaker. Great in both stereo and multichannel surround modes.



**Naim**  
n-SAT/CENT/SUB £3,385  
Five n-SATs, and n-CENT and an n-SUB make a highly engaging and (for Naim) discreet multichannel package.



**ATC**  
Concept 3 £4,877  
It might not look as flashy as some, but the quality of engineering in this ATC package ensures superb all-round performance.



**Linn**  
Akurate package £13,750  
Linn has worked wonders with its new multichannel speaker system – it's not cheap, but its performance is breathtaking.

## Our favourite BEST BUY EDITOR'S CHOICE

# AV SPEAKER PACKAGES

### Multichannel speakers

BADGE?	PRODUCT	£	COMMENTS	FACE-OF-DRIVE	NUMBER OF SPEAKERS	BASS FROM (Hz)	FREE SPACE	CLOSE TO WALL	SCALE NUMBER
<input type="checkbox"/>	ATC Concept 3	4,877	Extremely engaging, revealing and musical multichannel system providing 360 degrees of full-on entertainment	A-	6	12	opt		255
	B&W 300 package	900	An excellent compromise between the requirements of music and those of home cinema (inc. subwoofer)	A	6	27			241
<input type="checkbox"/>	B&W 600 S3 (602/601/LCR 600)	900	Unquestionably delivers the sonic goods. High-quality drivers in standmount enclosures	A	5	22			224
	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
	Dynaudio Audience 42 package	1,142	Multichannel package for hi-fi purists with real authority and imaging, but needs subwoofer for full-bore movie sound	A-	5	53			241
	Final Sound Electrostatic system	4,875	Sim, attractive, electrostatic panels have clever connections, limited loudness but a breathtaking transparency	A-	6	20			251
	Focal-J/MLab Electra package	3,017	Bold, solid system, tremendous consistency and easy to expand with an added subwoofer	A	5	50			232
<input checked="" type="checkbox"/>	Linn Akurate (242/212/225/221)	13,750	An extremely capable system that offers new insights into the potential for multichannel audio	A-	6	18			253
	Mirage Omni 2	2,650	Dark tonality, but superb imagery makes this an excellent all-round choice	A	5	30			232
<input type="checkbox"/>	Mission m5 package	1,450	Main m52 is a clean, attractive full-range stereo speaker, while the m5as sub does big bass for movie fans	A	6	28			241
	Mordaunt-Short Genie	800	A prince among sub/sat packages – good integration and impressively little compromise compared to full-size models	A-	6	38			262
	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
<input type="checkbox"/>	Naim n-SAT/n-CENT/n-SUB	3,385	Priced here as a 5.1 package, Naim's neat n-SATs and matching sub/centre make an exceptional compact ensemble	A	6	20			268
	Tannoy Arena	1,200	Fabulously stylish sub/sats with Dual Concentric drivers. Unusually revealing for the breed, but sub lacks refinement	A	6	29			269

**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 BEST BUY EDITOR'S CHOICE

# SUBWOOFERS

### Bass speakers

BADGE?	PRODUCT	£	COMMENTS	SIZE WxHxD (CM)	POWER (W)	BASS FROM (Hz)	SCALE NUMBER
<input type="checkbox"/>	B&W PV1	950	Gorgeously styled sub shakes the air but not the floor, delivering a very clean sound with negligible coloration	29,34,35	500	20	259
<input checked="" type="checkbox"/>	B&W ASW850	2,000	Does all the things subwoofers should do with music and movies alike, but transparently and seamlessly	53,56,52	1,000	18	246
<input checked="" type="checkbox"/>	Eclipse TD725sw	2,700	Delivers solid meaningful bass, but with unusual tunefulness, speed and articulation	52,47,50	500	40	287
	Monitor Audio ASW100	300	For the price, this compact subwoofer performs particularly well	32,32,34	120	27	225
<input checked="" type="checkbox"/>	REL 305	795	Landmark mid-price sub, works particularly well with low crossover frequency, looks great too	32,36,34	300	25	284
<input type="checkbox"/>	REL Stampede	550	Few subs at this price match the Stampede's subtlety and ease of integration. Much more hi-fi than AV	28,40,29	100	18	257
<input type="checkbox"/>	REL T1	595	Standard setter at the price: flexible, easily set up and packs quite a punch	36,40,420	300	25	291
<input type="checkbox"/>	REL Strata 5	700	Highly musical sub that integrates well but the REL Stampede offers near-identical performance for less money	32,46,33	150	18	257
	REL Storm III	900	Excellent sub with powerful, detailed and deep bass. Comprehensive facilities, including flexible filter adjustment	42,62,33	150	18	225
	REL Storm 5	1,000	Well engineered, good bass depth, appropriate for mixed hi-fi & home cinema/multichannel systems	34,52,37	200	15	267
<input type="checkbox"/>	MartinLogan Dynamo	449	Refined, compact sub brings established MartinLogan virtues to a new price and size point	23,35,32	200	25	301
	Velodyne SPL-800R	699	Powerful, highly configurable sub with auto setup feature and attractive, compact packaging	26,27,33	1,000	28	286
<input checked="" type="checkbox"/>	Wilson Benesch Torus	5,200	Amp and sub package built like a sophisticated pile driver, with deep, state of the art performance	45,33,45	1,000	10	290

**SPECS KEY** **SIZE WxHxD (CM)** Width, height and depth of one cabinet in centimetres. **POWER (W)** How many watts the onboard amplifier of active models delivers.

**BASS FROM** How low the sub goes, the smaller the number the deeper the bass.

# Next month

ISSUE 303 @ FEBRUARY 2008 @ ON SALE 10 JANUARY

## In-depth reviews of the most vital new kit, including...

- Ⓞ Ayon Spirit integrated valve amp
- Ⓞ Cambridge Audio TT50 turntable
- Ⓞ Martin Logan Source loudspeaker
- Ⓞ Escent Fireball recorder/music server
- Ⓞ Boulder 865 integrated amplifier
- Ⓞ T+A Powerplant amplifier
- Ⓞ PS Audio Quintessence conditioner



## Plus...

Our regular round-ups of accessories and music, not to mention the latest news, views and features from hi-fi's smartest grapevine... And much, much more!

**BE SURE NOT TO MISS BRITAIN'S MOST RELIABLE GUIDE TO REAL HI-FI**

## ULTIMATE GROUP TEST >> AMPLIFIERS

The latest amplifiers are put through our rigorous group-test regime, including...

- Ⓞ Arcam A90
- Ⓞ Consonance Tristan
- Ⓞ Flying Mole CA-S10
- Ⓞ Musical Fidelity X-T100/ Triple-X170
- Ⓞ Rega Cursa 3/Maia 3
- Ⓞ Russ Andrews HP-1/PA-1



THE ESSENTIAL HI-FI GUIDE

**SUBSCRIBE!**  
TO HI-FI CHOICE  
SEE PAGE 80 FOR DETAILS

Give this form (or a photocopy) to your local newsagent to guarantee your own copy of Hi-Fi Choice reaches you every month

PLEASE RESERVE ME A COPY OF HI-FI CHOICE EVERY MONTH

Name .....

Address .....

Postcode .....

Contact telephone no. ....

To the newsagent: Contact your magazine wholesaler to order Hi-Fi Choice

# HI-FI CHOICE

JANUARY 2008 ISSUE 302

Future Publishing Ltd, 2 Balcombe Street, London NW1 6NW  
Tel +44 (0)20 7042 4000 Fax +44 (0)20 7042 4529

### EDITORIAL

Dan George **editor** dan.george@futurenet.co.uk  
Corin Skeggs **art editor** corin.skeggs@futurenet.co.uk  
Richard Holliss **production editor** richard.holliss@futurenet.co.uk  
Alan Sircom **operations editor** hifisub@futurenet.co.uk

### CONTRIBUTORS

Richard Black, Alvin Gold,  
Stuart Harrison, Audley Jarvis, Jason Kennedy,  
Paul Messenger, Dave Oliver,  
Mark Prendergast, Malcolm Steward,  
Phil Strongman, Dominic Todd,  
David Vivian, Nigel Williamson

### PHOTOGRAPHY

Adrian Lyon

### ADVERTISING

Matthew Tasker **advertising director**  
020 7042 4263 mtasker@futurenet.co.uk  
Steve McKeon **advertising manager**  
020 7042 4258 smkeon@futurenet.co.uk  
Brad Francis **account manager**  
020 7042 4255 brad.francis@futurenet.co.uk  
James Rhodes Baxter **account manager**  
020 7042 4260 james.rhodes-baxter@futurenet.co.uk  
Yemi Williams **classified sales executive**  
020 7042 4252 graham.phillips@futurenet.co.uk  
Nick Weatherall **inserts and direct marketing manager**  
020 7042 4155 nick.weatherall@futurenet.co.uk

### MARKETING & LICENSING

Tim Hudson **head of international licensing**  
tim.hudson@futurenet.co.uk  
Libby Latter **marketing manager**

### PRODUCTION & DISTRIBUTION

Simon Nicoll **circulation manager**  
Ralph Stringer **production manager**  
Roberta Sanders **production coordinator**  
Alexa Cuthell **ad coordinator**

### PUBLISHING & MANAGEMENT

Andy Ford **group publisher**  
andy.ford@futurenet.co.uk  
Nick Merritt **group senior editor**  
Jim Douglas **editorial director**  
Malcolm Stoodley **advertising director**  
Simon Wear **chief operations officer**  
Robert Price **chief executive, Future UK**

### SUBSCRIPTIONS

To order, renew or check your subscription details, please visit myfavountemagazines.co.uk. Alternatively, call our order line on +44 (0)870 837 4722, or for general subscription enquiries call (0)870 837 4773

### BACK ISSUES

Tel: +44 (0)870 837 4722  
Prices: UK £5.95 per issue, Europe €6.95 per issue,  
rest of the world £7.95 per issue

Distributed by Seymour Distribution Ltd,  
2 East Poultry Avenue, London  
EC1A 9PT Tel: 020 7429 4000

All contents © Future Publishing 2007. 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 Ltd is part of Future plc. Future produces carefully targeted special-interest magazines for people who share a passion. We aim to satisfy that passion by creating titles offering value for money, reliable information, smart buying advice and which are a pleasure to read. Today we publish more than 150 magazines in the UK, US, France and Italy. Over 100 international editions of our magazines are also published in 30 other countries across the world. Future plc is a public company quoted on the London Stock Exchange (symbol: FUTR).

Stevie Spring **chief executive, Future plc**  
Roger Parry **non-executive chairman**  
John Bowman **group finance director**

Registered Office 30 Monmouth Street, Bath BA1 2BW  
☎ +44 (0)1225 442244 🌐 www.futureplc.com  
Bath • London • Milan • New York  
Paris • San Diego • San Francisco



When you have finished with this magazine please recycle it.



# HEADPHONES

*For your ears only*



Headphones come in several varieties and some are designed for particular usage. The majority of 'cans' use dynamic cone and coil-type drive units and can be used with anything from a personal stereo to a dedicated amplifier. Other types also exist, most significantly electrostatics that use a charged panel membrane to produce a distinctly refined sound. These are supplied with their own dedicated amplifiers, which tends to increase the price.

Cans are split into several types. There are open and closed-back designs, the latter being

best for noisy (or noise sensitive) environments as they minimise leakage and intrusion. Open-back types tend to have a more open, less 'in-head' sound. There are also three variants of earpad design: circumaurals enclose the ear and press on your head, supra-aurals press on the ear and intra-aurals sit in the ear and are particularly popular with personal stereo users.

### Getting the best from your cans

Getting a good result with headphones is not

quite as straightforward as it should be. Merely plugging them into the output on your CD player or amp will not give particularly engaging results unless you are very lucky. If you are planning on serious listening, invest in a dedicated amp – the increase in dynamics is not in the least bit subtle. A variety of models are made and prices start at around £80 for a QED, a little more for designs from, say, Creek or Musical Fidelity. And if you're really into cans, look up the valve-powered Earmax.

## Our favourite HEADPHONES

BEST BUY  EDITOR'S CHOICE

### Stereo headphones

BADGE?	PRODUCT	£	COMMENTS	ELECTROSTATIC	SUPRA-AURAL	CIRCAURAL	OPEN BACK	CLOSED BACK	WEIGHT (g)	3.5MM JACK ADAPTOR	ISSUE NUMBER
<input type="checkbox"/>	AKG K270 Studio	129	Pro oriented design which is very transparent and great with acoustic material						270		230
<input checked="" type="checkbox"/>	AKG K1000	650	Neutral, analytical and completely out of the head sound, suitable for connection to speaker outputs only						270		244
<input type="checkbox"/>	Beyerdynamic DT990	160	Impeccable balance, very extended bass and treble, and bags of detail place this model ahead of the pack						250		245
<input type="checkbox"/>	Beyerdynamic DT770	190	A touch coloured in the mid, but less than most closed cans: detailed and with excellent bass						290		287
<input type="checkbox"/>	Beyerdynamic DT880	200	Informative, neutral and surprisingly close to good loudspeakers. Good for occasional and long-term listening alike						205		300
<input type="checkbox"/>	Grado SR225	180	Tonally shows the way to Grado's amazing GS1000 flagship, but detail and soundstage are not truly class-leading						200		300
<input checked="" type="checkbox"/>	Grado SR325i	310	Highly sophisticated and detailed sound with great extension: check for comfort						200		270
<input checked="" type="checkbox"/>	Grado GS1000	995	One of the finest transducers on the planet, with detail to die for						250		288
<input type="checkbox"/>	Sennheiser LX90	35	Brings recognisably hi-fi sound to in-ear transducers, with surprisingly good resolution						35		290
<input type="checkbox"/>	Sennheiser HD485	65	A great all-round headphone for occasional or even heavy use, refined in sound and comfortable, too						220		296
<input type="checkbox"/>	Sennheiser HD595	150	Technology from upmarket HD650 model makes this a very revealing headphone that's also extremely comfortable						270		266
<input checked="" type="checkbox"/>	Sennheiser HD650	300	Astonishing resolution and hardly less impressive tonal balance make this a true hi-fi experience						260		252
<input type="checkbox"/>	Shure SE420	240	Expensive and no replacement for top conventional 'phones, but streets ahead of most in-ears with real refinement						15		295
<input type="checkbox"/>	Shure E500PTH	420	Sophisticated in-ear design with three drivers, plus switchable 'voiceover' mic in the lead; high-quality stuff						20		285
<input type="checkbox"/>	Stax SR-001 Mk II	239	Expensive and power hungry, but this electrostatic drags personal stereo into the world of high fidelity						280		268
<input checked="" type="checkbox"/>	Stax SRS-2020 Basic Sys. II	349	Luxury option at its price, but the sound delivery is five-star quality all the way						205		295

**SPECS KEY** **ELECTROSTATIC** Uses electrostatic film instead of more common cone or dome dynamics. **SUPRA-AURAL** Earpads sit on ear rather than around it. **CIRCAURAL** Earpads rest on the head around the ears. **OPEN BACK** Vented capsules let sound in and out. **CLOSED BACK** Sealed capsules. **WEIGHT** in grams. **3.5MM JACK ADAPTOR** Allows connection to personal stereos, computers etc.



## SPECIAL OFFERS & EX-DISPLAY BARGAINS

CALL SALES: (020) 8318 5755 or 8852 1321 - 248 Lee High Road, London, SE13 5PL  
0% APR Credit options are available for purchases of New products exceeding £900, please call for details. £&O

For more Special Offers, Systems & Pre-Owned Bargains like these - visit [www.billyvee.co.uk](http://www.billyvee.co.uk)\*

### ➔ Linn Majik-I + Katan System - Save £790

System Comprises  
Majik CD Player  
Majik-I Amplifier  
Katan Speakers  
(pair) Inc stands  
Delivery & Install  
(within the M25)  
5 year warranty  
Offer ends 31/12/07



Normal Price £4290  
**£3500**

Introductory Offer - Upgrade to Majik 140 Speakers? Add £700 Please Call for details.

\*Ex-Display & Pre-owned bargains can be found in the Marketplace section

Arcam A70 Amplifier - Silver E/D (2Yr G/tee)	.....(530.00)	<b>£359.00</b>
Arcam A90 Amplifier - Silver E/D (2Yr G/tee)	.....(950.00)	<b>£659.00</b>
Arcam FMJ A32 Amplifier E/D (2Yr G/tee)	.....(1300.00)	<b>£895.00</b>
Linn Unidisk 2.1 Disk Player E/D (2Yr G/tee)	.....(4850.00)	<b>£2695.00</b>
Linn Chakra 2200 Power Amp Blk E/D (2Yr G/tee)	.....(2530.00)	<b>£1695.00</b>
Naim Nait 5i Amplifier S/H (1Yr G/tee)	.....(725.00)	<b>£495.00</b>
PMC TB2+ Speakers - Oak E/D (2Yr G/tee)	.....(850.00)	<b>£595.00</b>
Spendor S5e Speakers - E/D (2Yr G/tee)	.....(1225.00)	<b>£959.00</b>
Sugden CD Master CD Player E/D (1Yr G/tee)	.....(1299.00)	<b>£839.00</b>
Sugden MusicMaster Power Amp E/D (1Yr G/tee)	(1299.00)	<b>£839.00</b>

# SALE

100s OF PRODUCTS REDUCED

# SUPER SALE

MASSIVE SAVINGS AVAILABLE IN-STORE AND ONLINE:  
WWW.SUPERFI.CO.UK/SALE STARTS 27TH DECEMBER

**STORE HOLIDAY OPENING TIMES:**  
CHRISTMAS EVE: OPEN UNTIL 4PM  
CHRISTMAS DAY/BOXING DAY: CLOSED  
NEW YEAR'S EVE: OPEN UNTIL 4PM  
NEW YEAR'S DAY: CLOSED  
JANUARY 2ND: OPEN AS NORMAL

## HI-FI AND HOME CINEMA SPECIALISTS

Acoustic Energy, Apollo, Apple, Arcam, Archos, Atacama, Audiolab, B&W, Beyerdynamic, Creative, Creek, Denon, Epos, Grado, Helios, Humax, iRiver, KEF, Linn, Marantz,

Mission, MJ Acoustics, NAD, Onkyo, Panasonic, Pioneer, Pro-Ject, Pure, Q Acoustics, QED, Quad, Roksan, Rotel, Samsung, Sennheiser, Sonos, Sony, Soundstyle, Tannoy,

Topfield, Wharfedale, Yamaha and many more top brands. Not all products are available from all outlets; please call, or check online at [www.superfi.co.uk](http://www.superfi.co.uk)

# Superfi

**IN-STORE EXCLUSIVE**

## MARANTZ SIZZLER

- Marantz CD6002 CD Player
- Marantz PM6002 Amplifier
- Q Acoustics 1030 Speakers



**WAS: £769.95**  
**SAVE: £270**  
**£499.95**

**WAS: £599.95**  
**SAVE: £120**  
**£479.95**

**WAS: £399.95**  
**SAVE: £200**  
**£199.95**

**WAS: £399.95**  
**SAVE: £40**  
**£359.95**

Also available separately  
Marantz CD6002 CD Player £219.95 (Was £269.95, Save £50)  
Marantz PM6002 Amplifier £219.95 (Was £269.95, Save £50)

**FLOORSTANDING SPEAKERS**

## WHARFEDALE EVO 2-30

- Outstanding real-wood finish in either cherry or maple
- Based on the 5-star-rated Evolution-30s
- 2 x Kevlar drivers for impressive, distortion-free bass extension
- Improved high-resolution tweeter delivers brilliant detail from all sources
- 5.1 package also available



**WAS: £649.95**  
**SAVE: £350**  
**£299.95**

Also available: Evo2-Centre £119.95 (Was £249.95, Save £130)

**DVD PLAYER**

## MARANTZ DV7001

- HDMI out with 1080p HD upscaling
- Plays DVD, SACD, DivX, MP3
- In-store exclusive



**WAS: £599.95**  
**SAVE: £120**  
**£479.95**

**UNIVERSAL DVD PLAYER**

## YAMAHA DVDS1700

- Multi-region DVD, DVD-Audio, SACD, DivX, MP3, WMA, VCD and JPEG Playback
- HDMI out with 1080p Faroudja HD upscaling



**WAS: £399.95**  
**SAVE: £200**  
**£199.95**

**SPEAKERS**

## KEF IQ5SE

- Elegant floorstanders in a choice of finishes
- System and room friendly design
- In-store exclusive



**"STAR PERFORMERS"**  
WHAT HI-FI? SOUND & VISION

**WAS: £399.95**  
**SAVE: £40**  
**£359.95**

**WAS: £159.95**  
**SAVE: £100**  
**£59.95**

Also available: Evo2-Centre £119.95 (Was £249.95, Save £130)

**FLOORSTANDING SPEAKERS**

## EPOS M15.2

- Floorstanding version of Award-Winning M12.2, with superior bass extension
- Dark cherry or black real-wood veneer



**WAS: £699.95**  
**SAVE: £300**  
**£399.95**

**TUNER**

## NAD C422

- FM/AM reception
- 12 volt trigger and IR in for custom install setups
- Titanium finish



**WAS: £189.95**  
**SAVE: £10**  
**£79.95**

**AMPLIFIER**

## CREEK EVO AMP

- Remote control, 2 x 85 watts
- Overspecified toroidal transformer and numerous audiophile enhancements
- Silver finish



**WAS: £499.95**  
**SAVE: £200**  
**£299.95**

**DAB RADIO**

## PURE EVOKE 2

- DAB and FM reception
- Runs on mains or batteries
- Stereo speakers
- Real wood veneer
- B Grade – guaranteed for 12 months



**WAS: £159.95**  
**SAVE: £100**  
**£59.95**

**FURTHER OFFERS – EVEN MORE AVAILABLE IN-STORE**

Audiolab 8000AV/X7	£999.95	(Was £2499.95, Save £1500)
Denon AVR1707	£169.95	(Was £299.95, Save £130)
Pioneer BDPLX70	£699.95	(Was £999.95, Save £300)
Slim Slingbox	£99.95	(Was £179.95, Save £80)
Sony STRDG710	£199.95	(Was £249.95, Save £50)
Yamaha CRXMT70	£149.95	(Was £199.95, Save £50)
Yamaha YSTFSW100	£99.95	(Was £149.95, Save £50)
Yamaha YSP1100	£599.95	(Was £899.95, Save £300)

### FIVE REASONS TO CHOOSE SUPERFI

**Real Hi-Fi**  
Quality turntables, CD players, hi-fi amplifiers and speakers always in stock and available to demonstrate

**Latest technology**  
Hard disk, HD-DVD and Blu-Ray, MP3, DAB, PVR and multi-room products – all available to demonstrate

**Official UK models**  
Fully-guaranteed, genuine UK products

**0% credit available**  
Ask in-store for details and a quotation

**Free parking**  
See [www.superfi.co.uk/](http://www.superfi.co.uk/) freeparking for details

### STORES – EACH BRANCH OFFERS EXPERT DEMONSTRATION AND INSTALLATION

**Birmingham**  
67 Smallbrook, Queensway  
0121 631 2675

**Coventry**  
2 Corporation St  
024 7622 3254

**Derby**  
22 Sadler Gate  
01332 360303

**Lincoln**  
271a High Street  
01522 520265

**London**  
2-4 Camden High St  
020 7388 1300

**Manchester**  
54 Fringe Street  
0161 835 1156

**Nottingham**  
15 Market Street  
0115 941 2137

**Stockport**  
68-70 Lower Hillgate  
0161 429 9080

**BUY ONLINE NOW**  
[WWW.SUPERFI.CO.UK](http://WWW.SUPERFI.CO.UK)

# CABLES



## Wires to hook your system together



Hi-fi cables come in two varieties: interconnects and speaker cables.

Analogue interconnects come in preset lengths, generally with RCA (phono) plugs attached, though some equipment uses XLR connectors for balanced connection – this can be sonically advantageous, especially over longer runs. Speaker cable is commonly sold by the metre and can be used without plugs or can

be fitted with screw or solder-on types.

Choosing cables is not quite as straightforward as it might seem. One problem is that components interact with the cables you use and this often results in audible effects, but there are few cables that are fundamentally incompatible with any components, and we recommend the advice of a good dealer. In any case, you should look to spend as much as you can afford.

Digital cables come in two flavours: electrical and optical. In most instances electrical varieties sound better than optical, given the choice, but optical cables may be a better bet over long runs (10m+). Optical inputs/outputs usually use Toslink connectors, while most electrical types use RCA plugs, but some opt for BNC connection instead – check your components before you buy.

## Our favourite CABLES

BEST BUY  EDITOR'S CHOICE

### Interconnects and speaker cables

BADGE?	PRODUCT	£	COMMENTS	STRANDED	SOLID CORE	COPPER	SILVER	DIGITAL CABLE TYPE	SCALE NUMBER
<b>ANALOGUE INTERCONNECTS</b>									
<input checked="" type="checkbox"/>	Atlas Questor	70	Very open and informative at high and mid frequencies, with slightly dry bass. Imaging particularly fine						295
<input type="checkbox"/>	Audioquest Sidewinder	45	A lively and detailed cable, with fine tonality and excellent rhythm. Slight added upper-bass warmth does little to detract						297
<input type="checkbox"/>	Black Rhodium Prelude	80	Practical and sensibly priced all-rounder that seems happily compatible with a wide range of kit						293
<input type="checkbox"/>	Black Rhodium Coda	150	Superb bass and excellently neutral and detailed midrange: treble generally sweet with occasional slight constriction						299
<input checked="" type="checkbox"/>	Black Rhodium Concerto	225	This DCT cable from the Polar range gives a distinctively dark timbre, rich in detail, with low subjective noise						270
<input type="checkbox"/>	Cambridge Azur Reference	50	Performance wouldn't shame a cable at twice the price: especially adept in the treble with no trace of dryness						296
<input type="checkbox"/>	Clearer Audio Copper-Line Alpha	50	Sounding like something a good deal dearer, this cable offers near high-end detail and seems highly compatible too						295
<input type="checkbox"/>	Clearer Audio Silver-line	244	Complex, well-screened cable which offers good sound all round with exceptional bass – at a price!						279
<input checked="" type="checkbox"/>	CrystalCable Piccolo	260	Thin cable, but tougher than it looks, Piccolo has some qualities of a solid core type generally - notably resolution, focus and articulation						294
<input type="checkbox"/>	Ixos Ixotica IX1	200	Notable for its relaxing sound, this cable still presents plenty of analytical detail						283
<input type="checkbox"/>	Monster M350i	45	Few cables at this price reveal so much about the recording space. Clear treble, too						281
<input type="checkbox"/>	Monster M1000i	200	Very capable, with only a hint of bass dryness to set against excellent results elsewhere						284
<input checked="" type="checkbox"/>	Nordost Heimdall	370	Micro-monofilament cable, silver plated more affordable alternative to Valhalla, sounds transparent, detailed and neutral						278
<input type="checkbox"/>	Oehlbach NF214	63	The bass is a matter of taste, but suits many smaller speakers. Very good mid and treble						281
<input type="checkbox"/>	Profigold PGA3000	60	Not the ultimate for lovers of clinical precision, its character is engaging and detail and extension are good						299
<input checked="" type="checkbox"/>	Supra Sword-ISL	379	Unusual inductance-free design, beautifully built, with bold, finely detailed and outgoing sound quality and excellent discipline						292
<input type="checkbox"/>	TCI Tiger	30	Not the most detailed interconnect around, but performance belies its modest price, especially in the bass						285
<input checked="" type="checkbox"/>	Vanden Hul MC Silver IT MkIII	2,250	Incredibly resolute and low distortion cable that makes the alternatives sound crude, pity about the price						289
<input type="checkbox"/>	Wireworld Luna 5	30	Authoritative bass and clear treble outperform many cables at twice the price						273
<b>DIGITAL INTERCONNECTS</b>									
<input type="checkbox"/>	Atlas Compass	50	Slight improvement in detail over giveaway cables, plus distinctly more tuneful bass and more open treble, make this fine value					E	289
<input checked="" type="checkbox"/>	Clearer Audio Silver-line	125	Very satisfying performance with finely-etched detail and sweet treble					E	278
<input checked="" type="checkbox"/>	Kimber Select KS2020	629	Provides a subtle but rewarding lift in musicality with any DAC, justifying the price					E	260
<input checked="" type="checkbox"/>	QED Qunex Signature 75	80	First-rate balance and imaging – ever so nearly as good as it gets at any price					E	265
<input checked="" type="checkbox"/>	Wireworld Starlight 5	90	Clear gains in detail and imaging precision are this cable's main strengths: good value and near-high-end performance					E	279
<b>SPEAKER CABLES PRICE PER METRE</b>									
<input type="checkbox"/>	Atlas Hyper 1.5	10	Don't look to this cable to beef up the bass, but its performance at higher frequencies is revelatory at the price						299
<input checked="" type="checkbox"/>	Atlas Ascent 2.0	55	A highly analytical cable, with more bass extension than at first appears and very fine detail across the board						294
<input type="checkbox"/>	Chord Epic Twin	40	Good all rounder, which generally sounds relaxed and musical, and a full bass that stops the right side of sounding blowy						287
<input type="checkbox"/>	Kimber 8PR	12	A cable that really enjoys the music, also admirable for the levels of analytical detail it allows through. Excellent value						299
<input type="checkbox"/>	Kimber 8VS	18	Beautifully full, open and transparent sound right across the board						227
<input type="checkbox"/>	Monster MCX-1s	8	Notable for its bass, which is perhaps a touch overdone at times but could be a good foil to small speakers. Good mid and treble						280
<input checked="" type="checkbox"/>	Nordost Heimdall	162	Alternative to Valhalla, silver plated, micro-monofilament construction, low colouration, hi-res and suitable for exacting systems						278
<input type="checkbox"/>	QED Silver Anniversary XT	5.50	Full bass and nicely detailed treble combine with good imaging - a budget bargain						276
<input type="checkbox"/>	QED X-Tube XT300	10	A natural and well controlled sounding cable that's cost effective for mid-priced systems						234
<input checked="" type="checkbox"/>	Supra Sword	116	Zero inductance construction, medium resolution cable that has an excellent midband and is fundamentally musical						287
<input checked="" type="checkbox"/>	Townshend Isolda DCT	50	Cryogenically treated 'impedance matched' cable with stabilising components added: great sound all-round						241
<input type="checkbox"/>	van den Hul The Bridge	6	Better bass than treble, with good detail though a touch of constriction at times						291
<input type="checkbox"/>	Wireworld Luna 16/4	5	Budget biwire cable offering tuneful and extended bass, good treble, and midrange with just a little lack of detail						292

**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.

ATL™



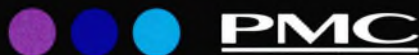
# SERIES IS COMING

DB1*/i* TB2*/i* GB1*/i* FB1*/i* OB1*/i*

The best has just got better



Ring your dealer



[www.pmc-speakers.com/i-series](http://www.pmc-speakers.com/i-series)

# SME

The way to play vinyl

Model 10A



Model 20/2A



Model 20/12A



Model 30/2A



Series M2



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.uk](mailto:sales@sme.ltd.uk) or visit our website [www.sme.ltd.uk](http://www.sme.ltd.uk)

Aberdeen	Sevenoaks S&V	01224 252797	London W5	Audio Venue	0208 567 8703
Ashford	Soundcraft	01233 624 441	Leeds	Audio Republic	0113 217 7294
Bath	Paul Green Hifi	01225 316197	Leeds	Sevenoaks S&V	01132 452775
Bournemouth	Sullans Hifi	01202 555 512	Maldstone	Home Media	01622 676703
Bristol	Sevenoaks S&V	0117 9743727	Maidenhead	Audio Venue	01628 633995
Cambridge	Audiophile	01223 368 305	Market Harborough	Divine Audio	01858 432999
Chester	Adventures in Hifi	01244 345576	Millon Keynes	Technosound	01908 604949
Edinburgh	Sevenoaks S&V	0131 229 7267	Norwich	Basically Sound & Vision	01362 820800
Gateshead	Linton Audio	0191 477 4167	New Malden	Unilet Sound & Vision	0208 942 9567
Glenrothes	Shadow Audio	0844 800 0073	Swansea	Audio Excellence	01792 474 608
Hatch End	Music Matters	0208 4201925	Worcester	Worcester Hifi	01905 612 929
Kingston	Infidelity	0208 9433530	Yeovil	Sevenoaks S&V	01935 700078
London SW11	Oranges & Lemons	0207 924 2040			

# STANDS AND SUPPORTS

## Equipment racks and speaker stands



If you want to get the most from your source and amp components, it's important to consider good quality support. Dedicated equipment supports are racks and tables made specifically to hold hi-fi gear, and the best can have a profoundly positive effect on sound

because, for example, they can help to isolate kit from ground-borne vibrations and mechanical or electrical interference. Equally, if you own a pair of small 'bookshelf' or 'standmount' speakers, it's important to place them on good quality, purpose-built speaker stands.

## Our favourite BEST BUY EDITOR'S CHOICE EQUIPMENT SUPPORTS

### Equipment supports

BADGE?	PRODUCT	£	COMMENTS
	Alphason A5-G	399	Nice looking, very solid and practical with a pretty well balanced sound, but lacks a little detail
	Atacama Equinox	280	Stable, modular design with style. Excellent bass transients and a fresh design concept
<span style="border: 1px solid black; padding: 0 2px;">EC</span>	Audiophile Base	615	Price is justified by its earth-shattering sonic abilities – a worthy upgrade
	Avid Isoschelf	1,100	An enthusiast's equipment support stand free from coloration, if a little fiddly to set up
<input type="checkbox"/>	Clearlight Audio Aspekt	650	Stunning neutrality and detail from a well-damped design. Its performance makes the price tag good value
	Custom Design Icon Signature	330	Gorgeous wood and glass looks: sound lacks a little detail but is nicely lively
	Custom Design XL4	380	Simple construction pays off in smart looks. Sound contribution is minimal and largely harmless
<span style="border: 1px solid black; padding: 0 2px;">BEST BUY</span>	Custom Design Icon 400	600	Beautifully built, conveniently adjustable and with little sound of its own, a very classy rack
<span style="border: 1px solid black; padding: 0 2px;">BEST BUY</span>	Custom Design Concept 400	700	Slightly drab looks, but great sound and efficient use of space ('Acoustic' version tested – standard version £300)
<span style="border: 1px solid black; padding: 0 2px;">BEST BUY</span>	Custom Design Vantige	449	'Acoustic Aluminium' shelves plus steel supports equal practicality plus musical satisfaction: just a shade bright
	Partington Minim	389	Looks good, sounds good and is impressively flexible to boot
	Quadraspire Q4 Reference	480	Excellent performance from the school of wobbly racks. Natural sounding and plenty of detail
	Russ Andrews Torlyte Rack	988	Attractive modular system made of very light Torlyte: a touch of added warmth is its only vice
<input type="checkbox"/>	Sound Organisation Z560	195	Excellent value rack, five shelves too! Well balanced and under 200 quid!
<span style="border: 1px solid black; padding: 0 2px;">EC</span>	Townshend VSSS	1,300	The Seismic Sink goes all glassy and attractive, yet retains the same excellent vibration-killing sound quality

SPECIFICATIONS					
HEIGHT (CM)	TOP PLATE SIZE (CM)	WELDED	NUMBER OF SHELVES	SHELF TYPE	ISSUE NUMBER
80	66,46		5	Glass	247
81	50,50	<input checked="" type="checkbox"/>	4	Glass	217
82	43		4	MDF	193
87.5	48		5	MDF	193
75	53,5,45		4	MDF	217
75	56,37		4	Glass	286
65	60,42		4	Glass	293
75	57, 41		5	Glass	263
74	48,40		4	Metal	247
62	49,44		4	Metal	271
75	45,36		5	Glass	261
51.5	49,39,5		4	MDF	217
68	54,49		4	Torlyte	240
92	50,40		5	Glass	217
76	35,50		4	Glass	273

## Our favourite BEST BUY EDITOR'S CHOICE SPEAKER STANDS

### Speaker stands

BADGE?	PRODUCT	£	COMMENTS
	Anvil Sound Display Stand	226	A variety of smart looks available - sound is clear and precise
<span style="border: 1px solid black; padding: 0 2px;">BEST BUY</span>	Custom Design RS300	110	An attractive stand whose lack coloration and ringing makes suits it to high resolution systems, at a tempting price
	Custom Design SQ402	100	More a range than a model, capable of fine results especially with Acoustic Steel top plates
<span style="border: 1px solid black; padding: 0 2px;">EC</span>	Custom Design SQ404	200	Robust four-pillar design gives very low coloration and maximises performance of speakers great and small
<span style="border: 1px solid black; padding: 0 2px;">BEST BUY</span>	Partington Ansa 60	99	Elegant flat-packer 'disappears' sonically; restrained but neutral and coherent
<span style="border: 1px solid black; padding: 0 2px;">EC</span>	Partington Dreadnought BS	249	The Dreadnought Broadside is a superb stand for high-class standmount speakers – and it looks great too!
<span style="border: 1px solid black; padding: 0 2px;">EC</span>	Partington Heavi II	399	Robust to the nth degree, this stand helps produce very taut, precise bass and detailed upper frequencies
<span style="border: 1px solid black; padding: 0 2px;">EC</span>	Russ Andrews Torlyte	299	Very relaxed sound from this metal-free design, with excellent imaging too

SPECIFICATIONS					
HEIGHT (CM)	TOP PLATE SIZE (CM)	FILLABLE	WELDED	NUMBER OF LEGS	ISSUE NUMBER
50	20,17	<input checked="" type="checkbox"/>		1	293
56	16,5,18	<input checked="" type="checkbox"/>		1	281
62	18,16,5	<input checked="" type="checkbox"/>		2	299
61	18,16,3	<input checked="" type="checkbox"/>		4	283
62	18,15	<input checked="" type="checkbox"/>		4	232
61	17,15	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	5	261
53	31,22	<input checked="" type="checkbox"/>		6	287
60,50	15,21			3	280

**EQUIPMENT SUPPORTS SPECS KEY** HEIGHT Of complete stand. TOP PLATE SIZE (CM) Width by depth of the supporting platform(s). Single figures indicate a square platform.

**WELDED** As opposed to bolt-together construction. **NUMBER OF SHELVES** To put your kit on (different configurations are often available). **SHELF TYPE** Material that shelves are made of.

**SPEAKER STANDS 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.

## Equipment Racks

www.standanddeliver.com



## Stand & Deliver

The Home Of Audio Visual Furniture

The UK's AV Furniture Superstore  
24 Hour Despatch

Plasma Stands  
LCD Stands  
TV Stands  
Hi-Fi Stands  
Speaker Stands



Customer Helpline  
0845 460 6006

www.standanddeliver.com

Equipment Racks



Music First

Zingali comes to London



Silver Arrow

Anniversary Series



Italy Series



Client Name

Graaf



Bel Canto



Check out our website for the full product range.

**audioboffs**

Home Demonstrations by appointment

Email: [info@audioboffs.co.uk](mailto:info@audioboffs.co.uk)  
[www.audioboffs.co.uk](http://www.audioboffs.co.uk)  
Tel: 020 8177 4095

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](http://www.Vickers-HiFi.co.uk)

**Specialists in high fidelity sound reproduction - since 1967**

- Atacama
- Audio Lab
- Audio Quest
- Castle
- Cyrus
- KEF
- Marantz
- Meridian
- Michell
- M. J. Acoustics
- Monitor Audio
- Mordaunt-Short
- NAD
- Nordost
- Origin Live
- Ortofon
- Pathos
- Pickering
- Primare
- Pro-Ac
- Project
- QUAD
- Roksan
- Shanling
- SME
- Stands Unique
- Sugden
- Tannoy
- TEAC
- Trichord
- Unison Research
- Van Don Hul
- Wharfedale
- Yamaha
- & Lots more...





Is this your problem? Here's your answer



loud    too loud    way too loud

It's a common problem. The usable range on the volume control is all down at the bottom end and fine control at low listening levels is either difficult or impossible. The noise floor may be audible, too. There is a simple and effective solution - the **Rothwell In-Line Attenuators**. They can be used with pre/power or integrated amps to cure the problems of excess gain and bring sonic benefits with even the most expensive equipment.



"this accessory is heartily recommended" Gramophone

£39/pair - post free  
01204 366133 [www.rothwellaudioproducts.co.uk](http://www.rothwellaudioproducts.co.uk)

Front End Problems?  
contact:

# The Cartridge Man

It doesn't have to cost an arm and leg to get the best  
- listen to my Koetsu - and - Decca - eater.  
Also agents for Croft, Moth, Hadcock & Mitchell & E.A.R, Graham Slee projects.  
Valve equipment re-build service available.  
- Plus cartridge re-tipping service

**020 8688 6565**  
Website: [www.thecartridgeman.com](http://www.thecartridgeman.com)

[www.hifichoice.co.uk](http://www.hifichoice.co.uk)



Outstanding music and video systems from a retail shop established for over 40 years.

Come and enjoy your favourite discs and a cup of coffee with our relaxed team.

Every brand we sell is chosen for its spectacular quality, performance and reliability.

## O'Brien Hi-Fi

60 Durham Road - London - SW20 0TW  
020 8946 1528 or [shop@obrienhifi.com](mailto:shop@obrienhifi.com)  
Tuesday to Saturday from 9am until 6pm  
[www.obrienhifi.com](http://www.obrienhifi.com)




Cornwall's Hi-Fi & Home Cinema Specialists



NAD Masters Available for demonstration  
**0870 458 4438**  
[www.audio-cinema.co.uk](http://www.audio-cinema.co.uk)

Callywith Gate Industrial Estate  
Launceston Road  
Bodmin  
Cornwall  
PL31 2RQ  
[marcus@audio-cinema.co.uk](mailto:marcus@audio-cinema.co.uk)

FOCAL JMLAB • PRIMARE • ESOTERIC • USHER • REVEL

# ORANGES & LEMONS



Hi-Fi, Home Cinema & Multi-room Specialists

**020 7924 2040**  
[www.oandlhifi.co.uk](http://www.oandlhifi.co.uk)  
61 Webbs Road, Battersea SW11 6RX  
email: [oranges.lemons@virgin.net](mailto:oranges.lemons@virgin.net)




# Analogue Seduction

where music is our passion



Analogue Seduction are dedicated towards two channel Hi-Fi, specialising in vinyl replay.

As well as our on-line shop we have dedicated demonstration retail facilities based in Peterborough, Cambridgeshire and we can offer our customers home demonstrations.

We stock the finest in amplification, analogue, digital replay and speakers. We also specialise in a cable termination and cable burn in service.

Please visit our website [www.analogueseduction.net](http://www.analogueseduction.net) to browse or purchase products that are not easily available elsewhere.

**New vinyl records now stocked**

**Tel: +44 (0)1733 344768**

## Hi Fi Separates are redundant!

AVI's ADM9 monitors are a complete Hi Fi System in one pair of Compact speakers.

They comprise: A high performance Burr-Brown DAC, a remote controlled two input preamp (one USB DAC and one Analogue), 4th order electronic crossovers and two high speed, linear, bipolar power Amps (250 and 100 watts) in a pair of 6.5" two-way Loudspeakers Measuring 31 x 20 x 26cms.

And there is an optional dedicated 10" Subwoofer if you need it!



ADM9s plug into the USB port of any computer to turn it into one of the best Hi Fi systems you will hear at a fraction of the cost of traditional separates.

The analogue input can be for TV or satellite sound.

You save money and space as well as getting much better Sound Quality.

**One day all Hi Fi systems will be built this way.**

Retail price: £1000 per pair.  
[www.avihifi.com](http://www.avihifi.com)

**REVOX SERVICE** **THE MANUFACTURERS' APPOINTED SERVICE COMPANY** **REVOX SERVICE**

Correct Revox Spare Parts Pricing  
24 Hour Estimation procedure  
Manufacturer Upgrades and Advice  
Delivery and Collection Service  
Comprehensive Guarantees

Factory Trained Engineers  
Rapid Response Turnaround  
Full Revox range serviced  
Written Technical Reports  
Late Evening Opening

**THE AR TECHNOLOGY LIMITED**  
TTL House, Sheeptick End, Near Lidlington, Bedfordshire, MK43 0SF  
Telephone 01525 841999 Facsimile 01525 841009

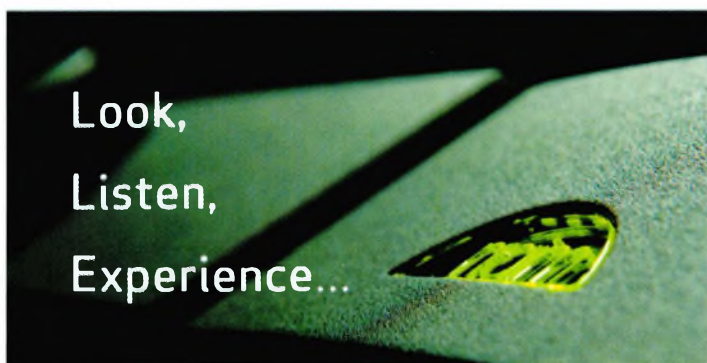
**IAN HARRISON HIFI**

Denon DL304 .....	£175
Denon DL103R .....	£169
Denon DL103 .....	£85
Denon DL160 .....	£80
Denon DL 110 .....	£69
Grado GS1000 .....	£845
Michell Tecnoarm (a) .....	£380
Trichord Diablo .....	£599
Transfiguration Spirit 3 .....	£800
Transfiguration Orpheus .....	£2335

All goods are brand new and fully guaranteed. Goods are not supplied on approval. Free UK delivery.

Details and prices from: Ian Harrison,  
7 Mill Hill, Repton, Derby DE65 6GQ, UK.  
Tel: 01283 702875 9am-9pm inc Sundays

To advertise here please call Ben Keightley on 0208 072 4262



Look,  
Listen,  
Experience...



**FREE SPEAKERS!**

The award winning Arcam Solo  
Now available with free Qacoustic speakers!








▶▶ [www.soundgallery.co.uk](http://www.soundgallery.co.uk)




65 Castle Street, High Wycombe, Bucks  
01494 531682

Offering you the very best in audio and visual system solutions.

- Two Channel Audio
- Multi Room
- Turntable Workshop
- Home Cinema
- Custom Installation
- System Set-up

...and others

Visit our showroom at:  
Calveley Court, Southburgh Road,  
Reymerston, Norfolk. NR9 4QD  
tel: 01362 820800  
email: [enquiries@basicallysound.co.uk](mailto:enquiries@basicallysound.co.uk)  
[www.basicallysound.co.uk](http://www.basicallysound.co.uk)

**BASICALLY SOUND AND VISION**

Bespoke Audio Visual Furniture from HI FI Racks Ltd



All our products are hand made from solid Hardwoods. No MDF. No Veneer. Just the best Hardwoods available  
We will manufacture any size of rack for any piece of equipment

[www.hifiracks.co.uk](http://www.hifiracks.co.uk)

01572 756447

[info@hifiracks.co.uk](mailto:info@hifiracks.co.uk)

# Rochester Hi-Fi

30 HIGH STREET, ROCHESTER, KENT, ME1 1LD - 01634 880037

## ORACLE AUDIO



## Raysonic®



UK DISTRIBUTOR FOR ALL RAYSONIC & ORACLE PRODUCTS.

ANATEK, ARCAM, ATACAMA, AUDIOPHILE BASE, AVI, CHORD COMPANY, CHORD ELECTRONICS, CLEARAUDIO, CREEK, DALI, EPOS, EUPEN, EXPOSURE, FOCAL JMLAB, GAMUT, GRAHAM SLEE, LAT, METRONOME, NORTHSTAR, NOTTINGHAM ANALOGUE, NU FORCE, OPTIMUM, ORIGIN LIVE, ORACLE, PARTINGTON, PROJECT, QUAD, QUADRASPIRE, RAYSONIC, RESOLUTION AUDIO, RENAISSANCE, TANNOY PRESTIGE, USHER.

### www.rochesterhi-fi.co.uk



### Rock Solid Sound Systems

Vivid Audio  
Audiostone  
Electrocompaniet  
Astintrew  
dCS  
VTL  
Verity Audio  
True Colours Industries

Shop Now Open...

www.rocksolidsounds.co.uk

atc  
creek  
arcam  
dynamvector  
epos  
focal  
grado  
infocus  
kudos  
lexicon  
lyra  
naim audio  
neat acoustics  
nottingham  
ortolon  
roksan  
sim2  
something solid  
stax  
sumiko  
trichord



what goes round,  
comes round

refreshing honesty, every time



hi-fi for grown-ups

ipswich (01473) 655171  
www.signals.uk.com

# MUSIC MATTERS

## HI-FI & HOME CINEMA

**New Store Now Open**

**10a Chapel Street  
Stratford-Upon-Avon  
Warwickshire CV37 6EP  
01789 414 533**

We offer custom installation of complete systems integrating hi-fi, home cinema, multi-room and lighting.

Home trials are available for many products.

### Our extensive range of products includes

- Arcam ● Apollo ● Anthony Gallo ● Atacama
- Atlas ● Base ● Bose available at SOLIHULL ● Bowers & Wilkins
- Rega and Nautilus Diamond available at EDGBASTON ● Chapter Audio ● Chord Company ● Chord Electronics ● Cyrus
- Denon ● Dream Vision ● Dynaudio ● Dynavector ● Epos ● Grado ● Infocus
- KEF ● Krell ● LAMM ● Marantz ● Meridian
- Michell ● Mission ● MJ Acoustics ● Monitor Audio ● Musical Fidelity ● NAD ● Naim
- Nordost ● Ortofon ● Panasonic ● Pioneer
- PMC ● Project ● Pure ● QED ● Quad
- REL ● Rotel ● Sennheiser ● Sim2
- SME ● Sonus Faber ● Tascam ● Teac
- Wharfedale ● Wilson Benesch ● Yamaha

OPEN TUES - SAT 10:00 - 5:30  
LATE NIGHT AT BIRMINGHAM AND  
SOLIHULL WEDNESDAY TIL 6.30PM

Interest free credit on selected items • 0% APR  
Written details on request • Licensed credit broker



[www.musicmatters.co.uk](http://www.musicmatters.co.uk)

- EDGBASTON  
363 Hagley Road,  
Birmingham B17 8DL  
0121 429 2811
- SOLIHULL  
93-95 Hobs Moat Road,  
West Midlands B92 8JL  
0121 742 0254
- STOURBRIDGE  
9 Market Street,  
West Midlands DY8 1AB  
01384 444 184
- SUTTON COLDFIELD  
10 Boldmere Road,  
West Midlands B73 5TD  
0121 354 2311
- HATCH END  
344 Uxbridge Road,  
Pinner, Middlesex  
HA5 4HR  
020 8420 1925
- DARLINGTON  
17 Comscliffe Road  
County Durham DL3 7EE  
01325 481 418



**marantz**

**PREMIUM**

because music matters



Sound Hi Fi

**USHER**



Usher Class A



Usher Be-718

Usher, Marantz, Goldring, Audio Technica OC9, Acoustic Solid, NuForce, Black Rhodium,  
Graham Slee, Haddock, Clearaudio, 78rpm reproduction, QED, Timestep, DC and much more.

All demonstrated in a relaxing setting with river views! Very high part exchanges & mail order.

Sound Hi Fi Dartmouth Devon 01803 833366 web [www.SoundHiFi.com](http://www.SoundHiFi.com)

## NOTE PRODUCTS PhoNote



The PhoNote is a purist valve phono stage hand crafted entirely in the UK, with every aspect of the design carefully selected to produce the finest performance possible.

It uses an all triode valve audio circuit with short signal paths, low output impedance and no global feedback, which is fed from a very high quality power supply. All of this is housed in an Aluminium case with internal divisions shielding the power supply from the audio circuitry.

Hi-Fi World 5 globe review "Near faultless phonostage with glorious soundstaging, tremendous textural acuity and wonderful musicality."

The PhoNote is available as either a MM version for £1,500 or MC for £1,750 and is available exclusively from Noteworthy Audio.

[www.noteproducts.com](http://www.noteproducts.com)



## NOTEWORTHY AUDIO

hi-fi by enthusiasts

BELOW IS A SMALL SELECTION FROM OUR RANGE OF CAREFULLY CHOSEN EQUIPMENT

**Audio Note lo 1 MC cartridge.** Surely one of the best cartridges in existence, the lo uses Alnico magnets and pure silver coils to extract everything from your LP's in the most musical way possible. £1,850.

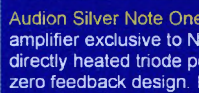


**CEC TL-51X** this top loading transport is something rather special. Its novel design uses a belt drive (rather than the more common direct drive) to spin the disc. It produces a sound which is incredibly effortless, with tremendous resolution of space and is intensely musical for just £1,200.

The **Something Solid XR** has become our reference equipment support, its novel use of balsa end grain shelves and tensioned shelf suspension give it a neutral presentation that lets equipment perform without added artifice. 4 tier version available from £600. EXR 'Economy' version also available from just £300.



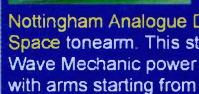
**Consonance Linear CD players** start from just £695 and use a filterless design to produce some of the most enjoyable results from CD imaginable. The CD2.2 Reference linear pictured left features a valve output stage and costs £1,395.



**Audion Silver Note One** This is a specially commissioned amplifier exclusive to Noteworthy Audio. It uses a single 2A3 directly heated triode per channel in an ultra purist single ended zero feedback design. It produces 3.7 of the finest watts Available. If you have high efficiency speakers the we think you really need to hear this remarkable amplifier! £2,500.



**Music first Audio TVC pre amplifier** Instead of using resistors to control the volume, a TVC uses stepped transformers. Incredible transparency without any of the dynamic compression found in conventional passive preamplifiers. Copper wired version: £1,600. All silver wired: £2,750.



**Nottingham Analogue Dais** turntable pictured right with 12" Ace Space tonearm. This stunning heavy weight turntable comes with Wave Mechanic power supply. It costs £3,520 excluding tonearm, with arms starting from £587 for a 9" and £710 for a 12" version.



**Noteworthy Audio**

36 Buckingham Street, Aylesbury, Bucks, HP20 2LH. Tel: 01296 422224  
[www.noteworthyaudio.co.uk](http://www.noteworthyaudio.co.uk)



**SOUTH EAST**

**ASTLEY AUDIO LTD**  
3 Marketplace,  
Wallingford,  
Oxfordshire  
OX10 0EG  
☎ 01491 839305

**GREATER LONDON**

**GRAHAMS HI-FI**  
Canonbury Yard,  
190a New North Road,  
London N1  
☎ 020 7226 5500  
🌐 www.grahams.co.uk

**BADA**

**INFIDELITY**

9 High Street,  
Kingston-upon-Thames,  
Surrey, KT1 4DA.  
☎ 020 8943 3530  
🌐 www.infidelity.co.uk

**BADA**

**SOUTH WEST**

**AUDIO AND CINEMA**  
Callywith Gate Industrial Estate,  
Launceston Road,  
Bodmin, Cornwall  
PL31 2RQ  
☎ 0870 458 4438  
🌐 www.audio-cinema.co.uk

**MIKE MANNING AUDIO**

110 Middle Street,  
Yeovil, Somerset  
BA20 1NE  
☎ 01935 479361  
🌐 www.mikemanningaudio.com

**MIKE MANNING AUDIO**

54 Bridge Street,  
Taunton, Somerset  
TA1 1UD  
☎ Tel: 01823 326688  
🌐 www.mikemanningaudio.com

**THE RIGHT NOTE**

56 High Street,  
Saltford,  
Bristol  
BS31 3EJ  
☎ Tel: 01225 874728  
🌐 www.loissoftware.co.uk/rightnote/home.asp

**EAST**

**AUDIO IMAGES**  
128 London Road North,  
Lowestoft, Suffolk  
NR32 1HB  
☎ 01502 582853  
🌐 www.audioimages-hifi.com

**AUDIOBOFFS**

338 Shenley Road,  
Borehamwood,  
Herts WD 1 TP  
☎ 020 8177 4095  
🌐 www.audioboffs.co.uk

**EAST MIDLANDS**

**ACOUSTICA**  
114 Wolverhampton Road,  
Stafford, Staffordshire  
ST17 4AH  
☎ 01785 258216  
🌐 www.acoustica.co.uk

**DIVINE AUDIO**

The Courtyard,  
Bennett's Place,  
High Street,  
Market Harborough,  
Leicestershire  
LE16 7NL  
☎ 01858 432999  
🌐 www.divineaudio.co.uk

**NOTTINGHAM HI-FI CENTRE**

**BADA**

120-122 Afreton Road,  
Nottingham,  
Nottinghamshire  
NG7 3NR  
☎ 0115 9786919  
🌐 www.nottinghamhifi.co.uk

**WEST MIDLANDS**

**CREATIVE AUDIO**  
9 Dogpole,  
Shrewsbury,  
Shropshire SY1 1EN  
☎ 01743 236055  
🌐 www.creative-audio.co.uk

**SOUND CINERGY**

37 High Street  
Aldridge  
WS9 8NL  
☎ 01922 457 926  
🌐 www.soundcinergy.co.uk

**NORTH WEST**

**ACOUSTICA LTD**  
17 Hoole Road,  
Chester, Cheshire  
CH2 3NH  
☎ 01244 344227  
🌐 www.acoustica.co.uk

**AUDIO COUNSEL**

26 High Street, Cheadle,  
Cheshire SK8 1AL  
☎ 0161 491 6090  
🌐 www.audio-counsel.co.uk

**BADA**

**DOUG BRADY HI-FI**

Kingsway Studios,  
15a Kingsway North,  
Warrington,  
Cheshire WA1 3NU  
☎ 01925 828009  
🌐 www.dougbradyhifi.com

**SYNERGY AV HI-FI**

12a West St,  
Congleton,  
Cheshire  
CW12 3JB  
☎ Tel: 01260 280017  
🌐 www.synergyav.co.uk

**WALES**

**ACTON GATE AUDIO**  
4 Ruabon Rd, Wrexham,  
Clwyd LL13 7PB  
☎ 01978 364500  
🌐 www.acton-gate-audio.co.uk

**TO ADVERTISE IN THE  
HI-FI CHOICE  
DEALER DIRECTORY,  
PLEASE CONTACT  
YEMI WILLIAMS  
+44 (0) 20 70424252  
ywilliams@futurenet.co.uk**

# 2nd-hand shootout

£1,500 buys a lot of CD player – if you know where to look

This month, we have a budget of £1,500, and a choice of four second-hand CD players that are a little out of the ordinary. You won't find any big brand names here, but all are more than capable in their own quiet way.

Kicking off the quartet is the home-grown Sugden Masterclass CD player. Sugden, by its own admission, prefers to keep a low profile in the UK with its Masterclass series. This is hardly surprising given that the company exports 95 per cent of its product.

Although still available in MK2 form, the Masterclass CD player was first launched in 1998 and sold for around £2,750. It only recently finished production in 2006, and so a later model should fall rather nicely within our budget limitations.

The Masterclass uses a Philips transport. This appears to have been a wise choice, as the factory has only had to replace two laser mechanisms in eight years. Sugden also keeps a stockpile of spare parts for its digital components dating back to 1989, which makes the Masterclass a sound second-hand buy. The warranty is not transferable however, so it's advisable to buy from a reputable dealer for complete piece of mind. Sound quality is typically Sugden – unforced, expressive and highly involving – and in stark contrast to some of the local competition.

Next up is the Copland CDA823. This Danish player is probably the best-known model in this month's line-up and makes a perfect ex-demo/nearly new purchase. The brand is well supported by distributor Absolute Sounds and you shouldn't have to travel too far to find a dealer with stock.

Rather like the Sugden, the £2,100 CDA823 is an effortless player that can stretch itself across a wide dynamic range with little apparent strain. One aspect

that we particularly like about this player is the potential for future firmware upgrades, due to the use of flash programmable microprocessors. If you're looking for a CD player that will last the distance, then a CDA823 is probably the best choice.

Moving down the continent to Germany, our next contender is the Audionet ART V2. In the past, German hi-fi products have often sounded a little too clinical for UK ears, but the ART V2 couldn't be more different. The sound is every bit as precise as you'd expect from a company that has its origins in medical equipment. But the ART V2 is also musical and seamless in its presentation. It also happens to have a very solid bass; no doubt helped, in part, by the 10kg slab of granite that forms its base.

Like the CDA823, the ART (Aligned Resonance Transport) V2 is still a current model and therefore not too hard to come by. Costing as much as £2,500 when new,

**“...an effortless player that can stretch itself across a wide dynamic range.”**

two-year old models sell for around £1,000. Our budget is sufficient for a six month old model. And that's a saving you'd be unlikely to find with a similarly equipped Naim, Linn or a Meridian player.

Like the Copland, the ART is well supported and there's no problem obtaining spares. Just make sure that the transport's puck is in place, and that there's no damage to the granite. Any cracks or chips will be an indication that the player has received a pretty hefty knock at some point in its life.

Our final player is the Simaudio Moon Eclipse. This striking CD player from Canada

first saw the light of day in 2000. Costing a pricey £4,200, it quickly established



Above: Simaudio's Moon Eclipse

this little-known brand as a force to be reckoned with. And if you find the other CD players featured above a little laid-back, then this is the model for you. With thunderous dynamics and an undeniably forward sound quality, the Moon Eclipse offers a thrilling listen. When buying Moon second-hand, you need to be aware of the unit's age. Earlier models played HDCD discs, unlike post spring 2003-models, but later kit did benefit from the superior CDMPRO2 mechanism. Do make sure this mechanism is in good order, though, as a

replacement will set you back as much as £450, or £750 (including conversion) for an earlier model.

And look for a model with the serial number prefix 'E' or later, as this is when current UK distributors Redline took over distribution and will therefore know its history. They also told us that the centre pins for the disc puck are easily broken off if not carefully handled so, once again, do check this area of the player.

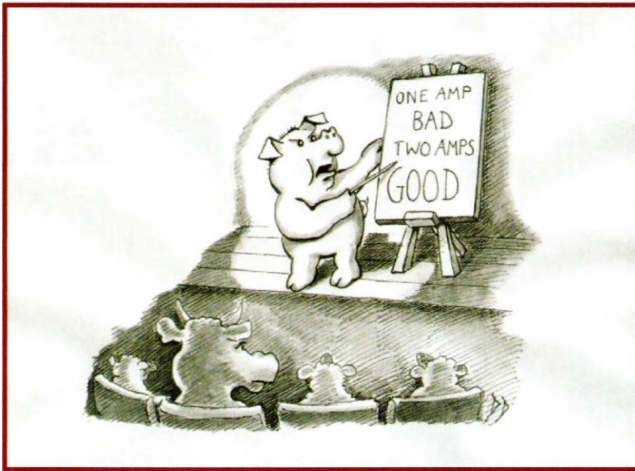
All four players make an excellent case for choosing something less mainstream. All models offer a sound quality with near-esoteric potential. The savings to be had on the ART V2 are exceptional and the Copland is a classic ex-demo choice. For excitement choose the Eclipse, for smoothness the Sugden. Regardless, you'll be the owner of something special. **HFC**

Dominic Todd  
Next month: DACs



Above: Sugden's Masterclass CD player

## Run by professionals – for professionals



**Don't worry, we take our business and our customers very seriously, but at the same time we ensure choosing the right product/system is fun...**

**Customers love the attention, commitment and service they receive from Guildford Audio. Why not call us to find out what you have been missing until now?**



SPECIALIST HI-FI BRANDS INCLUDE

Astintrew	Pathos
Audio Analogue	Prima Luna
Audio Research	Resolution Audio
Copland	Roksan
Crystal Cable	Shanling
Dream Vision	SME
Final	Sonus Faber
Focal Jmlab	Stands Unique
Gamut	Stax
Grado	Sterling Broadcast
Isophon	Stratton Furniture
Isotek	Sugden
Jadis	Sunfire
Koetsu	Theta
Krell	Transparent
Lavardin	Unison Research
Leema Acoustics	Velodyne
Martin Logan	Wadia
Mimetism	Wilson Audio
Music First Audio	Yter
Nordost	and
Opera	many more...

**Wishing our Customers, Distributors & Manufacturers  
a very Happy Christmas & New Year!**

# MIDLAND AUDIO XCHANGE

The Old Chapel  
Forge Lane  
Belbroughton  
Worcestershire  
DY9 9TD

t. 01562 731100  
f. 01562 730228

e-mail. [sales@midlandaudiox-change.co.uk](mailto:sales@midlandaudiox-change.co.uk)  
web . [www.midlandaudiox-change.co.uk](http://www.midlandaudiox-change.co.uk)



## Ex-demo and second hand items

Digital	Was	Now			
47 labs Dumpty S/H	1425	899	Martin Logan Fresco x-demo	850	635
47 Labs Flatfish MKII Transport S/H	3020	1995	Martin Logan Grotto Subwoofer x-demo	999	749
Audio Synthesis DAX Decade Balanced S/H	3600	1399	Monitor Audio Radius 360 Subwoofer Cherry S/H	350	249
dCS Verdi Encore Transport BNIB	9500	5999	ProAc D25 Maple Floorstanders S/H	2700	1599
Krell Showcase DVD x-demo	3698	2775	Pen Audio Charm Active Subwoofer x-demo	1995	999
Krell SACD Standard 5.2 x-demo	3998	2999	Pen Audio Rebel 2 x-demo	995	699
Linn Karik/Numerik S/H	1500	449	Rel Acoustics Studio III Subwoofer x-demo	4500	2995
Nagara DAC x-demo	7250	3999	Sonus faber Concerto Domus x-demo	1799	1350
Naim Audio CD3 S/H	N/A	399	Sonus faber wall domus x-demo	787	590
Orelle CD100EVO S/H	1500	975	Sonus faber Centre domus inc stand x-demo	986	739
Rotel RDC 865 CD Player S/H	N/A	99	Sonus faber Gravis Domus subwoofer x-demo	1290	959
Sugden CD21SE CD Player S/H	1499	1099	Sonus faber Cremona Maple x-demo	5000	3999
Theta Generation V Balanced S/H	6290	1299	Spendor S3 Cherry S/H	599	379
Theta Pro Basic II DAC with Oscom/Balanced S/H	2990	695	Tsunami TS300 Beech Subwoofer S/H	299	169
Wadia 270/271X Transport & DAC x-demo	16000	9499	Velodyne DD12 Subwoofer S/H	2350	1399
			Wilson Audio System5 Black S/H	18000	5499

### Analogue

Heed Audio Orbit TT PSU New & Boxed	225	179
Benz Micro Refill Silver MC Cartridge S/H	1500	749
Clearaudio Signature MC x-demo	1500	699
Mc Cormack Micro Drive Phono Stage S/H	650	399
Phonomena BPS Battery supply for phono BINB	650	399
Phonomena Photo stage MM/MC BINB	650	399
Rega P5/Elys x-demo	772	579
Roksan Xerxes X with XX bearing & plinth x-demo	1795	1325
Sugden Stage 2 MM/MC phono stage x-demo	399	299
Tesseract Taada MM/MC Phono stage S/H	N/A	499
Vdh Grasshopper GLAll MC Cartridge x-demo	2500	1699
Vdh MCOne Special BNIB	950	649
VPI HR-X Turntable x-demo	9250	6999

### Preamplifiers

Audio Analogue Bellini Remote Preamplifier X-demo	625	399
Audio Research SP16 with Phono Stage x-demo	2249	1749
Conrad Johnson Premier 18LS x-demo	4000	1999
ECS Preamplifier S/H	5000	3999
Krell Showcase Processor X-demo	4495	3370
Krell KRC3 Series II Remote Controlled Preamplifier S/H	2998	1695
Meridian 501 Preamplifier S/H	N/A	399
Musical Fidelity X P100 Preamplifier S/H	899	499
Nagra PLP Battery Phono Stage x-demo	7250	4999
Orange MKII Ltd Ed Valve Preamplifier with Phono Stage S/H2500	1299	1299
Prima Luna Prologue 3 Preamplifier x-demo	1099	899
Roksan L1.5 Preamp (requires PSU) S/H	2299	995
Roksan L1.5 Preamplifier (requires PSU) S/H	2699	1299
Spectral DMC 30s Reference Preamplifier S/H	7600	3795

### Amplifiers

47 Laboratory Shigaraki Intergrated x-demo	1500	1299
Audio Research VM220 Valve mono Amplifiers x-demo	9000	7499
Audio Research VS55 Stereo Power Amplifier S/H	2500	1499
Audio Research VT60 Stereo Power Amplifier S/H	1995	795
Conrad Johnson MV60 SE Valve Amplifier x-demo	2500	1895
Krell KAV400xi Black x-demo	2498	2199
Krell Showcase 5 multichannel Power x-demo	4999	3750
Leben CS-200 Power Amplifier x-demo	1800	1350
McCormack DNA125 Power Amplifiers BNIB	2195	1499
Meridan555 Poweramplifier S/H	N/A	399
Nagra MPA RCMI x-demo	10450	7999
Pathos Model 1 MKII x-demo	1295	975
Prima Luna Prologue 1 x-demo	899	699
Prima Luna Prologue 2 x-demo	1198	950
Prima Luna Prologue 4 x-demo	799	625
Prima Luna Prologue 5 x-demo	1099	899
Primare A31 x-demo	1500	1125
Veritas P400 Digital Amplifier S/H	N/A	1199

### Loudspeakers

JM lab Alto Utopia be Signature S/H	11399	6499
JM Lab Micro Utopia be Classic x-demo	4700	3750
Living Voice Avatar OBXR2 Cherry x-demo	4400	3599
Martin Logan Aeon I Oak x-demo	3189	1999

### Cables and Accessories

Audio Note AN-SPA Silver 2x1.5B1 wired Speaker Cables S/H	630	299
Audio Note AN-1 digital RCA cable S/H	N/A	99
Audioquest 1.5m Topaz RCA-RCA S/H	N/A	99
Cardas Cross 2M RCA-RCA S/H	590	399
Cogan Hall Intermezzo EMD 0.75m RCA S/H	N/A	99
Hovland HPC 1m RCA Interconnects S/H	749	250
Finite Elemente HD12 MR 3 tier table Black x-demo	4400	2999
Isotek Sigmas Euro Version x-demo	995	745
Madrigal MDC2 1m RCA/RCA 75ohm Digital Cable new boxed	420	249
Nordost Baldur 5m pair bi wired Speaker cable x-demo	1265	999
Shun Mook 1pr Spatial Controller x-demo	450	229
Shun Mook Ultra Diamond Resonators set of 3 x-demo	710	399
Sonic Link 1.4m Gold mains cable S/H	N/A	59
Spectral MI-330 10ft Interconnect RCA-RCA S/H	650	299
Spectral MH-750 8ft Speaker cable S/H	900	399
Spectral MI=330 15ft interconnect S/H	1257	599
Vdh CD102 MKIII 1.5 S/H	199	99
Wireworld Equinox 2.2.5m Biwire S/H	1299	399

### Tuners & Tape decks, power supplies

Arcam Delta 80 LW/MW/FM preset Tuner S/H	399	169
Cymbol CDAB Tuners S/H	1200	599
Isotek Sigmas x-demo	995	745
Isotek Substation special version S/H	1600	695
Magnum Dynlab FTR remote/Tuner for Etude S/H	395	199
PS Audio PS300 with multiwave S/H	1750	799
Rotel RT850L AM/FM Tuner S/H	189	99

### Suppliers and installers of High Quality Audio Systems

- 47 Laboratory • Living Voice
- ATC • Lyra
- Audio Research • Magnum Dynlab
- Cardas • Mark Levinson
- Clearaudio • Martin Logan
- Conrad Johnson • Mimetism
- Copland • Nordost
- Crystal Cables • Primaluna
- Dartzeel • Primare
- dCS • ProAc
- Densen • Rega
- DNM/Reson • Siltech
- Electrocompaniet • Sonus Faber
- Finite Elemente • Sugden
- Jadis • TransparentAudio
- Koetsu • VPI
- Krell • Wadia
- Kuzma • Weg3
- Lavardin • WilsonAudio



# READER CLASSIFIED

Welcome to *Hi-Fi Choice Reader Classified*, the UK's first and best free private ads service for second hand hi-fi. These pages a must-read if you're thinking about buying used kit, and if you want to sell something it's definitely the place to be. It's free to place an advertisement – simply submit your ad of up to 30 words,

remembering to include your name, phone number and home town or county. The simplest way to send your ad is via email – send to: [hificlassifieds@futurenet.co.uk](mailto:hificlassifieds@futurenet.co.uk). Or mail to: **Reader Classified, Hi-Fi Choice, Future Publishing, 2 Balcombe Street, London NW1 6NW**. Please note that this service is open to private advertisers only.

## FOR SALE

**ARCAM FMJ SYSTEM**, CD, amp, poweramp, Castle Inversion 100 large floorstanders. High quality cables, accessories, rack. True high end sound, excellent condition, £2,595. Tel 01923 662295 (West Herts).

**ATACAMA EQUINOX HI-FI** four-shelf rack in silver. Five star award winner. Excellent sound, £200. Also legendary Marantz CD-63 KI Signature in black, £250. NAD 422 FM-only tuner. Great sound, £100. 020 8684 1274 (Surrey).

**ATC SCM 19** speakers, £1,050 (£1,499.) Jas Audio super tweeters £350 (£650). Both only three months old (mint and boxed). 01225 429170 (Bath)

**AUDIO ANALOGUE** Bellini/Donizetti pre/power amps, silver, £400. Marantz CD63KI Signature CD player, £225. All boxed with manuals. Owned from new. Call Steve 07802 483911 or [mcdonaldslawther@ricsonline.net](mailto:mcdonaldslawther@ricsonline.net) (West London)

**AUDIOLAB 8000A** amplifier, £150. Cable Talk 3.1 bi-wire speaker cable, 2x3m, £15. Chord speaker cable, 2x2m, £10. 07964 660214 (Birmingham).

**AUDIOLAB 8000A** amplifier, black 60wpc boxed, with manual, £150. Creek T40 (FM only) tuner also boxed with manual, £25. 01268 637490 (Essex).

**AUDIO NOTE ZERO** valve pre/power and CD system. Huge soundstage, rarely available, one year use, recent service, mint condition, boxed (£3,000) £1,600. 01992 300713 (Herts).

**B&W AV 7.1** speaker package (no sub). 703 main speakers, HTM 7 centre speaker in cherry finish. DS 7 dipole rear speakers in white finish (two pairs).

Main speakers used once, others unused. All boxed etc; cost today £4300, sell for £2,000 no offers. 07859 388167

**B&W CM4** Maple, excellent condition, owned from new, orig box £400. Matching CMC Maple, second owner, no box, also great condition, £150. 07803 034 578 or email [richard@worklogic.co.uk](mailto:richard@worklogic.co.uk) (Bedford)

**COPLAND CDA 823** CD player and Copland CTA 405 valve amp. Both mint condition, as new. (£4,250) £3,000 plus postage.

Cannot split. Please email [alan395shona@btinternet.com](mailto:alan395shona@btinternet.com)

**DALI IKON2** speakers, walnut, mint and boxed (can demo). Mission stance stands, black, mint. Both with warranty until August 2008, £280, bargain! Steve 07952 688661 (Derby).

**DELTEC** DPA 50S power amplifier plus special cables, £350 ono. Creek 4040 amp, £50. Pioneer PL12D record deck, £40, Technics SUV-900 amp, £130. 01708 457691 (Essex)

**DENON** DRM-710 cassette deck, three head system. Dolby B/C/HX-Pro, many features, can demo, super recording performance, in black, mint condition, £200. 07703 537210 (E. Sussex)

**DYNAUDIO AUDIENCE 42** wall speakers in white finish, as new condition. Cost £455, accept £195. 07729 600847 (W Sussex).

**FANFARE FT1** Legendary Reference Quality FM tuner with balanced and unbalanced outputs. Complete with remote control and manual, £350. [needs@bbsrc.ac.uk](mailto:needs@bbsrc.ac.uk). Tel 01603 440405 after 7pm (Norfolk).

**FOCAL JM-LAB MICRO** Utopia Be. Mint, manual, inc stands, £1,750 07968 189647 (London)

**JEFF ROWLAND COHERENCE** One preamp with two Model 3 Mono power amps. 100W into 8 ohms, with manuals. £3,250 may split. 01255 421589 (Essex)

**ICON AUDIO** integrated amplifier 300B, remote, used one week, (£1,600), £1000. Magnum Dynalab MD308B integrated remote amp, 18 months old, (£2,200) £1,200. 01803 523553 (Devon)

**KALIN KN-7** preamp (valve), Rotel RB-03 power amp. Both mint, less than year old, £495 pair. 01252 659058 (Surrey).

**KEF IQ5** floorstanders, maple, mint and boxed, £200. 01473 410025 (Suffolk)

**KLIPSCH RF-82** floorstanding speakers, cherry, mint condition. One yr old w/manual, rare find in Britain. Clean and powerful sound. (£920) £600ono. 07806 434683 (Glasgow).

**KRELL DVD STANDARD/HTS** Processor/Theatre Amplifier Standard. All silver, immaculate, boxed, papers etc. UK supplied (Pinewood). (£27,000) £12,000. Won't split. Call Roger 07801 287409 (London). ▣

## WANTED

**ALL QUALITY** separates and complete systems – Naim, Linn, Cyrus, Meridian, B&W etc. Friendly response, willing to travel and cash paid. Call John on: 07815 892458

**B&W DM303** speakers in good condition. 01689 818166 (Bromley).

**CELESTION** SL6, 600 or 100 loudspeakers, working, good condition, unmarked preferred, good price paid, private buyer, will collect. 01946 862815 (Cumbria)

**COPLAND** CSA 28 integrated amplifier. 01260 295804 (Cheshire).

**DECCA LONDON** international arm, metal headshell version with side entry cable connection. Tel 01749 676174 or e-mail: [roy.cole@connectfree.co.uk](mailto:roy.cole@connectfree.co.uk) (Wells).

**PIONEER A300R** precision amplifier. 1970's Sugden A21a Onyx AO21, Naim Nait amp. Inca Tech Claymore. Sonneteer Champion amp. 07810 103908 (West Yorkshire)

**SD ACOUSTICS SD2** speakers (must be SD2) any condition considered. Contact marc 01642 864314 or email [telliott30@ntlworld.com](mailto:telliott30@ntlworld.com)

## BUYING TIPS

Buying second-hand can be a great way to pick up a bargain. A formerly expensive second-hand component might well prove a better long-term bet than a brand-new product if the price is right.

Do some research on which brands have a good service back-up, so if something does go wrong, you can get it fixed. Unless you purchase from a dealer, you're unlikely to get any warranty, so it's up to you to ensure the fitness of any gear that you buy.

Usually, speakers should be less prone to breakdown than amps, and amps should be more reliable than CD players. But any abused component could be trouble – have a proper dem, and judge the seller as well as the goods!

**FOR SALE**

❑ **KRELL FPB300CX** in mint condition (unused) out of the box for taking photo. £5,950 plus shipping. For more details and offers send an email to erezvi@barak.net.il (Israel)

**MARANTZ SR8001** receiver 7X125 watts, £695. Marantz DV7001 DVD player, £395. Marantz SA-7S1 CD/SACD player £3,950. Yamaha 759SE AV amplifier £175, all mint. 020 8951 3178 (Middx)

**MERIDIAN 200 TRANSPORT** with Trichord clock upgrade. Excellent condition. Manual and remote. Collectable. £150ono. 01494 727504 (South Bucks)

**MICHELL ISO**/Hera phono stage (separate power supply) for MC cartridges. Pristine condition. Cost £895 in 1998, not used since 2000. £100ono. Call 01359 259152 (Suffolk).

**MODIFIED THORENS TD150** turntable, Linn armobard, P+C Rega RB300 arm, Denon 110 high output MC cartridge, £250. Various amp, tuners and speaker cables 07956 438044 (Kent)

**NAIM NAIT 51** amplifier, Naim CD5i CD player, Totem Mite Monitor speakers in maple, mint, boxed, (£2,220) accept £1,400 01781 533054 (Swansea)

**NAIM TO IPOD/MP3** Interconnect. Neutrik five-pin 180 degree DIN to 3.5mm Minijack. OFC Copper with 100% foil screen. £9.99+postage. email johndavidedwards@hotmail.com Tel 07733 441087 (Manchester).

**QED SILVER ANNIVERSARY** biwire speaker cable, 3 metre pair with bananas £45 (£90). Mint. Lee 01384 412234 (West Midlands)

**QUAD 33, 303, FM3** system, 33 for spares, £275. Inca Tech Claymore II, £125. NAD 4155 tuner, boxed £50. Denon TU-260L II tuner, boxed, £60. Leak Troughline Chassis, £75. 07956 438044 (Kent).

**QUAD ESL988** electrostatics, black finish, three years old, superb sound, major improvement over ESL63's, manual + spikes provided, (£4,000) £1,700. For demo ring 01453 544354 (Gloucs).

**ROGERS LS3/ 5a** loudspeakers, 11 ohm (domestic) version, walnut finish, good condition, no boxes or manuals, £350ono. 01323 723292 (E Sussex)

**ROTEL RB-1090** power amp, 2x380 Watts @ 8 Ohms, Rotels flagship and best power amp. Mint, boxed, one owner from new, £825. 07979 903989 (Bristol)

**RUARK SABRE III** speakers, rich walnut finish, boxed, as new. HFC and WHF Best Buy. Lively and detailed, can demonstrate, £600. 01970 615386 (Wales)

**SHANLING CDT-300** 3Dsonics, £2,350. Transparent Music Link Super 1.5m RCA interconnects, £345. Vertex Kinabula, £190. Excellent condition. All 'ono'. 07810 434589 (Glasgow).

**SHANLING CDT 80** valve CD player, mint condition, lovely warm sound, 18 months old. Cost £650, bargain, £325ono. Contact Rich 07751 537148 (Oxon).

**TEAC A450** cassette deck. Very rare, never used, still in box. Battleship build quality. Offers over £250. 0161 865 9607 (Manchester)

**STD 305M** turntable, Mission 774 arm, Lentek Entre 1 MC cartridge. Meridian 101MC pre, 103D power. KEF 105 Ref speakers. Denon DRM 600 cassette. Sony DVP NS330 DVD/CD player. All good condition. Offers.

Phone Bill 02088 660 9694 (South Croydon).

**SUGDEN BIJOU CDMASTER** CD player, Headmaster preamp, Musicmaster Class A power amp, careful use and excellent condition, half cost price at £1,600 for the complete system. Stunning sound and look. 09794 099635

**TRICHORD DINO** Dino+ power chord, £495. Three Leak TL12+, £275 each. Quad IIs and pre, £600. Mitsubishi LT 5V parallel tracking upright turntable, £250. 01597 825018 (Powys).

**TRICHORD NC PSU** and high performance interconnect. Designed for Diabolo but suits Dino as well. Superb sound. C/w Russ Andrews mains lead, (£680) £300 01384 394441 (West Midlands)

**TRIO 3X SYSTEM** (turntable, tuner, graphic equaliser, amp and double cassette) with Jamo 52 speaker system and Philips CD160 CD player, £125. Geoff 01252 621308 (Hants)

**WILSON BENESCH ARC** speakers; four years old, gloss burr walnut cheeks, one owner, excellent condition and all original packaging. Will happily demo. £1,600. 07908 205519 (North London).

**YAMAHA DSP-A590** Digital Sound Processing Cinema 5.1 surround sound amplifier. Annoy the neighbours for £80 (cost £350 new). Remote control included. 01993 843055 (Oxon)

**VITA R1** DAB/FM Radios. Gloss Red or Gloss Grey, £90. Walnut or Cherry £80. Vita R2 Walnut, information display not working, £75. All excellent condition. 07949 910455 (Essex)



Above: Copland CDA823 CD player

**HOW TO SUBMIT YOUR FREE ADVERTISEMENT**

To submit your advert to us, please email [hificlassifieds@futurenet.co.uk](mailto:hificlassifieds@futurenet.co.uk) or alternatively, use the postal form below. Please limit ads to a maximum of 30 words, ensuring all details, model names etc are correctly stated. Kindly also include your telephone number and home county. We regret that we cannot take adverts over the phone.

Name \_\_\_\_\_ Advertisement \_\_\_\_\_  
 Address \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 Daytime telephone \_\_\_\_\_  
 Date \_\_\_\_\_

**PLEASE SEND YOUR ADVERTISEMENT TO:**

Reader Classified, Hi-Fi Choice, Future Publishing, 2 Balcombe Street, London NW1 6NW.



*the sound  
of beauty*




# AVID

main dealers

[www.avidhifi.co.uk](http://www.avidhifi.co.uk)

Analogue Seduction (Peterborough)	01733 344768
Bradys HiFi (Warrington)	01925 828009
O'Brien HiFi (London)	0208 9461528
Oxford Consultants (Oxford)	01865 790879
Progressive Audio (Kent)	01634 389004
Tom Tom Audio (St. Albans)	01727 893928
Turntable World (Darlington)	01325 241888



**We're not trying to give the most. We're trying to lose the least.** That was John Bowers' philosophy 40 years ago, and it lives on in our new 600 Series. Speakers that neither add to, nor take away from, the original sound. That requires world-class science – and extremely experienced ears. Because once we've selected exactly the right components, we begin the long, careful process of tuning. Listening and refining, over and over. Until the frequencies combine to conjure a sound so true, so alive, you want to reach out and touch it. *Dr John Dibb, Senior Development Engineer and Fellow of the Society of Sound, on the new 600 Series.*

Visit the Society of Sound at [www.bowers-wilkins.com](http://www.bowers-wilkins.com)

**B&W** Bowers & Wilkins

Listen and you'll see