

# RAZOR SHARP'S SACD PLAYER AND DIGITAL AMP COMBO THE CUTTING EDGE OF HI-FI?





INCREDIBLE SPEAKERS 12 NEW MODELS FROM £600 TO £1,500 ON TEST



THE RIGHT CONNECTION 8 INTERCONNECT CABLES SHOW THEIR METAL www.hifichoice.co.uk | www.t3network.co.uk



# OVER 1000 HI-FI MODELS RATED EVERY MONTH

We do understand that... Less is more White comes in 50 different colours Your favourite design is your own It's sushi time – again Hi-fi means black boxes Now you need the speakers to match

# The best speakers are the ones who listen

# The SoundGuide®

What is good sound?

A 510

There is no easy answer. Good sound is individual. It is shaped by personal choices like room size and music style. Whatever your listening needs, there's a sound solution to meet them.

Jamo has developed the SoundGuide, an advanced resource that leads you to your perfect sound solution. We listen to you before you listen to us.

For further information, call Jamo UK at 01788 556 777 or visit your local Jamo dealer. Tell us what you want.We'll listen.

www.jamospeakers.com





# r'evolution

The unique Cyrus blend of stunning audio performance and digital control systems, is something of a revolution in the hi-fi World. Your Cyrus system may be specified from a wide range of components which means you can evolve your system from a basic audio system through to sophisticated hi-fi, home cinema and multi-room options, maintaining simple control at each upgrade. Each component is housed within a hand finished die-cast case, and to make it even more revolutionary, you may order components in 5 aluminium silver or soft sheen black finish to complement your home.

High-performance hi-fi, chic design and simple control. A r'evolution indeed!



Cyrus Electronics, Spitfire Close, Ermine Business Park, Huntingdon, Cambridgeshire, PE29 6XY

Tel: 01480 435577 Fax: 437715

www.cyrusaudio.com email: info@cyrusaudio.com

# **EDITORIAL**



February 2001 Issue 211

### CONTRIBUTORS



Tim Bowern likes dance and indie music and plays it on an Arcam FMJ CD player, Musical Fidelity amp and PMC speakers.



Dan George likes rock music and plays it on a Marantz CD player, Audiolab amp and B&W Matrix 801 loudspeakers.



**Richard Black** plays piano professionally and uses EAR electronics and ATC speakers for classical and world music.



Christian House has just discovered hi-fi and likes folk/pop/rock which he enjoys via Philips cans and a Discman.



Paul Messenger likes dance, folk, rock and classical music on vinyl and uses Linn, Naim and Rehdeko kit with gusto.



Paul Miller is the king of the technical world when it comes to hi-fi. He uses DPA amps and Audio Note speakers.



Wes Phillips lives in NYC and worships at the shrine of Muddy Waters, he uses Linn, Conrad-Johnson, MF and Thiel.

How we test the products Our reviewing process is the most rigorous in the business. We focus on transparency and resolution, mixing traditional hi-fi values with the latest technological developments via a blend of subjective views and scientific analysis. BENCH TESTS Our main group test each

month concentrates on a key area, with products from across the separates market. The testing consists of three stages: 'blind' listening, handson subjective testing and scientific measuring. The latter phase is conducted by our Technical Editor using computerised measuring equipment custom designed for the purpose. He is recognised as the leader in his field.

**GROUP TESTS** Each issue features a number of additional tests aimed at narrowing the field in a specific product area. Here the testing involves just the reviewer concerned with no lab or panel testing, but plenty of comparisons.

**SOLO REVIEWS** As well as group tests we also review single components. In our First Impression section, you'll find brand new products that warrant early exposure, while High Performance concentrates on the latest aspirational, high tech components.

# HI-FICHOICE BESTBUY

**AWARD TAGS** BEST BUYS are considered to offer an excellent standard of performance at an attractive price. RECOMMENDED products are first class components, losing out to Best Buys only because of a higher price or less competitive sound quality. A third award, EDITOR'S CHOICE, is reserved for those products reviewed solo and awarded where the Editor is convinced that a product offers exceptional quality for the price.

"Does anyone seriously think that the PlayStation 2 is going to produce a sound that even the least critical music lover could enjoy? Leave it to the kids"



h

ow do you like our 'Smoke on the Water' cover then? You can't beat a bit of deep purple when it's mixed with the luxurious satin silver finish of an outrageous bit of hi-fi design. Sharp's new 1-bit digital

amplifier and SACD make a bold statement even before you hear them, and they're not backward in coming forward when it comes to the listening.

It's quite miraculous that such a mainstream brand should be making a state-of-the-art stereo system. It's also rather exciting. We know that stereo is where it's at when music is what you want to hear, but it's easy to assume that those chasing the mass market are more interested in games. PlayStation 2! Does anyone seriously think that's going to produce a sound that even the least critical music lover is going to enjoy? I sincerely hope not. It's going to be as riddled with noise as the average computer but with no option to put in a better sound card. So leave it to the kids. (And practice the games when they've gone to bed – you won't get whupped so badly next time!)

We've found a whole stack of gorgeous new kit for you to drool over this Christmas. Paul Messenger has been lugging some hefty loudspeakers around and come up with interesting results. There are some real bargains to be had in this most competitive of arenas, with brands both domestic and foreign doing their utmost to give you more for your money.

I've let Richard Black loose on some rather nice tuners, of both analogue and digital persuasion. He's still not convinced about DAB but concedes that for those of us who don't have massive, rotating antennas, digital has its advantages. And with the plethora of stations now available it is an increasingly tempting option for those of us who can't live without Radio 3's *Late Junction* (10.15pm, weeknights).

I'm using two new contributors this month: Wes Phillips is the only hi-fi scribe I know to have built his own electric guitar and tube amp, while David Berriman is a professional speaker designer who knows his cables. Reviews





AND DIGITAL AMP A hi-fi revolution in the making?

AUDIO NOTE SYSTEM

Valve innovation and micro style from AN's Deluxe Zero



Is the DVD-3300 the first DVD-Audio player to do this new music format justice?

**GROUP TEST** INTERCONNECT CABLES

> Every system needs good interconnects. Here are eight of the best below £50.



Future Publishing Ltd, 99 Baker Street, London W1U 6FP EDITORIAL 020 7317 2600 Fax 0207317 1125 Regrettably we cannot speak with readers or answer queries on the tele-

phone. Please send a letter, fax or e-mail instead Editor Jason Kennedy jason.kennedy@futurenet.co.uk 020 7317 2496 Deputy Editor Tim Bowern ern@futurenet.co.uk 020 7317 2495 Art Editor Del Gentleman del.gentleman@futurenet.co.uk 020 7317 2494 Production Editor David Bailey david.bailey@futurenet.co.uk 020 7317 2493

Staff Writer Dan George dan.george@futurenet.co.uk





**GROUP TEST TUNERS** The latest DAB and AM/FM models battle it out.

Online Editor Christian House christian.house@futurenet.co.uk 020 7317 2490 Consultant Editor Paul Messenger Consultant Editor Paul Messenger Technical Editor Paul Miler Contributors David Berriman, Richard Black, Kelly Churches, Jimmy Hughes, Wes Phillips, David Vivian Photography Chris Foster, Richard Appleby, Peter Dazely

### ADVERTISING Fax 020 7486 5676

020 7317 2497

Group Ad Manager Rob Debenham: 020 7317 0239 rob.debenham@futurenet.co.uk Ad Manager Andrew Goldsmith: 020 7317 0202

andrew.goldsmith@futurenet.co.uk andrew.goldsmith@tuturenet.co.uk Senior Sales Executive Gina Fontanarosa 020 7317 2684 gina.fontanarosa@futurenet.co.uk Sales Executive Richard Dappiano 020 7317 0278

richard.dappiano@futurenet.co.uk Sales Executive Mark Smith 020 7317 2643 mark.smith@futurenet.co.uk

PRODUCTION 01225 442244 Production Coordinator Production Manager MARKETING 01225 442244 Product Manager Racheal Beasely Marketing Manager Bronwyn Stubbs Bronwyn Stubbs MANAGEMENT Publisher Simon Davies 020 7317 2600 simon.davies@futurenet.co.uk

Group Publisher Jon Bickley Managing Director Mike Frey



BACK ISSUES - SEE PAGE 137 for details.

Selected back issues are available at £4.00 each (£6.95 overseas) inc. p&p. Call (01458) 271147 to order — all major creditcards accepted. SUBSCRIPTIONS – see page 96 FOR DETAILS

UK: £29.97. Europe: £43.00. North America: £49.99. Rest of world: £56.99. Call (01458) 271147, 8am-8pm, Monday-Friday.

NEW PRODUCT INFORMATION

We welcome information on all new and upgraded products — please send all press releases to the Editor. The magazine is obliged neither to review nor return unsolicited products, and does not accept responsibility for unsolicited copy. Pre-Press Bureau Westside, London W1 Printing St Ives (Plymouth) Ltd.



### Hi-Fi Choice is publis hed 13 times a year by Future Publishing Ltd, 30 Monmouth

Hirf Choice is public hed 3 Umeta ayaar by viture vanoning s.o., su woomwaan Smerk, Bahhah 2120W
All material G Future 2000/2011. All rights reserved.
This publication may note reproduced or tranmetid in any formin whole or in part without the written permission of the publiches. While every carehas been taken in the paparation of this ground, the publices cannot be hed responsible for the accuracy of the information contained herein, nor for any consequence arising.
Deversas Licensing department
Hi-FiChees: panalized for Sizerad publication coressas. For further details contact, Chine

hoice is available for licensed publication overseas. For further details cont. on +44 (0)1225 442244, byfax +44 (0)1225 732384; or bye-mail at xwer@huturenet.co.uk



The Company lists of 21 Address of the therefore the information needs of a group of people who share a passion. We and the safety of the passion of of the passi

Finance Director: lan Linkins Tel: +44 1225 442244 www.thefuturenetwork.plc.uk Bath London Los Angeles Milan Munich New York Paris Rott San Francisco Tokyn Wrocław





### FIRST IMPRESSIONS The latest kit, fresh from the lab. If you tell anyone, we'll have to kill you...

# 8

### **05 EDITOR'S NOTEBOOK**

Jason Kennedy reports on this month's happenings.

### **21 DESTINATION** UNKNOWN

Our American correspondent ponders an uncertain future.

# 23 LEVIATHAN

The definition of power? A £31,000 amp from Chord, according to David Vivian.

### 43 KIT'S ON SINK DRAMA

Jimmy Hughes discovers that a Sink is a great match for his horn. 92 THE SHARP EDGE

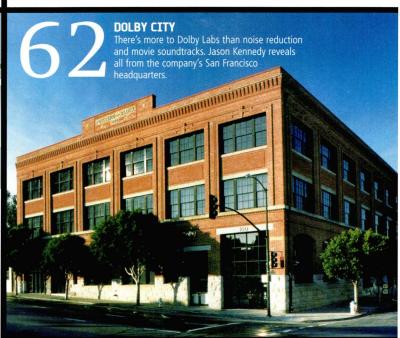
In an age of digital source components, fully digital amps make a lot of sense. Paul Miller explains why.

### 138 STOP THE ROT! Multichannel may be hi-fi's new

black, but Paul Messenger is hardly a dedicated follower of fashion.

# PRODUCTS IN THIS ISSUE

ALR Jorda	n Note 3	46	Jamo D 830	51
Arcam DiV	A CD72	12	KEF Reference One-Two	52
Arcam FM	J DT26	66	Linn Pekin	69
Arcaydis C	oncept 2	47	Magnat Vintage 710	53
Audio Not	e AZ Three	28	Marantz ST6000	71
Audio Not	e CDT Zero	28	Mission m71	13
Audio Not	e DAC One 1x	28	Mission 783	55
Audio Not	e M One Remote	28	Neat Petite III	57
Audio Not	e P Zero	28	Pioneer DV-737	09
Audioques	t Sidewinder	84	PMC TB2	58
AVI Biggat	tron Red Spot	48	Profigold PGA301 MkII	86
Cable Talk	Advanced 3	84	Prowire VHX	87
Chord SMF	P12000	23	Psion Wavefinder	73
Chord Corr	npany Calypso	85	QED Qunex 1	87
Cyrus CLS7	70	49	Roksan Kandy KT-1	75
Cyrus FM7	7.5	67	Sharp DX-SX1	24
Cyrus Quat	ttro	10	Sharp SM-SX1	24
Denon DVI	)-3300	32	Snell E.5 Mk2	59
Dynaudio /	Audience 72	50	Sony NW-E3	08
Ecosse Re	f. The Composer	85	Sony ST-D777ES	77
Exposure a	2010 TR	14	Townshend Seismic Sink	43
Ixos Gamr	na Audition II	86	Videologic DRX-601E	79



### 110 HI-FI DIRECTORY

A complete listing of current hi-fi kit reviewed by us over the years with ECs, BBs and Recs.

### 96 SUBSCRIPTIONS

Save time and money when you subscribe to the finest hi-fi magazine in the world. **95 READER CLASSIFIED** 

### Track down a hi-fi bargain by checking out our plethora of lovingly pre-owned kit.

### **137 BACK ISSUES**

Looking for a past review? This page tells you how to obtain a back issue or order a review reprint.



# FIRST IMPRESSIONS

TIM BOWERN AND DAN GEORGE GET THEIR HANDS DIRTY WITH SOME OF THE NEWEST KIT TO HIT THE STREETS

# **SONY** NW-E3 SOLID STATE PERSONAL STEREO

### £249.00

he inventor of the personal stereo now intends to dominate the solid state future. This is Sony's second Network Walkman and a gorgeous slice of technology it is too. No bigger that a cigarette lighter, it hooks up to a PC and lets you store MP3 music you've downloaded from the Internet. Or you can 'rip' tracks off CDs, using your computer's CD or DVD drive, and store them too.



"LIKE ALL SOLID STATE PERSONALS, IT HAS NO MOVING PARTS -NOTHING TO KNOCK AROUND WHEN YOU'RE OUT AND ABOUT"

Inside lurks 64MB of re-writable flash memory, similar to the RAM inside a computer. That's sufficient to hold an average length album, plus a bit more, at a reasonable level of quality. It's small and light enough to slip neatly into a shirt pocket, yet it feels solid to hold. Its controls are positive to the touch and as a stylish, envy-inducing widget it has few peers. A perfect partner for Sony's stunning VAIO range of laptops.

Like all solid state personals, it has the advantage of no moving parts. That means there's nothing to knock around when you're out and about, so music is skip free. Capacity is a down side though – you can only take with you whatever is stored in the device at the time, and this particular model doesn't even offer memory card slots for upgrades. What you

AYMODE

see is ultimately what you get, though 64MB built-in is a pretty good whack at present. Being a Sony, the way it works is somewhat different to the competition. It employs the company's own ATRAC-3 data reduction codec in place of MP3; no bad thing because of its good comparative quality. MP3 files from the Internet are converted to ATRAC-3, so the transfer procedure takes a little longer than it might. CD tracks are converted directly.

The supplied PC software is easy to use but the personal's facilities are basic considering the asking price. You get bass boost and repeat/shuffle modes, but nothing worth shouting about. Sound quality is well above par, however – a little bright and sub-CD standard on the whole, but more engaging than many of its ilk – and its sleek form just oozes 'buy me' appeal. **TB** 

MEGABASS

# DATASTREAM

ATRAC-3 format; 64MB built-in memory; no card slots; proprietary 'Check In/Out' copyright protection; in-ear headphones; bass boost; USB connection cable; OpenMG Jukebox installation CD-ROM. SONY @ 01932 816000

The NW-E3: small, sleek and good sounding.

OPEN

# PIONEER DV-737 DVD-V PLAYER

### İ İ İ İ 🔝 £699.95

inding a DVD player that's good with CDs is like panning for gold - if you catch one it is precious. One player that made a fine fist of it was Pioneer's £550 DV-717. It was great with movies and, although it wouldn't beat a good dedicated CD player for the same kind of money, as a catch-all solution it really did the business.

But times move on and product lines evolve, so here is the DV-717's effective replacement. Like its predecessor it launches as Pioneer's DVD-video flagship, only to be topped by two DVD-audio/ video combination players when they eventually arrive in the UK. But it costs an extra £150, a premium warranted by even sturdier construction and a number of cutting edge features, mostly on the picture side.

As one might expect, given its heritage, the DV-737 proves an exceptional beast with CDs. Where most DVD players sound soft and smudgy, this one gives a crisp account of itself and delivers decent musical energy. Such prowess is doubtless aided by the player's heavily damped construction, but you still shouldn't

Alongside an accomplished dedicated CD player, one costing £700 or £800 say, the Pioneer is notably short of clarity and dynamics.

Where it really comes into its own is with surround-encoded DVD-video discs: we haven't heard a better player with dts or Dolby Digital soundtracks this side of £1,000. Picture quality is also excellent, accompanied by a laudable range of video controls and advanced digital noise reduction. This permits an unusual degree of customisation, to suit your video display and even the requirements of individual discs via 15 programmable settings.

Ultimately, it's motion picture performance that proves the DV-737's greatest selling point. It's a top-notch machine for home cinema aficionados who want excellent A/V performance from DVD-video discs coupled with good CD sound from the same player. For those with a greater musical bent, we would suggest the following: make sure you own a skillful dedicated CD player, and if you want to experiment with DVD-video, buy a less costly DVD player to tide you over. Then wait and see what's

around the corner. **TB** 

"THE DV-737 **PROVES AN EXCEPTIONAL BEAST WITH CDs.** DELIVERING DECENT MUSICAL ENERGY"

0

# DATASTREAM

SOUND: outputs Dolby Digital, dts. MPEG and linear PCM bitstreams; no built-in surround decoding. PICTURE: comprehensive facilities including advanced digital noise reduction and progressive scan (NTSC only).

CONNECTIONS: two Scarts; two sets of analogue audio outputs; optical and coaxial digital outputs; two RCA video outputs; two S-video outputs; component video outputs

PIONEER HIGH FIDELITY (GB) LTD 01753 789789



Contra DV-737

# FIRST IMPRESSIONS

# **CYRUS** QUATTRO CD PLAYER/PREAMP

# £649.90

spent an evening with John Peel recently, becoming re-acquainted after some five years. This came courtesy of the FM tuner within the new Cyrus Quattro, a clever little box of tricks combining a CD player and fully functioning preamp in one micro-width unit. The tuner is a plug-in option, available for an extra £200 on top of £650 for the basic product.

So why is it that a company respected for its separate hi-fi components feels the compunction to combine several functions in one box? According to Cyrus, the CD player part of the Quattro is essentially the dAD 3, until recently the company's £598 entry-level machine. In true Cyrus style you can add a PSX-R off-board power supply, or exchange the power amp for one of the more ambitious models in the Cyrus range.

Talking of performance, with the Smart Power in tow and tuner card installed the resultant sound is typically Cyrus. Both CD and radio are detailed and informative, with a fine

Can lifestyle really sound lifelike? Ask Cyrus...

"THE CYRUS QUATTRO IS A CLEVER CONCEPT, WITH MORE THAN RESPECTABLE HI-FI SOUND"

INPI IT

# DATASTREAM

11215

BURR-BROWN 24-bit DAC; one line-level input and two tape loops; coaxial digital output; input for optional power supply; rear-mounted headphone input; optional FM tuner and multi-room plug-in modules. CYRUS @ 01480 432777 It's a sign of our convenience obsessed times, but not one to fear according to Cyrus. The aim is to provide a convenient and upgradable package occupying the minimum of space yet delivering a high level of sound.

The idea is to combine the Quattro with your choice of Cyrus power amp. One option is to use the new two-channel Smart Power at £550, giving you a complete £1,200 CD/amp combo. If you want radio you can add the FM tuner module, complete with RDS, or those wishing to expand into multi-room can add the facility for £350. And you're still left with only two compact boxes. sense of timing propelling the music along. Dynamics are punchy, instruments well separated, and it succeeds in maintaining the pace of a track like Duke Ellington's *Caravan*, complete with convincing soundstage.

However, we're not entirely convinced about the bass. It lacks some weight and authority, which makes the overall presentation slightly cool and sometimes edgy. That apart, this is a clever concept with more than respectable hi-fi sound, and it might just make a few prospective purchasers of upmarket mini systems think twice. **DG** 

BE READY when the mood takes

you

THE PLEASURE JUST GOES ON AND ON WITH OUR LATEST PERSONAL MINIDISC RECORDER. ENJOY YOUR FAVOURITE TRACKS LONG INTO THE NIGHT THEN PUT IT BACK IN ITS DESKTOP CHARGING STATION SO IT'S READY WHEN YOU WANT IT NEXT. GIVING YOU ANOTHER 12 HOURS OF PURE LISTENING PERFECTION FROM OUR SMALLEST-EVER MD RECORDER. SO COMPACT, YET SO RICH IN ADVANCED FEATURES. THE NEW SHARP MD-MT866H. YOU CAN'T HAVE TOO MUCH OF IT.



For more information on the full range of Sharp MiniDisc recorders, visit our website at www.Sharp.co.uk or Freephone 0800 262958

# FIRST IMPRESSIONS

The new Arcam CD72 is a lot of player for the money.

### "THE ARCAM CD72 IS FLEET OF FOOT AND FINGER-TAPPINGLY RHYTHMIC, BUT SMOOTH WITH IT"

# ARCAM CD72 CD PLAYER

### £399.90

.

R

ith all the talk of new music formats, it's easy to assume that CD's days are numbered. Not so. DVD-Audio and SACD may offer something new and improved for

the future, and Internet audio adds another dimension to the way we can obtain music, but make no mistake: CD is set to remain the dominant format for years to come.

> This is something Arcam understands. Its reputation has largely been built on a series of class-leading CD players and it is not about to abandon the format now. So, as the company's comprehensive DiVA line-up hits the shops, we're

treated to the prospect of two new mid-price players dedicated to the art of CD.

The CD72 is the more affordable of the pair, £100 more than the Alpha 7SE and not a direct replacement, at least not yet. That's hardly surprising given the continued success of Arcam's entry-level player, and equally predictable is the new machine's reliance on the 7SE's electronics. Significant differences concern the skeleton

and outer skin in which these inner workings are

clothed. The case is new, continuing the chic visual theme Arcam introduced with its upmarket FMJ range. Available in black or silver, it's a comparative feast for the eyes and should match the shop window appeal of larger makes like Marantz and Sony. Meanwhile, just beneath the skin, a three layer FMJ-derived sound-deadening composite has been added to the chassis.

The CD72 performs like a budget thoroughbred. It retains the characteristics that make the Alpha 7SE great – fleet of foot and full of body, yet smooth enough to prevent forward recordings ending up in your face. It also seems to bring a touch more decorum to the party, cleaning up some of the occasional unruliness of its entry-level sibling. The result is smooth consistency across various musical flavours from red raw rock to deep blue soul.

The second new player in Arcam's range is the CD92, a £850 design to which CD72 owners can upgrade. A more detailed analysis of both will appear in next month's Bench Test, but for now it seems the future of CD is in safe hands. Those who can't live without music should be grateful indeed. **TB** 

# DATASTREAM

BURR BROWN 24-bit compatible Delta Sigma DAC; Sony transport mechanism; optical and coaxial digital outputs. ARCAM 🕿 01223 203200



# MISSION M71 LOUDSPEAKER

# 🖬 🖬 🖾 🖾 🕺 £129.90

aking a budget speaker isn't easy. Imagine trying to create a big sound from a small box and an even smaller budget. And let's face it – they don't come much smaller

than Mission's m71. Standing at just over 29cm, it's the entry point in an all-new range, the brand's latest attempt to recapture its past dominance in the budget sector. Further up the range lies a larger stand mount speaker and a couple of floorstanders, along with centre and rear models for surround sound applications.

The m71 is a pretty little speaker, its vinyl wrapped MDF cabinet and neat compliment of drivers exuding a visual appeal that Mission excels at producing. Round the back there's a reflex port and twin binding posts for a choice of single or bi-wiring. Build quality is of an exceptionally high standard for the money and its dwarf-like size should appeal to those building a two or multichannel system in limited space, and with limited budget to spare. Up and running, bass is impressive providing you carefully position each speaker relative to the wall behind. You may also find it necessary to tune its low end via the rear port and a supplied foam bung – care in this area is vital to avoid a boomy, muddied sound. But once you've mastered the positioning the speaker's midband comes to the fore, giving instruments and voices a fresh, vital feel. It occasionally lacks openness in the treble, but the midband crunch of *Blackened* by Metallica remains faithful to the original and got me strumming my air guitar with abandon.

In a highly competitive market the m71 has a lot to offer. Its strikingly contemporary design might not appeal to all, but it's a well appointed package and sonically very capable. It treads a generally impressive line between excitement and refinement across a range of musical styles, but it does appear particularly sensitive to positioning, so if you decide to go for it take the time to get it right. **DG** 





MEASURES 17x30x28cm (WxHxD); MDF cabinet; 130mm woven glass composite mid/bass cone; 25mm soft dome tweeter; bi-wirable binding posts; quoted sensitivity of 88dB; quoted impedance of 8 Ohms. MISSION @ 01480 451777

The m71: a good stab at budget supremacy.



VOLUME



£599.95

mps from Exposure are traditionally blessed with a strong sense of rhythm, the kind of sound sure to spur air guitarists and table drummers into frantic, flailing activity. The brand has been in productive stasis for a while, but now it's back with an all-new line up waiting in the wings.

First to gain entrance is the 2010 Integrated Amplifier, a stereo design available in two versions. The one here is remote controllable. A non-remote version is available for £100 less. Both come with a black or 'Titanium' finished front panel, made from 5mm thick aluminium and well secured to the main case. Overall construction is impressively solid, and though you won't find the stylistic detail afforded by some larger manufacturers it's hard to knock the general standard of build. Solid acting machined and strong rhythmic sense, a little laid-back when it comes to fine detail but undoubtedly very musical. It isn't a particularly clean or taut sort of sound, and not the ideal choice for those requiring razor-sharp resolution to pull them to the edge of their seats. But if your order of sonic merit places an effusive whole before crisp minutia you may find it much to your liking.

AUX 2

CD

TUNER

PHONO AUX 1 AUX 3

TAPE

"IF YOU LOVE MUSIC, YOU MAY END UP WITH REAL AFFECTION FOR THE EXPOSURE'S TALENTS"

Certainly, in a musical sense this is an effective all-rounder. It may not pinpoint a vocal as sharply as some, yet it is easy to fall for its fluid and substantial delivery, as apt with an orchestra as it is with something guitar-driven. If it seems a bit of a transistorised lush at first, give it time; if you love music, you may end up with real affection for its talents. I know I did. **TB** 

# DATASTREAM

RATED power 50 Watts per channel into 8 ohms; remote control; six linelevel inputs; optional phono stage (£99.95); two pairs of speaker outputs for biwiring; preamp output for bi-amp upgrade. EXPOSURE ☎ 01273 423877 rear panel add to the sense of quality, while a trio of blue LEDs set off our review sample's Titanium finish to a tee, even if the remote handset is disappointingly bland.

controls and a well-appointed

Those who have enjoyed Exposures of old will find solace in this return. Its delivery is fairly typical – bold daubs of music with good dynamics

~

The 2010's impressively solid fascia.



mercur



ÖÖÖ

Tannoy monitors are highly sought after across the world in the professional music recording industry. We have also supplied many famous film production studios ever since sound made its way into the movies. This know-how from satisfying the worlds most discerning listeners goes into the new Tannoy Mercury mX range. Great speakers for hi-fi and home cinema. Speakers that are every bit better than the rest.

0



ö



For free literature on the mercury mX range from Tannoy, call 01753 680868 www.tannoy.com



THE LATEST IN HI-FI BROUGHT TO YOU BY TIM BOWERN

# BACK TO INFINITY SPEAKER MANUFACTURER RETURNS TO THE UK

Infinity is setting its sights on these shores once more and has an ambitious range of budget loudspeakers with which to woo the discerning audio enthusiast. The Infinity Alpha range's claim to fame is its use of ceramic metal matrix diaphragms (CCMD) in models priced from £179 upwards. These are aluminium cones with an unusually thick alumina ceramic coating, making them significantly stiffer than metal alone and thus more consistent in operation. The claimed advantage being a break up point that's high enough in frequency and low enough in amplitude to be inaudible.

Infinity Alpha starts with the 10 (£179) and 20 (£219) twoway stand mounts and progresses via two floorstanders, the £299 two-way 30 and three-way 40 (£499) to the Alpha 50 with twin CCMD 200mm bass drivers at £599. A £199 centre speaker completes the line up.

0

The Alpha series will be joined by the Prelude and Revolution ranges, featuring room-adaptive RABOS technology, when Infinity returns to the UK in late February.

Harman Consumer International 🕿 0033 2 43 38 44 60

# BOTTLE OF SCOTS LINN'S NEW SUBWOOFER RUMBLES INTO TOWN

Linn fans looking for more low-end welly will be tickled pink with the Glaswegians latest launch: the Sizmik 10.25 subwoofer.

The most interesting bit is its built-in Sizmik 1000 amplifier, claimed to deliver a whopping 1,000 Watts of bass power to the driver. It incorporates switch mode power supplies, and runs cool and buzz free. If you want a slice of the action, it will cost you £995 in black, or £1,030 in a maple or cherry finish. Linn @ 0500 888909





# PLANARS COME TOGETHER

PROVING THERE'S LIFE IN THE OLD VINYL YET, REGA REFITS ITS PLANAR TURNTABLES

Britain's most famous budget turntables have been tweaked for the first time in years. Rega's long-run Planar 2 and Planar 3 have both seen changes, improving performance and even reducing price in the case of the Planar 2.

Now costing £198 with an RB250 tonearm, the revamped Planar 2 features a platter made from a high-mass metalised composite. The motor has been changed too, an ultra-low vibration device directly coupled to the plinth using high-tech adhesive pads.

Meanwhile, the Planar 3 has gained a new plinth made from exceptionally lightweight composite material, reducing mass by 20%. It incorporates the same re-worked motor as its lower priced sibling and costs £298 with an RB300 arm. Upgrades are available for existing owners of both turntables. *Rega* **2** 01702 333071

# NEWS



# **REV HEAD**

TAG MCLAREN UNLEASHES NEW POWER AMP

Well-healed audiophiles with a penchant for Formula One will doubtless drool over TAG McLaren's F1-600M power amp. Rated at 300 Watts into 8 ohms, doubling to 600 Watts into 4 ohms, this is a heavily specified monoblock featuring balanced output architecture and weighing a massive 40kg. It's intended as a statement product, to show what standard of amplification the brand can achieve, and is said to be a good sonic match for the stunning F1 AvantGarde loudspeaker, reviewed in *HFC* 202. The price? TM has yet to confirm, but you can bet it will run into several thousand pounds. And you'll need at least two. *TAG McLaren* **2** 0800 783 8007



CANADA UNLEASHES TERRIFYING POWER AMP!

Canadian brand Bryston has uncaged a monstrous new power amp. The 14BST is a two-channel model built to withstand the heaviest studio-style abuse, weighing a whopping 39kg and packing a staggering 800 Watts of continuous power per channel.

And yet, despite such brutal specifications, its UK distributor describes it as "sweet" and "detailed", as well as possessing "wide and stable bandwidth, very low noise and huge dynamic range". It comes with a 20 year warranty, natch, and you can pick up this hefty beast for £4,949. PMC • 01707 393002

# NAIM THAT TUNE IN TWO

TAG McLaren's hefty new

power amp, the F1-600M.

NEW PRE/POWER AMP COMBO FOR SERIES 5

Naim Audio has progressed its re-styled Series 5 with the first pre/power amp to hit the range. This two-box combo weighs in at  $\pm$  1,375 and comes in the brand's new black livery, first sported by the flagship NAP 500.

The NAC 112 preamp costs £625, encased in aluminium with compliant feet and anti-resonance circuit board mountings. Naim appears particularly proud of its discrete resistor ladder volume and balance control, a network of microprocessor controlled resistors and switches claimed to be key to its performance. Six line-level inputs are supplied, each with its own gain control, and an additional output provides power for a Naim phono stage should one be required.

Its perfect partner is the NAP 150 power amp, a £750 design rated at 50 Watts per channel. Apparently, it has more in common with the mighty NAP 500 than mere looks – it borrows aspects of circuit design, producing faster signal transmission and better rejection of power supply noise. *Naim Audio* **2** 01722 332266

Naim's new Series 5 pre/power amp combo – the perfect partners.



# IN BRIEF

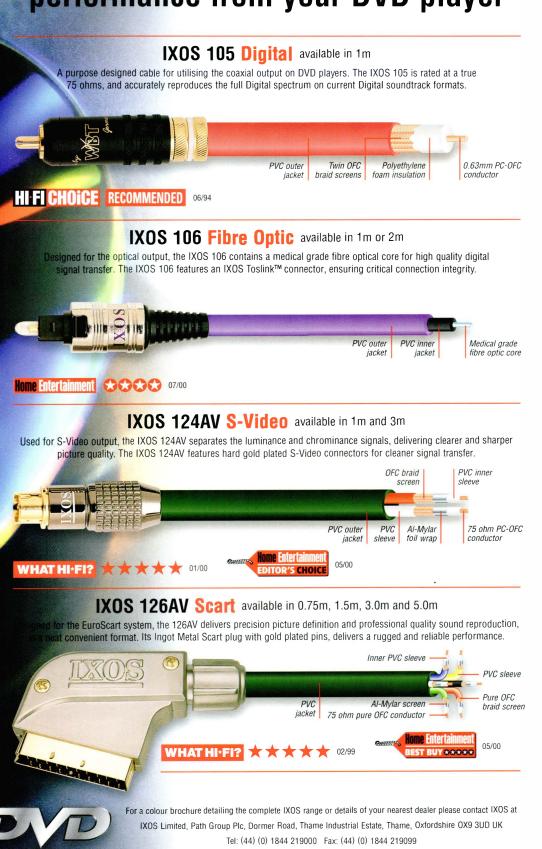


- SOME PEOPLE call them boom boxes, others opt for ghetto blasters, but Bang & Olufsen prefers to call its first portable stereo a "mobile music system". The £700 BeoSound 1 combines CD and FM radio with B&O's usual high-brow styling, featuring vertical CD loading, a motorised antenna and a choice of fetching colours.
- PENTAX recommends CD and DVD users use its Supaclean cloths to clean their precious little discs. The brand claims "enhanced wiping ability" because of its particularly fine microfibre technology. They cost £2.99 from opticians. ☎ 01753 792792
- SENNHEISER says its new MX Series in-ear headphones are substantially better than ordinary in-ear designs. There are three in the range, priced from £10 to £20, each promised to deliver a crisp, clean sound on the move. © 0800 652 5002

MAPLIN ELECTRONICS is now selling a CD-ROM aimed at anyone wanting to build their own IN BRIEF FONTINIES ON P.19



# Cables that unleash the true digital performance from your DVD player



www.ixos.co.uk

VIDEO

Audio Exceller Paul Roberts I Sevenoaks Hi 01225 465085 01179 264975 01179 429370 01179 297779 Bristo Bristol Bristol Sevenoaks m Bedfordshire Sevenoaks Hi Technosound Redford 01234 272770 Dunstable 01582 663297 Berkshire Sevenoaks Hi Fi Reading 0118 9597768 Buckinghamshire 01494 521382 High Wycombe Cambridgeshire A N Audio 01480 472071 01223 461518 01223 368305 01733 897697 St Neots Cambridge Cambridge Peterboroug Systems Cambridge Hi Fi Channel Islands Base Hi Fi Fortuna Hi Fi Jersey Jersey 01534 506957 01534 732549 Audio Excellence Chester AV Centre Warrington AV Centre Cornwall Quarterdeal: Cheshire Chester 01244 345576 Chester Warringtor 01244 320414 01925 636215 Quarterdeck Cumbria Hadwins 01637 851441 Newquay Kendal Carlisle 01539 722557 01288 546756 Hadwins Peter Tyson Searle Audio Barrow 01289 821233 Searle Audio Devon Audio Excellence Sevenoaks Hi Fi Dorset Movement Audio Essex Rayleigh Hi Fi Hi Spek 01392 491194 Exeter Exeter 01392 218895 01202 730865 Poole Southend 01702 435255 01277 226303 Brenty Gloucestershire 01452 503691 Gloucester Sight and Sound Audio Excellence Gloucester Cheltenham 01452 300046 01242 241171 Sevenoaks Hi Fi Hampshire Now Thats Hi Fi Sevenoaks Hi Fi Hertfordshire Hi Spek Humberside Sevenoaks Hi Fi Kent 023 92 811230 01703 337770 Portsmouth Southampto St Albans 01727 791100 Huil 01482 587171 Kent Sevenoaks Hi Fi Sevenoaks 01732 459555 01892 531543 Sevenoaks Hi F Tunbridge Wells Lancashire Cleartone Hi Fi Bolton Bolton Preston Rishton 01204 531423 01204 395789 01772 825777 Practical Hi Fi Sevenoaks Hi Fi Romers Leicestershire Sevenoaks 01772 825777 01254 887799 L eiceste 0116 253 6567 0116 253 9753 eicester Hi Fi Co Leiceste Lincolnshire Boston 01205 350505 Oldrids Downtown Oldrids Downtown Grantham Bourne 01476 590239 01778 562438 Techtronic London Hi Fi Care Kamla Hi Spek Bartletts onics ttenham Court Rd ttenham Court Rd Finchley N7 0207 6738911 0207 3232747 0208 3491166 0207 6072148 Hi Fi Confidential SW1 0207 2337225 Manchest 0161 8398869 Bridge Street Practical Hi Fi Sevenoak Manchester 0161 8317969 0161 7472108 Trafford Centre Merseyside Beaver Radio Middlesex Musical Images Norfolk Hughes TV & Audio Hughes TV & Audio Hughes TV & Audio Bennets Retail Sevennaks Hi Ei 0151 7099898 Liverpool Edgware 0208 9255535 Gt Yarmouth 01493 330886 White Lion St Norwich Castle Mall Norwich 01603 660935 01603 622063 Norwich 01603 625955 01603 767605 Norwich venoaks Hi F Northamptonshire Northampton Irket Harborough 01604 626064 01858 461460 Sony Centre The Auditorium Nottinghamshire Forum Hi Fi John Kirk 01159 622150 Nottinoham Nottingham 01159 2529 Oxford Audio C Sevenoaks Hi Fi 01865 790879 dio Consultants Oxford Oxford 01865 241773 Astley Audio Wallingford 01491 839305 Astiey Audio Staffordshire The Hi FI Store Living Design Suffolk Hughes TV & Audio Hughes TV & Audio Bennets Retail 01782 219595 01782 260047 Hanley Hanley 01502 569133 01473 712444 01788 540772 owestof Parks Ips Ipswich Euro Surrey Tru Fi Tru Fi Camberley 01276 686414 Redhill 01737 766128 Sevenoaks Hi Fi Sevenoaks Hi Fi Guildford Kingston 01483 536666 0208 5470717 Sussex Adams & Jarrett Jefferies Hi Fi Tyne & Wear Lintone Audio 01425 437165 01323 731336 St Leonards Eastbourne Metro Centre 0191 4600999 0191 2303600 0191 2212320 Global Hi Fi Sevenoaks Hi Fi Newcastle Wales Audio Excellence Swansea 01792 474608 02920 228565 Audio Excellence Cardiff Cardiff 02920 472899 01633 262790 01702 465777 Sevenoaks Hi Fi Western Hi Fi Newport Swansea Wrexham evenoaks 01792 465777 01978 364500 Audic West Midlands Downing & Downing Spains The Sony Centre 01384 371747 Stourbridge Bromsarov 01527 872460 01384 486770 Merryhill Centre Solihull Solihull 0121 7420254 0121 7114145 0121 4292811 Music Matters Music Matters The Sony Centre Music Matters The Sound Academy Hi Fi in Harmony Music Matters The Sound Academy Sounds Expensive Frank Harvey Hi Fi Wiltshire Edgbaston 01922 473499 0121 7455880 0121 3542311 0121 3212445 01788 540772 Bloxwich Shirley Boldmere tton Coldfield Sut Rugby Coventry 01203 525200 Wiltshire Salisbury Hi Fi Salisbury 01722 322169 Worcestershire 01905 612929 Sevenoaks Hi Fi Sight and Sound Audio X Worceste Worceste Worceste 01905 22335 01905 619059 Yorkshire Brighous Bradford 01484 713996 Audiovision Empire Megasto Sevenoaks Hi Fi Sony Centre 01274 575000 Leeds Wakefield Sheffield 01924 377856 aks Hi Fi 0114 2555861 Scotland

Dunfermline

Aberdeen

Dundee Glasgow Glasgow

A Thompson Sevenoaks Hi Fi

Sounds Perfection Sevenoaks Alan James

01383 724541

01224 587070 01382 226592 0141 3329655

0141 2484434

Please contact your nearest dealer to purchase these cables

Bath

Avon

# NEWS

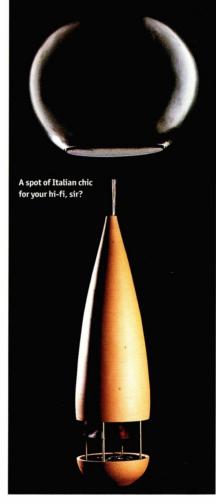
# **BELLISIMO!**

IDIOSYNCRATIC ITALIAN SPEAKERS ADD A DESIGNER TOUCH TO HI-FI

If ordinary speakers aren't fit to grace your chic designer pad, how about a little high fashion from Italian outfit New Acoustic Concept, NAC Sound for short. The Romebased firm has seven visually stunning creations for your delectation, mixing interior design aesthetics with an unconventional approach to acoustics.

There are seven speakers in all, some of them spherical, others long and tapered. The reasons given for these shapes are standard – they help reduce resonance and internal standing waves. However, while most speakers work by combining two or more drive units radiating in a specific direction, NAC speakers are omnidirectional; they use a single driver to radiate sound equally in all directions. The effect on imaging is debatable, but NAC claims it makes a more natural kind of sound, which is more consistent wherever the listener is in the room.

One thing's for sure: these speakers are gorgeous to behold. So gorgeous, in fact, that Audi has featured the spherical Zemi in its recent ads for the TT coupé. You can hear selected models for yourself at London's Walrus Systems hi-fi shop. Walrus Systems ☎ 020 7724 7224 Website: www.nacsound.com



# **CLUNK CLIK! EVERY TRIP**

EASY-TO-USE RECORDABLE MEDIA HITS MP3

LG is taking the MP3 concept one step further with its latest personal player, the Evzone. Instead of storing music in solid state memory, like most current models, it uses lomega Clik1 Discs on which up to 40MB of data may be stored. That means around 40 minutes of music at a decent level of quality – 128kbps, for those with a head for such things.

The advantage is the cost of these discs compared with that of flash memory cards. Such cards are too expensive to interchange as you would a tape or CD, so most users end up downloading and re-downloading

every time they want to hear something new. But Click! Discs cost around £10 each, so building building a software collection is more viable. MiniDisc fans might query the 'innovation', but it could be just the thing for MP3 users frustrated at their current player's lack of portable capacity. LG **2** 0870 1223322

> LG's Evzone, a more flexible approach to MP3 audio.



# IN BRIEF CONTINUED

speaker. The Speaker Enclosure Designer software from Eminence helps you to model your speaker then lets you print out your plans, with plenty of additional guidance for beginners. It costs £50. 20 0870 264 6000

MP3 file swapping Website Napster received another twist in its fortunes when the parent company of music giant BMG dropped its lawsuit and announced an alliance. A joint filesharing, subscription-based music service will apparently result.



TDK is the latest company to license NXT's flat speaker technology. The firm's Tremor line-up consists of various sub/sat systems using NXT's SurfaceSound panels, aimed at multimedia applications. 20 01737 773773

ROCKY MOUNTAIN Traders claims to have developed the perfect cure for damaged CDs and DVDs. Scratches in the polycarbonate from which they're pressed are filled by a mix of wax, turpentine and emulsifier. Then, when the mixture has dried, a silicone sealing solution is rubbed on, forming a clear skin that stops the laser jumping. ♀ 2020 8234 3288

MONSTER CABLE has

launched a new coaxial digital interconnect. Interlink Datalink 100 costs £50 for a single 1m cable, £70 for 2m or £90 for 4m. 201908 319360

ELTON JOHN'S new live CD, One Night Only: The Greatest Hits, was the first to hit the streets recorded using Euphonix's 24-bit/96kHz technology. A DVD-Audio release is planned to make full use of its superior resolution. www.euphonix.com

THE BRISTOL hI-fi show, Sound & Vision 2001, will take place will take place between 23 and 25 February. Tickets are £6 for adults and £3 for students. Children under 16 are free. ☎ 029 2023 6100

# **CLASSICAL OVERTURE**

RUARK LAUNCHES SERIES OF UPMARKET SPEAKERS

Ruark is to mark the launch of its all-new Classic range of speakers with a floorstander. The CL20 is the first of several products to emerge, with a smaller stand mount model and a larger floorstander set to follow. These will also be joined by a subwoofer and rear speakers for multichannel applications.

Priced at £1,500, the CL20 is a 92.5cm tall two-way speaker. Its 180mm mid/bass driver sports a paper cone and is reflex loaded via a port at the rear, while its soft dome tweeter is driven by a 28mm aluminium coil. It is available now in steamed beach or rosewood. *Ruark* **2** 01702 601410



The CL2O, the first of Ruark's new Classic speaker range.

# Whatever your .... in music...

# QED Silver Anniversary

One of a range of multi-award winning cables, Silver Anniversary delivers new levels of detail, precision and realism without breaking the bank, *and don't just take our word for it......* 



... Capture the Essence



QED Audio Products Ltd. Ridgeway House, Ridgeway Close, Lightwater, Surrey GU18 5XU Tel: (01276) 451166 Fax:(01276) 452211 Email:panic@qed.co.uk Internet:http://www.qed.co.uk

AWARD WINNING SPEAKER CABLES

**OPINION USA** 

# **Destination Unknown** Wes Phillips reflects on the indecisiveness of the American Public in Areas other than the obvious.

ndecided" seems to be the tenor of the times in the United States as I write. Just as "none-of-theabove" appears to be the clear front runner in the 7 November Presidential election, American consumers have refused to embrace any of the new digital choices currently confronting them.

Sales of SACD hardware have been modest so far and, once you get away from the audio enthusiast press, there is an almost total lack of consumer awareness that it even exists. To be fair, there does not seem to be a ground swell of whole thorny issue of Internet-based access to music. Many of the news articles reporting the issue have included instructions on ripping MP3 files and burning CDs, so the public is merely reacting to a six-month unpaid advertising campaign for digital storage devices.

While the seemingly constant barrage of news items surrounding Napster has probably convinced the American public that everyone's busily ripping and burning to their hearts' content, there are no really trustworthy statistics indicating how widespread the practice actually is. What seems certain, however, is that

# "IT REMAINS TO BE SEEN HOW THE PUBLIC WILL TAKE TO PAYING FOR NEW MUSIC NOW THEY ARE ACCUSTOMED TO GETTING IT FREE"

anticipation for DVD-Audio either, a situation not improved by Warner's decision to delay its release of seven DVD-A software titles until mid-November.

Sales of expensive multi-box player/ processor combinations remain stagnant, reflecting consumers' uncertainty over the digital future, although modestly priced DACs with oversampling capabilities continue to create a buzz and sell fairly well.

But the Consumer Electronics Association (CEA) released figures indicating that sales of CD machines for the year were up by 27% over 1999. This increase is primarily due to the popularity of CD recorders – not particularly surprising, as the biggest audio-related news story over the last six months has concerned Napster, MP3.com, and the some form of digital-on-demand will constitute the music distribution paradigm of the future. BMG has announced a membership-based programme called OnePriceCDs, which effectively straddles the fence, offering physical CDs ('atoms' in e-marketing jargon) for \$8.99-\$9.99 or downloads ('digits'), priced at \$1.98-\$3.49 for singles and \$9.98-\$14.98 for CDlength downloads. In November, Blue Note released Medeski, Martin & Wood's *The Dropper* simultaneously as a \$15.99 CD and as an identically priced download available from Liquid Audio.

Internet music distribution company Emusic has bruited a different plan. Customers will purchase subscriptions for a flat monthly fee of \$10 for all the MP3s they can download. The company will then compensate the artists and labels for their work. Emusic claims it has agreements with more than 600 record labels, providing them with an expanding catalogue of more than 125,000 tracks for download.

"There are entire catalogues from leading indie labels such as Epitaph, Concord Jazz, Heiro, Jewel-Paula, SpinArt, Lookout, and Shanachie," said a company representative. What remains to be seen is how enthusiastic the public will be about paying for new music, now that they have grown accustomed to getting it for free.

On a sad note, Sidney Stockton Smith, one of American audio's founding fathers, died on 25 October 2000. Sid Smith designed the first Williamsontype amp made by RadioCraftsman in the late 1940s, and later joined Saul Marantz's fledgling firm, where he designed the Marantz Model Seven preamplifier and Model Eight B stereo amp among others. Many budget-challenged neophytes began their love affairs with tubes (valves) by purchasing one of Sid's designs, and like many others I still occasionally kick myself for moving on from my Model Eight B. Contemporary products may have greater bandwidth, but audio designs by Sid Smith made music come alive. It would be no exaggeration to label the entire American high end industry Sid's legacy.

Wes Phillips is our new US correspondent. We welcome him from across the pond and wish him many cups of tea.



# The Centrum. Bringing music to home cinema.

# it sounds better neat.

Grahams Hi Fi www.grahams.co.uk Canonbury, London 020 7226 5500

The Listening Rooms www.listeningrooms.com South Kensington, London 020 7244 7750

Auditorium Chelsea, London. 020 7384 3030 **Oranges & Lemons** www.orangesandlemonshifi.com Battersea, London 020 7924 2040

Thomas Heinitz www.thomasheinitz.com Bayswater, London 020 7229 2077

Sevenoaks Hi Fi Holborn, London 020 7837 7540 Infidelity www.infidelity.co.uk Kingston Upon Thames 020 8943 3530

**RJF Audio Visual** Camborne, Cornwall 01209 612260

**The Audio File Objective** Hoddesdon, Herts. 01992 478666

The Right Note Bath 01225 874728 Sevenoaks Hi Fi Worcester 01905 612929

J Cryer Ltd Accrington, Lancashire 01254 391440

Replay Audio www.replay.dial.pipex.com Urmston, Manchester 0161 202 9922

**Newcastle Audio** Newcastle upon Tyne 0191 230 4141

# **neat** acoustics

tel: o1833 631021 fax: o1833 630022 e-mail: bob@neat.co.uk http://www.neat.co.uk

# Leviathan IT LIVES! DAVID VIVIAN MEETS A MAN WHO HAS CREATED A MONSTER, AND NOW IT GROWS STEADILY OUT OF CONTROL... IN KENT.

ohn Franks isn't the only bloke in British hi-fi who speaks quietly and carries a big stick but, just recently, he has taken the metaphor to new extremes: whispering laryngitis, and a Giant Redwood log that blocks out the sun.

Let's put this another way. The mother of all power amps has just been launched with all the razzmatazz of a three line announcement in the classified section of the *Croydon Weekly Advertiser*. That's how it is with Chord Electronics, the company Franks started in his garage 10 years ago. No hype, no histrionics, not much advertising. He lets the products (originally amplifiers, more recently super-trick DACs as well) do the talking.

The upshot is that Chord – now operating out of an impossibly pretty period factory overlooking the river Medway at East Farleigh in Kent – has slowly but irresistibly acquired the sort of unburstable reputation for design, quality and performance most rivals would kill for.

If there is such a thing as 'real world' high-end, that's where Chord is at. The latest version of the company's stalwart pre-power combo, the CPA3200/SMP1200E, fires a mortar-dislodging 350 watts a side and costs a commensurately hefty (but not unfair) £8,000. Designed around the high frequency, high power switch-mode power supplies Franks brought to the hi-fi party from his time as an avionics engineer, the 1200 is, realistically, as much top-notch power amp as the most avid, wedged-up audiophile could reasonably want. It totes massive headroom and dynamic reserves, aerospace standards of construction and exquisitely functional machined alloy case design. I used one for several months. It was fab.

But I've popped in today to have a listen to an amp that, to be blunt, makes the 1200E seem, how to put this...? Hormonally challenged. It's called the SMP12000, costs £31,000 and, says Chord, will not only drive any domestic hi-fi speaker ever made to 'plead-for-mercy' levels but enough of them in one go (eight B&W 801s, for example) to rattle the rafters in the Albert Hall. Hell, this thing will drive herds of cattle right across America. The spec sheet says it pumps 800 watts per channel RMS into 8 ohms and 3.2 kW into 2 ohms. Which explains a few things. The 12000 probably owes its existence to a conversation John had with a Thai customer who, while appreciating the power and efficiency of Chord's existing amps, couldn't help feeling they were a bit on the small side. What he wanted was a BIG amp, something that looked like a distended Borg cube clad in alloy armour and carrying the unspoken warning that resistance was, indeed, futile... And yes, people of planet Krell, that means you. Heh-heh.

So here it is, a knee-high, 98kg hi-fi engine making no noise, but bathing its immediate surroundings in a soft violet light emitted from somewhere just beneath the top plate venting. Intentionally or not, this mimicks the piston girth of a giant American V8. You almost expect the whole thing to rock gently on its feet, reacting to the great gobs of torque generated from within. Space cube technology meets supercar grunt. Weird image, strangely compelling.

Some facts. The 12000 is the size it needs to be (475x435x670mm, WxHxD) because it's stuffed to the gills with electronics: six 4 kilowatt (peak) power supplies and a huge bank of secondary reserves for starters. In addition, there are 94 output MOSFETS. The main rails run at +/-110V and there are drive circuitry rails outside of those. Build time is a week for two people, and Franks works on every one. As yet, no 12000s have been sold in the UK. The first dozen examples have ended up in Korea, Singapore, Thailand, Russia, Spain and, yes, Norway.

I slip Madonna's *Music* CD into the Wadia transport that feeds Chord's DSC1500 converter that, in turn, drives the 12000 direct. The sound? Two words: real and loud. Not compared to other hi-fi, but compared to life itself. And the 12000 is barely ticking over. John tweaks the volume, first a little then quite a lot. Street lights flicker, alarm sirens spool up at the National Grid HQ, the sky grows a little darker. And the 801s – power-sink speakers that eat lesser amps for breakfast – start to shake, flap and, well, lose it Big Time. Point proven, John.

David Vivian holds no fear of amps, no matter what their size. Mice, on the other hand...



"THE 12000 IS A BIG AMP. IT LOOKS LIKE A BORG CUBE, CARRYING THE WARNING THAT RESISTANCE IS FUTILE. AND YES, PEOPLE OF PLANET KRELL... THAT MEANS YOU."





t came as no little surprise when Sharp launched its first bid for high-end credibility with the SM-SX100 digital amplifier last year. Wasn't this, after all, a multinational that made everything from pocket calculators to camcorders, but not much in the way of serious hi-fi? What could the appeal have been for the

brand to launch a c£10,000 high tech stereo amplifier. The answer probably lies in the word 'brand', the image of which is not usually harmed by statement products – witness the publicity and kudos that B&W and latterly TAG McLaren have garnered with very expensive glass fibre loudspeakers. Presumably Sharp wanted to prove that it wasn't just good at making real world high tech, but that it too had aspirations to high fidelity greatness. An excellent sentiment indeed.

As a follow up to that first 1-bit amplifier, Sharp has introduced the stylish pairing you see before you. (Stylish in the sense that they make a distinct aesthetic statement that is, they don't strike me as being particularly of the moment, though the lipstick volume knob has a certain appeal.) The proud bearer of that purple probe is the SM-SX1 integrated digital amplifier, a full technical analysis of which can be found in Paul

# "PRESUMABLY SHARP WANTS TO PROVE THAT IT TOO ASPIRES TO HI-FI GREATNESS. AN EXCELLENT SENTIMENT"



Miller's column (page 92). Its spec on paper is a modest 50 Watts per channel which is derived from a switch mode power supply, explaining the relatively diminutive nature of the beast.

Connection-wise, it has three analogue inputs and a single output alongside two digital inputs of the normal persuasion (optical and electrical) and a Toslink output. What marks this and the accompanying SACD player out from the norm is the existence of a 13-pin connection for the digital transmission of an SACD bitstream. This is the first time such a connection has been created: none of the Sony machines have featured one, the principle reason being that it presents the would-be software pirate with a virtual master tape of any SACD recording. To avoid this problem, Sharp has included a relay-exciting handshake protocol that takes place between player and amp before bits are streamed, and

UDIO CD

SUPER AUDIO CD

every time the SACD input is selected as far as one can hear.

This amplifier has one rather surprising omission: there's no remote control handset or receiving eye. Apparently this is because such conveniences denigrate an amplifier's audiophile appeal in Japan. And there I was thinking the British were at the top of the hairshirt tree! It does strike me as odd that what looks like a lifestyle product should be aimed at the hi-fi nut in the first place, but clearly tastes are different on the other side of the world.

The other half of this system is the DX-SX1 SACD player, the first from the brand and the first from outside the Sony/Philips axis (Marantz representing the high end of Philips technology). This looks like selling for around the £2,700 mark and features identical styling to the amplifier, albeit sans lipstick. Features are pretty basic, save for the aforementioned SACD connector and the presence of a remote control. Yes, source components are allowed to have them it would

 $\land$ 

# LOCKING SHARP MORE HIGH-END HIGH JINKS FROM THE UNLIKELY SOURCE OF SHARP, AS IT UNLEASHES A FEROCIOUSLY FLASHY

SACD PLAYER/1-BIT AMP COMBO

**REVIEW JASON KENNEDY** 

D



Impress your neighbours with DiVA - Digitally integrated Video & Audio, the powerful new series from Arcam, the UK's biggest selling amplifier and CD manufacturer. DiVA's advanced engineering lifts music dynamics to another level. Build up your own spectacular system from: 2 CD players, 3 amplifiers, 2 power amplifiers,

AM/FM tuner, DVD player, AV receiver. Best ask for a demonstration before you try it at home. ARCAM Pembroke Avenue Cambridge CB5 9PB England. Tel: + 44 (0)1223 203203 www.arcam.co.uk



www.audio-shed.com

**Free phone** 

# Free advice

**Free delivery Free installation** 

Some things in black & white do make sense

Free yourself

# 0800 169 7079

# SHARP DX-SX1 SACD PLAYER & SM-SX1 1-BIT AMPLIFIER | HIGH PERFORMANCE



seem. There are the usual varieties of analog and digital outputs, one of the former being variable in output level, so a couch potato option is available to those who can cope with the compromises (analogue connection to a digital amp and digital volume control – neither are a good idea). One small surprise is that the SACD connector will not transmit 16/44.1 CD bitstreams, for that you need a regular digital cable – in other words two connections for one component, leaving one spare on the amp for a CD recorder or DAB radio.

Remote control aside, the pair is operationally straightforward, the disc player much like any other – until you stick an SACD in, when it takes a little longer to read the TOC. The amp has a gain readout which gives you a starting point with discs of a known level. But the system is very sensitive to variations in mastering level so be cautious with new discs.

### **SOUND QUALITY**

 $\triangleleft$ 

I used these components individually and together with Living Voice Avatar OBX-R loudspeakers (a relatively easy load), Kimber and Townshend cables, with the Eikos CD player and NAD Silverline pre/Gamut D200 power amps for reference.

As a CD player the DX-SX1 proved to be on the lively side, with an emphasis on leading edges and plenty of detail, Barenboim's piano producing more ring and Ali Farka Toure coming across with a bit more energy than I'm used to. Against this the Eikos sounded a little richer, and added body to the detail provided by the Sharp. More highly manipulated recordings like Missy Elliot's Da Real World also faired well, sounding powerful if a little full in the bass but strong on lyrical intelligibility. There's a definite emphasis on the upper midrange that makes for a detailed sound at the expense of overall colour. Rhythmically its strong, but not unduly emphasised, and in terms of imaging it seems to be as good as the Eikos, which is no mean feat.

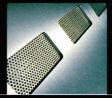
Moving over to SACD, I tried a couple of the new Linn recordings; Tommy Smith's saxophone-led jazz quartet providing a rich, vivid sound with plenty of attack. This is mediumhard contemporary jazz with a be-bop feel and, on one occasion, a rather nice Jan Garbarekesque solo from Smith that revelled in the format's space creating skills. Claire Martin's Take My Heart, on the other hand, is a more up-front recording with extraordinary presence. I got the unusual impression that the recording was more robust than the speakers were capable of revealing; not something I encounter very often. The other disc I had to hand did a similar thing: Hein Van de Geyn's Woodwind Works (Challenge Records), contemporary classical material recorded live to DSD at the Concertgebouw and very strong on the venue's acoustic.

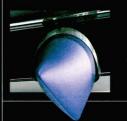
Bringing the SM-SX1 amplifier into the picture also involved changing the high capacitance Electrofluidics bi-wire speaker cable for the more 'cautious' varieties listed above (Paul Miller's comments regarding output impedance had put me on guard). Possibly as a result, the atmosphere in the Concertgebouw dimmed slightly, but the sound was still highly vivid. Playing CDs via digital connection provided a very crisp, detailed picture with plenty of presence and impressive sensitivity to phase variations on the Missy Elliot. Replacing the Kimber with Townshend cable improved the ambience resolve and revealed an 'inky black' background behind Smith's saxophone.

This is not a powerful amp, however, and there were occasions when the sound verged on the uncomfortable, but it is rarely less than gripping. I guess I prefer a more relaxed sound than this amp could muster with these speakers, but so long as I stuck to sensible playback levels the result was always interesting. Occasionally instruments like piano could sound a little glassy but with other material the SM/DX ensemble could produce startling realism.

### CONCLUSION

Of the two shiny Sharp components the SACD seems the strongest, presumably because it has the power of Sony/Philips R&D behind it. The amplifier has a certain something that you rarely hear, a being-there quality of immediacy that can really make you take notice. Against this is a subjective and measured shortage of power that cannot be ignored, but for scholars of the absolute sound it is an interesting design that can work rather well when the moment is right. *£3,300 (SM-SX1, Amplifier) £2,700 (DX-SX1, SACD) Sharp Electronics (UK) Ltd* **2** 0161 204 2644





Top: Even switch mode power supplies get quite hot. Above: The Sharp duo's styling is certainly on the glossy side. Lip-glossy, that is. Below: The simple remote control only operates the SACD player.



# "IN TERMS OF IMAGING, THE SHARP DX-SX1 SEEMS TO BE AS GOOD AS THE EIKOS, WHICH IS NO MEAN FEAT."



REVIEW TIM BOWERN

ne Christmas, not so long ago, a music lover wrote a letter to Santa. "Dear Saint Nick," scribbled he. "I should like a proper hi-fi system for Christmas. One which will bring the music I love to life, so I can dance with its spirit, shut my eyes

and believe it's there with me." Not unreasonable, you might think, but old Santa was vexed. And our music fan hadn't finished.

"Thing is, I don't have room for big boxes and black doesn't go with my colour scheme. I want something compact and stylish, like a micro system. But not. The sound should be sumptuous, so I can sink in and lose myself. It's a tall order but I know you can do it. And I have been a very good boy."

Santa scratched his head. Modern miniaturisation mixed with traditional sonic values. Where would he find such a thing...?

Down at Audio Note, perhaps. Two or three years ago, the Sussex firm decided it should add some mass market appeal to its valve-based technology. It beavered away, using aluminium extrusions to create natty 22cm wide components that combine to form a tasty micro-width system. Now, there's nothing particularly original about a small hi-fi specialist going down the miniaturised route; the likes of Cyrus and Musical Fidelity got there first. But here's the rub: Audio Note's Zero components make extensive use of valves, or vacuum tubes, and that's distinctly different.

We reviewed the first Zero system back in *HFC* 191, consisting of a two-box CD player, three-box amp and a pair of floorstanding speakers. And were greatly impressed by the way it fused traditional valve attributes with a fine sense of immediacy, all wrapped up in a bundle of boxes cute enough to tempt even the hard-bitten high-street

shopper. Its sound had elements you could criticise, yet the way its component parts came together to wrap the listener in music was magical indeed.

That original Standard Zero system is still available at £2,500. But for an extra £500 you can now opt for the Deluxe Zero – the same CD transport and mono power amps, but with a better DAC, preamp and loudspeakers. And at a package price of £3,000, the purchaser saves £495 off the combined list prices.

### THE CD PLAYER

The interesting bit here is the DAC One 1x, a stand-alone digital-to-analogue converter unlike any other at the price. It uses a valve in its output stage, an American 6111WA sub-miniature if you've a passion for such things. But if you think that's different, try this: it has no digital filtering, something all other manufacturers consider mandatory.

 $\triangleright$ 

Whether built in or off-board, the vast majority of DACs use filtering to prepare the digital signal for conversion and remove ultrasonic signals that may affect partnering amps. However, digital filtering extracts its price and leaves an audible mark, albeit one that's considered necessary among the majority of engineers.

However, Audio Note believes it can engineer its products so as to render such filtering redundant. That's exactly what it did with the DAC 5, a digital filterless device costing a cool £18,500, reviewed and raved about by Paul Messenger in *HFC* 203. The DAC One 1x brings the concept to more affordable climes and seems a notable success, at least in the context of a sympathetic system; the open quality of its midrange is really quite stunning. For a more thorough individual inspection, and no doubt some bizarre lab results, see our CD player Bench Test next issue.

# ABSOLUTE ZERO TAKE A SMALL AND SHINY BOX, ADD SOME VACUUM TUBES AND WHAT HAVE YOU GOT? PROOF THAT MICRO SYSTEMS CAN SOUND BEAUTIFUL TOO.

# AUDIO NOTE DELUXE ZERO SYSTEM HIGH PERFORMANCE

CDT-ZERC

"IT MAY NOT HAVE THE PUNCHIEST BASS OR CLEANEST TREBLE, BUT ITS MIDRANGE IS ELECTRIFYINGLY OPEN"

0



# HE SPIRIT OF MUSIC



Distributed by

Sennheiser UK Ltd. **FREEPOST**, High Wycombe, Bucks HP12 3BR. Brochure Line: 0800 652 5002 Fax: 01494 551 550 email: info@sennheiser.co.uk Web: www.sennheiser.co.uk

ELAL

ELAC CL 82 MKII – "I thoroughly recommend you to try them out." hi-fi+ April/May 2000

ELAC CL 82 MKII – "Reliable German made speakers that sound exciting with detail and refinement rare at the price." Hi-Fi World January 2000 ⊕⊕⊕⊕

ELAE

ELAC Electroacustic GmbH, Rendsburger Landstr. 215, D-24113 Kiel, Tel: +49 (431) 64 774-0 Fax: +49 (431) 68 21 01 Web: www.elac.com

# **SENNHEISER**

Sennheiser UK Ltd, FREEPOST, High Wycombe HP12 3BR Brochureline: 0800 652 5002 Fax: 01494 551 550 email: info@sennheiser.co.uk www.sennheiser.co.uk Like the Standard Zero system, Deluxe Zero uses Audio Note's neat CDT Zero transport to spin those shiny discs. There's less to shout about here, but it's a sturdy enough beast with a Sony mechanism at its heart. One down side concerns the controls – there aren't any, at least not on the front panel. Everything is selected via the remote, so it is even more imperative than usual you don't lose it. Emergency open/close and play/stop buttons are accessible round the back; though "accessible" may not be the appropriate word. Keep hold of that remote!

### THE AMPLIFIER

Three boxes are employed here. First is the M One Remote, an upgrade from the M Zero Remote supplied with the Standard package. The difference? Some choice capacitors in the signal path, and also the power supply.

It is remote controllable, as the name suggests, but, like the CDT Zero transport, it has its operational quirks. There are two knobs on the front panel, one for volume the other for balance. The volume knob is poorly judged, so that a quarterturn takes you from zero to nigh on maximum, and the lack of a front-mounted source selector means it is as vital to keep hold of this remote as it is the one for the transport. Talking of which, it would have been handy to combine controls for both units on a single handset.

Round the back are five source inputs, along with a recorder loop. All are line-level, so if you want to run a turntable you'll need a phono stage. Under the lid lies a single valve, another 6111WA employed in the line stage.

Still on the valve trail, you'll find a couple craftily hidden inside each P Zero mono power amp. They use ECL82 push-pull output devices, a multipurpose valve common in the 1950s and 1960s. They're sourced from Yugoslavia and there's a pair in each amp. Power is rated at eight Watts apiece.

### THE SPEAKERS

This is where the whole aesthetic angle breaks down. You might think a pair of snazzy aluminium-clad miniatures would suit this system to a tee, but if that's what you were expecting you're not acquainted with Audio Note speakers. The AZ Three stands at a metre tall and by modern standards is far from pretty, packing a 160mm paper-coned main driver and a 20mm soft dome tweeter into its hulking, square jawed frame. "They look home-made," was the considered response of one visitor during the review period, but these sensitive beasts are a good match for the electronics.

### SOUND QUALITY

Like its less luxurious forebear, the Deluxe Zero system proffers a sound of joyous imperfection. I had been listening to an excellent solid state system prior to this review, one of similar cost, and in many ways that system was superior: tighter in the bass, crisper up top, more focussed overall. But despite its foibles, this Audio Note set-up remains a hugely enjoyable experience.

You see, it gets to the heart of the music. It may not have the punchiest bass or cleanest treble, but its midrange is electrifyingly open; so full of spacious drama, it pulls you into its space and demands your attention. It gives music a tangible presence and texture, pitching instruments and voices between and around the speakers. Sometimes the music feels so close it's startling. There's a track on the last Grant Willard

Conspiracy CD that starts with a whisper of guitar. Through this system, that guitar's energy is in the room, plucking thin air. Then the band crashes in and the vocal begins, rumbling centrestage. Interlaced guitars have clarity, and the whole thing gains shape and form, flowing to your ears like a river of Castrol GTX.

It does roughly the same thing with classical too – if you like to be moved it should work for you. Not so sure on the dance front, though. A slither of Sasha and Digweed's *Northern Exposure* highlights both good and bad: the breakdowns sound magnificent, like waves of liquid sound. But when the rhythm and bass line crash in there's some 'oomph' missing. Not a lack of depth, more punch and drive.

To promote this system, Audio Note could do worse than donate one or two to select music magazines, to use in the office. Music journos love their music but traditionally have crap systems. This one would prove an emotive wake up call, though it sounds more *Uncut* than *Mixmag*.

### CONCLUSION

This isn't the zenith of high-end audio or valvebased sound, but it is a rather unique starting point. It's a one-stop purchase with micro-component appeal, yet its sound is unlike any system of similar design. Try the visitor test, the reaction is always the same. First a frown at the speakers, then a delighted "coo" at the electronics. And when you start to play, their eyes widen: such a substantial and musical sound from those cunning little boxes.

This system deserves to take valves to a wider audience, and if that becomes its legacy then Amen. Perhaps you'd better get scribbling too. Christmas 2001 is less than 12 months away... Complete system £3,000, Audio Note ☎ 01273 220511







From the top: Audio Note's Deluxe Zero system in all its shiny glory; the DAC One 1x doesn't feature any digital fittering, which Audio Note claims improves sonic purity; Those "homemade" speakers, close up. Below: The two remote controls. Whatever you do, don't lose them!



# "THIS SYSTEM DESERVES TO TAKE VALVES TO A WIDER AUDIENCE, AND IF THAT BECOMES ITS LEGACY THEN AMEN"

# READY WILLING AND ABLE DENON HAS A NEW PLAYTHING FOR THE

DENON HAS A NEW PLAYTHING FOR THE LION'S DEN THAT WE CALL RETAIL – THE SHINY NEW DVD-3300. IS IT WORTH SNAPPING UP?





either SACD nor DVD-A players are emerging thick and fast, but with Sony and Marantz championing SACD there are at least more independent manufacturers having a stab at DVD-A. The latest to climb aboard is Denon with its £1.000 DVD-3300, a heavy and

REVIEW PAUL MILLER

£1,000 DVD-3300, a heavy and deceptively simple-looking player with the vast majority of its facilities deferred to a colourcoded remote handset.

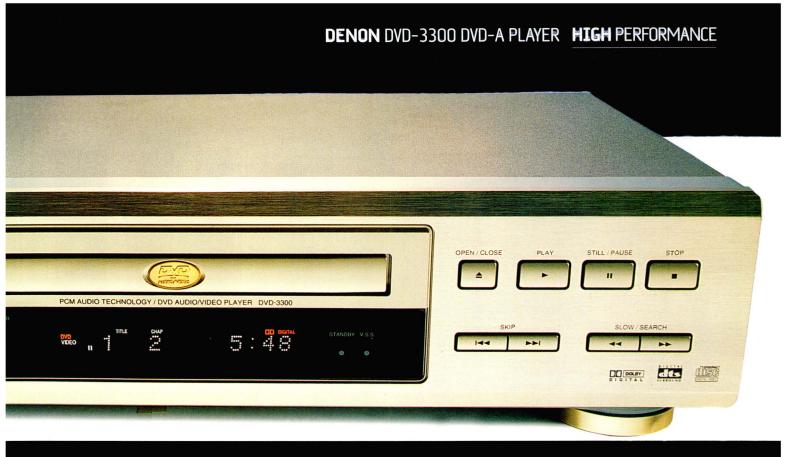
This is not to suggest the DVD-3300 is bereft of features. The rear of the unit is equipped with dual-SCART, composite and S-Type video outputs with Dolby Digital and dts-compatible digital outputs, *and* a complete set of decoded, 5.1 analogue sockets. The latter would be connected to the six-channel analogue input of a partnering AV amplifier, typically without its own on-board DD/dts decoder, though optimum results are likely to be obtained by off-board decoding via

# "THE BASS LINE WAS PRETTY CLEAN AND KEEN, SO IT WAS A PITY THAT THE MIDRANGE WAS A LITTLE SLOPPY IN COMPARISON"

Denon's digital outputs. The on-screen menus provide access to a host of set-up, picture, sound and playback utilities and will be very familiar to anyone who's used a recent Panasonic/ Technics DVD player.

Denon's machine seems, at least, to use a very similar if not identical DVD transport, loader, motherboard and MPEG decoder board to that of the Technics DVD-A10 reviewed in HFC 210. Higher quality capacitors, including audiophile favourites like Silmic and Cerafine electrolytics, are in evidence as a nod to Denon's high-end aspirations. Otherwise, if Matsushita has gone to all the trouble of developing such a sophisticated technology, it makes commercial sense for more specialist manufacturers to implement existing boards rather than re-invent the digital wheel. After all, DVD-A is still in its infancy and projects like the DVD-3300 are best viewed as a 'toe in the water'. There's a precedent too: Denon's first straight DVD (video) player, the DVD-3000, was built using Panasonic's DVD-A350 as a template...

Technically too, there are clear parallels in the performance of the DVD-A10 and this DVD-3300. Both players enjoy impressively low levels of jitter (230psec and 255psec, respectively), a very flat response (-0.1dB at 20kHz and -0.7dB at



45kHz in 96kHz mode) plus, in Denon's case, exceptionally low distortion (0.0003% to 0.006% 1kHz-45kHz). Distortion was fractionally higher from the Technics model, but then the DVD-A10 has 1-2dB more S/N ratio than the Denon. Likely as not, this could be put down to variations in production tolerance. Otherwise, the two players are peas from the same pod.

### **SOUND QUALITY**

With the benefit of 20:20 hindsight, it would have been instructive to compare the DVD-3300 and DVD-A10 back-to-back. Nevertheless with the same blind listening panel auditioning the former at the same level and in the same system, clear parallels in their notes emerged. The Denon was feted for its intrinsically open sound, clean bass, detailed midrange and somewhat indifferent treble – but all these things were served on a bed of crushed ice atop a cold platter.

Awarding the DVD-3300 full marks for its technical merit but rather less for artistic impression with CD software, it was described as "keen enough with its positive drive and focus but still lacking a cohesive warmth or sense that it really 'cares' about the music at hand". The sound is very listenable, very easy on the ear and absolutely unfatiguing, but it's just as easy to get up and walk away from, so tenuous is its grasp on the listener. Carman Lundy's *Self Portrait* CD is a case in point, for though her voice was articulate and showed a good range, it didn't soar with the free-flowing spirit we know to be possible. Similarly, the drum line sounded a little recessed and the sax was slightly reduced in scale and 'presence'.

Rickie Lee Jones' It's Like This sounded sharper, the percussion possessing a crisper sense of attack, but then this is a more up-front recording from Artemis (Sony Music). Once again the slurred, drawl of her vocals was "unmistakably Rickie", suggested one listener, though the sense of focus was compromised by the forwardness of her voice in the mix. Once again, the bass line was pretty clean and keen, so it was a pity the midrange was a little sloppy in comparison. "A bit like grafting the legs from Colin Jackson onto Homer Simpson's body," mused another panellist. "You can hear the join from the strong bass to the indifferent top-end." It looks simple, but Denon's DVD-3300 has a bundle of features – and a comprehensive set of audio and video outputs.

 $\geq$ 

# Sound looks

# Inner value



Myryad distribution by Sennheiser UK Ltd. FREEPOST, High Wycombe, Bucks HP12 3BR. Brochure Line: 0800 652 5002 Fax: 01494 551 550 email: info@sennheiser.co.uk www.sennheiser.co.uk FB1



Stars



01707 393002 www.bryston.ca/pmc sales@promonitor.co.uk

Ashford (Kent) Aylesbury Birmingham Bournemouth Brighton Bristol Cheltenham Chelmsford Chester Dunstable East Grinstead Edinburgh Glasgow Enfield Epsom . Guildford Hitchin Hull High Wycombe lpswich Kingston Lakeside Leeds Leicester London (W1) London (NW) London (SE) London (SW) London (SW) London (SW) London (W) Margate Newcastle Upon Tyne **Milton Keynes** Nottingham Norwich Oxford Rayleigh Sheffield Southampton Southend St Albans Swansea Taunton **Tunbridge Wells** Worthing Worcester Yeovil

Soundcraft HiFi Northwood Audio Griffin Audio Suttons HiFi The Powerplant Radfords Audio T Rayleigh HiFi Audio Excellence Technosound Audio Designs Loud & Clear Stereo Stereo Audio T Audio I PJ HiFi David Orton The Audio Room Audio T Signals Infidelity , Rayleigh HiFi Image Audio Leicester HiFi The Cornflake Shop Audio T Billy Vee Auditorium Oranges & Lemons SMC Thomas Heinitz LMD Audio Lintone Audio Technosound Nottingham HiFl Basically Sound Audio T Rayleigh HiFi Moorgate Acoustics Audio T Rayleigh HiFi Radlett Audio Audio Excellence Mike Manning Audio T Phase 3 Seven Oaks HiFi Mike Manning

**DENON** DVD-3300 DVD-A PLAYER **HIGH** PERFORMANCE



So what of DVD-A? Following on from my investigations of DVD-A mastering quality (HFC 210), we were at least able to audition the DVD-3300 with genuine 192kHz software – an advance copy of what will become Technics's Jazzport 2000 disc (supplied by Syrinx Music & Media). The bass section of the drum solo played to the Denon's strengths, generating a tremendous sense of weight and scale, of movement of air and peddle action on the skin, though, at the other end of the spectrum, the hi-hat was perhaps less precise. Here at least was a taste of the potential offered by the wide bandwidth and broad dynamic range of 192kHz/24-bit recording.

 $\leq$ 

There remained a feeling that the player itself was reining in the extreme top-end, sparkle and natural freshness of the music, but then the problems in engineering a conventional CD player with its 20kHz bandwidth are going to be multiplied for a DVD-A player with its ~ 100kHz response. But even with certified 192kHz DVD-A discs, the player was not able to inspire our listeners in the fashion of the best SACD or even CD hardware. For those enthusiasts sticking to a 'purist' two-channel system, it's also worth noting that down-mixed multichannel 96kHz audio sounds more compressed and cluttered than either CD or 192kHz DVD-A.

### CONCLUSION

There is nothing overtly 'wrong' with the DVD-3300, save the fact that there's a lot of similarsounding and performing product available, notwithstanding its compatibility with DVD-A software. Then again, with the quality and reliability of 192kHz DVD-A yet to be proven and many software houses delaying the launch of DVD-A discs until 2001's Consumer Electronics Show, compatibility with 192kHz audio, at least, remains something of a non-issue.

So, the fact that it will handle the full spectrum of DVD-A discs, available some time in the future, should be viewed as a bonus. But for early adopters and those enthusiasts who simply must have the next 'new thing', the DVD-3300 represents stiff competition for both the existing DVD-A10 from Technics and IVC's cheaper XV-D723.

Otherwise, the utility value of the DVD-3300 is still very high, not least because the player handles CD, CD-RW, DVD-V and A formats, with the bonus of on-board decoding for multichannel software. As a high-end DVD player then – and as a replacement for Denon's previous flagship – the DVD-3300 is the obvious choice for owners of a Denon AV receiver or AV pre/power combination. There is a lot to be said for brand loyalty! £999.99 Hayden Labs 201753 888447



Top: You can stick just about anything in there: CD, CD-RW, DVD-A, DVD-V. Above: The DVD-3300 features onboard Dolby Digital and dts decoding. Below: Every command under the sun is available on the remote control handset.



# "THE BASS SECTION OF THE DRUM SOLO PLAYED TO ITS STRENGTHS, GENERATING A TREMENDOUS SENSE OF WEIGHT AND SCALE"



Send us your views of the magazine and the world of hi-fi: Forum: Letters Hi-Fi Choice 99 Baker Street London W1U 6FP

"MY PRESENT GEAR IS 1990 STATE OF THE ART WHICH I COVETED BUT COULDN'T AFFORD AT THE TIME!"

ALISON GILDING - NEW FOR OLD?

"I HAVE RELENTLESSLY UPGRADED MY SYSTEM, TAKING CARE WITH CABLES, CONES, SQUASH BALLS, SAND, THE LOT. BUT STILL I CRAVED MORE" ANDREW MORTON - POWER TO THE, ER, SYSTEM

"IF A MOBILE IS GIVING OFF THAT MUCH RF, WHAT IS IT DOING TO YOUR HEAD AND BRAIN?"

NEIL HUNTER – IT AIN'T RF STRANGE



# LETTER OF THE MONTH

### **SACD AND FRIENDS**

I was very interested to read Paul Miller's report on the Marantz SA-1 CD player in the December issue, and would be very interested to know what ancillary equipment was used for the listening tests.

I am a big fan of Super Audio CD and believe it to be the audiophile medium of the future, but not being all that technical, I am not sure which components are required get the best from it, I have been told that wide bandwidth amps are required, and it has been suggested the Musical Fidelity CR3 choke regulated pre and power amplifiers are very suitable. Pete Jackson, via e-mail

The Editor replies... Paul used DPA amps and Audio Note loudspeakers for this review, both considerably older than wide bandwidth digital audio but nonetheless up to the task of revealing its advantages. SACD will be served best by the most transparent ancillaries; its strength lies in the way it deals with the rolloff of very high frequencies rather than our ability to actually perceive these frequencies. As far as I know the MF CR3 amps don't claim to offer extra wide bandwidth.

**<b>ADK** 

at the heart of it





### POWER TO THE, ER, SYSTEM

After browsing through the Best Buys issue I was somewhat disappointed to not to see any mention of the benefits of replacing standard power cables, nor any products featured. There was plenty to be said about other possibilities to improve on the power getting to the components but then there is a big gap between the distribution board and the component itself.

I have relentlessly upgraded my system, taking lots of care with speaker and interconnect cables, stands, power supplies for both pre and power amps (Cyrus with a PSX on each), cones, feet, squash balls, sand, distribution boards, the lot. Let's not forget speaker positioning. All tweaks added different things to the sound making it clearer, faster, bigger, louder... Whatever. But still I craved more. I needed that special something in the sound that grabbed my attention and made me really enjoy the music itself. I was sick of listening to my 'system'.

So finally I fitted decent power cables. Initially they sounded a bit mean in the treble but after just two weeks with them I am very happy to report that they have really made my system gel. Soundstaging improved immensely with sound now coming from the entire wall and not just out of the speakers, and the instruments are nicely

placed before me. Timing is better. Bass is harder and fatter. Music that used to make the system struggle is now a delight and the system sounds a lot less 'digital'.

But the best improvement is that the music now sounds thrilling and involving and my foot taps far easier and more often and then I find myself dancing around like a clown. Maybe all power cables should be supplied with Valium?

Andrew Morten, via e-mail

### IT AIN'T RF STRANGE

Whilst listening to some music the other night, I made a call on my mobile phone. What a shock! The signal given off from the phone was picked up by my valve preamp. The preamp is an Audio Note, feeding a pair of monoblocks and B&W Nautilus 804 speakers.

I made the call with the preamp lid off as I had just

replaced the ECC82 valve with a different sounding one – as I prefer it for that particular CD!

As I moved around with the phone, the effect through the speakers was dramatic, to the extent that you could damage them if the volume was turned up (no music playing). The hum/buzz was very loud.

If the mobile is giving off that much RF, what's it doing to your head and brain? Perhaps Paul Miller could do an "Oasis of Sanity" (or should that be Insanity?) on the subject of RF interference with your hi-fi. (RF pickup on Mains cables/speaker cables and interconnects/ LCD displays, etc.) *Neil Hunter, via e-mail* 

The Editor replies... Paul has written a lot about the effects of RF on hi-fi in the past, but usually it's RF that's created by the kit itself rather than mobile phones. The answer is clearly to turn the phone off when you're listening – they always ring at the wrong time – and some things are much more important than phone calls, after all.

### **NEW FOR OLD?**

Having bought HFC on and off for about 10 years and having had a query answered and published, I am wondering if there is any chance that you might re-visit old reviews? My present gear is 1990 state of the art (ish) which I coveted but couldn't afford then!

My main concern is that as time has moved on I could maybe do better although to me it sounds excellent (which is what matters I guess!).

I don't mean reprint reviews, I mean actually re-reviewing. I am sure there are many people out in hi-fi land with oldish (not vintage) kit who would love to read how their gear compares with newer kit. Although that might be difficult with my gear, as virtually every manufacturer has ceased trading!

The system consists of Audio Innovations amps, Impulse speakers and a Voyd turntable. Although my gear is old it has some pedigree: Helius Cyalene tonearm serial no. 00001, Impulse H6 speakers with a non standard finish, an Audio Innovations series 500 integrated used as a preamp to drive Border Patrol powered 2nd Audio monoblocks.

I'd be interested to hear or read your views on a "retro feature" described above. I have visited the website: maybe the very old reviews could be put on here as a separate area to visit. I know that some are already and that it would take a lot of work to put more on.

Alison Gilding, via e-mail

The Editor replies...You say your system sounds excellent, and you're right, that's exactly what matters! If your curiosity gets the better of you why not pop down to a good dealer in your area, have a chat and have a listen to the latest in high fidelity? Certainly electronics have evolved somewhat, yet the fundamental mechanics of loudspeakers have not changed and our listening tests occasionally utilise older speaker designs. Sadly for reasons both logistical and economical we can't re-review old kit, but that's no reason not to do it yourself.



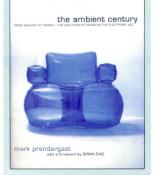
CHRISTIAN HOUSE ON WHAT'S HAPPENING AT www.hifichoice.co.uk

### 412,248 HITS THIS MONTH

### COMPETITION

Let your post-Christmas lethargy fade away courtesy of our new online competition. In partnership with Bloomsbury publishing we are giving away six copies of Mark Prendergast's definitive history of ambient music, *The Ambient Century*. All you need to do is go to www.hifichoice.co.uk and enter our new caption competition.

The book examines the composers, musicians and inventors who contributed to the ambient movement, and includes Mahler, Lee De Forest, William Orbit and Brian Eno, with a potted history of each and examples of their work to audition.



#### AS A TASTER OF THE BOOK, HERE'S AN EXCLUSIVE EXTRACT

"The importance to 20th century music of atmospheric sound, its timbre and personality - indeed its 'ambience' - is a measure of how much innovative music is intertwined with technological change. The series of quiet, luscious Hispanic-inflected albums which Miles Davis made in the late 50s are a case in point. The spirits of Debussy and Iberian composers such as Rodrigo infuse this beautiful work but so does the impressive state of studio technology of the time. Multi-track recording and editing at the production console, enhanced by special microphone placement, highlighted qualities in the music that in earlier times would have been buried underneath gramophone crackle and tape hiss. It's true to say that improvements in production and consumption of music allowed quieter experimental elements to creep in."

### POLL NEWS

Our latest online poll asked browsers to select their favourite recording medium. DAT won with 44 per cent of the 4,141 votes, with cassette coming in second with 29 per cent. MiniDisc trailed with 15 per cent, while CD-R received only 11 per cent. And the supposed format of the future, MP3, garnered a paltry 2 per cent. New online polls are posted fortnightly.

### ACT OF COMPRESSION THIS MONTH'S HOT TOPICS ON THE CHOICE WEB FORUM...

**D** pinions are split amongst forum users as to whether MP3 players are hi-fi or not. While *Hi-Fi Choice* has recently tested players, our stance is simple: it's too important a development to ignore. However while some readers have demanded that we review 'a wide range of components', others believe we should 'stick to traditional territory'.

A number of browsers have mourned the loss of a classifieds facility on the site, asking if it has 'gone forever or just a temporarily blip'. Well, while there are no plans at the moment to add a separate section we would like to promote the use of the forum for selling, requesting and exchanging gear. And if that doesn't work we'll look into reinstating the site's classified section.







### **WEBSITE HI-FIVE**

EACH MONTH WE'LL BE LOOKING AT THE BEST HI-FI WEB SITES. AND THIS MONTH WE'VE SEEN THE FUTURE FOR MP3...

#### SAMSUNG www.samsung.com

This excellent company site has more information on their products and company activities than you could ever need. Particularly interesting sections include a detailed technical support service and coverage of Samsung's involvement in international sport.

### T3 NETWORK www.t3network.co.uk

Hi-Fi Choice, Home Entertainment and those gimmick-crazed guys at 73 have combined resources to bring you a portal where you can receive news, reviews, polls and links covering the gamut of the technology world.

#### SONY www.sony.co.uk

A suitably slick online presence from the hi-fi world's equivalent of Gap. Lifestyle and gear merge in a site that has games, product information, purchase options and a new technology showcase.

### ■ MP3 MAGAZINE www.mp3magazine.co.uk

Tantalising titbits from the online presence of the definitive MP3 magazine. Check out the features section where Oasis mentor Alan McGee explains his ambitions for the internet, and an indispensable A-Z of free music can send you towards your favourite downloadable 'choons'.

#### HI-FI DEALERS www.hifidealers.co.uk

Does exactly what it says on the tin. Hifidealers.co.uk gives a county-by-county rundown of hi-fi dealers across the UK, specifying which dealers act as agents for which manufacturers, along with individual contact details.

# the new Monitor Audio Bronze Series



Bronze 2 Beautiful build and finish with both power and finesse. Plenty of detail and bags of bass, the Monitor Audios put the music first. A great buy. Sound **\*\*\*\*** Build **\*\*\*** Compatibility **\*\* \*** Verdict **\* \* \*** 

> Monitor Audio Proprietory Metal Gold Dome Tweeters MMP<sup>TM</sup> (Metal Matrix Polymer) Long Throw Bass-Mid Drivers Slim Cropped Chassis Design and Full Magnetic Shielding Exemplary Cabinet Construction With 27mm Dual Sandwich Baffles Available in Black Oak, Cherry or White Vinyl finishes



Monitor Audio Bronze 2 HiFi Choice 'Best Buy', October 2000.



34 Clifton Road, Cambridge CB1 7EB England. Tel: 01223 242898 Fax: 01223 214532 email: info@monitoraudio.co.uk www.monitoraudio.co.uk

# FORUM HELP

IS IT ALL GETTING TOO MUCH FOR YOU? JOIN HI-FI PSYCHIATRIST TIM BOWERN ON HIS COUCH, AND LET HIM GUIDE YOU...

LOUDSPEAKERS

### AN ENGLISHMAN'S HOME...

Write to us with your hi-fi queries: Forum: Help Hi-Fi Choice 99 Baker Street London W1U 6FP



Owing to redecoration I have to ditch my Castle speakers in favour of small models to wall-mount either side of a fireplace. Cosmetics are important to the future of my marriage! Do you know anything about the BOSE Acoustimass 5 speaker system? It costs £400, but it doesn't appear in your pages. *Mike Houghton, via e-mail* 

The Acoustimass 5 consists of two tiny satellite speakers and a passive subwoofer,

which can be hidden out of sight. Some find the effect impressive, because a relatively beefy sound seems to be emanating from such minuscule boxes. However, despite being considered the epitome of cool in some circles, they don't cut it sonically. Bass is detached and there's not a lot of midrange to shout about. We think you'd be better off with a pair of more traditional but still ultra-compact boxes like Dali's Royal Minuet II.



"DESPITE BEING THE EPITOME OF COOL FOR SOME, THEY JUST DON'T CUT IT SONICALLY"

### AMPLIFIER **AMP IT UP**

I'm in the process of assembling a separates system. So far I've acquired a pair of B&W 602 S2 speakers and a CD changer, the Sony CDP-CA80ES. For the amp I'm considering a Sony TA-FA3ES, which I've been offered for £250. Would this be a good buy, seeing as it sold in New Zealand for the equivalent of £530 when launched and apparently has more or less the same internals as the *HFC* Best Buy TA-F3000ES? I like its build and also its sound; I listen to classical music, particularly string quartets.

D. G. A. Murray, New Zealand

The TA-FA3ES is a very sound amp and could prove a bargain at around half it's original price, assuming it's in good nick. There's no obvious reason why it shouldn't match well with your B&Ws and the net result should be substantial and expressive. But before you take the plunge, assuming there's no urgency, give a couple of similarly priced alternatives a listen, like NAD's excellent C340.



### BUDGET SYSTEM THE FULL MONTY

I am very confused! I want good stereo separates but not too expensive. I want a CD changer, twin cassette deck, tuner, amp and speakers. My budget is £800 at the most. Simon Hadar, Israel

No problem. With your budget we suggest the Technics SL-MC7 CD changer, Denon TU-260L II tuner, Denon PMA-255UK amp and Tannoy mX2 speakers. The twin cassette deck is more tricky – we haven't reviewed one for quite a while. The Aiwa AD-WX727 was a decent budget twin, if it's still around.

### OUT WITH THE OLD

I'm looking for a replacement for my eight-year-old CD player, to go with an Arcam Alpha 5 amp and KEF Q65 speakers. I thought I might go for an Arcam Alpha 7SE, but another dealer has suggested I go for one of three exdemonstrations models: the Alchemist Nexus APD32A, Trichord Revelation and Micromega Stage 4. These are all priced between £300 and £400. What do you think? Hayden Wilding, Manningtree

Tricky one. Each of the three ex-dem players offers a distinctive character, which may or may not be to your taste (or your system's). They're all worth a listen at that kind of price, and we'd be particularly interested to hear how the Trichord performs with the rest of your gear. See if you can arrange auditions or home trial, but you may find the Arcam turns out to be the most synergistic solution of all.



### FRUGAL PHONO

I'm looking for a low-cost stereo amp with a built-in phono stage. Which would you recommend with a budget of up to £250? Tim Mitchell, via email

The Kenwood KA-F3030R is an

obvious choice, smack on

your budget with a reason-

able moving magnet phono stage. Alternatively, have a

listen to the NAD C320 or

Rotel RA-971 MkII - neither

has a phono stage built-in but you could add an low cost off-board unit like the Pro-Ject Phono Box and still come in around budget.



### MINIDISC PERSONAL

I've just bought a MiniDisc deck and now I want to buy a portable MD player (not a recorder). Are there any you recommend between £150 and £250? Shaun, via e-mail

The last time we did a MiniDisc personals round-up (HFC 204) we were rather keen on the Aiwa AM-HX50. Its sound is substantial and well endowed basswise, though a touch short on detail. Check with Aiwa to find a stockist (0870 168 9000). Aside from that, the only ones we've tested that beat it for sound are recorders like the Sony MZ-R91.

### CD RECORDER RADIO ACTIVITY

We have a fine collection of audio cassettes, recorded on a Nakamichi DR3 from selected Radio 3 broadcasts. These are all filed and give us a lot of pleasure, but as this mode of recording has become rather old hat I feel that any future recordings should be made on CD. What is your opinion of CD-R, and can you recommend a model for both recording and playback? *Iames Manning, Dorset* 

From a sound quality perspective CD-R is an excellent recording format, as is the rewritable (but more costly) CD-RW format with which many current CD recorders are compatible. It lends itself perfectly to your archiving requirements, but if you want a recorder that also plays back with gusto the choice narrows considerably. Marantz recorders are better than most and also tend to do well when recording from analogue sources like FM radio. Consider the DR 6000 at £500 or the DR-17 at £1,500. Alternatively, go for a less costly model and retain your existing CD player for playback. 

### 

I'm fairly ignorant when it comes to hi-fi but I'm keen to learn. Can you recommend some good books for beginners, and also some at a more advanced level? *Aamir Ayub, via e-mail* 

Finding a well-written book on hi-fi can be tricky, particularly one that takes it from a basic level. One of the more digestible we've found is an American title called *The Complete Guide to High End Audio* by Robert Harley and Keith Jarrett (Acapella). Also worth checking out are *Audio and Hi-Fi Handbook* by Ian R. Sinclair (Newnes), *Audio Electronics* by John Linsley Hood (Butterworth), *High Performance Loudspeakers* by Martin Colloms (Wiley) and *The Audio Dictionary* by Glen D. White (Washington).

### SUBWOOFER

I want to add a subwoofer to my Linn pre/power amp and Tukan speakers. Which would you recommend for £400? Jooz, via email

You must make sure any active subwoofer you consider offers a range of adjustment options, particularly if it's intended for music use, and enough input flexibility to suit your needs. If £400 is your ceiling we recommend REL's Q50; if you can stretch further try the Q100E or B&W ASW1000.



"YOU MUST MAKE SURE ANY SUBWOOFER YOU CONSIDER HAS A RANGE OF ADJUSTMENT OPTIONS"

### Some people still travel by car

### Test drive the new NAP 500 power amplifier

#### London

Billy Vee Sound Systems, Lewisham, 020 8318 5755 Grahams Hi-Fi, N1, 020 7226 5500 Oranges and Lemons, SW11, 020 7924 2040

#### Near London

Infidelity, Kingston-upon-Thames, 020 8943 3530

#### South

Audio Designs. East Grinstead, 01342 314569 Audio T, Reading & branches, 0118 958 5463 Jeffries Hi-Fi, Brighton, 01273 609431 Phonography, Ringwood, 01425 461 230 Soundcraft, Ashford, 01233 624441

#### East

Rayleigh Hi-Fi, Chelmsford & branches, 01245 26524

#### West

Audio Excellence, Bristol & branches, 0117 926 4975

#### Midlands

Creative Audio, Shrewsbury, 01743 241924 New Audio Frontiers, Loughborough, 01509 264002 Overture, Banbury, 01295 272158

#### North

Acoustica, Chester & branches, 01244 344227 Audio Counsel, Cheadle, 0161 428 7887 Audio Counsel, Oldham, 0161 633 2602 Audio Images, Sheffield, 0114 273 7893 Fortissimo, Manchester, 0161 834 2545 Lintone Audio, Gateshead, 0191 477 4167 Zen Audio, Hull, 01482 587397

#### Wales

Audio Excellence, Cardiff & branches, 029 2022 8565

WORLD CLASS HI FI



# System of the year.

**Home**Entertainment

IOME CINE

BEST BU

HAT VIDEO &

### THE ENERGY €1000€™ SYSTEM

represents the most recent development in home theatre enjoyment. Close your eyes and you'll be able to pinpoint the position of every single voice, instrument or cosmic explosion.

Unsurpassed focused imaging and striking good looks make encore<sup>™</sup> the reviewers choice worldwide.



For more information please contact: Audio Products International (UK) Ltd. Fairfax House, Goddard Road, Ipswich, Suffolk, ENGLAND, IP1 5NP Phone: 44 (0) 1473 240205 Fax: 44 (0) 1473 240218

e-mail: api.uk@btinternet.com

www.energy-speakers.com

-2-

# Kit's on Sink drama

JIMMY FINALLY GETS HIS HANDS ON SOME SIESMIC SINKS FOR HIS HUGE HORN SPEAKERS, BUT WAS IT WORTH THE WAIT?

"BECAUSE OF THE IMPULSE H-1'S SIZE, I'D NEVER TRIED SEISMIC SINKS UNDER MY MAIN SPEAKERS. HOPEFULLY, A SIZEABLE IMPROVEMENT WAS IN STORE. BUT I WASN'T SURE..."



t last they've arrived; a set of Townshend Seismic Sinks big enough for my Impulse H-1 horn loudspeakers. Although I'd been using Sinks under my two REL Q-Bass subwoofers with very good results for nearly two years, because of the H-1's size I'd never actually tried a set under my main speakers. Hopefully, a sizeable improvement was in store. But I wasn't sure...

Ordinarily, I'd expect Siesmic Sinks to improve the sound of any loudspeaker; they're an almost bomb-proof recommendation. So why the doubts – surely the H-1 wouldn't be any different? Agreed, they're unusually big and fairly heavy. But that shouldn't adversely influence things. No, what worried me was a modification I'd made to the H-1; four or five years ago I mounted the six drive units on Deflex polymer decoupling gaskets.

Would having decoupled drive units erode some of the benefit produced by the Sinks? Clearly, painstaking before and after comparisons were needed. Easier said than done! Given such large enclosures, even the simple matter of getting the speaker on and off the Sink proved a major exercise. Because of the difficulties involved, I did most of my early comparisons in mono, putting one speaker on a Sink while the other sat on the floor as per usual.

### CONTRASTS

First impressions were encouraging. There was a big change in the sound – the most obvious being a shift in tonal balance. The Sink-mounted speaker's mid-band seemed fuller and richer. Bass was deeper and more voluminous, but slightly better integrated with middle frequencies. Tonal balance was definitely warmer; the whole presentation looser and more relaxed.

But was it better? Listening to individual speakers in mono, I wasn't totally sure. Changes in tonal balance and suchlike are very much down to personal preference; and opinions can vary according to the music being played. To be honest, both options had their good points. The floormounted speaker offered impressive tightness and control, while the Sink mounted speaker sounded a shade more natural too.

It was only when I put both speakers on the Sinks that the changes started to make musical sense. Of more consequence than the shift in tonal balance was the increase in inner clarity and fine detail with the Sinks. Voices and instruments seemed better separated and more individual.

It's easy to underestimate the importance of all this. For me, the thing that ruins most hi-fi systems is the way voices and instruments often seem to be in competition. It's natural to give the bulk of your attention to the dominant musical line, but listening grows ever more rewarding when you can follow subtle inner background detail, not just the lead vocal.

The degree of 'loud' dominance varies from system to system, but it's always present. Indeed, the fault is so pervasive, it's easy not to consciously notice it at all. Often, it's only when you hear something that's relatively free from such problems – maybe at a good live concert – that you register what's wrong.

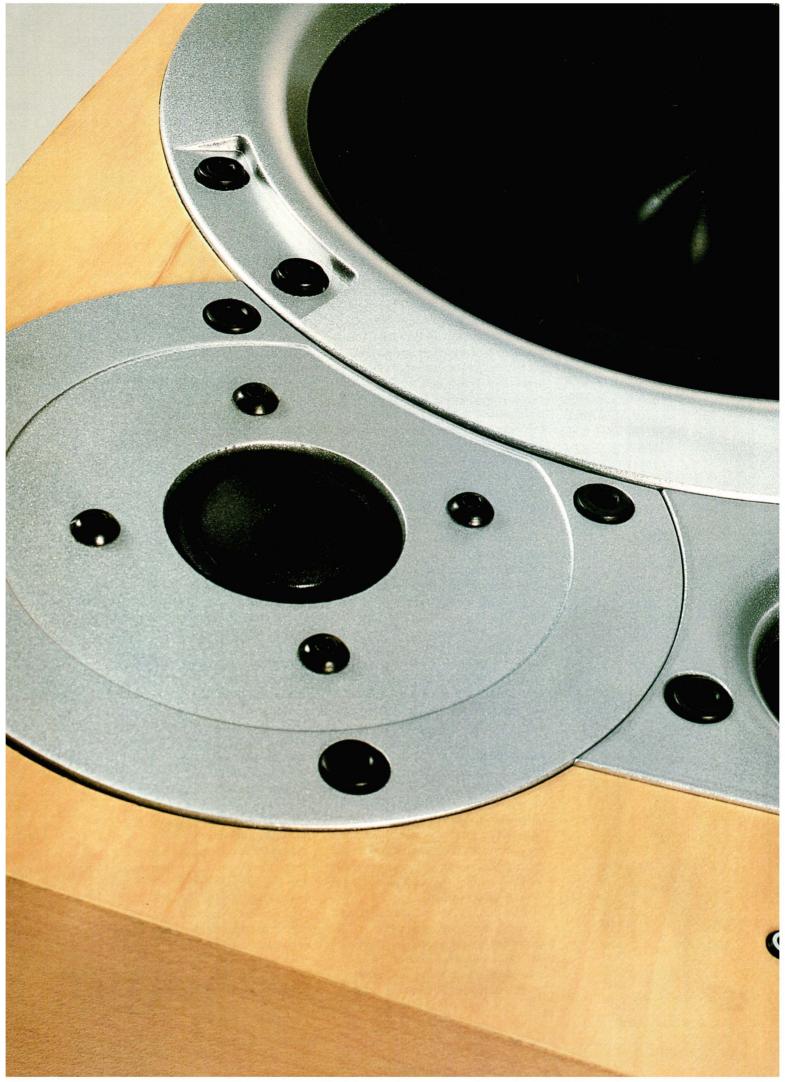
### **COLLABORATIVE COMBINATIONS**

Putting speakers on Siesmic Sinks alters the competitive relationship between loud and soft. The recreation of complex combinations of voices and instruments becomes more collaborative. Dynamic contrasts remain identical, of course. But because loud no longer dominates to the same degree, clarity is much improved and the sound is freer and less fatiguing to listen to.

It's not an inexpensive upgrade to make (£499). But the difference is a truly musical one. Moreover, the nature of the improvement is very difficult to obtain by other means – it's not like upgrading to a better amplifier or CD player. Only you can say whether it's for you. But, the more I experience the benefits of mounting speakers this way, the more convinced I am it's right.

Townshend Audio 🕿 020 8979 3787

Jimmy Hughes has never been known to leave a stone unturned in his quest for the absolute sound.



### **SPEAKERS** PAUL MESSENGER AND PAUL MILLER TAKE A LOOK AT A DOZEN PAIRS OF MID-PRICE LOUDSPEAKERS WITH DESIGNS ON YOUR SYSTEM.

his month's major group test brings together 12 relatively upmarket loudspeakers, priced between £600 – £1,520. Perhaps surprisingly, more than half of these are compact two-way stand-mounts; much less surprisingly, given their prices, these are luxuriously equipped in both enclosure build/finish and drive unit technology.

It's interesting to note just how much these seven stand-mounts have in common. All have nominal 6.5-inch frame main drivers (in cast alloy, of course!); all bar one are reflex-loaded; and all bar one has an internal box volume close to 15 litres. There are several variations on the theme – the Neat has a smaller enclosure, the AVI has a sealed box, the PMC has a transmission line (of sorts), and the ALR Jordan uses a large ABR (auxiliary bass radiator) in place of a port – but the overall configurations are basically very similar.

The five floorstanders show much greater variation. The Arcaydis has the same driver configuration as the stand-mounts, albeit mounted in an enclosure that's half as big again, whereas the Dynaudio and Snell are so called 'two-and-a-half-way' designs. These have twin 6.5-inch main drivers operating in tandem through the bass region (with additional port reinforcement), but the lower one rolls off early so that just the upper one carries the main midrange portion of the spectrum up to the tweeter.

The Mission and KEF, in contrast, are full three-way designs, with separate bass, midrange and treble drivers. By mounting its bass unit in the side, the Mission can use a large bass driver in a fashionably slim enclosure, while in the KEF's case the only visible driver is a two-way mid/treble co-axial, the bass driver being concealed inside the box.

The unsighted listening tests were carried out in a room which is a little larger than average, but not excessively so – 5.5x4.2x2.6m (LxWxH). The speakers are installed one pair at a time behind an acoustically transparent curtain, and positioned according to the results obtained from a series of sine wave sweeps taken in the room itself across the listening arc. Each presentation takes roughly half an hour, covering as broad a range of music as possible, split evenly between vinyl and CD sources.

N RUS

### THE SPEAKERS

ALR JORDAN NOTE 3	£1,000.00
ARCAYDIS CONCEPT 2	£1,200.00
AVI BIGGATRON RED SPOT	£600.00
CYRUS CLS70	£800.00
DYNAUDIO AUDIENCE 72	£1,100.00
JAMO D 830	£1,400.00
KEF REFERENCE ONE-TWO	£1,350.00
MAGNAT VINTAGE 710	£800.00
MISSION 783	£1,000.00
NEAT PETITE III	£795.00
PMC TB2	£600.00
SNELL E.5 MK2	£1,520.00

### OTHER EQUIPMENT USED

Linn LP12 turntable Naim ARO tonearm Linn Arkiv B and Dynavector XV-1 cartridges Naim CDS CD player Naim NATO1 tuner Naim NAC52 pre-amp Naim NAC52 pre-amp Naim NAC55 speaker cables Kudos S100 speaker stands.

### MUSIC USED DURING TESTS

Joni Mitchell - *Miles of Aisles* Mari Boine - *Eallin* Captain Beefheart and the Magic Band -*Strictly Personal* The Grateful Dead - *Reckoning* The Cambridge Singers/Rutter - *There is Sweet Music* Villa-Lobos/Stokowski/Stadium Symphony Orchestra New York - *Uirapuru* BBC Radios 3 and 4

### THE LISTENING PANEL

Russell Kauffman (Densen/Morel) David Inman (Castle) Keith Haddock (various) Jim Kempton

### ALR JORDAN NOTE 3

CONTACT 020 8642 4436 www.alr.de GUARANTEE 5 YEARS

SOUND **SOUND SOUND *

A

LR Jordan is a German brand, although the Jordan bit refers to UK pioneer Ted Jordan,

whose metal-cone technology is used in the main drive unit. The Note 3 is the baby stand-mount brother of the hefty floorstanding Note 7 reviewed in *HFC* 196, and shares quite a number of the same ingredients.

It closely follows the stand-mount stereotype set by this group, with a nominal 6.5-inch frame main driver, and an enclosure of around 15 litres. It's very sturdily built, turning the scales to 12kg, and nicely finished in real wood veneer, with distinctively curved sides which extend up to the baffle edge, though the price-tag is also pretty hefty in context.

The most obvious and unusual feature is a large ABR (auxiliary bass radiator), sometimes referred to as a 'flapping baffle', which takes up most of this speaker's rear panel. Looking like a large elliptical drive unit but lacking a motor assembly, this behaves exactly like a reflex port, though in this implementation there's extra flexibility through being able to adjust the diaphragm's mass (and hence the tuning of the box/ABR resonance) by adding or subtracting weights in the form of steel washers to a knurled bolt attached to the diaphragm centre. In fact the range of adjustment with the supplied weights was not great, allowing the port tuning to be varied between 40Hz and 50Hz, but that could be useful in avoiding major room modes.

Some time was spent experimenting with this adjustment and the siting, but room measurements still indicated a rather strong midbass and lean upper bass, even with the speaker well clear of walls. Had the ABR been a full drive unit, connected just to a rear panel potentiometer, it would also have been possible to vary the Q of its resonance, and so damp out the excess.

### SOUND QUALITY

Although the Note 3 didn't do badly in the listening tests, it didn't particularly stand out either. There were no It may be a sturdy beast, but at its high price, the ALR Jordan doesn't really get the music pumping.

strong criticisms of the sound per se, but almost every panellist remarked on finding it difficult to get involved in the performance. Comments were also made that the music failed to grab the interest and attention, and the overall sound was a little thin and forward, lacking in warmth and weight.

Speech works pretty well, with no obvious boxiness, while across a broad range of material the speaker demonstrates a good dynamic range, though its balance is just slightly on the over-explicit side. This preserves good articulation and intelligibility at very low levels, but it can sound a little aggressive with the wrong material.

### CONCLUSION

This is a decent enough loudspeaker, and the tuneable ABR is an interesting feature. It's also very substantially built, but the sound didn't get our listening panel too excited, and the price is quite high for a two-way stand-mount.

### "ACROSS A BROAD RANGE OF MATERIAL, THE SPEAKER DEMONSTRATES A GOOD DYNAMIC RANGE"

### THE LAB REPORT

ALEJORDAN

#### TESTED WITH THE TWO ABR

shims used during Paul's listening tests, the ALR Jordan Note 3 boasts a very accurately-tuned bass with both the peak output of the ABR (which can be thought of as a port with mass) and null in the front driver coinciding at 43Hz. The front (active) driver is arguably a little peaky in its alignment, but the rolloff is smooth and distortion reasonably low at 0.5-0.6% (re. 96dBA). Swings in (electrical) phase amount to +55/-40 degrees here with a minimum impedance of 5 ohm. The mean impedance is a moderate 10 ohm. Sensitivity is healthy for a reasonably small enclosure at 88.8dB, but a narrowband analysis of its response shows loss in output between 4.6kHz-6.8kHz (where THD climbs from ~1% to ~2%) before the soft-dome tweeter really gets into its stride. Nevertheless, its averaged, in-room 3rd-octave response looks impressively smooth and extended. Sure enough, there's the merest hint of a treble peak, but this is successfully tamed by toeing the speakers in by a few degrees.

### **ARCAYDIS** CONCEPT 2

radiused edges, and flush-mounted

drive units. However, one port had

woodwork around this orifice didn't

worked loose in transit, and the

look too well fashioned. Arcaydis

uses classy Chord Rumour cable

look too neatly dressed.

internally, though again this didn't

The main driver is a Morel 6.5-

diaphragm, while the Focal tweeter

has an inverted 25mm Kevlar dome,

incher with a 115mm plastic

and is mounted on Arcavdis'

own faceplate

Not surprisingly,

in-room responses

indicate free space

siting, and show a

fine extension and

mid-bass excess.

good alignment with

relative freedom from

**SOUND QUALITY** 

The Concept 2 was well

liked by some of the lis-

tening test panellists, but

rather less so by others. It

sounds very even-handed,

smooth and easy to listen

to, and there was general

But there was also some

of coloration.

CONTACT 01562 865788 www.arcaydis.co.uk GUARANTEE 5 YEARS

### SOUND **SOUND SOUND *

new name to this reviewer, and to the pages of Hi-Fi Choice, Arcaydis is a relatively new brand (established for just three years), hailing from Kidderminster. The two Concept models sit at the top end of a guite extensive range, both distinguished by the use of solid 20mm American White Oak for the cabinetwork, which probably accounts for its substantial price-tag. This Concept 2 floorstander has a baby stand-mount Concept 1 brother (£699), both sharing the same two-way driver line-up.

Two-way stand-mounts are usually compact affairs, especially when the whole of the enclosure is acoustically active, as here, and the Concept 2 is comfortably the smallest floorstander in this group test. However, the sheer density of the hardwood is vividly illustrated by the fact that it's just as heavy as the much larger Dynaudio Audience 72.

The 25 litre internal volume is loaded by a large downward-firing port, the leaflet suggesting that the spike-length can adjusted to 'fine tune' the bass response. Carpeting too will play a part, especially in absorbing the port's unwanted midrange output mentioned in the Lab Test. Inset sockets made the spikes tricky to tighten properly, but do prevent over-tightening.

It's a good-looking speaker, with nicely figured wood grain, elegantly

### THE LAB REPORT

THE ARCAYDIS IS optimistically rated at 89dB sensitivity but, in practice, a figure of 86.6dB is closer to the mark. Using an averaged, 3rd-octave axial trace as a guide to how the Concept 2 will perform, suggests its response is extended but a little lumpy with broad prominences around 1-2kHz and 3-5kHz. The response smoothes out a little as the speakers are toed inward, but this must be traded against some loss in treble - about 10-20 degrees is optimum. The LF rolloff is clean from the bass driver's point of

view but exceptionally untidy from the perspective of the downwardfiring port. Frankly, I'd be tempted to 'short' the port by standing the Concept 2 on carpet, for this tube (tuned to 45Hz) is accompanied by a severe quarterwave resonance at 180Hz (-5dB) and a midband peak at 510Hz (+5dB above bass level). The former is visible on both the nearfield bass response and impedance/phase spectra. The load itself is a moderately tough average of 7.8 ohm with a minimum of 5.7 ohm.

### HI-FICHOICE RECOMMENDED

lacking in drive and authority. Dynamically speaking it's just a little lazy, and one can fairly accuse it of lacking something in drive and excitement, which probably explains the panel's ambivalence.

### CONCLUSION

The Arcaydis is an attractive looking speaker whose unforced neutrality is as easy on the ears as it is on the eves. On balance, a cautious Recommendation is indicated.

### **"THERE WAS GENERAL PRAISE FOR ITS OVERALL NEUTRALITY AND LOW LEVELS** OF COLORATION"



### AVI BIGGA-TRON RED SPOT

CONTACT 01453 752656 www.avihifi.co.uk GUARANTEE 5 YEARS

### HI-FICHOICE BESTBUY



Speaker in 'Not A Spider' shocker! It may have a silly name – but it's a good speaker at a sensible price.

he Bigga-tron Red Spot is not, as the name might suggest, some rare and ghastly spider found only in the wetlands of the Somerset Levels. Rather, it's the bigga brother of the tiny NuNeutron reviewed and Recommended in *HFC* 189. That said, I don't think anyone could seriously regard the Bigga-tron as big – not even its maker, which clearly has a thing for small loudspeakers.

Its price tag puts the Red Spot at the bottom end of our test group, but that's still a pretty hefty sum to pay for a simple two-way stand-mount, especially one as plain as this. You do at least get real wood veneer, in black ash or cherry, but it isn't the most luxuriously finished variety. It follows the stereotype set by the majority of stand-mounts in this group, by using a 6.5-inch frame main driver in a 15-litre enclosure. The important difference here is that the Red Spot doesn't have a port. The main driver here is loaded by a simple sealed box, which has major repercussions on the bass alignment.

The other unusual factor is that the Bigga-tron Red Spot has just a single terminal pair, securely fixed through the back panel with no moulded plastic block. The main driver has a 'curvilinear' doped paper cone and cast frame, while the tweeter uses a 28mm fabric dome. It's about 20 per cent lighter than the average of comparable size models, but still features 18mm double-veneered panels with bitumastic damping.

Wall mounting seems advisable for this speaker, in view of the 'lean'

bass output. That said, the net result of such positioning remains lacking in upper bass and lower mid output, and rather strong through the upper midband.

### SOUND QUALITY

Despite its balance anomalies, and a quite obvious lack of bass power and 'thump', the panel reacted quite positively to the Bigga-tron, praising its overall coherence and the way it helped listeners become involved in the music. The bass might lack weight, but it's agile and lively with good timing, giving the music real impetus and direction, and the lack of 'thump' was considered something of a plus.

Smooth and articulate with a sweet top end, the dry and forward balance adds distinct colorations to speech, with cuppy almost shouty effects, and some boxy nasality. The same was true on our choral extract, which tended to harden on peaks. During the hands-on work, this verged on the unpleasant when trying to listen to highly compressed Radio 1.

### CONCLUSION

Difficult to sum up, the Bigga-tron's undoubtedly good communication skills must be set against its tonal coolness and lack of natural warmth. It won't be to every taste, but the Red Spot does deserve a cautious Recommendation, despite the shameless linguistic vandalism of its name.

### "THE BIGGA-TRON'S COMMUNICATION SKILLS MUST BE SET AGAINST ITS TONAL COOLNESS AND LACK OF NATURAL WARMTH"

### THE LAB REPORT

#### BEARING IN MIND THAT the

Bigga-tron encompasses a mere 15 litre volume and uses a sealed box rather than reflex-loading, its high 90dB sensitivity seems quite remarkable. So too is the substantial 107dBA maximum output and averaged response which is surprisingly even-handed, albeit with a slightly reduced output (a mild shelf) beyond 2kHz or so. Off-axis, there's a drop in treble output, so for the brightest sound aim the speakers directly at the listening position. Placed away from rear walls, the Bigga-tron features a very smooth bass roll-off, free of the peakiness used in other designs to yield a false transient edge (or 'whack') to the bass. Distortion, too, remains usefully low at <0.3% through the bass (up to 96dBA in level) but increases closer to 1% through the midrange crossover frequencies where the electrical phase remains a relatively mild +30 degrees. The *average* 8.1 ohm load is fairly current-hungry, particularly at HF but the 5.4 ohm minimum is far from tortuous.

### **CYRUS** CLS70

CONTACT 01480 435577 www.cyrus.co.uk GUARANTEE 2 YEARS

### 

Check out the Cyrus if you like your music loud – but make sure you're prepared to fiddle about with the sand...

the band, however, with a loss of energy in the crossover zone.

### SOUND QUALITY

The Cyrus gave rather disappointing results in the listening tests. Although

the bottom end delivers decent punch and authority, and avoids the 'thumpy' quality that so often seems to accompany speakers of this size and type. The CLS70 supplies decent dynamic expression too, through the bass and midband, but further up the band there were general complaints of a lack of clarity and 'softened' leading edges.

One panellist questioned whether the speaker would work better at a higher volume level, and there may be some truth in this. Although we do our best to play all speakers at the 'same' level, in practice the major spectral balance variations between different models makes this as good as impossible. That said, midband colorations are undeniable here, and speech tended to highlight 'boxy' and 'shut in' effects which, in extremis, could make a broadcaster sound as though he/she was suffering from a bad head cold.

#### CONCLUSION

Unquestionably a styling *tour de force*, especially for those prepared to take the trouble with the stands, this speaker will appeal most to those who like their music loud, as its laid back presence is very adept at avoiding aggressive tendencies.

t's actually a full 10 years, almost to the day, since Choice reviewed a Cyrus branded loudspeaker. That's because Mission and Cyrus used to be joined at the hip, with Mission focusing on the speaker side while Cyrus concentrated on the electronics. Now that the two companies are operating as independent entities, it's logical for Cyrus to complete its systems with its own loudspeakers, and in its own particularly creative style. In fact it's highly unlikely Mission would have produced a speaker like this. Such a chunky little stand-mount is simply too audiophile, and not mass market enough.

The CLS70 is essentially a compact port-loaded two-way stand-mount based on a 6.5-inch frame main driver. The speaker feels exceptionally solidly built and uses high quality ingredients throughout, including an attractive real wood veneer and cast frame main driver. But its most obviously distinguishing feature must surely be the shiny metal cosmetic trim which decorates the front panel around the drive units and port.

I saw the stands fully assembled, and they look absolutely gorgeous in polished silver finish. A hefty package was shipped, and while I could have handled the self-assembly thing (despite the regrettable lack of a diagram), I gave up at the bit about obtaining kiln-dried sand from the builder's merchants, and cramming 20kg of it through tiny 8x12mm holes. Perhaps Cyrus could supply the ballast, and also facilitate the fill?

In-room measurements show that this Cyrus does better than most of its size/type in avoiding midbass boom, and close-to-wall siting seems feasible, though free space looks preferable. Problems occur further up

### "THE BOTTOM END HAS A DECENT PUNCH, BUT AVOIDS THE THUMPY QUALITY THAT CAN ACCOMPANY SPEAKERS OF THIS SIZE"

### THE LAB REPORT

**MEASURED ON-AXIS** (but without the metal grille in place), the CLS70's averaged, 3rd-octave response is pretty even up to 1kHz or so, where it drops away slightly to reveal a depressed presence band. This partly explains the low 86.2dB sensitivity, which only increases to 86.8dB from 200Hz-20kHz. Listening *above* the speaker axis makes the presence dip even *more* obvious, I might add, as does toeing the speakers inward. Nevertheless, despite its uneven response and low sensitivity, the CLS70 is still able to maintain a low level of distortion at a (relatively) high 96dBA sound pressure level. Typically <0.4% from 200Hz-20kHz, in fact. Similarly, the bass reflex alignment is beautifully executed with no hint of false 'peakiness' from the driver as it rolls sharply away below 70Hz (-3dB). Phase angles are minimal while the average 10 ohm load and 6.5 ohm minimum (at 220Hz) rank as 'easy-going' by modern standards, ensuring a broad compatibility with a wide range of amplifiers.

### **DYNAUDIO** AUDIENCE 72

CONTACT 01732 451938 www.dynaudio.com GUARANTEE 5 YEARS

SOUND **XXXX** VALUE **XXX 1**,100.00

ynaudio's vinyl-clothed Audience range has just gone through an

upgrade programme, which involves replacing the 0 at the end of the model number with a 2. so this Audience 72 is a direct replacement for the Audience 70 reviewed in HFC 199. Apart from the nomenclature and re-locating the port onto the front rather than the rear of the box, it's difficult to see what changes have taken place, and the importer was vague on this point too. The price tag remains as before, as does the overall configuration, and although the surface isn't real wood, it's a very good imitation. A substantial floorstander standing nearly a metre off the deck, styling is conventional and plain, though a chunky plinth is fitted to the base of the enclosure, securely accommodating the substantial 8mm spikes, though not extending the stability footprint in any way.

Two of Dynaudio's renowned main driver units are used in a 'two-and-ahalf-way' configuration, where the lower one is rolled off by the crossover network at a lower frequency than the upper one. Each main driver has a 115mm plastic cone/dome diaphragm, a cast alloy frame, and the large diameter voice coil which is very much a Dynaudio trade mark, conferring more than ample power handling. The tweeter is the company's familiar soft fabric dome, and the speaker has just one terminal pair, as Dynaudio doesn't believe in bi-wiring. Foam bungs are supplied to block the ports if preferred (for example, if the speakers are placed close to a wall).

The far field in-room averaged response is typically Dynaudio – very well balanced right across the band.

0

Relative bass output is a tad full, even when kept well clear of walls, so those foam bungs could well be useful. The top end here looks notably smooth, much more so than the midband (300Hz-1kHz).

### SOUND QUALITY

Impressive bass weight is perhaps the Audience 72's most obvious characteristic, but there was less agreement on the quality thereof, and more than one listener felt that it was a little over-dominant. Although this speaker is essentially neutral and well-balanced,

### "ALTHOUGH THE DYNAMIC RANGE IS GOOD, THE DYNAMICS THEMSELVES LACK SOME EXCITEMENT"

### THE LAB REPORT

TO ALL INTENTS AND purposes, this new Audience 72 behaves rather like a 70 with its rear-firing port switched to the front. Sensitivity is just fractionally down from 88.0dB to 87.7dB but the room-averaged response does not look quite so bright Indeed, toe these speakers inward by 10-20 degrees and the response smoothes out very respectably. Nevertheless, a narrowband analysis shows a similar series of midrange cone modes from 2-4kHz that were seen with the 70. Distortion is slightly higher at ~0.4% through the midrange and, while the bass port still features a broad 25-95Hz reinforcement, the lower of the two bass/mid drivers is substantially more peaky in its output, potentially encouraging a livelier bass register. Once again, amplifiers will not be troubled by modest swings in phase but the average impedance of 5.4 ohm is very currenthungry indeed, varying between just 3 and 7.7 ohm across the entire audioband. This represents the toughest load in our 12-strong test. speech sounds a bit heavy, with some chestiness and thickening, while the presence and treble are a bit restrained, so the whole effect is laid back and a little hooded and shut in.

The dynamic range is good, but dynamics themselves lack some excitement, so although the sound does have a decent measure of authority and power, it also lacks sweetness and delicacy, and voices seem a bit pinched and boxy.

### CONCLUSION

Dynaudio's Audience 70 didn't quite manage to hit the spot when we reviewed it last year, and the same seems to have happened this time around with the Audience 72 despite the changes. The Dynaudio is very competent in almost every respect, but the speaker somehow lacked the vital spark needed to switch on our listeners' attention and focus it on the music being played.



### **JAMO** D830

CONTACT 01788 556777 www.jamo.co.uk GUARANTEE 7 YEARS

<image>

are believed to be sourced from SEAS. It's clever the way the main driver's 120mm metal cone matches the tweeter's faceplate, but more significant is the former's solid cast chassis and the pointy copper phase plug which protrudes from the middle of the cone.

In-room analysis unequivocally indicates this speaker should be sited well clear of walls, and even here the

### THE LAB REPORT

### AMONG OTHER QUALITIES,

Jamo's D830 has a very sharply tuned bass with both the rear-port and null in the forward driver coinciding at 53Hz. Swings in phase of up to +50 degrees occur here, but the real dips in impedance typically occur at mid and higher frequencies. The port is a particularly high-Q affair but includes spurious resonances around 1250Hz and 1500Hz that also appear on the speaker's axial response. By contrast, the averaged, 3rd-octave response (which gives us a better mid-bass is a little strong, and the upper bass rather lean. Furthermore, the broad midband is not particularly smooth.

### SOUND QUALITY

Given my praise for this model in last month's surround sound test, I was both surprised and discomforted when it didn't perform well in the unsighted listening tests. While it remains a good communicator with a wide dynamic range and useful dynamic expression, it's also a bit shiny and over-projected, with a mild tendency to 'shout' with the wrong material.

It drags you into the music and conveys excitement rather well, though the balance is a bit lean and the bass isn't great. The net result is a bit cold and clinical, and would benefit from more warmth, body and richness. It's not a smooth sound, and does have generalised colorations, but also low time-smear and sounds pretty coherent overall.

#### CONCLUSION

Listening tests notwithstanding, I still like this speaker and consider it a class act. But the twin disciplines of the group test and the listening panel have provided a broader perspective, indicating that it will not be to every taste, and that the price is rather high. Worth checking out though, if you like your music dramatic.

idea of overall balance) looks smooth and extended with a hint of forwardness in the upper midrange and a slightly brightened mid-treble. Fortunately, the latter is easily dismissed by angling the boxes slightly inward. Not too far though, as the penalty is a broad loss of treble altogether. Importantly, the lower midrange and bass are wellintegrated while distortion is fabulously low at typically <0.3% from 150Hz-20kHz. Here is one speaker that manages to combine low coloration with a flat response!

anish manufacturer Jamo is better known for rather more startling

looking speakers than this sober and conventional two-way stand-mount. The D830 is not a new design by any means (it used to be known as the Concert 8, and it's been around for some years) but for some reason first made it into *HFC*'s editorial pages only last month, as part of a Jamo surround speaker package. It was so obviously a class act, rather outshining its system stablemates, it seemed a good idea to give the speaker a full stereo review.

This particular group test has brought together some six 15 litre

"YOU COULD ACCUSE THE JAMO OF BEING

**CONSERVATIVELY STYLED - BUT IT'S STILL** 

A VERY CLASSY LOOKING SPEAKER

stand-mounts, and the D830 is the most expensive, though the fact that it's also the heaviest of its size/type goes a little way towards justifying its hefty price-tag. Once you've summoned enough energy to pick it up, you can appreciate the gorgeous real wood finish, with nicely post-formed edges, and the awesome solidity, especially in the extra-thick front panel, made from Jamo's patented NCC (Non Coloration Compound) material. Internal braces further enhance the structural integrity.

One might fairly accuse this Jamo of being conservatively styled, but that in no way implies criticism of a very classy looking speaker indeed, much of which is down to the very advanced looking drive units, which

### **KEF** REFERENCE ONE-TWO

### CONTACT 01622 672261 www.kef.co.uk GUARANTEE 5 YEARS

he junior member of KEF's upmarket series of speakers, the £1,350 per pair Reference One-Two is so named to indicate that the Reference One has now achieved mark Two status. The roots of this design go back several years, and the basic configuration remains the same as before. A chunky little floorstander with a weight of a hefty 22kg, it's nicely finished in so-called rosenut wood veneer, and set upon a moulded plastic plinth which offers a cavity for adding mass loading, and accommodation for a rather clever spike/ foot arrangement. The speakers come with little gilt discs as feet, but the screws which hold these in place can be removed and replaced by supplied 6mm spikes, whereupon the discs take on the role of lock-nuts.

The fact that this is a full three-way design is not at all obvious from a cursory inspection. The bass driver is entirely hidden within the box, and the mid/treble is handled by a single co-axial driver from KEF's Uni-Q collection, in which a tiny tweeter is located on the central pole within the main driver's cone. Immediately below this driver is a large, shallow port, through which comes all the bass energy of the speaker. Known as a 'band-pass' enclosure, the bass section is acoustically complex, featuring a vertically oriented driver mounted on an internal partition, with a lower enclosure ported into the upper one,

and the upper one ported to the outside world.

The lavish instructions include a section about positioning, suggesting that the speaker should be sited clear of walls, but curiously there's no mention here of a feature built into one of the terminals to set a close-to-wall alignment. The latter info is confined to a diagram tucked away on the back of the specifications, where it is easily missed. Room measurement confirmed the free space suitability, and showed a remarkably even overall balance, albeit with limited bass extension (a direct consequence of the band-pass bass).

### SOUND QUALITY

The listening panel was very impressed by the Reference One-Two, but qualified its praise with the observation that the presentation had maybe been just a little too 'loud'. Trying to match the perceived loudness of different loudspeakers is a thankless task, given that every speaker has its own characteristic freguency balance, and it could be that the Reference One-Two's obviously 'middly' balance conferred some advantage. But it's still a good sounding speaker, not only for its impressive overall evenness and smoothness, but also for the sheer coherence created by its near-pointsource aeometry.

The lack of deep bass is audible, and does rob the music of some

### THE LAB REPORT

KEF, ALONG WITH B&W, takes its test and measurement regime very seriously indeed, so when KEF rates its Reference One-Two at an 89dB sensitivity, I'm very gratified to measure precisely 88.9dB in the lab. With a 150W amplifier, this means you are looking at peaks of 105-106dBA in the 'average' room, which is plenty loud enough. The Uni-Q midrange/treble driver array, meanwhile, delivers a uniform 3rdoctave response, albeit with some sensitivity to the listening angle. This is particularly obvious at the top-end, which drops away slightly as you move further off axis. Distortion falls as low as 0.1% through the midrange (re. 96dBA) but increases to ~1% at low frequencies where KEF's coupledcavity bass system takes over around 160Hz. The vent peaks at 80Hz, free of quarterwave, pipe or obvious enclosure resonances, but it delivers big swings in phase (+70 degrees at 30Hz and +65 degrees at 65Hz) for the amplifier to deal with along with a dip to 2.90hm at 100Hz – ouch.

### HI-FICHOICE RECOMMENDED

scale and gravitas, but dynamics are lively, expressive and communicative, and coloration is limited to a modest touch of nasality. There's also some lack of air and transparency, perhaps because the drivers are set a little below seated ear level.

### CONCLUSION

Although it doesn't have the most weighty or transparent sound around, KEF's classy compact floorstander is beautifully neutral and well balanced, and it's certainly nice to look at as well. Recommended.

### "THE LACK OF DEEP BASS IS AUDIBLE, AND DOES ROB THE MUSIC OF SOME SCALE AND GRAVITAS"



### **MAGNAT** VINTAGE 710

CONTACT 02392 240287 www.magnat.de GUARANTEE 10 YEARS

### SOUND

agnat is the German component of the International Recoton Group, which funded a

four year research programme in order to develop the 'no compromise' Vintage 7 series. This Vintage 710 is the 15-litre stand-mount in the range, featuring a nominal 6.5-inch main driver – the same basic configuration as the majority of standmount models in this test group.

Its most unusual feature is a hexagonal box shape - coincidentally, very like the JBL Xti speakers which featured in last month's surround sound speaker group test. Hexagons actually make good sense for speaker enclosures, because the shape helps to 'spread' the standing wave box resonances. It also adds a distinctive aesthetic touch, though it's a moot point whether the rest of the styling mix will appeal as strongly to British tastes as it presumably does to the Germans. Notably, the real wood finish is very plain, with none of the grain figuring that British brands favour. The four different finishes available include Black Ash, Beech, Mahogany and Cherry.

Chunky is the single adjective that best sums up this speaker. Try picking it up and you'll wilt under its 12kg weight. The back panel has an enormous cast twin terminal block, with massive screw terminals (combined with 4mm sockets). The classy looking main driver has a large protruding cast frame (nominal 6.5-inch) and a 120mm aluminium cone, which stands out shiny against the 25mm thick, high gloss black baffle. The tweeter here has a small (20mm) ceramic dome. Room measurements indicate free space siting, though even here the midbass output was a little strong and the upper bass weak, while relative treble output also seemed a little high.

Magna

### THE LAB REPORT

### THIS SENSITIVE, RUGGEDLY

engineered speaker has a very cleanly tuned bass with both its rear-firing port, driver null and impedance minimum all coinciding at 43Hz, the former free of spurious rattles and pipe modes. The average 7.9 ohm load is reasonably tough, however. Distortion is a little less impressive as 3rd-harmonic output increases from the bass/midrange unit as it stretches up to reach the treble crossover point (where there's an additional swing in phase and impedance), delivering <0.3% through the bass but up to ~3% through the midrange at 96dBA. This is only 7dB or so above the speaker's high 89.2dB sensitivity, where neither the unit or crossover components should be struggling. On and up to 30 degrees off-axis, the Vintage 710's response remains smooth but slightly declining from 500Hz-6kHz after which the metal-dome tweeter picks up with a vengeance. With this sort of polar uniformity, it's difficult to see how you can avoid the bright treble. Unless, of course, you duck. The Magnat split opinion in the listening panel, and ended up not really standing out from the pack.

### **SOUND QUALITY**

The Vintage 710 got mixed responses from the listening panel, praised by some but criticised by others, with a net result that came out around average, but offered little consensus of opinion for this summary. "Started out well, but went off," was one sum-up comment, while another surmised that the speaker might need further running in – highly unlikely, in view of the well-battered carton in which it was travelling.

In truth it has quite nice voicing, but also a little boxiness. Speech sounds slightly pinched and nasal, and is a tad over-projected, though quite expressive. The bass end packs a fair wallop, though it could be smoother and more even with greater ultimate weight, while the top end is distinctly shiny, and applause didn't sound particularly convincing. It sounds clean as well as bright, but is maybe just a bit too self-consciously 'hi-fi'.

### CONCLUSION

In this group test, the Vintage 710 comes up against close competition. While it's a very competent speaker, it didn't particularly stand out from the pack, though it's certainly a contender if the styling and slightly shiny sonic signature appeal.



### anything else when you can OWN something this good!

WINDED

Why settle for

**KIMBER 8TC Speaker Cable** 

"detail and neutrality are first class and treble is very well extended and open... some of the best depiction of depth I've heard, and instrumental placing is well defined."

> Richard Black, Hi-Fi Choice, Issue 203, June 2000.

### 00000





RUSS ANDREW

Mail Order Direct on UK Freephone 0800 373467 quoting ref: ACH0201 and request a catalogue Cable Upgrade Scheme • Lifetime Guarantee • 30 Day Home Trial • Expert Advice



RUSS ANDREWS ACCESSORIES LTD., FREEPOST NWW881A, KENDAL, LA8 9ZA. Tel:+44 (0)1539 825500 Fax: +44 (0)1539 825540 E-mail: ACH0201@russandrews.com www.russandrews.com

### **MISSION** 783

#### CONTACT 01480 4511777 www.mission.co.uk GUARANTEE 2 YEARS

### SOUND



ission's relatively new 78series is running along in parallel with the earlier and only slightly less

expensive 77-series, partly because the two ranges represent very different design choices. Whereas the 77s use high sensitivity aerogel cone main drivers, the 78s have midrange cones made of a ceramic material called Keraform.

The 783 is the bigger brother of the 782, Recommended in *HFC* 199. It's a generous and substantially built three-way floorstander, and follows precisely the same formula as its smaller brother, but with everything scaled up by around 30 per cent.

### "MOST PANELLISTS PRAISED THE GOOD WEIGHT AND FINE BASS POWER, BUT THERE WAS CRITICISM OF ITS QUALITY"

As a three-way design which mounts the port-loaded bass driver on the side near the floor (the better to keep the front profile slim and provide good mechanical stability), it's inevitably less discreet than its baby brother. But it's still artfully styled, especially around the front drive units, and beautifully finished, with a heavily chamfered front baffle edge, and hefty, well-braced cabinetwork and plinth.

Mounting the bass driver into the side allows it to be significantly larger than those usually encountered these days, without compromising the slim front view that current fashion demands. The bass driver here has a cone diameter of around 160mm (plus a port), while the midrange cone - a baked ceramic impregnated onto a fabric substrate – is 120mm across, on a nominal 6.5-inch frame. The tweeter has a 25mm fabric dome. Chunky 8mm spikes give stability, but could have more secure fixings, while twin terminal pairs are fitted (a third pair wouldn't have gone amiss).

The in-room responses show good bass extension, and seem to indicate free space siting, though as with the 782 there's a measure of ambiguity here. Smoothness is not its forte, and the upper bass is decidedly lean.

### SOUND QUALITY

'Inconsistent' is the best word to describe the panel's reaction to the 783. Everyone recognised and most praised its good weight and fine bass power, but there was criticism of the bass quality: "Sounds like a big woolly box," one commented succinctly; another referred to "thickened" and "furry" textures.

The midrange is well projected – perhaps a little over-projected – and shows good articulation and voice intelligibility, although it's not without a measure of coloration. Speech is free from chestiness, but shows some 'cuppy' and 'quacky' effects, which are perhaps more obvious because of the projection. There's also some lack of warmth here, which can make for a slightly clinical presentation.

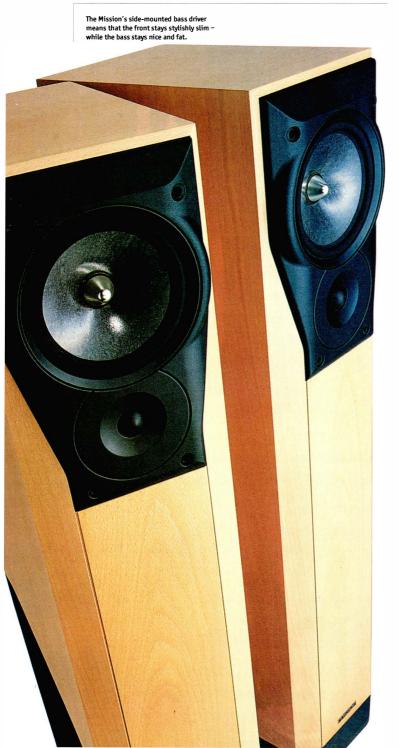
### CONCLUSION

The 783 wasn't entirely convincing to the majority of our listeners. It offers plenty of bass weight, and a clean and articulate midrange, but the two don't quite seem to gel together in the manner of other, simpler designs. It is, however, very elegantly styled, attractive, and pretty good material value for money, and certainly capable of delivering a full scale sound with a largely neutral balance.

### THE LAB REPORT

### PARALLELING THE MISSION

782 (*HFC* 199), the 783's Keraform bass/mid driver simply cannot maintain the high ~90dB sensitivity previously associated with its Aerogel series. In practice, the 783 is capable of delivering just 86.8dB (500Hz-8kHz, 2.83V/1m), though this figure is nearly 2dB *ahead* of the lookalike 782. The averaged 3rd-octave trace, meanwhile, shows an even upper bass, mid and lower treble but something of a 'stinging' treble above 10kHz if you sit onaxis. Unusually, distortion also exceeds 1% at HF. Bass frequencies (below 120Hz) are handled by a 165mm bass driver, reflex-loaded, side-firing and mounted into its own enclosure at the bottom of the box. Unlike the 782, however, the 783 is packed with sufficient wadding to render its LF behaviour more like a sealed box and prompt a sub-6 ohm load from 25Hz-540Hz which will tax those amplifiers not designed for such a task. Fortunately, the dip in electrical phase to -50 degrees occurs when the load is a higher 10 ohm.





"In every sense the Prodigy is a true classic." Alvin Gold, Hi Fi Choice, January 2000

"Bearing in mind what it does, the UK pricing makes it competitive, and so this design must be warmly recommended." Mario Colims, If Fi News, Juguel 2000

Ascent / like its big sister, the Prodigy, a taste of the Statement Evolution 2 in a room-friendly package.

Absolute Sounds' commitment to Martin Logan has been rewarded with a line of speakers so comprehent that it now encompasses every permutation of home theatre, and a price band from entry-level to cutting edge

Prodigy and Ascent are the models marking a new era for Martin Logan. Having mastered the art and science of creating hybrid systems, with the awe-inspiring Statement Evolution 2, Martin Logan has applied the same skill to smaller systems suitable for a wider range of applications.

MARTIN LOGA

Both Prodigy and Ascent are immediately recognisable as Martin Logan products because of the peerless, room-friendly appearance with the captivating see-through panels and furniture grade finish. But it is sound as clear as the panels themselves which mark the Prodigy and Ascent as children of the Statement. Also available is the best-selling Aerius 2 for those purists with limited space.

To provide a selection for all home entertainment needs, the Prodigy and Ascent have also been joined by the new Theater centre-channel model, the Script, the Scenario and the Cinema, to create multi-channel systems able to grace any size or shape of room.



2 ( aby

ADSCILICES AB Durham Read, Landon SW2D DTW, Tr. 444 (0)20 88 31 ve 08-F: 444 (0)20 88 19 27 8 25 Wr. view.caboliu/elemend: eau.

### NEAT PETITE III

CONTACT 01833 631021 www.neat.co.uk GUARANTEE 2 YEARS

SOUND **SOUND SOUND *

### HI-FICHOICE RECOMMENDED

a design which is by no means all things to all men. There was plenty of praise for its openness, clarity and agility, but some felt that the speaker was less comfortable with more complex material.

Carefully positioned, it shows a fine freedom from boxiness combined with surprising bass power. The balance is remarkably neutral and open, if a tad thin and bright, giving fine low level articulation. It was extraordinarily easy to understand the lyrics on 'difficult' rap material, but there was also a tendency to over-emphasise sibilants and consonants, which makes ultra-clean partnering electronics mandatory. Ultimately, the bass does lack something in texture and subtlety, and the speaker could be more dynamically expressive.

### CONCLUSION

Decidedly idiosyncratic in view of its crossover peak, the Petite III should only be used with high quality sources and amplification, and may still be a little too bright for some tastes. But it still sets the standard amongst true tinies, for its fine musical coherence and life, and all-round midband clarity – for that, it retains its Recommendation as it enters its second decade.

### "THE PETITE DIDN'T GIVE AWAY ITS SMALL SIZE WHEN HIDDEN BEHIND THE ACOUSTICALLY TRANSPARENT CURTAIN"

### THE LAB REPORT

WAY BACK IN *HFC* 167, I criticised the Neat Petite 2 for its huge increase in distortion of some 5-6% as the bass/mid unit struggled to meet the lower registers of the EMIT tweeter. And, despite changes to the treble unit and crossover, nothing has changed as far as the Petite 3 is concerned – distortion still marches unchecked through the midrange till the treble ribbon really takes over. Its sensitivity is slightly improved from 86.7dB to 87.1 dB but there's still a 'ragged' 5-6dB peak around 4kHz. The

tinct peak in the crossover region,

The Petite III didn't really give any

clues to its small size when hidden

behind the acoustically transparent

reactions of the panel point towards

curtain, though the rather varied

due to an octave or so's overlap

between the drivers.

SOUND OUALITY

Petite's phase angle shoots to +65degrees through this region, but the tough HF impedance trend (4 ohm at 20kHz) occurs later. Otherwise, the Petite's treble lift is ameliorated by listening 10-20 degrees off axis while, at the other end, its bass alignment remains very 'peaky' with a -3dB point of ~88Hz before falling sharply away. Even with the broad 25-130Hz output of the narrow rear-firing port, the Petite's bass will have plenty of upper bass 'thwack' but little weight to back it up.

long-time favourite luxury near-miniature, Neat's Petite was first reviewed

and Recommended some nine years ago, and to stay in production for nearly a decade is itself an achievement. Although the Petite III has a similar sized main driver and a two-way port-loaded configuration to most of the speakers in this test group, it has a significantly smaller enclosure. It also uses a rather unusual 'area drive' tweeter, where the voice coil that carries the signal is 'printed' onto the thin plastic disc that forms the actual diaphragm.

Both the enclosure and main driver have remained pretty constant throughout the Petite's life, while this is the second significant change to focus on the tweeter and crossover network. Although this latest EMIT- type tweeter looks similar to that used in the MkII, it isn't the same, this new 'radial' version allowing a much simpler (1st order) crossover network.

To avoid its quirks and foibles, the

Neat Petite III should be partnered with high quality sources.

It's a good looking and very solid little box, nicely finished in classy real wood veneer (with a choice of four finishes) and slightly softened edges. Both drivers are flush-mounted, the tweeter diaphragm surrounded by a foam 'blanket'. Two terminal pairs are individually mounted directly through the enclosure, more to aid bi-amping than bi-wiring, according to the manufacturer.

Room measurement confirmed expectations that close-to-wall is at least the starting point, but the exact proximity needs to be balanced against its adverse impact on midband coloration. In fact the Petite delivers an impressively flat and smooth midband, but shows a dis-

### PMC TB2

CONTACT 01707 393002 www.bryston.ca/pmc GUARANTEE 5 YEARS

### SOUND

MC's-TB1 and its 1S (Profinish) sibling have long been Choice favourites, so the news that it was being phased out in favour of a new and rather more expensive model brought a tinge of apprehension. Would the new model match up to its predecessor – and indeed justify a price increase from £500 to £600?

We had a sneak preview in last month's surround sound tests, in which the TB2 (in shielded and unshielded versions) supplied the dialogue and surround channels alongside a pair of floorstanding FB1s. This highlighted a major reason for the change from TB1 to TB2: to improve the former's rather dowdy looking styling and achieve a close cosmetic match for the FB1. TB2 has classy real wood veneer all round, and also nicely rounded vertical edges to the front panel – designer Peter Thomas told me how surprised he'd been at the improvement that last small detail had made.

Like most of the speakers in the group, this is a medium size standmount based on a 6.5-inch frame main driver and an internal box volume of around 15 litres. Transmission line loading is a PMC trademark, and the TB1 has a large slot-shaped port on the rear, which is typical of the breed, though in practice such a small enclosure is likely to behave more like a reflex. Besides the enclosure improvements, which are allegedly more than merely cosmetic, there have also been changes to the transmission line arrangements, and also the crossover network. However, the drive units remain the same as those used in the TB1 – and the FB1 for that matter - with a 6.5-inch cast-frame main driver with doped paper cone, plus a 25mm metal dome tweeter.

The port-loaded 15-litre standmounts featured in this group test show a tendency to excessive midbass output, but this PMC manages to avoid this potential difficulty, perhaps because of its transmission line approach. Although free space siting is likely to give the best results, some wall reinforcement may be tolerable.



HI-FICHOICE BESTBUY

Considering its relatively modest price, the TB2 did remarkably well in the listening tests, attracting almost universal praise for its natural and delicate midband, which brings easy intelligibility and separation to voices, with fine depth layering good ambience recovery, and a welcome lack of boxiness

Some lack of bass power and drive also attracted comment, which might have arisen as a result of the order in which the speakers were presented, but subsequent hands-on work does tend to confirm this as a minor weakness in a mostly very impressive and communicative loudspeaker.

#### CONCLUSION

The TB2 is one of the least expensive speakers in the test group, and it outdid many of its more expensive rivals. It could perhaps have more dynamic authority through the bass region, but basically this is a very well balanced design that's also a great deal nicer to look at than its predecessor. Best Buy.

### **"CONSIDERING ITS RELATIVELY MODEST** PRICE. THE TB2 DID REMARKABLY WELL IN THE LISTENING TESTS"

### THE LAB REPORT

FEATURING IMPROVED cabinet construction over the TB1, PMC has also uprated the quality of the TB2's crossover to help reduce distortion. And at typically <0.2% through the midrange at a hefty 96dBA, the TB2 may truly be described as a low-coloration monitor. This does not mean that its response is flat or neutral sounding, however, for the TB2 has both an axial mid-treble boost and sub-250Hz bass lift to contend with. The former may be tamed by angling the boxes a little off the listening

axis, but the strong bass remains. I'd certainly not recommend these speakers being placed on a shelf or against a rear wall. There's also a peak in the response at 4.1kHz just after the crossover point and where the major +/-40 degree swings in electrical phase occur. The average 11.5 ohm load should not prove troublesome. Finally, although the TB2 is fractionally more sensitive than the TB1 at 87.7dB (re. 2.83V/1m), it still falls noticeably short of the 90dB manufacturer's specification.

### SNELL E.5 MK2

CONTACT 01795 597590 www.snellacoustics.com GUARANTEE 3 YEARS

### SOUND \*\*\*\* VALUE \*\*\*\* £1,520.00

floorstanding variation on the K.5 reviewed in *HFC* 190, Snell's E.5 Mk2 is the most expensive model in our test group, but it is also the largest and one of the heaviest, so there's some justification. A two-and-a-half-way design, it uses two port-loaded 6.5-inch main drivers with 120mm plastic cones to cover the bass end of the spectrum. The upper one of these continues up through the midrange, while a 25mm metal dome handles the high frequencies.

These are all mounted on a suitably substantial black painted front panel, and can be hidden behind a smart perforated metal grille. It's probably a bit too big to be considered a pretty loudspeaker, but it's smartly turned out with beech or black real wood veneer on the sides, top and part of the front, and sits on a proper plinth. It also has just about the best set of spikes I've yet encountered on a mainstream speaker model.

Unusually, the back panel is almost as interesting as the front. Towards the top there's a second tweeter (continuing a longstanding Snell tradition), while close to the twin terminals there are three small toggle switches: one to turn on or off the rear tweeter; another to adjust the level of the front tweeter; and a third to set a bass alignment better suited to close-to-wall siting. The latter switch seemed less than truly effective, but providing this large speaker is positioned well clear of walls, it delivers a remarkably good in-room balance, with impressive deep bass extension, and just a slight notch to take any 'edge' off the presence region. For our listening, the speaker was therefore sited in free space, with 'normal' front tweeter setting, and the rear tweeter active.

### SOUND QUALITY

The E.5 did pretty well in the blind listening tests, though it's fair to say that the reactions were more those of respect than enthusiasm. Although some panellists felt it didn't do enough to drag the listener right into the music, the exceptional bass performance was recognised and praised: "Leading edges of bass notes really well defined. Excellent timing. Bass very taut and not overblown".

But the longer term hands-on listening really gave the E.5 the opportunity to shine, emphasising its impressive neutrality and a midband delicacy and transparency which is unusual amongst large loudspeakers, alongside that fine bass delivery and impressive sense of headroom when driven hard. It is, in truth, an excellent all-rounder, which might have a little more top end air and delicacy, and does have slight chestiness, but the thickening is generally well controlled.

### THE LAB REPORT

EVALUATED WITH ITS rear-firing tweeter switched off and the bass level control set to 'normal' (freestanding), the Snell E.5 proved just shy of its 90dB sensitivity rating at 88.8dB, though the mean 8.9 ohm loading is as tough as the 4 ohm rating suggests. Nevertheless, the thermal capacity of the drivers and crossover heatsinking enables peaks of 108dBA to be generated in-room, provided you have a 250W power amplifier. At 89dB, the E.5's response is very flat indeed through bass, mid and lower treble, though it'll lose much of its sparkle should you be listening off the main axis. Distortion, too, is very low at typically 0.2% from 200Hz-20kHz (re. 96dBA) though the bass alignment is atypical. In this instance, the two bass/mid units exhibit a rather peaky rise to around 85Hz after which the port takes over with its low 33Hz tuning. Deep bass to around 30Hz will be possible inroom, but may prove excessive if the E.5 is used too near rear walls, regardless of its 'placement' switch setting.

### HI-FICHOICE BESTBUY

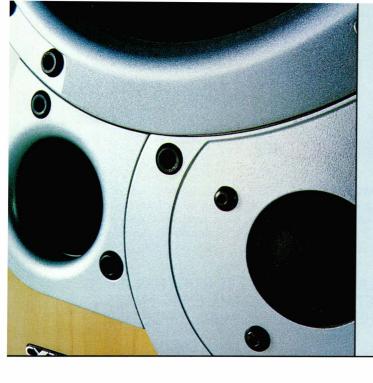
### CONCLUSION

Large loudspeakers are much more difficult to get right than small ones, which makes this Snell all the more impressive. The E.5 Mk2 has a

surprising ability to generate serious deep bass without boom – but it also retains a fine neutrality with a good midband transparency. All in all, a definite Best Buy.

### "LARGE SPEAKERS ARE MUCH HARDER TO GET RIGHT THAN SMALL ONES, MAKING THE SNELL ALL THE MORE IMPRESSIVE"





# CONCLUSIONS

t the end of a hard day's listening, the panellists collectively felt that this group of speakers could and should have done better, especially considering their pretty substantial price-tags.

There's nothing like a group test for highlighting the similarities as well as the differences between models which have plenty in common. More than half of these speakers closely follow a two-way stand-mount stereotype, with a nominal 6.5-inch frame main driver and an enclosure of around 15 litres.

### SPEAKERS AT A GLANCE













		HI-FICHOICE RECOMMENDED	HI-FICHOICE BESTBUY			
MAKE MODEL	ALR JORDAN NOTE 3	ARCAYDIS CONCEPT 2	AVI BIGGATRON RED SPOT	CYRUS CLS70	DYNAUDIO AUDIENCE 72	<b>JAMO</b> D830
PRICE	£1,000.00	£1,200.00	£600.00	£800.00	£1,100.00	£1,400.00
	<mark>★ ★ ★</mark> ₩ ₩ ★ ★ ★ ₩ ₩	***	****	× ★ ★ ★ ★ ★ ★ ★ ★ ★ ★	****	***** ***
COCLUSION	A decent enough speaker, but the sound was unexciting and the price quite high.	This speaker is a little lazy sounding, but is well balanced and smooth with modest coloration.	Good coherence in the bass, though the lean and forward balance won't be to every taste.	Appealing to those who like it loud, this speaker's laid-back attitude avoids aggressive tendencies.	A very competent speaker, but lacking the vital spark to grab your attention.	Not to every taste, and quite a high price, but worth checking if you like your music dramatic
GUARANTEE	5 YEARS	5 YEARS	5 YEARS	2 YEARS	5 YEARS	7 YEARS
THE LAB REPOR	Т					4
HOW LOUD? (SENSITIVITY)						
EASY TO DRIVE? (IMPEDANCE)						
HOW DEEP? (BASS EXTENSION)						
HOW COLOURED? (DISTORTION)						
OVERALL RATING						
MEASUREMENT	S					
SENSITIVITY (2.83V @ 1M)	88.8dB	86.6dB	89.9dB	86.2dB	87.7dB	88.9dB
TYPICAL MAX SPL, 2m	105.5dBA @ 150W	105.5dBA @ 150W	107dBA @ 150W	103dBA @ 150W	106dBA @ 200W	106dBA @ 170W
IMPEDANCE, NOMINAL/AVERAGE	6 ohm/10 ohm	6 ohm/7.8 ohm	6 ohm/8.1 ohm	8 ohm/10.2 ohm	4 ohm / 5.4 ohm	6 ohm/8.35 ohm
IMPEDANCE, MINIMUM	4 ohm @ 200Hz	5.7 @ 240Hz	5.4 ohm @ 20Hz	6.4 ohm @ 220Hz	3.05 ohm @ 35Hz	4.3 ohm @ 205Hz
MAXIMUM PHASE ANGLE	+56 degrees @ 55Hz -41 degrees @ 705Hz	+43 degrees @ 90Hz -18 degrees @ 50Hz	+40 degrees @ 95Hz -35 degrees @ 60Hz	+46 degrees @ 95Hz -25 degrees @ 995Hz	+28 degrees @ 80Hz -30 degrees @ 2.1Hz	+49 degrees @ 90Hz -35 degrees @ 800Hz
PROJECTED IN-ROOM EXTENSION (-6dB)	48Hz	42Hz	50Hz	50Hz	40Hz	50Hz

### THE TESTS PERFORMED, PAUL MESSENGER CASTS A NOT ENTIRELY PLEASED EYE OVER THE GROUP OF SPEAKERS...

All of these, to varying degrees, showed some tendency to exaggerate the upper midband, and hence over-project voices. Furthermore, the port-loaded examples using metal main driver cones (ALR Jordan, Jamo, Magnet) seemed to share a common characteristic at the bass end of things, with rather too healthy a thump in the mid-bass alongside a lack of richness through the upper bass and low r midband. It might be mere coincidence, but could be cause-and-effect. Neutrality isn't the only performance criterion of a good speaker of course, but it's an important one nonetheless, and should perhaps be more readily achievable in this sector of the market. It's certainly an important factor in the confident Recommendations of the KEF, PMC and Snell models in this test, and neutrality remains a powerful arbiter, especially when comparing models which have a great deal in common, as here.

SPEAKERS AT A GLANCE

### "It might be mere coincidence, but could be cause-and-effect"

	HI-FICHOICE BEST BUY	HI-FICHOICE BESTBUY	HI-FICHOICE RECOMMENDED			HI-FICHOICE RECOMMENDED	
MAKE MODEL NUMBER	SNELL E.5 MKII	PMC TB2	NEAT Petite III	MISSION 783	MAGNAT VINTAGE 710	<b>KEF</b> REFERENCE ONE-TWO	
PRICE	£1,520.00	£600.00	£795.00	£999.90	£800.00	£1,350.00	
SOUND VALUE	****	****	****	****	★ ★ ★ ★ 法 ★ ★ ★ ★ ★ ★	****	
CONCLUSION	A large floorstander with deep bass extension, but also a delicate midband with low coloration.	This sets a high standard in its size/type class for neutrality and transparency.	This is one of the most coherent and communicative miniatures around.	The bass and midrange don't quite gel – but it's good value for money, and largely neutral.	Not outstanding, but worth thinking about if the styling and shiny sonic signature appeal.	Limited low bass but bags of headroom, and a very coherent and lively sound.	
GUARANTEE	3 YEARS	5 YEARS	2 YEAR	2 YEAR	10 YEARS	5 YEARS	
HE LAB REPORT		<i>i</i> .					
HOW LOUD? (SENSITIVITY)							
EASY TO DRIVE? (IMPEDANCE)							
HOW DEEP? (BASS EXTENSION)							
HOW COLOURED? (DISTORTION)							
OVERALL RATING							
<b>IEASUREMENTS</b>						N	
SENSITIVITY (2.83V @ 1M)	88.8dB	87.7dB	87.1dB	86.8dB	89.2dB	88.9dB	
TYPICAL MAX SPL, 2m	108dBA @ 250W	106dBA @ 200W	105dBA @ 200W	105dBA @ 200W	107dBA @ 200W	105.5dBA @ 150W	
IMPEDANCE NOMINAL/AVERAGE	4 ohm/8.86 ohm	8 ohm/11.5 ohm	4 ohm/13.2 ohm	8 ohm/9.2 ohm	4 ohm/7.85 ohm	6 ohm/9.8 ohm	
IMPEDANCE, MINIMUM	3.5 ohm @ 155Hz	5.8 ohm @ kHz	4 ohm @ 20kHz	4.35 ohm @ 285Hz	4.25 ohm @ 180Hz	2.9 ohm @ 100Hz	
Maximum Phase angle	+32 degrees @ 310 Hz -45 degrees @ 7.4kHz	+39 degrees @ 4.5kHz -44 degrees @ 1.3kHz	+64 degrees @ 4.4kHz -40 degrees @ 795Hz	+18 degrees @ 5.7kHz -49 degrees @ 910Hz	+45 degrees @ 100Hz -32 degrees @ 60Hz	+68 degrees @ 30Hz -63 degrees @ 840Hz	
PROJECTED IN-ROOM EXTENSION (-6dB)	35Hz	55Hz	70Hz	47Hz	45Hz	45Hz	

# **DOLBY MAT DOES DOLBY MEAN**

WHAT DOES DOLBY MEAN TO YOU? NOISE REDUCTION FOR TAPES, OR DIGITAL ENCODING FOR MOVIE SOUNDTRACKS? IN FACT, ITS TECHNOLOGICAL NET SPREADS FAR WIDER. JASON KENNEDY REPORTS FROM SAN FRANCISCO.



he Potrero district of San Francisco is not one of the most salubrious neighbourhoods, consisting mainly of warehouses and highways, but since Ray Dolby moved

his labs from Clapham it's been the HQ of his increasingly successful operation. The Dolby Labs building is a converted warehouse, albeit a rather nice one with a lot of bare wood and a distinctive cedar aroma. It was here that I joined journalists from all over Europe to hear about what the company has been up to, and listen to some of its new technologies which may shape the way we listen to music in the future.

### **PRO-LOGIC II**

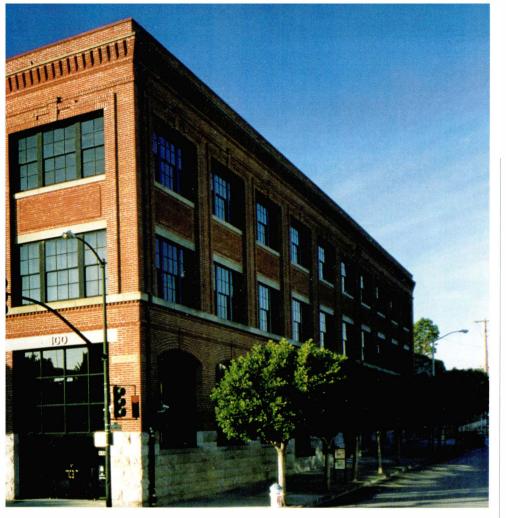
In this increasingly digital age it might seem odd for Dolby to be coming out with a second version of the surround format that got home cinema off the ground a decade ago, but it seems that there are those for whom a matrix sys-

tem still has a strong appeal. In particular there is industry stalwart Jim Fosgate, a vinyl enthusiast who wanted to get more effective surround sound out of two channel material. He invented the core matrix behind Pro-Logic II in 1998 and has been working with Dolby to turn what he has done with vacuum tubes into a chip based processor. Unfortunately, we didn't get to hear the tube version of his decoder but the demo was very interesting nonetheless. As with original Pro-Logic you have a five speaker set up with the option of a subwoofer, but as the system is oriented towards music you can adjust various parameters regarding the way music is handled by each channel. One such is the centre width control, designed to take the emphasis off the centre and broaden the sweetspot.

We will have to wait for someone to produce a decoder to make a judgement – Onkyo and TAG McLaren have been mooted. But for now it is good to know that someone is working on ways to get new results with raw stereo material.

### **OUT OF YOUR HEAD**

Further afield in Australia, Lake Technology has developed surround sound technology for headphones, and



### "JOHN HAS BEEN MASTERING A NUMBER OF CLASSIC ALBUMS FOR MULTICHANNEL DVD-A, INCLUDING MACHINE HEAD BY DEEP PURPLE."



Pro-Logic II was developed using traditional valve technology, then transferred into a chip based processor.

Dolby is taking on the role of licensing. Designed to give 360 degree sound from normal headphones, the Dolby 'phones are intended to create home cinema sound without a stack of speakers and is well suited to personal DVD players. So far, decoders are only available in Japan, where the only hardware solution is a Sony Vaio MX PC that looks like a mini system, but there is a Marantz receiver on the way and Lake has developed MGI and Real Jukebox plug-ins for PC users.

Dolby Headphone works with Dolby Digital signals to produce the effect of five channels and their reflections in one of three simulated environments, although how many of these modes are offered depends on the maker of the decoder. At best you can choose between reference room, livelier room and large room – the relatively damped sounding reference room looking to be the standard option. In all cases the extent to which sound is placed outside of the cans is impressive, but the livelier 'rooms' proved more appealing with most of the audience.

### **UNCOMPRESSED SURROUND**

Dolby's man in Hollywood, John Kellog, gave us a far too short demonstration of DVD-A surround, but not so short as to discourage me from investigating the format further. Dolby's role with the format is two-fold. Firstly, DVD-A discs will likely include a Dolby Digital version of the recording to aid compatibility with DVD-V machines. More fundamental to the hi-fi fraternity is the fact that Dolby licenses Meridian Lossless Packing, the compression system whereby 5.1 channels of 24-bit/96kHz digital music can be stored on a single DVD-A disc. The encoding software for this is sold as a \$7,500 application.

John showed us a DVD-A demo disc including material from the likes of Stone Temple Pilots, Miles Davis and Emerson, Lake & Palmer. He also told us about the planned 7 November launch date for the first seven Warner titles, a launch that didn't actually come to pass (see our US news column on page 21). However, John has been mastering a number of classic albums for multichannel DVD-A, including *Machine Head* by Deep Purple and *Brain Salad Surgery* by the aforementioned ELP. The next seventies rock revival starts here!

### **DOWNLOAD QC**

Dolby is also part of the powerful axis behind AAC, the SDMI-approved Internet download format for music. Co-developed with MP3 creator the Fraunhoffer Institute, communications giant AT&T and all round big-wig Sony, AAC offers considerably higher sound quality alongside genuine (for the meantime) security. Music industry confidence can be seen on the BMG and Universal Websites, where for a not inconsiderable fee you can download individual tracks or albums from the back catalogues. Likewise, you can pick up a decoder to play them with. Encoders are available for \$99 from Liquid Audio.

The format's limitations lie in its security element - you can't for instance turn an AAC file into a .wav file and burn it onto CD-R, and there is a limit to the amount of different players you can copy a track onto. On the other hand it completely destroys market barriers for software – unlike buying CDs online there's no danger that customs will be able to charge you tax for importing 'software'. Ironically it looks like AAC files will actually cost more than CDs an interesting way to launch a format, let alone one that's competing with MP3. However, I am told that at 256kb/s the quality is indistinguishable from CD, which if true is pretty impressive.



## FMS DAB TUNER THE AIRWAVES FOR THE BEST IN ANALOGUE AND DIGITAL TUNER TECHNOLOGY, DON'T TOUCH THAT DIAL!



tuner batch with a difference – the first *Choice* group to include both analogue and digital tuners. Digital Audio Broadcast or DAB (or Digital Radio as some twit has now deemed it should be called, thus ensuring everlasting

confusion between DAB and FM tuners with a digital display) has definitely arrived. There are a dozen or so models floating around, and the prices have already been safely launched on that downward slope.

The issue of DAB versus FM is not clear cut. In order to squeeze the maximum number of stations into the ether, DAB relies on data reduction similar to that used in MiniDisc and MP3. This kind of compression is a major audio can of worms and somewhat compromises sound when compared with the established popular reference of CD. No one is claiming that FM was ever perfect and, with the near-universal use of heavy audio compression and serious overcrowding in many areas, it's probably worse than ever. But at its best, FM is capable of very fine performance, at least for those folks who have the option of installing a proper rooftop aerial.

Meanwhile for the typical flat-dweller in an inner city, DAB is something of a blessing. In fact despite my reservations I use it alongside FM, deciding which to listen to on an evening-by-evening basis according to the amount of pirate station breakthrough and multipath interference on my FM set-up.

Anyway, it seems the powers that be have decreed that DAB is the way ahead, so we'd better hope that concerned engineers at the broadcast stations can make the best of it. There is in fact a further alternative in the shape of satellite radio, principally digital: this uses basically the same technology as DAB but gives access to foreign stations as well. The main drawback seems to be the near impossibility of finding out anything about it, never mind getting equipment. A few specialists exist and are worth consulting if you're interested.

This group test assembles four FM and three DAB tuners, plus one that juggles both. The prices of the models cover a wide range – but will their performance do likewise?

### THE PLAYERS

ARCAM FMJ DT26	£999.90
CYRUS FM7.5	£400.00
LINN PEKIN	£545.00
MARANTZ ST6000	£150.00
PSION WAVEFINDER	£299.00
ROKSAN KANDY KT-1	£375.00
SONY ST-D777ES	£549.99
VIDEOLOGIC DRX-601E	£299.00

### **OTHER EQUIPMENT USED**

EAR 802 preamp and 519 power amps ATC SCM20 speakers 5-element rooftop FM aerial Revox A76 FM tuner Sound Technology 1000A FM generator (Fed by a Rotel CD player to simulate 'perfect' reception)

### MUSIC USED DURING TESTS

BBC Radios 1-4, Kiss FM, Jazz FM, Classic FM, Planet Rock (DAB-only)



### ARCAM FMJ DT26

CONTACT 01223 203200 www.arcam.co.uk GUARANTEE 2 YEARS

SOUND

"ARCAM'S DT26 DOES A BETTER JOB THAN MOST, WITH PRETTY SOLID BASS AND DETAILED MIDRANGE" rcam got in early with a hi-fi DAB tuner, the Alpha 10. The DT26 is part of the company's 'Full Metal Jacket' range, housed – surprise, surprise – in an all-metal case instead of the Alpha family's plasticfronted version. On the whole, though, the DT26 is the same beast: the circuit board even bears the designation 'Alpha 10'. In fact the brain of the tuner is a bought-in item, the Gold Card from Roke Manor Research, a research and development wing of electronics giant Siemens, which has done a lot of work on DAB. The Gold Card is a sophisticated credit cardsized DAB module that receives and demodulates the radio waves and decodes the audio data. The final digital-to-analogue conversion and output stages are Arcam's, however, as are the power supply arrangements and control logic.

If you've not used DAB before, you'll not find that much difference between it and a modern FM tuner with RDS. However, it does away with manual tuning: when set up, a DAB tuner searches for receivable stations, which are then stored in memory just like FM presets. The 'tuning' knob scrolls through the presets, which are all identified by name on the display, so selecting stations is a breeze. Arcam has added seven one-touch preset buttons to speed things up.



A further convenience feature is the inclusion of a pair of input sockets so that an FM tuner can be looped through the DT26 and selected by a front panel switch, thus saving one input on the amplifier. Next to this switch is a volume control for the headphone socket – which is nice to have, but nearly impossible to grasp. Arcam supplies a basic wire aerial with the tuner, which should be adequate in most urban areas (and eventually throughout the UK). Outputs are analogue, electrical and optical digital, and optical Radio Data Interface. Dynamic Range Control is supported, with five degrees of compression available for those stations that transmit the relevant data.

### SOUND QUALITY

The whole point of DAB is that it's digital and so as long as the digits are correctly decoded performance should vary relatively little from one tuner to the next – effectively it's exactly the same deal as replaying CDs from that point on. Given that DAB uses data reduction it's not immediately obvious that all tuners should decode the exact same data, but in fact that's the idea. Variations in front-end performance – how efficiently tuners receive and decode the radio waves – are not likely to be very large and principally affect only the point at which the audio starts to break up. If that happens you need a better (or better oriented) aerial. Otherwise the sound quality is effectively determined by the basic parameters of DAB and the digital-to-analogue convertor (DAC) in the tuner.

The DT26 does a better job than most, with pretty impressive bass and detailed midrange. Imaging is as good as we've heard from DAB. It lacks nothing in clarity and spaciousness and its forté is the feeling of solidity it can give the sound with a strong broadcast. It also has a slightly richer midrange than some of the competition, filling out instruments and voices in a most appealing way. It also makes the most of DAB's most obvious advantage over most FM installations: the absence of noise, a factor that means you can have CD style subtlety at low levels.

### CONCLUSION

The DT26 seems to be pretty much as good as it gets with DAB, but its lead on cheaper models is only small and that makes it hard to recommend above the Alpha 10DRT for instance, which is less expensive, albeit less attractive too.

### CYRUS FM7.5

### CONTACT 01480 435577 www.cyrus.co.uk GUARANTEE 2 YEARS

SOUND

nother product in the Cyrus 'one size fits all' case – for my money, some of the nicest-looking hi-fi produced in this country in a while. Cyrus has also arguably got the balance just right between neat, bare fascia and ease of use, with just seven presets (how many people regularly use more than that?), a rotary tuning knob and four further buttons. As the name implies, it's an FM-only tuner and hence round the back has only sockets for aerial in and audio out, plus a further pair of sockets for connection to a Cyrus 'MC-BUS' remote control link. There's no RDS.

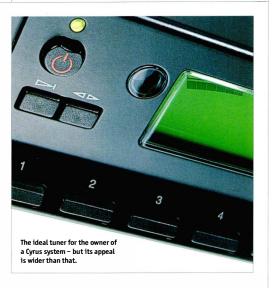
As far as the design is concerned it's no surprise to find a fairly standard set of integrated circuits doing the donkey work, but Cyrus has at least taken the trouble to spice up the power supply arrangements a bit in order to optimise performance. Internal construction is completely impeccable. Operation is straightforward, with just one very minor gripe: when tuning manually there is a rather strange electronic blip with every step up or down the scale, and since there is no interstation muting one gets rather a lot of noise blasting out when halfway between stations. But it's simple enough to turn the volume down when tuning. It's possible to tune in fine steps to optimise reception of slightly 'off-tune' transmitters (pirates, usually, though I was amused to find that Radio 3's South London relay appeared to be one fine step away from its nominal position - probably not really the case). The unit's display normally indicates signal strength, but in fine tuning mode it indicates centre tune instead so that you know when to stop twiddling the dial.

### SOUND QUALITY

Given the number of functional parts this tuner shares with a large number of current designs it's no surprise to discover that it doesn't blaze any dramatic new trails in sound quality, but it is better than average for its class. As with all tuners it gives its best when fed a really clean and strong radio signal and under those conditions its sound is admirably clear and free of congestion, with pretty good bass extension and no suggestion of drooping treble. It can become a bit 'splashy' in big climaxes: don't expect a dramatic cymbal clash to be revealed with the utmost precision, but then that's a bit much to ask of any save the most awesomely expensive FM tuners.

With more modest RF inputs, typical of an indoor aerial, the sound loses a little detail and clarity but retains its basically full-bodied and inviting character, and there is no tendency for it to become tiring. Very bassy broadcasts, and any music with a heavy rhythmic backing, are just slightly less walloping than with the best tuners, but frankly that can be quite welcome when listening to

### **HI-FICHOICE** RECOMMENDED



some stations. On the whole, Cyrus seems to have managed to balance the sonic requirements of different music styles, with none being unduly favoured or otherwise. Background noise is about average by current standards (i.e. pretty low) and performance with very weak signals is OK, although that's clearly not a major design criterion here.

### CONCLUSION

This is an attractive product, both to look at and to use. Obviously it will appeal principally to those who already own Cyrus equipment, who can certainly be assured that the matching tuner will not let the rest of the system down, but its appeal should not be limited to them alone. Only the disproportionate accomplishments of cheaper Far Eastern tuners deprive it of a Best Buy: it certainly merits Recommendation.

### "BETTER THAN AVERAGE FOR ITS CLASS, THE CYRUS' SOUND IS CLEAR AND CONGESTION-FREE"





Classé Audio & Mirage

### AUDIO ILLUSION

23 Langley Broom, Langley, Berkshire SL3 8NB TEL: 01753 542761 FAX: 01753 772532 www.audioillusion.co.uk

highs are Crisp

is excellent. Home Cinema Choice - 'Best Buy'

TUNERS ON TEST

LINN PEKIN

### LINN PEKIN

#### CONTACT 0141 307 7777 www.linn.co.uk GUARANTEE 2 YEARS

### SOUND **XXXX** VALUE **XXX** 545.00

inn's discreet Pekin is a rather plain affair that's built up from a cast front panel with the rest of the case being folded aluminium. That's part of the reason the unit is so light, the other part being that Linn has used a switch-mode power supply which means the mains transformer is less than an inch across and weighs about an ounce. In audio terms that doesn't necessarily have any implications one way or the other, but it does mean that the Pekin can be plugged into any mains supply anywhere in the world. With tuners there's an additional complication in that the frequency response of the broadcast audio varies from country to country, so Linn has programmed the required settings into the internal microprocessor and one can select the country of operation – a very thoughtful feature.

Although much of the work in this tuner is done by standard integrated circuits, they're not the usual ones found in hifi tuners and it looks as if Linn has done an uncommonly large amount of in-house design. Not only that but, apart from the audio and RF circuits (which also receive AM broadcasts, by the way), there is a sophisticated control system which gives very flexible operation. It features such luxuries as adjustable muting threshold and numerical readout of signal strength, the latter on an arbitrary but useful scale of 0 to 50, where 50 really does mean heaps of signal. There's even a data socket on the back panel so that software upgrades can be implemented. Two sets of output sockets allow for connection to 'local' and 'round-the-house' systems, and there are also connections for a Linn Knekt system remote. On the whole the Pekin is a joy to use, and it's also very well built. The only irritating aspect is the FM aerial socket, which is a screw thread 'F connector' as used in the USA. I wish Linn had included an adaptor to a UK type!

### SOUND QUALITY

There's a pleasing depth and perspective to the sound from the Pekin, but for some reason it has a tendency to sound rather bass-light and as a result lacks something in the listener involvement department. That's a shame, as it's really the only serious drawback in what is otherwise a very capable design. The Pekin is particularly capable with weakish radio signals, which still become rather hissy (even Linn cannae change the laws o' physics) but don't suffer from the dreaded break-up and rasping distortion to the same extent as with most competing tuners. That alone should put it on the shortlist of anyone living in a difficult FM area. In absolute terms, however, it falls slightly behind the best competing designs in sound quality and the main culprit seems to be that bass lightness. Very subtly boosting the bass does help, but in fact the measured response is pretty flat anyway so it seems there's something subtler at work here. Ironically, very bass-heavy music seems to be the least affected, while detailed classical and jazz sounds are less full and inviting than with the best tuners in this group.

### CONCLUSION

1054

A mixed result overall, then, with the tuner's strongest suit being performance in fringe reception areas. The good AM sound, intelligent ergonomics and seamless integration with other equipment from Linn will count in the Pekin's favour for many prospective purchasers. But when the Pekin is judged solely on sound quality as a standalone tuner at this price, it just misses a formal recommendation.



A genuinely homegrown design with a raft of features providing a great deal of flexibility from a neat box.



### Europe's First THX® Ultra certified DVD player for NTSC & PAL







The DVD32R is Europe's first DVD player which exceeds the high THX® Ultra standards and allows reference standard replay of CDs.

### High-mass Transport for Low Jitter

The DVD32R uses a top loading transport, allowing its drive motor and servo electronics to be mounted to a heavy, mass loaded sub-chassis. The result is improved data integrity and reduced jitter.

Automatic, Adaptive Drawer Mechanism

The DVD32R aluminium diecast drawer door runs on a polished steel bar and a Teflon glider for smooth and reliable operation, driven by an adaptively controlled electric motor via a steel wire

#### Precise Clock for best Sound and Video

The low phase noise single frequency master oscillator ensures that all video and audio clocks are synchronous, with clock signals being transferred using independently buffered and precisely terminated traces

### Field-leading MPEG Decoder

01342 314569

01256 324311

01277 264730

01276 685597

01703 252827

01494 558585

0207 794 7848

0207 730 1234

0208 930 9933 0208 400 5555

01895 465444

01603 627010

0114 275 6048

0121 429 2811

TAG McLaren worked closely with National Semiconductor's field-leading subsidiary Mediamatics, in finding the best MPEG decoder. After long evaluation Pantera-DVD™, the first IC to integrate all back-end functions of a DVD player onto a single chip, was selected. This unrivalled level of integration includes host processing, a 32-bit RISC processor, 10-bit video DACs and the NTSC/PAL encoders

### Uncompromised Video quality

The video circuitry uses broadcast quality components, with video outputs being individually buffered and vertical and anti-flicker filtering to deliver high quality graphics.

#### Test-Pattern Generator

In-built test-patterns and electronics test circuitry assist in calibrating the tv for best picture quality.

### Advanced Digital Waveform Control

Advanced circuitry optimises rise and fall times whilst preventing waveform discontinuities, reducing the demand on the digital interconnects.

#### TAGtronic Link T<sup>2</sup>L for Minimal Jitter

T2L allows the DVD32R to lock its data output to the low noise, ultra low jitter DAC reference clock in the AV32R

#### **Massive Power Reserves**

The DVD32R uses a large toroidal transformer as this has the benefit of a very low stray magnetic field, reducing the possibility of interference with the audio data and video signals. A second, smaller transformer is used to power the remote control circuitry, allowing very low electrical consumption when switched to standby

Ш L

LUCASELLM

### **Multiple Power Supplies**

0 ---

NO

Separate power supplies reduce interference between the processing stages, right down to having separate windings on the transformer

#### Multi-Layer Printed Circuit Boards

Multi-layer pcbs provide controlled impedances and minimise coupling. Performance is further enhanced using leaded components for perfect analog signals and SMD for fast digital transfer, with quality being optimised using inert-gas soldering.

#### **Enhanced TAGtronic Bus**

The TAGtronic Communication Bus allow products to work seamlessly together to form an effective, integrated system.

#### Upgrade Path

Building on TAG McLaren's class-leading commitment to upgradability, the DVD32R is scheduled to receive a hardware upgrade to DVD-Audio, Progressive Scan and Digital Video whilst functionality enhancements are distributed through TAG McLaren's website, allowing convenient software upgrades at home (using a PC).

TAG McLaren Audio, The Summit, Latham Road, Huntingdon, Cambs. PE29 6ZU freephone: 0800 783 8007 tel: 01480 415600 fax: 01480 52159 e-mail: helpdesk@tagmclarenaudio.com

### To book an audition contact one of these authorised DVD32R stockists:

Audio Designs
Audio T Ltd
Audio T Ltd
Audio T Ltd
Audio T Ltd
Audio T Ltd
Audio T Ltd
Harrods
Harrow Audio
Martin Kleiser Ltd
Martin Kleiser Ltd
Martins HiFi
Moorgate Acoustic
Music Matters Ltd

East Grinstead, West Sussex
Basingstoke, Hampshire
Brentwood, Essex
Camberley, Surrey
Chandler's Ford, Hompshire
High Wycombe, Bucks
West Hampstead, London
Knightsbridge, London
Harrow, Middx
Chiswick, London
Uxbridge, London
Norwich, Norfolk
Sheffield, Yorkshire
Edgbaston, 8irmingham

Music Matters Ltd Music Matters Ltd Music Motters PJ Hi-Fi PJ HI-FI Prestige Audio Ltd Rayleigh Hi-Fi Rayleigh Hi-Fi Rayleigh Hi-Fi aks Sound & Visio aks Sound & Vision aks Sound & Visi aks Sound & Vision Sevenoaks Sound & Vision

n Coldfield W N W W A d. Surrey Lakeside, Essex high, Essex d, Esse ledford Bedfordshire Surrey Suffolk th Devo

Sevenoaks Sound & Vision Sevenoaks Sound & Vision Sevenoaks Sound & Vision Sevenoaks Sound & Vision Sevenoaks Sound & Vision Stereo Stereo Ltd Suttons Hi-Fi Techniquest UK Ltd The Audio File The Hi-Fi Shop The Listening Rooms The Powerplant (Hi-Fi) Ltd Unilet Sound & Vision Zebra

01732 459555 Sevenoaks, Kent Tunbridge Wells, Kent Watford, Hertfordshire 01892 523548 01973 213533 01376 501733 Withom, Essex 01905 612929 Worcester, Worcestershire Glasgow, Strathclyde Bournemouth, Dorset 0141 248 4079 01202 555512 Wimbledon Village, Londor Bishops Stortford, Herts 0208 944 9040 01279 506576 Belfast, N. Ireland 02890 381296 Chelsea, London 0207 244 7750 Brighton, Sussex 01273 775978 New Malden, Surrey 0208 942 9567 elsea, Lond 0207 351 7795



### MARANTZ ST6000

CONTACT 01753 680868 www.marantz.co.uk GUARANTEE 2 YEARS

### SOUND

y rights, given the disparity in price, this tuner should be flapping around in this review group like a minnow in the company of rainbow trout. And yet from the outside there's nothing obviously wrong: it looks nice and smart, and that front panel is real brushed aluminium. Inside there's no obvious sign of scrimping either, with many of the same functional parts as found in the Cyrus tuner, for instance. Actually there are more features on this tuner than on any of the others, with two aerial sockets, switchable IF bandwidth (a useful dodge for making the most of poor or crowded reception conditions) and full RDS, plus a timer (and a clock which sets itself to the right time, courtesy of RDS) and a digital signal strength display. Oh, and connections to link up with a Marantz system remote control. And 90 presets, 30 on each band, which can be automatically loaded up with the strongest receivable stations if you wish, and can be manually named.

In case you haven't guessed, we're looking straight in the face of economies of scale. Marantz is bigger than Roksan, Linn and Cyrus combined and can justify production methods – and bulk purchase quantities – that the others can only dream about. To be quite fair, there are areas where the ST6000 is clearly more cheaply made than the others, the most obvious being the casework which is significantly thinner – but it's hard to deny that it's adequate for its job. They also seem to have economised on the instructions translation, but it's not exactly difficult to operate.

### SOUND QUALITY

So, does the sound bomb out, then? Sorry guys, but in some ways it's the best of the bunch. Only in some ways, mind: the bass is the weak link here and if you like to share your radio listening with the neighbours via rattling windows and walls, this might not be your tuner of choice. There is bass, but it's on the distinctly restrained and polite side.

However, if you prefer Radios 2, 3 and 4 to 1, and value clean midrange and treble higher than awesome bass, you will probably find this tuner extremely attractive. Under good reception conditions it is capable of extracting very pure sounds from the airwaves, with low levels of fizz and spit. There is plenty of detail, and it's easy to pick out particular instruments and to hear all the background comings and

### HI-FICHOICE BESTBUY

goings in well-recorded radio drama. Imaging is good too, and all in all it's a relaxed and enjoyable listening experience.

Not only that but when the radio signal fades, the drop-off in performance is no worse than with the other tuners – a little extra hiss and some loss in precision. And the IF bandwidth switch can be a life-saver when there's over-crowding on the dial, or particularly bad reception conditions, mean that stations start crashing together. In London at the weekend there are now so many pirate stations that interference is becoming a fact of life, and any measures to counter it are welcome. OK, the sound hardens a bit when 'IF narrow' is selected, but that's infinitely preferable to *The Nutty Professor* breaking in over Mahler or Humphrey Lyttleton.

### CONCLUSION

This tuner is easy to use, smart, well-made, and competitive on sound quality with others costing well over twice as much. Add a good aerial and in many cases it will comfortably beat DAB on sound and price. In short, it's a tearaway Best Buy. "IF YOU VALUE CLEAN MIDRANGE AND TREBLE MORE THAN AWESOME BASS, YOU WILL FIND THIS TUNER VERY ATTRACTIVE"

The feature-packed Marantz is also a whizz with sound – however strong the signal.



### WHERE TO FIND US

BASINGSTOKE 01256 324311 2 Feathers Lane

BRENTWOOD 01277 264730 30 Crown Street

BRISTOL 0117 926 4975 65 Park Street

CARDIFF 029 2022 8565 134/136 Crwys Road

CAMBERLEY 01276 685597 173-175 London Road

CHELTENHAM 01242 583960 38 Winchcombe Street

CHESTER 01244 345576 88/90 Boughton

ENFIELD 020 8367 3132 159a Chase Side

EPSOM 01372 748888 15 Upper High Street

**EXETER** 01392 491194 **156 Sidwell Street** 

GLOUCESTER 01452 300046 58 Bristol Road

HIGH WYCOMBE 01494 558585 30-32 Castle Street

LONDON: W. HAMPSTEAD 020 7794 7848 190 West End Lane

OXFORD 01865 765961 19 Old High Street, Headington

READING 0118 958 5463 4 Queens Walk Broad Street Mall

SOUTHAMPTON 023 8025 2827 10-12 Hursley Road Chandlers Ford

**SWANSEA** 01792 474608 9 High Street

SWINDON 01793 538222 60 Fleet Street

TUNBRIDGE WELLS 01892 525666 6 High Street

WORCESTER 01905 619059 Independence House The Trinity

All shops are closed on Mondays



For the very latest information please check our web sites: www.audio-t.co.uk www.audio-excellence.co.uk



# audio T

### THE BEST OF BOTH WORLDS

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

### CUSTOM INSTALLATION

(1)

If you want your Hi-Fi equipment neatly and attractively integrated into your home we can plan out the system to be installed, the choice

of the equipment to be used, where it will be installed in your home and how it will be

connected. Call us for advice on how you can enjoy music all round your home.

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

### For your FREE copy of **MUSIC AT HOME**, The Ultimate Guide 2001 **FREEPHONE 0500 101501** (quote ref HFC3)

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



HI-FI SYSTEMS HI-FI SEPARATES AMPLIFIERS CD PLAYERS LOUDSPEAKERS MULTI-ROOM SYSTEMS STYLE SYSTEMS HOME CINEMA ACCESSORIES



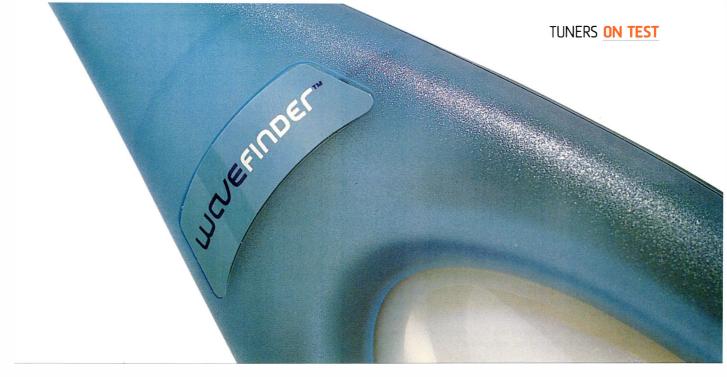
er Audio T and Audio Excellence

Products we sell include:

& KREISELL PANASONIC PIONEER TAG McLAREN

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

\*Subject to status. Written details on request



# **PSION** WAVEFINDER

CONTACT 01908 267937 www.wavefinder.com GUARANTEE 1 YEAR

# SOUND N/A VALUE

bout as far from traditional hi-fi as it is possible to imagine, this funky widget looks for all the world like the lovechild of an iMac and a lava lamp – even more so when it's operating, as the window on its front lights up in a changing sequence of colours. But hey, what's Psion (of handheld computer fame) doing with hifi anyway? According to the company's website, it's all about the 'convergence of digital technologies', and indeed DAB, with its major elements of data transmission alongside the audio, is a fine example of technological convergence.

However, there's an irony in this product to which no reader of this magazine will be blind: the fundamental premise of the WaveFinder is that digital technologies are converging on the home computer. Which is not typically a natural home for true hi-fi. Apart from the lamentable quality of most computer sound cards and speaker systems, the average home computer makes enough noise from its fans and disc drives to drown the finer details of any hi-fi in the same room.

But let's give the thing a chance. Psion prefers to call the WaveFinder a 'digital antenna', and that's apt. It receives DAB transmissions on all the relevant channels but, lacking any kind of audio output (analogue or digital), it connects to the host computer (a PC for review purposes) via a USB cable, down which it squirts raw data as recovered from the ether. The PC reconstructs the audio in 'normal' digital form and passes it to the sound card, which converts it to analogue and sends it out into the world, to headphones, local speakers or suitably connected hi-fi as the case may be. It's worth noting that this requires considerable processing power and a PC with a 500MHz processor and at least 64MB of RAM is required, running Windows 98 or later.

The clever part of course is that you get a nice friendly Graphical User Interface. All the available stations appear as icons on the display and you need only click on one to select it — though the WaveFinder is pretty slow to tune from one station to another. You can define station groupings on the screen and of course text that accompanies the broadcasts is displayed. Even nicer, images or web-style pages (although no broadcaster seems to be using that feature yet) are receivable, and these may contain hyperlinks to relevant websites to which you can connect in the usual way. But some information is missing — for instance error rate, which is useful for optimising antenna position.

Finally, audio can be recorded with one mouse click, being saved as either MP2 (native DAB format) or MP3, which should be avoided because it sounds terrible – cascading different data reduction systems is a recipe for disaster.

### SOUND QUALITY

Sound quality is largely dependent on the PC's sound card. If you have a very fancy sound card with a digital output you can use an external DAC to get results pretty much identical to those you'd achieve with any other DAB receiver and the same DAC, otherwise it's inevitably going to be several rungs below any standalone DAB tuner by normal hi-fi standards.

# CONCLUSION

So who's going to buy this gadget? Principally, I fear, full-on gadget freaks and 'the man who has everything'. Sound quality is a red herring, the GUI could and no doubt will be improved and most of the extra features can't yet be used anyway. It's a fascinating indicator of what's to come... But so far, not much more than that.

# "THIS LITTLE WIDGET LOOKS LIKE THE LOVECHILD OF AN IMAC AND A LAVA LAMP - BUT IS IT HI-FI?"

Hi-fi tuner or Barbarella's hairdryer? You decide...

# LIVING VOICE Auditorium Series



# Auditorium Hi-Fi Choice Best Buy

"This is an exceptionally subtle loudspeaker, maintaining fundamentally correct acoustic perspectives and tonality alongside a lively expressiveness and considerable delicacy and transparency

The £1500 Living Voice Auditorium has clearly been designed by someone who puts a passion for music ahead of marketing hype."



# Auditorium Avatar Hi-Fi Plus Editor's Review

Listening with the Avatar, you can hear much farther into the timbral identity of instruments. Music is richer and weightier, with greater substance and presence. It also displays much more impressive dynamic discrimination and sophistication. ...the whole sequence occurs in a single acoustic space and texture, whose quality is stable under even the most extreme assault.

With the tonal refinement required for acoustic recordings, they still retain the dynamic and rhythmic qualities so vital to rock, pop and jazz.

The Avatar is a supremely skilful balancing act.



If you really want to hear what's going on in your music collection, if you want to hear the precise level of individual notes, the exact timbre of specific instruments and the location of live recordings, get a great valve amp, a superb source and a pair of these loudspeakers. ...they'll turn you into the raving music nut that got you started on hi-fi in the first place."

Tel: 44 (0)115 973 3222	Fax: 44 (0)115 973 3666
website: www.livingvoice.co.uk	email: shout@livingvoice.co.uk

# definitive audio

Living Voice · Lowther · Vitavox · Electrofluidics · Art Audio · Border Patrol Canary · DNM · MF · **Sugden** · Wavac · Western Electric · Resolution Audio Wadia · Michell · Nott'm Analogue · SME · Ortofon · Van den Hul



# ...land of opportunity and adventure...

Definitive Audio is the most highly acclaimed audio specialist in the country. We have been featured in specialist journals, underground fanzines, high circulation glossies and several radio programmes.

Jason Kennedy - "Every time I visit Definitive Audio the systems sound better and better"..."The result is staggering."

Paul Messenger - "Definitive Audio has the crucial X factor that makes a good system great".

Alan Sircom - "...few dealers stock this combination of components...I have encountered few systems that sound as good as this one – at any price...In ten years time you'll still be grateful!"

For a unique and positive audio experience that is as reassuring as it is refreshing, call us on: 0115 9733 222

We are situated 1 mile from Junction 25, M1.

Sale of part exchanged and ex-dem items	Sale	New
Wadia 860x CD Player	£5900	£7200
Living Voice Auditorium. HFC best buy - immaculate	£900	£1500
Living Voice Avatar – cherry. Slight second.	£2000	£2500
Border Patrol 300B SE (Western Electric valves)	£3300	£4500
Border Patrol Power supply for valve amplifiers	£400	£595
Cary 805c 845 30watt SE monos	£3900	£8500
Linn LP12 with Avondale PSU	£190	£1300
Hadcock Tonearm – 1 NEW, 1 used	£400/£300	£600
Nottingham Analogue Foot tonearm. 12" carbon fibre		
unipivot. NEW	£500	£900
Spaghetti hoops (tall tin)	5p	73p
Nottingham Analogue Space Deck Ex Dem	£490	£750
Wilson Benesch Full Circle TT with 0.5 tonearm	£900	£2000
Ortofon MC750 cartridge - less than 50 hours use	£900	£2000
Croft Series 5 monos	£590	£1400
Audio Innovations Series 500 line integrated - classic	£450	£1200
Audio Innovations Series 800 Anniversary (silver circuit)	£650	£1550
Audio Innovations 2 <sup>nd</sup> Audio monos. 2A3 Triodes	£800	£3000
Art Audio Concerto 30watt valve line integrated amplifier	£1600	£2450
Art Audio Quintet monos	£1900	£2900
Unison Research Simply 4 valve line integrated amplifier	£790	£1600
Cary 300B SEI triode line integrated amplifier	£1700	£4000
Audio Note ANSP silver speaker cable 2x 3m sets	£900	£2100
Snell Types, JII and Ell – including Pirate stands	£550	/£700

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



# ROKSAN KANDY KT-1

s with most mid-priced tuners from smaller manufacturers, this is aimed principally at existing owners of Roksan systems who want a visually matching tuner. It would be unfair to call it an afterthought, but it clearly isn't any kind of radically new tuner design. The usual suspects in terms of components populate the circuit boards and indeed the main board appears to be a bought-in item, somewhat modified with a few higher performance components for Roksan's application. Said board even has places marked out for an RDS decoder, but Roksan has judged that most purchasers of standalone hi-fi tuners are not much bothered about that, however the KT-1 will receive both Medium- and Long Wave AM bands.

Maybe buying in what is effectively nine-tenths of the complete product seems a bit less than cricket. But bear in mind that it's hardly different from those manufacturers who buy in most of the same integrated circuits and restrict their 'design' operation to laying out the circuit board and perhaps adding an output stage and power supply to the application note circuits provided with the integrated circuits. There's honestly precious little else that small manufacturers can do with a limited budget.

Operation is simple, with no more functions than tuning and storing presets (up to 50, which can be on any band). There's a remote control, but no link to other Roksan equipment is offered. Assembly is reasonably smart and tidy and the tuner seems free of foibles.

# SOUND QUALITY

It's hard to describe overall performance as much better than medium, but that's an average of rather up-and-down aspects – depending on the received signal quality and the type of music one is listening to. Good news first: imaging is good and it's no problem to locate the performers in a broadcast of a piece of music (always assuming, of course, that microphone positioning and mixing techniques gave any information of that nature at all!). On the other hand, loud climaxes are not all that clean and indeed tend to become rather spitty and sibilant. The real problem with that is that most pop stations use such heavy audio compression that the music is practically at a full-time climax, so the end result is that such stations sound rather coarser and less detailed than with the other tuners in this group. Radio 3, which despite everything still puts out arguably the best sound quality in music broadcasts, sounds much better since there is actually such a thing as low levels – in fact a lot of the time performance is as good as any of the other tuners here. But with speech programmes on most stations the KT-1 only emphasises the sibilance endemic in much current broad-casting practice. If one can overlook that, bass is quite deep and assured and there's generally a convincing rhythmic underlay to rock and suchlike. The midrange is nicely balanced with the bass and seems very neutral but punchy when required, and noise is quite low. Performance with weak radio signals is not great, the spittiness becoming quite pronounced.

# CONCLUSION

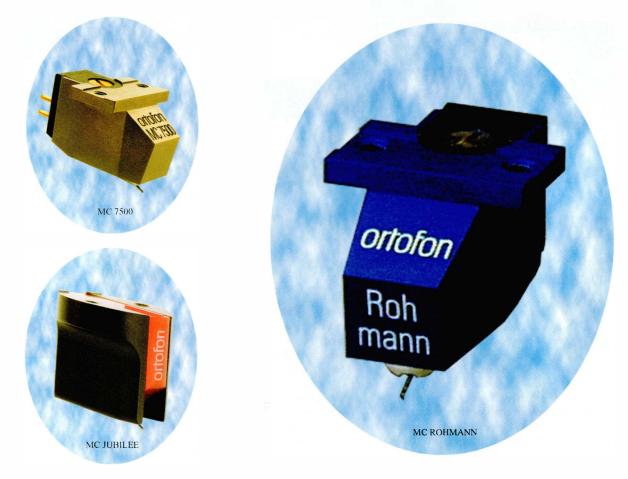
One can certainly have a good time with this tuner, and it's one of those products that should really be tried, if possible, with the same partnering equipment with which it will eventually be used. Laid back speakers will do a lot to hide its faults, such as they are, but it might prove too much with bright speakers. Although it is not really enough of an allrounder for a *Choice* gong it is worth a listen – especially if you already have some matching Roksan Kandy equipment.

# "IMAGING IS GOOD AND IT'S NO PROBLEM TO LOCATE THE PERFORMERS"

With 50 preset stations, on any band, the Roksan tuner is a breeze to operate.



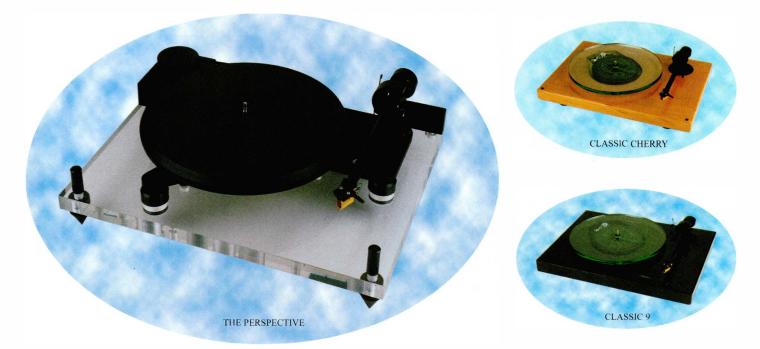
# Analog is everything



# Ortofon - the world's oldest and largest cartridge manufacturer

With award winning record playing systems available from as little as £110, a range stretching to £2,000 and fortunes still being spent on R&D, there never has been a greater choice for the vinyl lover and music enthusiast

# Pro-ject - the world's largest Hi-Fi turntable manufacturer





# SONY ST-D777ES

CONTACT 01932 816000 www.sony-europe.com GUARANTEE 1 YEAR

SOUND **SOUND SOUND *

f you're intrigued by DAB, but don't fancy adding yet another unit to your ever-expanding hi-fi rack, or were in any case considering a new FM tuner, this all-in-one solution will look attractive. It makes good sense, during what's likely to be a long transition period between FM and DAB. to offer both functions in one box not to mention AM. Sony has done so in some style here, with a smart unit that even relieves the user of the chore of deciding whether to listen to a station on FM or DAB. The D777ES can scan both bands, identify stations broadcasting on both (as long as the FM signal carries RDS) and store the stronger one as a preset. Apart from that, though, the functions are largely those one expects from a conventional FM tuner plus those of other DAB tuners, though DAB's Dynamic Range Control is not supported. Sony has even included the option, seen in many of its CD and MD players, of selecting different digital filters for replay, but given that DAB broadcasts seldom have a frequency range above about 16kHz this has a rather limited ability to make a difference.

Sony is clearly biding its time before developing its own DAB hardware in great detail, and the decoding chip is bought in from Panasonic. The FM tuner components are familiar parts from Sanyo as used in most of the FM-only tuners in this group. Operation is straightforward, with a particularly good feel to the tuning dial and a clear display. Both optical and electrical digital outputs are provided, plus optical RDI out. The FM section has selectable IF bandwidth and also an aerial attenuator for receiving exceptionally strong stations.

# **SOUND QUALITY**

Apart from the guestion of how this tuner compares to other DAB and FM models, there is also the intriguing comparison between FM and DAB versions of the same station. That's complicated by the differing kinds of dynamic range compression used on the two formats - reception doesn't always favour DAB, at least as long as a strong FM signal is being received. However, it's undeniable that the consistency of DAB, even when the aerial is a wire 'T' draped on the floor, is a welcome change from the fussiness of FM, which even in relatively strong signal areas is picky about aerial placement due to the infamous 'multipath distortion'.

In fact performance on both bands easily withstands com-

parison with single-mode tuners. On DAB, given that the digital part functions just like the others, sound is very similar to the Arcam and Videologic, though it seems to lack a little clarity. There's less involvement with good classical music broadcasts, and speaking voice is just a shade less 'present'. Once again, though, performance is dominated by the 'sound of DAB' rather than the tuner itself. As for FM, sound is clear and has a full, extended bass, though under poor reception conditions it becomes rather frazzled and indeed the Marantz ST6000 actually manages to hold things together a little bit hetter

### CONCLUSION

This is a slightly disappointing product. In terms of value for money, it actually offers less than a VideoLogic DRX-601 DAB tuner plus a Marantz ST6000 FM tuner, albeit being more user friendly than separates could ever be and a whole lot better looking to boot. Though it doesn't really offer a lot more than usual in the features stakes. This is a very nice unit but the conclusion has to be: 'close, but no cigar'.

# "AS FOR FM. SOUND IS CLEAR AND HAS A FULL, EXTENDED BASS"

While everything is present and correct, the Sony' flexibility is it's strongest suit.



The best connections... The original Monolith 20/20

> The unequalled twin foil loudspeaker cable with the exclusive termination system



from selected dealers for information 01206 823136









Say goodbye to wobbly towers, dust attracting plastic racks and unattractive open storage! We manufacture a quality cabinet range offering drawer storage for Compact Discs, Audio Cassette, MiniDisc, Video and DVD in a variety of styles and wood finishes including Mahogany, Oak, Cherry (as above), Teak and Ash. The cabinets are priced from £330 inclusive of delivery, for a unit holding up to 270 Compact discs, 60 videos or 120 DVDs. Larger sizes are available. For further details including a full colour brochure, please contact us at the address or telephone number (24 hrs) below.



Sounds of Music









# Agents for:

Avantgarde, Argento, Audio Synthesis, Advantage, Audio Physics, Audio Refinement, Apollo, Audion, Audio Note, Audio Research, Audio Analogue, Anthem, A.V.I. A.T.C., Acoustic Energy, Atacama, Base, Balanced Audio Technologies, Beyerdynamic, Boulder, Bow, Bose, Burmester, Cabasse, Carfrae Horns, Covergent Audio Technology, Chord, Copland, Cadence, Cable-Talk, Celestion, Copulare, Clear Audio, Dunlavy, Echo-Busters, Eggleston-Works, Electrocompanient, Graham, Goertz, Goldring, Grado, Hales, Harbeth, Hovland, Jamo, JM Labs, Karma, Koetsu, Krell, KEF, Klipsch, Lumley, Lyra, L.A.T., Lavardin, Meadowlark, Musical Technology, Magnum Dynalab, Marsh Sound Design, Marantz, Martin Logan, Mitchell, Musical Fidelity, Neat, Nordost, Opera, Optimum, Ortofon, Orchid, Parasound, Plinius, Pathos, Project, Passlabs, Pro-ac, Piega, Pink Triangle, Primare, QED, Quad, Rel, SME, Shure, Quad, Kel, SME, Shure, Sennheiser, Sonic Link, Soundstyle, Sound Organisation, Sumiko, Straight Wire, Sonic Frontiers, Sonus-Faber, Stands Unique, Target, Trilogy, Teac, Theta, Tannoy, Totem, Talk Electronics, Thule, Townshend, Transportert, Transfiguration Transparent, Transfiguration, Triangle, Unison Research, Van Den Hull, Wisdom, Wilson, Wilson-Benesch, Wadia, XTC, XLO, YBA, Zingali.

INTEREST free credit MOST credit cards accepted KNOWLEDGABLE helpful staff NONTH home trial exchange scheme FREE delivery & Installation FREE delivery part exchange GENEROUS part exchange

# Call: 01892 547003 now to book an appointment

Sounds Of Music 10-12 Chaple Place, Tunbridge Wells, Kent, TN1 1YQ fax: 01892 547004 www.sounds-of-music.co.uk



# VIDEOLOGIC DRX-601E

CONTACT 01923 277488 www.videologic.com GUARANTEE 2 YEARS

### SOUND

nother make not generally associated with reviews in this magazine, VideoLogic has applied its expertise in high-technology sound for PCs to the development of this, the first 'affordable' DAB tuner. Technics claimed that for its £500 model and we'll hear it again when prices hit £200... But good on VideoLogic for bringing prices below £300 in time for Christmas. Until the end of the year the tuner is exclusive to Dixons, by the way.

It's a much smaller box, but the DRX-601 matches Arcam's DT26 pretty much spec-for-spec. It handles DAB only but, like the Arcam, has a loop-through input for connecting an FM tuner, and it has both optical and electrical digital outputs plus an RDI output. Also like the Arcam, it supports Dynamic Range Control, the system which allows broadcasters to send information with the DAB data stream so that the user has the choice of whether to compress dynamics or not. Aside from the lack of noise this is one of the most obvious advantages of DAB over FM, but so far only BBC stations seem to be using it and not all tuners support it.

Where VideoLogic's cost cutting shows is mostly in minor areas, such as the display which is relatively small and so shows less text at once, and the general look and feel which is certainly not as nice as Arcam's, though still perfectly functional. There are one-touch presets, but only via the remote control. The usual DAB information is available on the display – station name, programme title, broadcasting mode and also signal strength: VideoLogic has made the signal strength display very conservative so that less than half scale is adequate for reception without break-up.

The guts of the DRX-601 are based on the same DAB decoder chip as the Sony and a very similar RF front end too – there aren't many to choose from at present! VideoLogic proudly boasts that the DAC chip is a 96kHz-capable one from a small Scottish manufacturer, although how this benefits a narrow bandwidth medium like DAB is unclear.

# SOUND QUALITY

All the same riders and caveats about DAB as a system apply to this tuner as to the Arcam and the Sony. That said, though, there's little if anything to give away the unit's low price. In fact I'm not too sure that I could tell it apart from the Arcam if tested blind. Perhaps, just perhaps, it's a little less secure in the bass, but the midrange and treble seem no less detailed and clear. Treble is best when it's at low levels, when the characteristic DAB sheen is least obvious. Classical chamber

# HI-FICHOICE BESTBUY

music, which tends to have quite restrained amounts of high frequencies, does well, likewise a good deal of 'easy listening' music, while high-energy pop and dance music is much less favoured.

Some humorous soul in digital audio research coined the term 'space monkeys' to describe the artefacts of many data reduction systems. These sound a bit like a very high-frequency version of chattering monkeys riding on the music signal, at the limit of hearing but becoming more audible the longer one listens. The level of this distortion varies a lot with programme and also depends on station bit rate: it's much worse with stations transmitting only 128kbps, which ironically includes most of the DAB-only ones. As usual, the BBC is best, but Virgin is also commendable.

### CONCLUSION

Given the way that DAB operates, it's to be expected that differences between tuners will in fact be less than those between CD players and so it's not really surprising that this 'budget' model can meet much dearer alternatives head-on. In the circumstances it seems to be the current DAB Best Buy. "IN TERMS OF SOUND QUALITY, THIS 'BUDGET' DAB TUNER CAN MEET MORE EXPENSIVE ALTERNATIVES HEAD-ON"

The Videologic brings digital radio within the grasp of a far wider audience than before.



# **IDOS OF PRODUCTS TESTED IN THE WORLD'S FINEST GUIDE TO TOP KIT!**



# SURROUND SOUND SEX!

BRING HOLLYWOOD HOME WITH OUR GUIDE TO HOME CINEMA SOUND, AND CHECK OUT THE BEST SURROUND TV SETS, TOO!

DON'T MISS ISSUE 86 ON SALE NOW

# **CONCLUSIONS** WHICH TUNER IS A DAB HAND? WHICH MERELY FM-ERAL? RICHARD BLACK ROUNDS UP.

he first question that should be asked must surely be, Is there anything to be said for buying an FM tuner now or should one go for DAB? The answer depends on your situation. For a start, your area might not be covered by DAB transmissions yet (look at the BBC website, www.bbc.co.uk, for a map of coverage). Second, why do you want to buy a tuner? If you're simply replacing a worn-out or elderly FM tuner, but have no specific problems with FM as such, you might as well stick to FM and wait for DAB prices to drop - they will, a lot. Third, what sort of music do you listen to? DAB is better at classical than pop, FM arguably the other way round.

As for which model to buy in either category, again that depends a lot on your

circumstances. In terms of sound quality per pound, the Marantz ST6000 wins hands down out of this group, even if you factor in a professionally installed outdoor aerial. The dearer FM tuners only just advance on it sonically (law of diminishing returns with a vengeance), but then they are all specifically designed to match one-make systems and the Cyrus particularly is a very attractive and appealing product.

The differences in sound quality between the three standalone DAB tuners are really pretty small and the Videologic is barely distinguishable from the Arcam at over three times the price. Even the four-band Sony seems overpriced already. If you want DAB, I'd say the choice is simple. The Psion really is eye-candy gadgetry rather than a piece of hi-fi, and in a sense isn't even in competition with the other three.

FM is a mature technology, although there are certainly ways in which it could be improved. DAB is still very new, but how much it can be improved is uncertain. What is certain is that it will spread, with better coverage, more stations, and more and cheaper receivers becoming available. It's undoubtedly an exciting technology, but it's just a shame that it could have been so much better.

# "THE DIFFERENCES IN SOUND QUALITY BETWEEN THE THREE DAB TUNERS ARE PRETTY SMALL"

			TOSY :	
		HI-FICHOICE RECOMMENDED		HI-FICHOICE BESTBUY
MAKE MODEL NUMBER	ARCAM FMJ DT26	CYRUS FM7.5	LINN PEKIN	MARANTZ ST6000
PRICE	£999.90	£400.00	£545.00	£150.00
SOUND VALUE	<ul> <li>××××××××××××××××××××××××××××××××××××</li></ul>	<b>大大大学</b> 大大大大学	****	****
CONCLUSION	Sounds as good as DAB gets, but it's a bit on the pricey side.	Good looking, good sounding and easy to use.	Good with weak FM signals, but a little uninvolving generally.	Great sound for a bargain price – a definite Best Buy.
GUARANTEE	2 YEARS	2 YEARS	2 YEARS	2 YEARS
	MCLERINGES	ROXSAN	and a second sec	Restances of the second s
				HI-FICHOICE BESTBUY
MAKE MODEL NUMBER	PSION WAVEFINDER	ROKSAN KANDY KT-1	SONY ST-D777ES	VIDEOLOGIC DRX-601E
PRICE	£299.00	£375.00	£549.99	£299.00
SOUND /ALUE	N/A	★★★ 送 送 ★★★ 美 読	★ ★ ★ 美 美 ★ ★ ★ 美 美	
	Only sounds as good as your PC does – it's	A bit hit and miss, but probably better	Good - but not brilliant - perform-	The best DAB model in the test,
CONCLUSION	really not much more than a flashy gizmo.	with other Roksan equipment.	ance from this DAB and FM one-box.	and for a great price.

# TUNERS AT A GLANCE



# INTERCONNECT CABLES DAVID BERRIMAN UNRAVELS A CROP OF SUB-£50 CABLES

AND GETS TIED UP IN FINDING THE BEST ONES FOR YOUR SYSTEM.

or this test, we have gathered together a group of cables priced below £50 – with one costing as little as just under a tenner. In the quest for sonic delight, manufacturers have adopted different topologies, insulation and conducting materials: in this group we're talking copper conductors of various purities. Generally speaking, internal insulation (dielectric) can range from inexpensive PVC to polyethylene and foamed polyethylene (for lower electrical loss) to PTFE (or Teflon). Teflon is more expensive and not found as a dielectric in any of these lower-end cables, though the phono plugs in some of the more expensive ones do feature PTFE.

Conventional interconnect cable is a single insulated conductor surrounded by a screen – a woven braid, sometimes made from aluminium/mylar. One or two manufacturers add an outer screen for improved interference rejection and use the inner braid for the signal 'return'. Some of the cables tested here twist the pair of conductors to reject interference, others add another outer screen to the pair for improved RF isolation. Another employs a similar conductor geometry, but without the twist. And others have still different approaches to construction. It's incredible that there are so many ways to make an audio cable, but each manufacturer has its own ideas about what works best.

With cables seen as a kind of 'black art', it's easy to fall for hype, but in the end the sound is what counts. Because interconnects can sometimes have greater influence on items having a highish output impedance (such as some valve amps), we chose to insert the cables under review between a fairly conventional digital to analogue converter (DAC) with a typically low output impedance and a transistorised pre/power amplifier of good quality. High-resolution low-coloration speakers were used to reveal differences through the whole audible music range.

By using a DAC with a low output impedance, any differences heard should be due to the cables only and not be caused by the equipment. Some budget systems may not reveal the same differences, but the equipment used for this test was not of such stratospheric quality that a mortgage-busting amp would be required to hear any benefits, which should be heard with well-chosen yet inexpensive set-ups.

# THE CABLES

AUDIOQUEST SIDEWINDER	£40.00
BANDRIDGE PROFIGOLD	£39.99
CABLE TALK ADVANCED 3	£34.95
CHORD CALYPSO	£30.00
ECOSSE REFERENCE THE COMPOSER	£29.00
IXOS GAMMA AUDITION II	£29.95
PROWIRE VHQ	£9.99
QED QUNEX 1	£20.00

# **OTHER EQUIPMENT USED**

Musical Fidelity AC3 CR pre- & power amp. Musical Fidelity A3 CD player Musical Fidelity X DAC Nordost Red Dawn speaker cables DBS7 speakers

### MUSIC USED DURING TESTS

Poulenc/Gervaise de Peyer/Gweneth Pryor - Sonata for Clarinet and Piano Gershwin/Previn/Fink - Someone To Watch Over Me Ali Farke Toure/Ry Cooder - Amandri

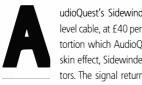
# **GROUP TEST** INTERCONNECT CABLES





# **AUDIOOUEST** SIDEWINDER

CONTACT 01279 501111 www.audioquest.com GUARANTEE LIFE SOUND 2 2 2 2 2 2 VALUE 2 2 2 2 2 40.00



udioQuest's Sidewinder is the company's entrylevel cable, at £40 per metre pair. To avoid the distortion which AudioQuest claim is introduced by skin effect, Sidewinder utilises solid-core conductors. The signal return is also a solid-core of the

same metal purity but is in contact with the outer screen. The idea is to give the audio signal a purer signal path than through the many metal-to-metal contacts of the braid. The conductor for both solid cores is what AudioQuest calls Long-Grain Copper, its proprietary name for oxygen-free copper with a long grain structure. No mention is made in the literature of insulation dielectric quality. Sidewinder's appearance is distinctive, with its red/black cloth braid covering and red-painted, gold-plated RCA phono plugs, marked with arrows to indicate signal 'flow'. Though thin, it is guite stiff, presumably due to the solid-core conductors.

# SOUND QUALITY

The Sidewinder was slightly disappointing in view of its pedigree and the fine reputation of AudioQuest. Visually Sidewinder is a delight, but sounds a trifle lacklustre considering its price and the tough competition within this group. Music reproduced with this cable initially seems competent enough. However, it introduced a slightly 'pinched' sound and reined back dynamics a touch, so that the music rarely opened out. There was a lack of warmth, and the piano seemed more like an upright than a grand. It was almost as though there were a peaky and fuzzy coloration in the low treble which masked and blurred the fluency of, for example, the clarinet's arpeggios. This is by no means an unpleasant sounding cable and in many systems will sound perfectly competent, seeming merely to introduce a slightly 'distant' sound, but it never quite sang or flowed in the truly invigorating way that some of the others managed. Sidewinder might have been a good buy at £20, but rather less so at twice that much.

CABLE TALK ADVANCED 3

CONTACT 01276 686717 www.cabletalk.co.uk GUARANTEE LIFE SOUND **Sound Sound Sound Sound Sound Sound Source So** 

able Talk Advanced 3 is finished in a fetching shocking pink outer sheath, arrow-marked for direction in white. It replaces the Advanced 2. comprises three twisted Construction 99.999999% high-purity oxygen free copper

(HP-OFC) conductors presumably multistranded. One of the three conductors is apparently reversed in what Cable Talk enigmatically describes as 'Reverse Twist Construction', providing 'Signal Return Flow System', whatever that is. Cable Talk enigmatically claims this optimises signal transfer. Unusually, screening is by means of a Mylar/aluminium foil wrap, with an externally wound helical unspecified drain wire connected at the source end. The construction is claimed to provide almost total rejection of electromagnetic interference. The plugs are of 24kt gold-plated brass, with a split centre pin and Teflon insulation. The cable's internal insulation (dielectric) is not specified.

# SOUND QUALITY

Reminiscent of the Ecosse cable in tonal balance, the Advanced 3 is bright and clear in presentation but paradoxically also powerful and rich in the style of the Ixos. Immediately impressive on first audition, the piano's left hand was weakened slightly and treble was marginally hardened in the Poulenc, adding a hint of 'chromium plating' and a touch of edginess to the clarinet. It didn't deliver quite the musical articulation of either the lxos or Ecosse cables - for instance the fluidity of Gervais' virtuoso clarinet playing. With the Farka Toure/Ry Cooder track, bass guitar was solid, harmonics were nicely captured and vocals quite convincing. While superficially smooth and refined, the music didn't flow so naturally as the two top runners and was slightly reined back in dynamics. With the Advanced 3, there wasn't quite the spark of life unleashed by the Ixos and Ecosse cables, but it runs a close third and deserves a hearty Recommendation.

# INTERCONNECT CABLES GROUP TEST



**HI-FICHOICE** BESTBUY

# **CHORD COMPANY** CALYPSO

CONTACT 01722 331674 www.chord.co.uk GUARANTEE 10 YEARS

his surprisingly thin and light screened cable utilises 17-strand, plated, oxygen-free copper conductors in the centre wire, surrounded by low-loss gas foamed polyethylene dielectric (which increases the percentage of air, reducing

loss and capacitance) and a lapped OFC screen shield. The cable also has low-mass RCA phono plug termination with Teflon insulation and gold-plated signal contacts. The cable's PVC outer covering and aluminium plug barrels are finished in a rather smart metallic silver. In a world of macho chunky cables, where thicker and heavier implies better (whether or not that is the case), it is unusually lightweight, but certainly not cheap, in both appearance and feel. With cables – as with so many things – appearances can of course be deceptive. Neither cable nor plugs are marked for directionality (so I connected it with the wording running from source to amplifier input).

# SOUND QUALITY

The Chord Calypso proved well balanced overall, another cable that runs the middle course between bright and mellow, with fine acoustics and mildly distant perspectives. The playing in the Poulenc was clearly revealed without brightening, and piano had a good sense of weight. There was only a hint of hardening but no harshness or extra brightness added. Also, there seemed to be none of the dulling that one or two cables introduced. In the Farka Toure number the sound was fast and open with rich bass harmonics and the metallic guitar sound was most convincing, without spilling over into harshness. The guttural vocals here were well conveyed too. Though it isn't very impressive to the eye, the ear is the final arbiter and overall this neutral and musically informative cable comes out well. At £30, this must surely represent good value but has strong competition from the Composer and lxos Gamma Audition II at the same price.

# ECOSSE THE COMPOSER



he Composer is Ecosse's answer to providing a Monocrystal cable at a budget price. Indeed, it's the only Monocrystal cable in this group, comprising conventional unbalanced coaxial screened geometry, with an extra screen. The copper used

for the central signal conductor is what the manufacturer calls Monocrystal, formed by a process that involves drawing a single pure crystal (which has by definition no grain boundaries) into a long thin wire. The outer screen 'return' is made from their lowgrain boundary annealed Oxygen Free Copper which Ecosse dubbs Ultra High Purity Oxygen Free Copper (UHP-OFC). According to Ecosse, the UHP-OFC conductor is drawn from 99.9997% pure metal and ends up with 15 grains per metre and ten parts per million of oxygen. The inner dielectric is foamed low-density polyethelene.

# SOUND QUALITY

The Composer stood out as offering a high degree of realism and clarity. The piano in the Poulenc sounded delicate, with the background acoustics revealed very clearly. The music flowed, with the rapid playing reproduced in a fluid, fleeting fashion, tripping lightly but surely. The sound was uncannily clear, with Gervais' subtlety of technique laid bare. The only negative to all these positives was that the presentation was slightly cold, which made the background acoustics seem more brightly reflective. Either this cable produces ambience more clearly, or it adds a touch of upper end lift, lightening the overall balance and heightening clarity a smidgen. The left hand of the piano is not so powerful as it is with, say, the IXOS, and the overall sound balance lacks a touch of warmth, but it is an impressive sound. The cables in this review seem to split into two main camps. Of the brighter sounding ones, the Composer is clearly at the top of this particular pile - and a definite Best Buy at only £29.

# **GROUP TEST** INTERCONNECT CABLES





# **IXOS** GAMMA AUDITION II

CONTACT 01844 219000 www.ixos.co.uk GUARANTEE 1 YEAR



amma Audition II cable uses a pair of unscreened conductors utilising 80-strand pure crystal, oxygen-free copper (PC-OFC) signal conductors. The chunky white enamel-finished RCA phono plugs have hard gold-plated contacts

and Teflon dielectric. Cable insulation is polyethylene which is claimed by Ixos to provide greater detail and naturalness. Audition II also utilises Ixos' Gamma geometry: an asymmetric weave in which live and return conductors are held in parallel without twisting by a third 'dummy' core of dielectric. The 'inductance-controlled core' is also claimed to reduce the electrical inductance compared to a conventionally twisted pair. The close coupling gives inherent interference coupling, while the lack of twisting is less inductive than a conventional 'twisted' pair. Ixos claims significant noise cancellation, together with reduced electrical and mechanical noise pickup.

# **SOUND QUALITY**

The Audition II placed both the clarinet and piano in a real acoustic, and rapid arpeggios were convincingly reproduced. The tone of the grand piano was rich, clear, firm and resonant, and the overall sound lacked any sense of introduced harshness. Interestingly, this cable seemed louder than just about all the others in the group, yet this was not a forward or in-yer-face loudness, more a loudness born of genuine rather than artificial detail and resolution.

Of the mellower cables in the group (or dare I suggest, most neutral), the Ixos Gamma stood out as at the top of its pile, looking across the tonal divide at Cable Talk's The Composer. Clearly, these represent two very different approaches towards high-performance cables. Ultimately, IXOS Gamma qualifies as a Best Buy for me because it recreates real musical events, yet provides an unexaggerated, smooth sound balance without dullness. PROFIGOLD PGA301 MkII

 CONTACT 020 8543 3633
 www.profigold.com
 GUARANTEE 5 YEARS

 SOUND
 Image: Ima



his cable outdid even Ixos in mechanical stiffness, feeling reassuringly solid. It utilises 99.99% multistrand extra-pure oxygen-free copper in what Profigold describes as semi-balanced configuration. This is double screening in which the

inner woven copper braid is for the signal return and the outer braid forms the actual screen (connected at one end of the cable only). The claimed benefit is improved rejection of interference. Of course, the cable is not balanced. The insulation (dielectric) material is low-loss foamed polyethelene. Termination is by bulky locking Teflon-insulated phono plugs in matt chrome for the outer barrels and hard gold-plated brass for the contacts. The large plugs and heavy cable tend to droop and the uninsulated outer barrels can touch each other (which is OK, so long as the two screen earths are indeed common – they usually are – but if not, an earth 'loop' may be formed in very rare cases). Once locked to the phono sockets, they are quite difficult to undo.

### SOUND QUALITY

Profigold is one of the more mellow sounding cables in this group. It had a very slightly distant balance, with just a hint of dulling and barely discernible hardening at extreme high frequencies. It reproduced acoustics quite well, while the weight and power with the piano in the Poulenc for instance, was plentiful, if slightly heavy. The overall sound was also very smooth, with no hint of harshness. The Farka Toure piece highlighted the solid delivery of bass guitar, though it was a tad pedestrian at times, as though the artists found it a chore to play. One comparison would be to liken this cable's effect to a good but characterful valve amplifier – mellow and well rounded. Though similar in balance to the Ixos, it lacked the latter's clarity, fluidity, dynamism and musical allure. This is not a bad cable, but it is out-performed by cheaper models in this group.

# INTERCONNECT CABLES GROUP TEST



# **PROWIRE VHQ**

CONTACT 01442 403020 GUARANTEE LIFE

# SOUND

P

rowire VHQ is an entry-level cable from Vivanco. It makes no pretence at being anything other than a cheapie – it's quite thin with a black outer plastic sheath. Sparse information was supplied but, essentially, VHQ is a conventional screened

cable utilising oxygen-free copper conductors, fitted to moulded RCA plugs with 24kt gold plating. No mention is made of dielectric (inner insulation) material or geometry, though we can safely assume it comprises a pair of conventional coaxially-screened, unbalanced cables. A 1.5 metre pair was supplied for review, at only £9.99, makes it by far the least expensive stereo cable in the test group.

# SOUND QUALITY

Prowire VHQ falls within the group of brighter cables and offers an impressive clarity and crisp open sound delivery. Though clearly lacking the refinement and musicality of the cables at or close to the top of this group, it nevertheless more than held its own. It clearly sounded better than a tenner's worth of cable ought to. In the Poulenc, the piano was reproduced clearly, with a mild touch of forwardness but lacking any additional hardness. Dynamics was good, though it lacked the warmth of, say, the IXOS. In the Farka Toure/Ry Cooder track it nevertheless sounded big and deep and the essential musical elements were there. The piano was a little short on weight in the Poulenc but the Gershwin piece offered a relaxed and well-balanced sound with good articulation even with fast runs of piano notes. Only a slightly 'fuzzy' crispening of leading edges and marginal lack of warmth give the game away that this is a budget cable. This cheapie in price, if not sound, is up with the middle performers - and definitely worth a Recommendation.



# QED QUNEX 1

Q

unex 1 is basically what QED used to sell as Qnect 1 until another manufacturer objected to a vague similarity to one of its brand names beginning with K! Thus re-labelled, this is still QED's entry-level stereo audio cable. Though

bottom of the range, it utilises low-loss foamed, low-density polyethylene (LDPE) dielectric. Unusually at its budget price, both left and right channel cables each combine a twisted pair of stranded signal conductors for noise cancellation, with external Mylar screening, to form a figure-of-eight cross section to help screen interference. Conductor quality is to 99.999% purity oxygen-free copper (OFC), for both wires in the pair, so the return signal is not forced to flow in the screen as in normal coaxial audio cables. Indeed it flows in the same purity copper throughout. Termination is by phono plugs with 24kt gold-plated contacts and the outer insulation is a rather lurid purple.

# SOUND QUALITY

Qunex 1 interconnect presented a fairly good sense of acoustics, with a rich clear and articulate clarinet sound in the Poulenc, revealing Gervais' playing technique even in fast arpeggios. The piano's left hand had enough weight and there was no brashness. On the downside, there was a slightly distant suppressed quality and marginal dulling coupled with a just perceptible 'tinkly' quality revealed in the Gershwin number. Though transients were fractionally dulled and the music lacked that last ounce of *joi de vivre*, this cable seemed very well balanced in its abilities, doing nothing badly and many things better than average. It was also a neutrally balanced cable fitting midway between the more mellow and brighter cables in the group. Indeed, this cable had a very good sound, especially as it rivalled some of the more expensive cables at a rather lower price. It doesn't quite set the world alight, but it certainly deserves a Recommendation.



# Do you have an Eye for a Bargain?

...Then Wise Up.



... Sharpen Up...

# ... and Get Down to the **Practical Sale!** (It's Practically a Give-Away) JE NO

Practical Hi-Fi **0%** FINANCE **UP TO 3 YEARS WARRANTY** 

PART-EXCHANGE WELCOME

\*Subject to Status - On Selected Items ritten quotation on request

- MANCHESTER: 65 Bridge Street / 0161 839 8869 (Sunday Opening 12noon to 4.00pm)
- PRESTON: 43 Friargate / 01772 883958
- CARLISLE: 106 English Street / 01228 544792
- LANCASTER: 84 Penny Street / 01524 39657
- WARRINGTON: 88 Bridge Street / 01925 682 179
- BLACKPOOL: 81Whitegate Drive / 01253 300599
- BOLTON: Knowsley Street / 01204 395789

KEF ((AE)) N.A.D Technics DYNAUDIO YAMAHA

DENON

SONY

B&W

TANNOY

חסוננורח

ARCAM

://4/=

() PIONEER

TEAC

manamiz

http://www.practicalhi-fi.co.uk

# INTERCONNECT CABLES GROUP TEST

# **CONCLUSIONS** DAVID BERRIMAN UNTANGLES THE CABLES FOR A FINAL RUN-DOWN.

n my view, the two outstanding cables in this group were Ecosse's The Composer and IXOS' Gamma Audition II at essentially the same £30 price point. Both were excellent but offered slightly different balances. The Ecosse may be better suited to warmer or duller systems. The powerful, rich IXOS would suit more neutral, or brighter, systems. Both interconnects were highly analytical and involving, but if push came to shove, I'd chose the IXOS for it's less explicit and more relaxed delivery of musical detail. And yes, I'd say it was also the more 'interesting' to listen to, but only by the narrowest of margins.

Trailing close behind was Chord's Calypso, which also offers a neutral balance and an agile, responsive sound, though coming under stiff competition from the Ecosse and IXOS offerings at the same price. Cable Talk's Advanced 3 is in a similar position, with fine detail marred only by the faintest hint of bright brashness for a fiver more. QED's Qunex 1 was another of the 'neutral' cables. This was a

cheap plonk, one can hardly complain if it's drinkable!

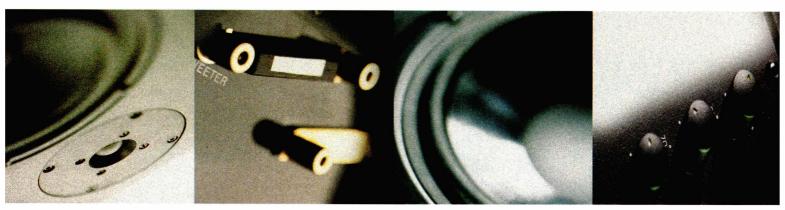
Perhaps the most salient conclusion is that it's no good being swayed by looks, price, and hype. The wimpy Calypso and beer-budget VHQ prove the point –

# "THE MOST SALIENT CONCLUSION IS THAT IT'S NO GOOD BEING SWAYED BY LOOKS, PRICE AND HYPE"

forgiving, good all-rounder and just fine at £20. Audioquest's Sidewinder disappointed: for one of the most expensive interconnects, its suppressed, pinched sound didn't match the £40 price tag. The Profigold, at a penny under £40, also missed the mark with its dull and heavy presentation. Vivanco's VHQ by contrast could hardly fail at £10 for an agreeably vivid yet unsophisticated sound. As with though the chunky IXOS looks the biz and delivers. But beware, many systems may mask some of the subtler musical achievements of the top cables here, sometimes rendering the extra expenditure of dubious benefit. In the final analysis, cable choice should be guided by synergy with the system in which it is to be used. Slavish attention to reviews alone rarely achieves sonic Nirvana.

# CABLES AT A GLANCE

	Q		Or	$\bigcirc$
4		HI-FICHOICE RECOMMENDED	HI-FICHOICE RECOMMENDED	HI-FICHOICE BESTBUY
MAKE MODEL NUMBER	AUDIOQUEST SIDEWINDER	CABLE TALK ADVANCED 3	CHORD COMPANY CALYPSO	ECOSSE THE COMPOSER
PRICE	£40.00	£34.95	£30.00	£29.00
SOUND VALUE	$\frac{1}{2} \times \frac{1}{2} ★ ★ ★ ★ ○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○	×××× ××××	****	
CONCLUSION	Supresses the sound. At this price it's a disappointment.	Good sound and great detail, but a slight brashness in the treble.	Informative, clear sound at a decent price. A clear Recommendation.	A high degree of realism and delicacy, and a fantastic price.
GUARANTEE	LIFE	LIFE	10 YEARS	2 YEARS
		$\bigcirc$		$\bigcirc$
	HI-FICHOICE BESTBUY		HI-FICHOICE RECOMMENDED	HI-FICHOICE RECOMMENDED
IAKE 10DEL NUMBER	HI-FICHOICE BESTBUY IXOS GAMMA AUDITION II	PROFIGOLD PGA301 MkII	HI-FICHOICE RECOMMENDED PROWIRE VHQ	HI-FICHOICE RECOMMENDED QED QUNEX 1
IODEL NUMBER	IXOS		PROWIRE	QED
	IXOS GAMMA AUDITION II	PGA301 MkII	PROWIRE VHQ	QED QUNEX 1
ODEL NUMBER RICE DUND	IXOS GAMMA AUDITION II £29.95 * * * * * * * * * Detailed and neutral, with just	PGA301 MkII £39.99 * * * * * * Mellow and well rounded, but can	PROWIRE VHQ £9.99 \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ This crisp cable lacks a little refine-	QED QUNEX 1 £20.00 * * * * * * * * * Well balanced, easily rivals some
ODEL NUMBER RICE DUND LLUE	IXOS GAMMA AUDITION II £29.95 ★★★★ ★★★★ ★	PGA301 MkII £39.99 * * * * * *	PROWIRE VHQ £9.99 * * * * * *	QED QUNEX 1 £20.00 * * * * *



# **Five Stars** For Value

Paul Messenger explains why you should visit an independent specialist dealer if you are searching for real hi-fi satisfaction

Why use a specialist hi-fi dealer? The short answer is because he knows one hell of a lot more about hi-fi than you do. And if you've gone to the trouble of picking up a specialist magazine on the subject, you're obviously interested in something rather more than a mini system from the nearest electrical superstore.

# **STAR QUALITIES**

value for money	****
service	****
facilities	****
verdict	*****

You've probably bought this magazine for one of two reasons. You're looking for advice (presumably unbiased and good) on choosing and using your hi-fi system, and/ or you're checking out the ads to decide where to go and buy it.

The independent specialist dealer doesn't know everything, and he doesn't know much about you, but if music's an important part of your life, he's the only guy around who's able (and hopefully willing) to help you choose the equipment which will give you the best long term satisfaction.

### **Power of the Press**

Dealers sometimes moan to me about the power of the press, and the disproportionate influence of its 'Best Buy' and multi-star ratings. Well, I've been in the press for twentysomething years, and still feel more ignorant than powerful.

The more I mess around with hi-fi gear, the more I become aware of our lack of real understanding of the subtleties involved, and the more I appreciate the importance of the dealer's skills and experience, in bringing together components so that the whole is greater than the sum of its parts.

We hacks get paid to write words, often about components in isolation, because individual product reviews are still the staple diet of the press. They can sometimes provide a useful guide to the way a product performs, but only under the particular circumstances in which the review was conducted.

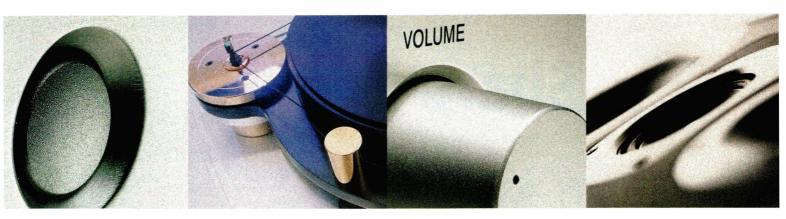
The hi-fi reviewer attempts, with varying degrees of success, to evaluate a particular component, and find something interesting (and hopefully positive) to say about it. That's about the end of it, and it's on to the next product.

The magazine prints the review, and that very process magically confers a measure of authority. Experienced hi-fi enthusiasts, who read reviews over a period of years and try out various products themselves, soon start to realise the limitations of that approach. Some reviews are better than others, but none can get to grips with the real heart of the problem - whether a given product will improve your musical satisfaction, in your system and your room.

### The Role of the Dealer

The dealer's role is very different, and potentially much more valuable. He has the chance to talk one-on-one. If he's good at his job, he'll use that opportunity to find out what you as an individual are looking (or listening) for.

His motivation is very different too. Sure he wants to make a sale. That's the lifeblood of any shop. But he also knows that if something he sells really does deliver long term satisfaction, there's a very good chance you'll come back again to see if he can repeat the trick some time in the future.



If you go into a shop and demand a particular CD player, on the basis that it got seven stars (out of five) in last month's magazines, the shop will probably simply take the line of least resistance and sell it to you. (Or switch-sell you to a similar price alternative, if he's fresh out of stock of that particular flavour-of-the-month.)

If you go in and say you're looking for a CD player, and want his advice on what to choose, things are liable to become more interesting. The onus is now on the dealer to show what he can do. His first task is to ask the right questions to try and get some idea of what you might be after.

Asking the questions is the easy bit. The real skill comes in using the information to come up with a shortlist of likely contenders, and then conducting a demonstration so that you have a real chance to play a central role in the decision making process.

Putting together a successful hi-fi system might not be as difficult as it was twenty or thirty years ago, but it's just as easy to make a mess of things. Put the 'wrong' combination of components together and it'll still sound a lot better than any cute little mini system package. It might even rate a five star review. But it won't match the potential of a carefully balanced and properly installed system, and it certainly won't cater for your own particular preferences and personality.

We British are notoriously undiscriminating consumers, at a mass market level at least. The majority of the population don't even bother to drive a car they're thinking of buying, never mind take the trouble to listen to hi-fi equipment.

The majority will therefore end up with hyperstore mediocrity, and hi-fi that's about as tasty as supermarket bread. But if music is an essential ingredient in your daily diet, you owe it to yourself to become a member of the discriminating minority.

You know full well that your music collection is as individual as your wardrobe, and just as precious too, so it's worth taking the time and trouble to search out the dealer and equipment that will make that collection come alive, and give you a new buzz every time you play your favourite discs.

The independent specialist may not beat the chain store on price, but he continues to thrive in a hostile environment because real hi-fi is so much more than a matter of price. The people who work in these shops are themselves enthusiasts, often with many years of experience in meeting customer's needs, and the very necessary expertise to ensure that the whole thing is properly set up to deliver the best results. The better the hi-fi, the more important it is to get the fine details right at the installation end of things, but even the least expensive equipment can be made to sound a whole lot better if good care is taken over the fine details - the support furniture, the cabling, the positioning of speakers and so on.

Without expert assistance even high class hi-fi can give mediocre results. With it you'll stand a very good chance of ending up with something rather more than a consumer durable - something which will be a source of considerable pleasure and genuine emotional satisfaction for decades to come.

I agreed to write this signed piece, irrespective of the specific sponsors, because I believe the independent specialist dealer plays a vital role in giving customers long term hi-fi satisfaction. The views and opinions expressed here are my own and not necessarily those of Hi-fi Choice.

Paul Messenger

The specialist Dealers listed here are professional and enthusiastic. Give your nearest a ring for a demonstration.

# **TOP 20 UK SPECIALIST HI-FI DEALERS**

### LONDON

N1 GRAHAMS HI-FI 190a New North Road 020 7226 5500

ORANGES & LEMONS 61/63 Webbs Road, Battersea 020 7924 2040

W4 MARTIN-KLEISER 109 Chiswick High Road 020 8400 5555

# SOUTH

SOUNDCRAFT HI-FI 40 High St. 01233 624441

RAYLEIGH HI-FI 216 Moulsham Street 01245 265245

AUDIO DESIGNS 26 High St. 01342 314569 Kingston-upon-Thames INFIDELITY 9 High Street Hampton Wick 020 8943 3530

Lakeside Retail Park RAYLEIGH HI-FI Dansk International Furniture World 01708 680551

RAYLEIGH HI-FI 44a High St. 01268 779762

PHONOGRAPHY Star Lane 01425 461230

RAYLEIGH HI-FI 132/4 London Road 01702 435255 Uxbridge MARTIN-KLEISER 278 High Street 01895 465444 Worthing PHASE 3 HI-FI 213-217 Tarring Road 01903 245577

MIDLANDS Banbury OVERTURE 3 Church Lane 01295 272158

SOUND ACADEMY 152a High Street, Bloxwich 01922 493499

Leicester CYMBIOSIS 6 Hotel St. 0116 262 3754 Northamotor LISTEN INN 32 Gold St. 01604 637871

CREATIVE AUDIO 9 Dogpole 01743 241924

NORTH Cheadle AUDIO COUNSEL 14 Stockport Road 0161 428 7887 Oldham AUDIO COUNSEL 12/14 Shaw Road 0161 633 2602

MOORGATE ACOUSTICS 184 Fitzwilliam St 0114 275 6048

York SOUND ORGANISATION 2 Gillygate 01904 627108

# SCOTLAND

RUSS ANDREWS HI-FI 34 Northumberland Street 0131 557 1672

Claseow STEREO STEREO 260 St. Vincent Street 0141 248 4079

### N. IRELAND

Belfast LYRIC HI-FI 161 Stranmillis Road 028 90 381296

# The Sharp Edge

WHAT WITH ALL THESE NEW DIGITAL FORMATS FLYING AROUND, PAUL MILLER THINKS ITS ABOUT TIME WE STARTED LOOKING SERIOUSLY AT DIGITAL AMPLIFIERS...

> ew digital sources, including DVD-A and SACD, stole the limelight last year and, in all likelihood, will build on that momentum in the years to come. Just as exciting, is the prospect that digital amplifiers like the TACT Millennium (*HFC* 194) and Sharp SM-SX100 (*HFC* 200) will extend the reach of these ultra-wide bandwidth, high-resolution sources right up to the loudspeaker terminals.

After all, once the data has been extracted from the disc, it makes sense to keep it in the digital domain and leave the conversion to analogue music till the last moment. A true digital amplifier uses the incoming data to control (or modulate) the level of its onboard DC power supply, producing a series of pulses that directly reflect the amplitude of the music signal.

It's only by the adaptation of MOSFET power transistors that such high-speed pulses can be produced at sufficient voltage to drive a loudspeaker. In effect, the power supply of a digital amp is directly connected to the speaker save for a (substantial) analogue filter.

Sharp's latest 1-bit venture takes the 1-bit PDM technology behind the SM-SX100, shoe-horns it into the slimline SM-SX1 amplifier and partners it with the DX-SX1 SACD player. All SACD players have a quoted response to 100kHz but all still feature a degree of very high frequency filtering to prevent strong ultrasonic signals from damaging conventional (analogue) amplifiers. In practice, the SX1's response has a greater VHF roll-off than, say, Sony's DVP-S9000ES (*HFC* 209) but is 'flatter' than both the Sony SCD-XB940 and Marantz SA-1 at -3.5dB (50kHz) and -22dB (100kHz).

In common with Sony's earlier SACD players, in CD mode the SX1's left channel is subtly different from the right with higher distortion (0.0025% versus 0.001% at 1kHz/0dBFs), a more pronounced loss of treble (-1.2dB versus -0.4dB at 20kHz, respectively) and slightly poorer S/N (101.4dB versus 102.3dB). Incidentally, this drops to just 96.4dB/98.3dB via its variable outputs... The DX-SX1 does have a highly distinctive

When the hi-fi industry needs the truth about technology, Paul Miller is its first port of call.

and 'original' jitter spectrum with a +/-2.8kHz modulation amounting to 690psec of its 710psec total. This is not up to the standard of current Sony/Marantz players but it is swamped by the higher 3790psec of (largely) data-induced jitter suffered by the SM-SX1 amplifier when driven to 1W/80hm via its S/PDIF coaxial link. The major peaks marked in red on Fig. 1 are all data-induced in origin, the dominant pair marked "6" typically contributing to a slightly grey sound that lacks a certain musical flair, in my experience.

Otherwise, Sharp's specification for its SM-SX1 digital amp is pretty vague. I managed to coax 65W, 90W and 45W at 20Hz (bass), 1kHz (midrange) and 20kHz (high treble) frequencies respectively, up to 1% THD into 8 ohm. At 1kHz, this falls to 70W into 4 ohm, indicating that the amp is no powerhouse and will be best suited to speakers of moderate to high sensitivity.

# **NO CLIPPING**

Figure 2 shows that distortion is clearly a little higher on the right than left channel (~0.04% compared to 0.008% up to 2W/8 ohm) but both increase quite dramatically to ~0.2% around the 25W mark. Strictly speaking, a true digital amplifier cannot clip because its maximum output is defined by the 0dBFs level of an incoming digital signal. It is possible to over-drive the analogue input of the SM-SX1, however, which will be manifest as a catastrophic increase in distortion from the digital power amp, regardless of the actual power level. In practice, the SM-SX1 gradually becomes less linear as 0dBFs is reached, probably because it incorporates a small amount of digital gain. At 1% THD the amplifier is delivering ~90W/8 ohm and the in-built protection is activated.

Nevertheless, there are bigger factors at work in determining the 'sound' of this combination than plain distortion. The two 3D plots on Fig 3 show, quite dramatically, that the noise both in (1) and out (2) of the audiorange is compromised by the SM-SX1 amp. This huge increase in ultrasonic noise is a by-product of a 16-bit digital input being upsampled to 2.8MHz and chopped back to a stream of single bits. A 7th-order noise-shaper is employed to squeeze this

# "THERE ARE BIGGER FACTORS AT WORK IN DETERMINING THE 'SOUND' OF THIS COMBINATION THAN PLAIN DISTORTION"



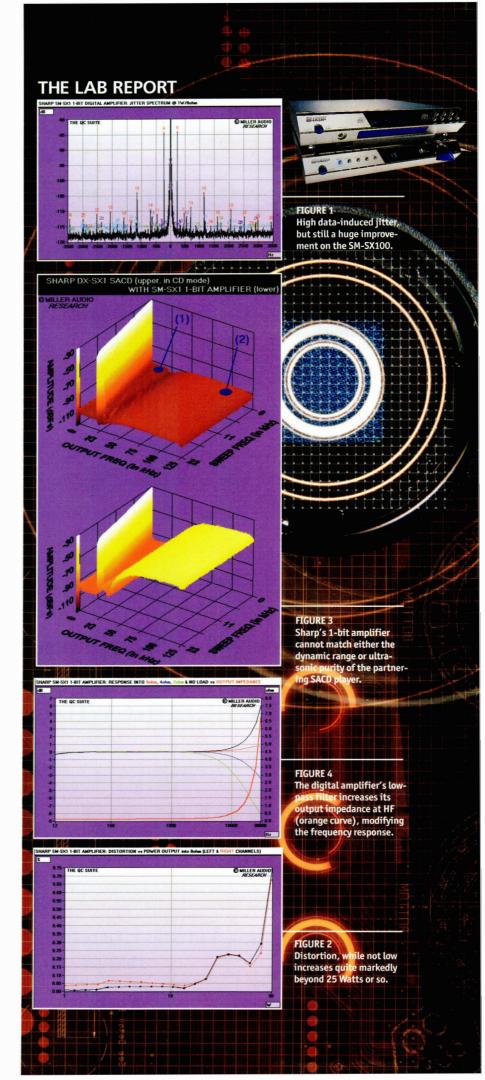
noise out to higher frequencies – the bright yellow welt on the lower 3D plot – leaving the audio band free (or freer) of noise and close to its original dynamic range. In practice, I obtained a 72dB A-wtd S/N ratio (re. 1W/8 ohm, improving to 83.5dB re. 55W/8 ohm) which is around 10-20dB short of what's possible with analogue amps.

# **DIRECT IMPACT**

More dramatic, perhaps, is the side effect of the big filter necessary to remove the RF component from the 'amplified' bitstream and reveal the underlying music signal. Because of this, the amp's output impedance hovers around 0.14 ohm up to about 2kHz before rising in line with the reactive component (the inductor) of the output filter network. Thus, at 10kHz the output impedance is 0.5 ohm, by 20kHz it's 1.9 ohm and at 30kHz it's a massive 6.80hm (thicker, orange curve on fig. 4). This will have a direct impact on the amplifier/ speaker frequency response.

All digital amplifiers, including the TACT, have to manage some sort of compromise. The respective frequency response curves into 8 ohm, 4 ohm and 2 ohm (speaker) loads are indicated by the red, blue and green traces, showing that the digital signal is 'pre-equalised' to give its flattest response into a standard 8 ohm load. With no load applied to the amplifier, the response has a very bright treble (black trace), with a progressively dull treble into low 4 and 2 ohm loads. Of course, in 'real life' the impedance of a speaker is not static but a continuously varying curve with peaks and dips typically swinging through many tens of ohms. In practice the (treble) response of the SM-SX1 amplifier will vary in sympathy with the choice of cable and speaker, potentially offering a different sound from set-up to set-up.

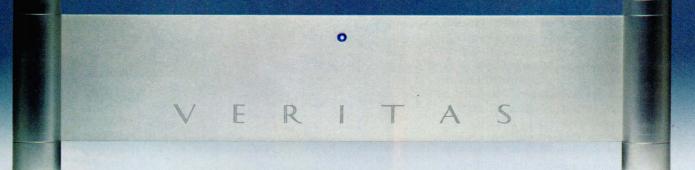
Almost inevitably, more sweat and tears need to be shed in the development of what is a very exciting technology. The SM-SX1 looks to be more refined than the SM-SX100 and cheaper too, but it's still got some way to go. Let's just hope that Sharp and its competitors continue to push back the boundaries of digital audio technology. If you have a subject for Paul to investigate, e-mail: MILLER\_AUDIO\_RESEARCH@compuserve.com



**Question:** Is this the best amplifier ever built?

Answer: oui, si, ya, nai, ja, igen, yes, haan, ken, evet, chai khan, ano, da, hai, ia.....

In any language the answer is the same



# The Veritas P400 Digital Power Amplifier. 400 watts of pure power. Made in England without compromise.

Veritas Horn Systems Ltd

Manor Farm Barns Glandford, Holt Norfolk NR25 7JP Tel: 01263 741417 Fax: 01263 740937

# **READER CLASSIFIED**

FOR SALE

# ADVERTISE IN HI-FI CHOICE FOR £5\*. To advertise

on this page, write your advert in block capitals and send it to: **Reader Classifieds**, **Hi-Fi Choice**, **99 Baker St**, **London W1U 6FP**. Include a cheque for £5\* made payable to Future Publishing Ltd. The advert will appear in one issue only, must be no more than 20 words (or five lines) long, and must include your phone number. Please ensure your ad is clear and legible (if possible, typed) and give your name, address (if these aren't included in your advert) and daytime phone number in case we need to check anything. Reader Classifieds are for the use of private individuals only. All Reader Classified adverts will be printed on a first-come, first-served basis, subject to available space, and Future Publishing Ltd accepts no liability for the accuracy of the information contained therein, nor any consequence arising from it, nor for any typographical errors. We reserve the right to amend or refuse adverts at the Editor's discretion and cannot guarantee that an advert will appear in any specific issue.

\*This service is FREE to subscribers, provided that their subscriber number is enclosed.

### TUBE TECHNOLOGY Unisys

Integrated (CD only). Amazing sound and looks. Rave reviews. Mint. Boxed. £2,200 new. Giveaway £800. Call 01302 349901.

**ARCAM ALPHA** Plus CD player. Boxed, manual, remote, includes £70 Audioquest lead. Bargain at £175. Call Alan 07774 187840.

MARANTZ CD67SE CD player. Excellent condition, £100. Call 01926 332982. (Midlands) MUSICAL FIDELITY E Series, E100 amp, E600 CD player, E500 tuner, immaculate and boxed. Includes system remote VDH cables, £975 (£1800 new). Reason for sale – going multichannel!

Call 01474 704382. (North Kent) **ROGERS STUDIO 7** speakers, factory sealed boxes. £900 new, will accept £299 o.n.o. Call 01733 205881.

**NAD 533 TURNTABLE** with Goldring 1006 cartridge. Excellent condition. Boxed with instructions and receipt. £285 new, will accept £100. Call 0161 702 9923.

B&W CDM1SE speakers, cherry veneer, £375. Musical Fidelity X-A1 amplifier, £275. Both mint. Call 01865 438222. (Oxford) THORENS FIT turntable drive belts, boxed, £4 each or three for £10, postage paid. Call 01642 594645. EXPOSURE XI, IX, IV plus two VI, £1,200 - might split. 100 LP records, rock to classics, £50. Call 01708 457691. BLUES CDs. five assorted, as new. £20. Sennheiser 420 MkII headphones, boxed, very good condition, £10 (will post). Call 01278 782622. NAIM SBLS, eight years old, original bass units, complete with dedicated transit boxes. £750 o.n.o. Call 01452 308302. (Gloucester) SHEARNE PHASE 2 integrated and Phase 3 power amps. Blue marble finish, excellent condition. £600. Call 01926 332982. (Midlands)

QUAD 33/303 complete. Fully serviced by Quad in April 1996, never used since, still in box. £150 o.n.o. Call 01794 389085.

TOWNSHEND ISOLDA speaker cable, 15 foot pair in excellent condition, £350. Call 020 8879 0364. IMPULSE H6 speakers, special

finish, excellent condition, boxed, £390 o.n.o. Pioneer PDS 505 Precision (Lithos D) CD player, boxed, £225. Call 0141 339 7387.

**ROGERS HG88** valve stereo integrated amplifier, serviced, valved, new speaker cable terminals, instructions. £175. Call 01202 481386.

TWO MUSICAL FIDELITY XA50 monoblocks. Call 01304 381101. SONIC LINK Violet interconnects, boxed as new, £50 each. Call 0191 529 4526.

**ELTAX LINEAR RESPONSE** 6.5 speakers, two years old, spiked and sand filled. Excellent build, beech finish, £150. Call 01423 562106. ARCAM ALPHA 8SE CD player, perfect condition, £250. Two pairs Cabletalk Monitor 2.1 interconnects, £50 o.n.o. Call 01743 460520. SOUTH COAST speakers Alto IIIG. Tall slim floortstanders, professionally finished in light beech, spiked plinths, latest upgraded design. £395 o.n.o. Call 01274 632492. SONY SCD-1 CD/SACD player, few months old, £1,700. Call 0141 637 4676. (Glasgow)

KRELL KAV 3001 (£2,600 new) £1,300. Piano Black Gershman RX-20 speakers (£4,500 new) £1,750. Both absolutely mint and boxed. Very reluctant sale. Call evenings, 02891 467435. KEF MODEL ONE speakers, black ash, very good condition, £500. Call 0117 984 7365 (day) or 07779 036657 (evenings).

**MISSION 773E** floorstanding speakers, cherry finish, three months old, boxed as new with receipt, £270.

# Call 020 8390 9936.

BOSE LIFESTYLE 20 hi-fi system, £850. Bose Acoustimas 10 home theatre speaker system, £300. Bose Acoustimas 5 Series II speaker system, £150. Yamaha DSP-A3090 digital field processing amplifier, £450. All as new and boxed. Call 01935 422804. VERITAS 25 floorstanding speakers, piano black, hardly used, less than a year old. £1,750 new – offers circa £900. Call 07769 742068. CYRUS DAD3Q, Cyrus III plus PSX-R power source, Castle Harlechs in light oak, plus quality cables. Lightly used.

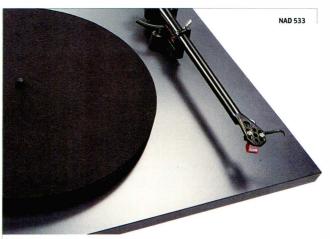
£800. Call 01332 766393. **B&W CDM1SE**, rosewood, with stands, £450. Flatline bi-wired 2x5m, £135. Audiolab 8000A, £230. Stage 4 CD, £200. Call 07799 602852. **MARANTZ CD67** mkll OSE, two years old, as new, boxed with remote. Cost £300, will sell for £125. Call 01423 562106.

MARANTZ CD63KIS, £185. Arcam Alpha 8SE, £325. Cambridge Disc/DacMagic transport/DAC, £150. All mint, boxed.Call 01706 345418.

AUDIO ANALOGUE Bellini preamp, £250, Donizetti power amp, £300. Castle Harlech cherry speakers, £450. All boxed and unmarked. Call 0121 7331961.

# WANTED

AUDIO-TECHNICA or Linn Basik tonearm. Audax HD3P gold oval dome tweeters. LP12 perspex cover. Call 01642 594645. QUAD FM2 valve FM tuner, mint or for spares. Call 01202 481386.



# **BUYING TIPS**

Buying secondhand 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 engineered down to a price. Do some research on which brands and products have a good service back-up, so if something does go wrong, you can get it fixed. Unless you purchase from a secondhand hi-fi dealer, you're unlikely to get any warranty. So it's up to you to ensure the fitness of any gear that you buy. Products such as speakers should be less prone to breakdown than amplifiers, and amps should be more reliable than CD players. But any abused component could be troublesome — have a proper dem, and judge the seller as well as the goods!



# I would like to subscribe to *HI FI CHOiCE*

YO	UR	DF	TAI	LS
	0	~	14 11	20

Title	Initials	
Surname		
Address		
Postcode	Country	
Tel no. (inc. code)	6.1 <sup>-</sup>	
E-mail address		

# PLEASE CHOOSE YOUR METHOD OF PAYMENT: 1 OR 2 1. DIRECT DEBIT

UK only £14.98 every 6 months - save £12.29 Complete form below. Lunderstand that I will receive 13 issues during the next 12 months.

Future Publishing Ltd. Cary Court, Someron. Somerset, TA11 68R	riginator's Identification Number
I. Name and full postal address of your Bank or To: The Manager Address	Building Society branch Bank/Building Society
	Postcode
2. Name(s) of account holder(s)	
3. Branch sort code (from the top right hand corner of your cheque)     4. Bank or Building Society account number     5. Instruction to your Bank or Buil Please pay Future ublishing Direct Debits from the at the safeguards assured by the Direct Debit Guarante with Future Publishing and if so, details will be passed	account detailed on this Instruction subject to e. I understand that this instruction may remain
Signature(s)	Date
Ref No (Office use only)	
Banks and Building Societies may not accept Direct You may photocopy this blank You cannot fax or e-mail	form and then complete it.
CHEQUE/CREDIT CARD UK £29.97 - save £12.28 North America £49.99	<ul> <li>Europe (including Eire) £43.0</li> <li>Rest of the world £56.9</li> <li>every 3 months. Complete form above.</li> </ul>

Signature

SEND TO: HI FI CHOiCE Subscriptions,

UK: Future Publishing, FREEPOST BS4900, Somerton, Somerset, TA11 6BR. Overseas: Future Publishing, Cary Court, Somerton, Somerset, TA11 6TB, UK.

\_Date



of

- YOU get every issue delivered to your door FREE. (UK only)
- ✓ YOU save money over 25% on the cover price.
- YOU will never miss an issue of your favourite magazine.

# How to subscribe

- Complete and return the form on this page.
- Call our credit card hotline on:
   01458 271147
   overseas readers call: +44 1458 271147
- Subscribe online: www.futurenet.com/promotions/pg211/89



website: www.futurenet.com/ promotion/pg211/89

Order code: P211

Offer ends: 28.02.01

# HI-FICHUICE SUBSCRIPTION OFFER 13 ISSUES for £29.97



# HOTLINE NUMBER: +44 (0)1458 271147

WIDE PRODUCT RANGE -

# absolute Sounds



"OUR CD PRODUCT OF THE YEAR FOR THE SECOND YEAR RUNNING, the Arcam Alpha 7SE continues to offer class-leading sound and sheer value for money." WHAT HI\*FI? ◆ AWARDS 2000

# why choose sevenoaks for compact disc?

As the main source component in most dedicated hi-fi systems, the quality of the CD player is vital, as any musical information lost at this stage cannot be retrieved later. **Sevenoaks** Sound & Vision have chosen models from all the leading manufacturers which, in our opinion, provide the very best performance, reliability and value for money. All CD players are sold with a minimum two year warranty, with extended warranties available, for peace of mind.

# selected cd players

Denon DCD835	Sale £219
Marantz CD6000 OSE	Sale £229
Marantz CD17 Ki Signature	Sale £999
Musical Fidelity A3CD	Sale £749
Musical Fidelity X-Ray	Sale £749
Roksan Caspian MK1 CD	Sale £749
Sony CDPXB330	Sale £89
Sony CDPXB930	Sale £229

# also available at selected outlets

Arcam FMJ CD23, Cyrus CD7, Naim CD5, Linn Genki, Meridian 508 24-Bit and Sony SCD555ES.

Mail Order not available on Arcam and Marantz Products

Please Note: Advertisement valid until at least 27th January 2001, E&OE

# ARCAM Alpha 7SE

"The 7SE still has that trademark Arcam fullness, but there's real spark and verve here, too. Detail retrieval and imaging abilities are top-notch for the price, while its command of rhythm and dynamics really brings the music to life." WHAT HEVER? AWARDS 1999

e



# essential accessories

We carry a wide range of interconnect cables, speaker stands, equipment supports and other performance enhancing accessories at all outlets.

OUTLETS NATIONWIDE



# The benefits of Recordable CD

With recordings which are virtually identical to the originals, CD-R has become the fastest growing recording medium. CD-R recordings are permanent and can be played back on any existing CD player, so they're good for making compilations or archiving irreplaceable records. CD-RW discs are ReWritable and may be re-recorded many times, however they will only play on the recorder itself or on some more recent CD players.

# digital recorder



CD-RW 
 Digital Recording Level 
 Coaxial & Optical Connections

Anyone looking at spending £300 on a digital recorder probably already has a CD player at least as expensive to feed it, and on which the copies made on the recorder are likely to be played. This is why the Pioneer PDR509 took Product of the Year gong in our 2000 Awards - not so much for its playback abilities, which are good but not stunning, but for the fact that here is a machine capable of high-quality recordings from digital sources. WHAT HI\*FI? ◆ NOVEMBER 2000

# minidisc or cd-rw tuners and turntables

There is a wealth of entertainment available through Radio broadcasts and with the advent of Digital Audio Broadcasting, background noise and other distortions are a thing of the past. The turntable, still provides excellent sonic performance and with many recordings only ever issued on this medium, how about recording those irreplaceable records onto minidisc or cd so you can enjoy them in your car or on the move?

# selected digital **recorders turntables** and **tuners**

Denon TU260MK2	Tuner	Sale £99
Michell Gyro SE (RB300)	Turntable	Sale £999
Project Debut II - Black*	Turntable inc OM5	Sale £109
Sony MDSJE440	MiniDisc Recorder	Sale £139
Sony MDSJE640	MiniDısc Recorde <mark>r</mark>	Sale £169
Sony STSB520	Tuner	Sale £99
Sony STD777ES	DAB Tuner	Sale £499
Yamaha MDX596	MiniDisc Recorder	Sale £159

Please Note: Some products are not available at all outlets \*Colours available at additional cost

also available at selected outlets

Arcam FMJ DT26, Cyrus FM7.5, Linn Sondek LP12, Marantz ST17 and TAG McLaren Audio T32R.



# two year warranty for peace of mind As the UK's largest independent specialist hi-fi retailer, all home cinema and hi-fi separates

come with a minimum two year warranty and ten day exchange.

# a selection from our unbeatable range



"Resolution is never in doubt, and yet this is music-making very definitely on the human scale, the X-A2 being as much about a natural balance as electrical ability. It's capable of driving even big, demanding speakers, is upgradable with the addition of extra Musical Fidelity power amps - when things get even more special - and is an absolute steal for the money."

Also Available: A3 Pre/Power Amplifier

# daunted by **amplifiers**? **sevenoaks** can help you choose

With complicated and often meaningless technical specifications, choosing the right amplifier can be really daunting. **Sevenoaks** Sound & Vision will help you choose from our unbeatable range. With inexpensive integrated models to esoteric pre/power combinations, all of which have been selected for their performance and flexibility, you can guarantee finding an amplifier ideally suited to your requirements.

# selected amplifiers

Arcam Alpha 9	Sale £399
Denon PMA255	Sale £119
Marantz PM6010 OSE	Sale £179
Musical Fidelity A3	Sale £799
Rotel RA931/II	Sale £149
Rotel RA971/II	Sale £229
Roksan Caspian MK1 Integrated	Sale £649
Sony TAFB940R SACD Compatible	Sale £229

# also available at selected outlets

Arcam FMJ A22, Cyrus 7, Meridian 551, Linn Kolektor/LK85 and TAG McLaren F3-60i.

Please Note: Advertisement valid until at least 27th January 2001, E&OE Mail Order not available on Arcam, B&W, Marantz and Monitor Audio Products

# Image: Constraining the second of

£649

# interested in multiroom?

sa

Multiply the enjoyment of your system by liberating it from the confines of one room with the freedom of full function wireless remote control.

OUTLETS NATIONWIDE



# (((AE))) ACOUSTIC ENERGY AE1 Series II

- 25mm Magnesium Alloy Dome Tweeter
- 90mm Tri-Layer Alloy Mid/Bass Unit
- ◆ Teflon<sup>™</sup> Insulated OFC Copper Internal Wiring
- Encapsulated Crossovers
- Cherry or Rosemah Finishes Available

£

Optional STAE1 Stands

sale



Also Available: Monitor Audio Studio 20SE Sale £999 Black Finish

save £300

77 Series

Includes Award Winning 773e and

Highly Acclaimed 77DS and 771e

Bookshelf, Floorstanding, Centre

Aerogel Bass/Mid Units

Magnetically Shielded

and Surround Models

25mm Fabric Dome Tweeter

Choice of Finishes Available

"But the best in the test are Acoustic Energy's AE1 Series IIs. The original design may be old but it's a good 'un and plays all types of music with the sort of power and solidity that is astonishing from such a small standmounter. Add class-leading resolution and excellent dynamics and the AE1s justify their original position as top dog."

# which **loudspeakers**? **sevenoaks** can help you decide

As the final component in any hi-fi or home cinema system, the loudspeakers determine the way sound is presented. However, not only is it imperative that the loudspeakers work correctly with the amplifier and source components, but also do not react adversely with your room. With such a variety of bookshelf, stand mounted and free-standing loudspeakers available, it makes sense to choose **Sevenoaks** Sound & Vision, where we can help you find the perfect solution - all you need to do is listen!

# selected loudspeakers

Sale £119
Sale £199
Sale £119
Sale £299
Sale £179
Sale £359
Sale £119
Sale £399

Please Note: Some products are not available at all outlets

also available at selected outlets

B&W CDM NT, Castle Classic Range, Jamo Concert Series and Ruark Contemporary Series.



# New Q.2 Series

- KEF's Fourth-Generation 'Uni-Q' Driver
- New 19mm Soft Dome Tweeter
- New 160mm Polypropylene Main Driver
- Upgraded Bi-Wireable Crossover Circuit
- Diagonal Internal Cabinet Bracing
- Black Ash, Natural Cherry and Dark Apple Finishes Available



# a heritage for hi-fi at sevenoaks

For most of the specialist British brands featured, Sevenoaks are the UK's number one retailer, and are Arcam's largest dealer in the world.

### WIDE PRODUCT RANGE



# 9.30-5.30 Monday-Saturday 9.30-7.00 Thursday 01224 587070

491 Union Street

EDINBURGH 5 The Grassmarket Air Conditioned 10.00-6.00 Monday-Saturday

ABERDEEN

E-Mail: sevenoakshifi@btconnect.com

0131 229 7267

# GLASGOW

88 Great Western Road 10.00-6.00 Monday-Saturday 12 00-4 00 Sunday

# 0141 332 9655

HULL 1 Savile Row, Savile Street 9.30-5.30 Monday-Saturday

01482 587171

# EDFORD 29-31 St Peters Street

E-Mail: sevenoaks.bedford@lineone.net 10.00-6.00 Monday-Friday 9.30-5.30 Saturday 10.00-4.00 Sunday

# 01234 272779

MBRIDGE 17 Burleigh Street E-Mail: sevoakscam@aol.com

10.00-6.00 Monday-Saturday 01223 304770

1 The Grove Centre, Witham E-Mail: 7oakshifiwitham@btconnect.com 9.30-5.30 Monday-Saturday Late Night Thursday by Appointment 01376 501733

# IPSWICH

12-14 Dogs Head Street 9.30-5.30 Monday-Saturday 01473 286977

# Scotland & North

# LEEDS

112 Vicar Lane E-Mail: sevenoakshifi@btinternet.com 10 00-6 00 Monday-Eriday 9.30-5.30 Saturday 11 30-4.30 Sunday

# 0113 245 2775

# LIVERPOOL

16 Lord Street Air Conditioned 10.00-6.00 Monday-Friday 9.00-5.00 Saturday

0151 707 8417

# MANCHESTER

69 High Street, City Centre E-Mail: sevenoaks manchester@htinternet.com 9.30-5.30 Monday-Saturday 11.30-4.30 Sunday

0161 831 7969

# Midlands & East

10 Loseby Lane E-Mail: 7oaks.leicester@virgin.net 10.00-6.00 Monday-Saturda 0116 253 6567

# 20-22 Corporation Street, City Centre

Air Conditioned, Customer Parking at Rear E-Mail: sevenoakslincoln@vahoo.co.uk 10.00-6.00 Monday-Saturday

# 01522 527397

29/29a St Giles Street Air Conditioned E-Mail: sevenoaks.hifi@virgin.net 9.30-5.30 Monday-Saturday 01603 767605

597-599 Mansfield Road, Sherwood Air Conditioned E-Mail: sevenoaksnott@yahoo.co.uk 10.00-6.00 Monday-Saturda 0115 911 2121

# Midlands & West

### CHELTENHAM 14 Pittville Street

9.30-5.30 Monday-Friday 9.00-5.30 Saturda 01242 241171

# EXETER

28 Cowick Street E-Mail: sales@sevenoakshifi.net 9.30-5.30 Monday-Saturday 01392 218895

# PLYMOUTH

107 Cornwall Street 9.30-5.30 Monday-Saturday Late Night Thursday by Appointment 01752 226011

# NEWCASTLE

19 Newgate Street E-Mail: 7oaks@btconnect.com 9 30-5 30 Monday-Saturday

# 0191 221 2320

# PRESTON

40-41 Lune Street Air Conditioned 10.00-6.00 Monday-Friday 10.00-8.00 Thursday 9.30-5.30 Saturday 11.00-4.00 Sunday 01772 825777

# SHEFFIELD

635 Queens Road, Heeley Air Conditioned E-Mail: SevenoaksSheffield@bun.com 9.30-5.30 Monday-Saturday 10.00-4.00 Sunday 0114 255 5861

# OXFORD

41 St Clements Street E-Mail: sevenoaks.oxford@lineone.net 10.00-6.00 Monday-Friday 9.30-5.30 Saturday 11.00-5.00 Sunday

# 01865 241773

# OROUGH

36-38 Park Road sevenoaks@peterborough0.freeserve.co.uk 9.30-5.30 Monday-Saturday

01733 897697

the

sevenoaks

Sale



# BIRMINGHAM

12 Queensway Arches, Livery Street Car Parking Opposite 9.30-5.30 Monday-Saturda

0121 233 2977

### BRISTOL 92b White Ladies Road, Clifton

Air Conditioned 9.30-5.30 Monday-Saturday 0117 974 3727

# CARDIFF

104-106 Albany Road E-Mail: 7oakswales@compuserve.com 9.30-5.30 Monday-Saturda 029 2047 2899

### 24 Mansel Street Air Conditioned

SWANSEA

10.00-6.00 Monday-Saturday 11.00-5.00 Sunday Late Night Wednesday by Appointment

# 01792 465777 WORCESTER

2 Reindeer Court E-Mail: sales@sevenoak.demon.co.uk 9.30-5.30 Monday-Saturday 01905 612929

# christmas opening hours

Sunday 17/12 **Christmas Eve**  Most Outlets Open - Limited Hours Most Outlets Open - Limited Hours

**Christmas Day Boxing Day** 



IMPORTANT: Due to regional variations, please confirm opening hours with your local outlet before you travel.



At Sevenoaks Sound & Vision you'll find the widest range of quality products anywhere in the UK. Everything from the latest DVD players and Widescreen Plasma Televisions to amazing special offers, all with our outstanding service. You can be sure that Sevenoaks are always more entertaining.

# London & South East

# SEVENOAKS

109-113 London Road Air Conditioned 9.30-5.30 Monday-Friday 9.00-5.30 Saturday

# 01732 459555

BRIGHTON

57 Western Road, Hove E-Mail: 7oakshifibrighto@btconnect.com 10.00-6.00 Monday-Saturday

# 01273 733338

BROMLEY 39a East Street Air Conditioned E-Mail: 7oakshifibromley@btconnect.com 9 30-5 30 Monday-Saturday 020 8290 1988

# CHELSEA

403 Kings Road, Worlds End Air Conditioned E-Mail: 7oakshifichelsea@btconnect.com 10.00-6.00 Monday-Saturday 020 7352 9466

# CRAWLEY

32 The Boulevard Air Conditioned E-Mail: sevenoakscrawley@aol.com 9.30-6.00 Monday-Saturday 01293 510777

# CROYDON

369-373 London Road E-Mail: 7oakshificrovdon@btconnect.com 9.30-5.30 Monday-Saturday 11 00-4 00 Sunday

020 8665 1203

# **EPSOM**

12 Upper High Street E-Mail: sevenoaks.epsom@virgin.net 9.30-5.30 Monday-Friday 9.00-6.00 Saturday 11.00-4.00 Sunday 01372 745883

# GUILDFORD

73b North Street Air Conditioned E-Mail: 7oakshifi\_gford@btconnect.com 9.30-5.30 Monday-Saturday 01483 536666

# HOLBORN

144-148 Grays Inn Road 10.30-6.30 Monday-Friday 10.30-4.30 Saturday 12.00-4.00 Sunday

# 020 7837 7540

KINGSTON 43 Fife Road Air Conditioned

### E-Mail: 7oaks\_kingston@breathemail.net 9.30-5.30 Monday-Saturday 020 8547 0717

MAIDSTONE 96 Week Street Air Conditioned E-Mail: 7oakshifimstone@btconnect.com 9.30-5.30 Monday-Saturday 01622 686366

# READING

3-4 Kings Walk Shopping Centre 9.30-5.30 Monday-Saturday 0118 959 7768

Scotland & North

LIVERPOOL

# SOUTHAMPTON 33 London Boad

Air Conditioned E-Mail: 7oaks\_soton@breathemail.net 9.30-5.30 Monday-Saturday 11 00-4 00 Sunda 023 8033 7770

# SOUTHGATE

79-81 Chase Side E-Mail: NEILEP1@eggconnect.net 10.00-6.00 Monday-Saturday 12.00-4.00 Sunday

# 020 8886 2777

SWISS COTTAGE

21 Northways Parade, Finchley Road Air Conditioned sevenoaks@swisscottage.homechoice.co.uk 10.00-6.00 Monday-Saturday 12 00-4 00 Sunday

# 020 7722 9777

# TUNBRIDGE WELLS

28-30 St Johns Road Air Conditioned E-Mail: 7oakshifitw@btconnect.com 9.30-5.30 Monday-Saturday

01892 531543 WATFORD 478 St Albans Road E-Mail: 7oakshifiwatford@btconnect.com 10.00-6.00 Monday-Saturday

Midlands & East

LINCOLN

### 11.00-4.00 Sunday 01923 213533





θ nationw



Midlands & East





new year opening hours

Sunday 31/12 Monday 1/1

Most Outlets Open - Limited Hours Sunday 7/1 Closed

**Sundays in January** 

Most Outlets Open - Limited Hours Most Outlets Open - Limited Hours

TINGHAM

IMPORTANT: Due to regional variations, please confirm opening hours with your local outlet before you travel.

BIRMINGHAM

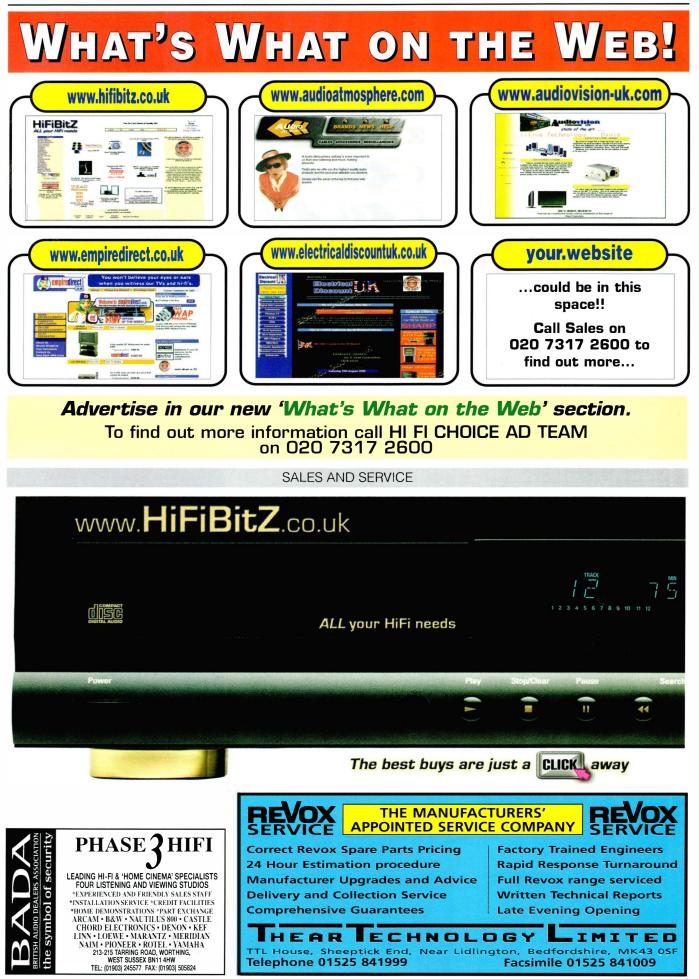


EAST SUSSEX



EXCELLENT ADVICE ON CHOOSING THE RIGHT CABLE FOR YOU





Telephone 01525 841999

TTL House, Sheeptick End, Near Lidlington, Bedf<mark>o</mark>rdshire, MK43 0SF

Facsimile 01525 841009

# SALES & SERVICE

### Heatherdale Audio Ltd 202 Findon Road, Worthing BN14 0EJ Pre-owned Equipment Available with Guarantee Export Facilities Available Visit our Web Page: WWW.hifi-stereo.com Main dealer for Mark Levinson Reference products for the connoisseur ARK LEVINSON 30.6 DAC 24/96 plus HDCD £11995 Cello Reference Standard DAC £2995 Mark Levinson 20.5 Reference Amplifiers £4795 Mark Levinson 26S Balanced Pre-Amp £2995 NOW DEMONSTRATING THE MARK LEVINSON 383 INTEGRATED AMP Speakers Thiel 2.2 Morado (rosewood), superb condition. £1595 Thiel 2.2 Speakers, £995 Linn Isobariks with Stands..... £895 ATC Towers 7s\_\_\_\_\_\_ Audionote ANE/SE (Rosewood) F. Veneer. Kef 101/2 Speakers\_\_\_\_\_ ...£795 .£3995 £475 Mission 782 Loudspeakers (stand mount model)£250 Tannoy 15" dual concentric Speakers in superb oak cabinets \_\_\_\_\_\_ Selection of Thiel ex demo Speakers. .£phone Pre-Amps £2995

Mark Levinson ML26S pre-amp...... Krell KSP-7B balanced with phonostage & 

# AMPLIFIERS

Mark Levinson 20.5 Monoblocks	£4795
Rega Mira Amplifier	£325
Sony TA-AX320 Amplifier	
Mark Levinson 334 Integrated Amplifier, mint	
Rowland Model 1 Power Amplifier	
Mark Levinson 33H Monoblocks	
(our own ex-dem)	£16495
Mark Levinson ML3 Amplifier	
Rowland Model 5 power Amplifier	
(champagne gold face plate)	£2695
Pioneer Precision integrated Amplifier	
Cello Performance 11 Mono Amplifiers	£9995
Mark Levinson 332 200 wpc Power Amplifi	
Audionote P4 Monoblocks	
Exposure 18 Stereo Amplifier	£495
Adcom GFA 5300 Power Amplifier	

# CD PLAYERS & TRANSPORTS

Mark Levinson ML37 CD Transport	£2795
Denon DCD660 CD Player	£95
NAD 517 Multi changer CD Player	£195
Linn Karik CD Player	

### DACS

PS Audio Ultralink Digital Processor	£995
Audio Synthesis Dax	
Meridian 203 DAC	£150
Arcam Delta Black Box DAC	£150
Mark Levinson 30.6 Reference DAC	
(HDCD-24/96hkz)	£11995
Cello Reference DAC	£2995
LFD DAC 3	£1595
Vac Dac Valve Dac	£895

# MISCELLANEOUS

Denon TU-260L Tuner£65
2mtr CZ Gel Balanced Interconnect (£650)ONLY £1995
Nakamichi BX2 Cassette Deck (just serviced)£295
Audio Research 2 metre set Litzline speaker cable
(£765) ex Demo£495
Teac A-33405 Tape Recorder£595
Stax Lamda Nova electrostatic
headphones and energiser£595
Selections of MIT cables available at discounted prices

# TURNTABLES CARTRIDGES & TONEARMS

Technics SL-BDZ Turntable	£75
Thorens TD125 Turntable	£295
CEC Turntable & PSU	£495
Helius Silver Wired Tonearm	£995
Roksan Xerxes. The mechanic pick-up an	m and
Linn Trioka Cartridge	£795
VPI TNT Turntable	£3495
Luxman PD 282 Turntable	£75
Technics SLD2 Turntable	£75

# We now offer 0% finance (sub) Please phone to arrange an audition

Main Dealers for: Mark Levinson, Thiel & Absolute Sounds Tel: 01903 872288 Evenings: 07860 660001 Fax: 01903 872234

We accept: vs C Email address: heatherdale@hifi-stereo.com



Ex-demo & Secondhand equipment

1599

799

199

245

169

750 679

249

399

### CD Players & DAC'S

Arcam Alpha 6 CD player (5 upgraded to 6)	199
Arcam Delta 70.2 CD player	179
Audio Alchemy DDE1.0V D/A Converter	99
Audio Note DAC 1 Valve DAC	350
Audio Synthesis DAX 2 DAC	1250
Audiolab 8000 CDM CD player	499
Audiolab 8000 DAC D/A Converter 20 Bit	339
Densen Beat 400 CD player (New) HDCD	999
Jadis JD3 Deluxe CD player/Transport	1795
Kenwood 9010X Clock 3 moded Transport	275
Marantz CD 7	2999
Monrio 18B2 DAC	399
Monrio Bit Match Transport	499
Pink Triangle Dacapo HDCD 20 Bit	695
Pink Triangle Ordinal 18 Bit DAC	349
Rega Jupiter Transport/Io DAC	750
Resolution Audio D92 24/96 Dac/Processor	995
Resolution Audio VT960 DVD Transport	1999
Wadia 6 CD player	1850
Wadia 860iX CD player (Ex-Demo)	5999

### Preamplifiers

reamplifiers	
Audio Research LS2 Hybrid Preamplifier	1299
Audio Research LS2 MKII Hybrid Preamplifier	1695
Audio Research LS9 Remote Solid State (Ex-demo)	1399
Beard P505 Preamplifier with Phono Stage	575
Densen DM20 Preamplifier	899
DPA Enlightenment (New style)	499
Graaf WFB Two (New & boxed)	1199
Mod Squad Line Drive AGT	299
Michell ArgoHR/Hera	475
OCM 55 Preamplifier	399
Sony Ref Preamplifier Esoteric TA 1ES (New )	32299
Amplifiers	
Audiolab 8000S Integrated	529
Audio Innovations 1st Audio Mono Blocks	599
Audio Note P2SE Valve Power Amplifier	795
Audion Sterling Integrated Line	449
Bartelomeo Transperenza ST140 Power Amplifier	695
Densen DM10 Line Integrated	950
Graaf GM100 (New & boxed)	3299
Graaf 50/50 Push Pull Power amplifier (New & boxed	d)1695
Graaf GM20 OTL Ex-Demo Re-Valved	1995
Jadis JA80 Mono 60W Valve Amplifiers	3499

Michell Alecto MK2 Mono Power amplifiers OCM 200 Power Amplifier Rega Big Brio Amplifier

Rega Luna Amplifier Rega Maia Power Amplifier 349 Unison Research Pentode 35 Valve Int (4x EL34) 895 Loudspeakers Acoustic Energy Aegis 2 Beech

Audio Note AN-J/SP Light Oak Loudspeakers	750
Audio Note AN-K/SP Light Ash Loudspeakers	629
Diapason Karis Walnut 2 Way Monitor (New)	950
Final 0.3 Hybrid Electrostatics (Ex-demo)	1299
Impulse Maya Loudspeakers (New & boxed)	• 395
Indigo Model One	250
Indigo Model Three	375
Indigo Centre	1129
Magnaplanar SMG C SE Black	599
Opera Platea Mahogany Floorstander	549
Velodyne TX810 Mk2 Subwoofer	379
Tunoro & Tono Dooko	

### Tuners & Tape Decks

Cymbol C DAB Digital Tuner (Ex-demo)
Magnum Dynalab FT101 Analogue Tuner (New)
Rega Radio R Tuner (Ex-demo)
Roksan Caspian Tuner AM/FM (Ex-demo)

# Midland Audio X-change is looking for good used British & American Hi-fi

www.midlandaudiox-change.co.uk	
call John Boberts Tel / Fax 01562 822236	

# 181 Franche Rd • Kidderminster • Worcs • DY11 5AD

e-mail sales@midlandaudiox-change.co.uk

Mobile 07721 605966



# ACCESSORIES



SPECIALISTS

# HI-FI CHOICE

wish all our readers and advertisers a very

# HAPPY NEW YEAR



# Does your rack sing along?



Treat your CD player to a quiet environment and hear the amazing improvements in sound quality.

# Damping Resonance for better sound www.hi-fi-accessories.com

Cd-str5, highly rated by *Stereo* and *Audio*, Germany's leading HiFi magazines. £59 set of four isolating footrests. No-risk money-back guarantee. Information and orders:

cd-str5, 1 Mortimer Cottages, Leominster, Hfds. HR6 9TG Tel: 01568 708 739 cd-str5@talk21.com

# MAIL ORDER

# **CARTRIDGES** Trade in your old moving coil and save up to 45% off a new one!!

I CAN ALSO SUPPLY: TURNITABLES, TONEARMS, CASSETTE DECKS, CD PLAYERS, DAT, MINIDISC, CDR, LOUDSPEAKERS, HI FI FURNITURE, AMPLIFIERS, TUNERS, ACCESSORIES, BLANK TAPES & DISCS, TEST CD'S, TEST RECORDS, TEST CASSETTES, CABLES, AERIALS, TRACKING FORCE GAUGES, ALIGMMENT PROTRACTORS. All goods are brand new & boxed with full U.K. guarantees. No ex-dem or ex-display equipment. No grey imports. Delivery is free. Sorry, no general catalogue. Please phone or write for specific details.

IAN HARRISON HI FI (MAIL ORDER ONLY) From: 7 MILL HILL, REPTON, DERBY, DE65 6GQ TEL: 01283 702875 9am-9pm including Sundays

### It's here

official PlayStation.2 Magazine

P

The only official PlayStation 2 magazine and the only one with a playable demo disc

## THE HI-FI CHOICE DIRECTORY ROUNDS UP 1,000 PRODUCTS REVIEWED IN OUR PAGES. HERE YOU'LL FIND OUR OPINIONS ON THE BEST HI-FI

COMPONENTS, ALONG WITH ALL THE INFORMATION YOU'LL NEED TO DECIDE WHICH ONES ARE RIGHT FOR YOU.

### THE ART OF SYSTEM BUILDING

HOW DO YOU GO ABOUT BRINGING TOGETHER AN IMPRESSIVE HI-FI SYSTEM? IT GOES A LITTLE LIKE THIS...

> hen it comes to getting together a great separates system, identifying decent individual components is fundamental, but it isn't the whole story. There is the business of system synergy to consider, which put simply means how well your compo-

nents gel as a whole. The degree to which this can affect the end result tends to increase with price, thus budget components are relatively immune (a competitively priced Best Buy disc player, amp and loudspeaker pairing of almost any hue will combine to make a good system). When considering a purchase it's always good practice to listen to alternatives. It's the only way you can learn what different components sound like and find out which ones appeal to you.

So once you have shortlisted some components, the next step is to track down a knowledgeable dealer to take you through the options available. As well as getting the basic hardware right there is the question of which cables to use; should you stick with what comes in the box or pay extra for interconnects and speakers leads? Once you've established that the latter is the way, listen to a dealer's recommendations as to the right cable for your system.

And don't skimp on supports. The temptation is to use any old shelf or sideboard for system and speakers, but it's worth the outlay for speaker stands and proper system support.

### MAKING CONNECTIONS

WIRING UP A SYSTEM IS REALLY QUITE STRAIGHT-FORWARD IF YOU FOLLOW A FEW BASIC GUIDELINES.

When bi-wiring with speaker cable you will sometimes need to connect two plugs to one socket on the amp. If the amp has a binding post connection you can usually put one plug through the hole that goes across the post and one in the end. If this is not possible you may need to get both pairs of cables soldered into single plugs at the amp end.
 If a cable has an indication of directionality, i.e. if there are arrows on the casing, use these with regard to the way the signal travels. If there are no arrows you can try it both ways and see if you hear a difference or just route the signal in the direction of the writing on the cable jacket.
 In multichannel AV systems you may have the option of routing video signals via the amp, or you can bypass it. The former option gives easiest functionality if you use several sources but by bypassing you are removing a source of distortion and thus improving sound quality.
 Try to avoid lying mains cables across or beside signal cables as the field they produce can have a negative effect.

Try to keep all cable runs as short as possible.

#### AWARD TAGS

Whenever *HFC* reviews a group of like components we have the opportunity to give the best products a Best Buy or Recommended award. Best Buys are considered to offer an excellent standard of performance at an attractive price. Recommended products are first class components losing out to Best Buy status only because of a higher price or less competitive overall sound quality.

A third award, the Editor's Choice, is reserved for those products reviewed solo, such as you see in the First Impressions or High Performance sections. An EC is awarded where the Editor is convinced that a product offers exceptional quality for the price.

HI-FICHOICE BESTBUY HI-FICHOICE RECOMMENDED HI-FICHOICE EDITORS CHOICE

#### DIRECTORY

### INDEX OF TESTED PRODUCTS

AMPLIFIERS		
INTEGRATED PRE/POWER	112	
PRF/POWFR	113	
PHONO STAGES	114	
PHONO STAGES MULTICHANNEL	114	
MOLITCHANNEL	114	
CABLES		
ANALOGUE INT.	11/	
	114 115 116	
DIGITAL INT.	115	
LOUDSPEAKER CABLES	116	
MAINS CABLES		
& CONDITIONERS	116	
CASSETTE DECKS	117	
DISC PLAYERS		
	117	
ONE-BOX CD PLAYERS	117 119	
CD TRANSPORTS	119	
DACS	119	
DVD PLAYERS	119	
DIGITAL RECORDERS		
MINIDISC RECORDERS	120 120	
CD RECORDERS	120	
	4.2.0	
HEADPHONES	120	
LOUDSPEAKERS		
STEREO	121	
SIEREU	121 124	
SUBWOOFERS	124	
MULTICHANNEL	124	
CENTRE CHANNEL	124	
	425	
PERSONAL STEREOS	125	
INTERNET AUDIO	125	
	125	
<b>RECORD PLAYERS</b>		
TURNTABLES	125	
CARTRIDGES	125 126	
TONEARMS	127	
	127	
<b>STANDS &amp; SUPPORTS</b>		
EQUIPMENT SUPPORTS	127	
SPEAKER STANDS	127 127	
STEAKER STANDS	127	
TUNERS		
ANALOGUE TUNERS	129	
DAB TUNERS	129	
	125	

.....

\$

### GLOSSARY

5.1 CHANNEL AUDIO: Six discrete channels, typically front left and right, centre, surround left and right, and LFE (Low Frequency Effects).
AC-3: Audio Code number 3, the compression algorithm that lies behind Dolby Digital.

**BÁLANCE:** Most loudspeakers have a characteristic frequency balance resulting from emphasising parts of the audio range and/or de-emphasising others. **BASS:** The lowest three octaves of the audio band – hence 'low bass' refers to the bottom octave (20-40Hz); 'mid-bass' the middle octave (40-80Hz); and 'upper bass' the 80-160Hz octave

BI-AMP: (sometimes tri-amp): Loudspeakers equipped with separate access terminals to each drive unit can be driven by separate (matching) power amplifiers for each driver.

BI-WIRE: (sometimes tri-wire): Loudspeakers with separate access terminals to each driver can be driven by separate cable runs between the power

amp and each driver. **CD-R:** Recordable CD that cannot be erased, though diss: that have not been completely filled can have more tracks added later until the disc is finalised. **CD-RW:** Recordable/erasable and rerecordable CD, diss: must be unfinalised before they can be re-recorded.

CLASS A: Operation of an amplifying stage or device in which current always flows, as opposed to Class B, where some of the devices are effectively turned off some of the time. Class A tends to give lower distortion. Most practical amps operate in CLASS AB: Class A for the first fraction of a watt and Class B thereafter. CLIPPING: An amplifier's output wave-

orm is clipped if the volume is advanced too far and no more 'volts' are available to sustain ever increasing power levels. Distortion increases dramatically at this point. **CLOCK**: Any electronic oscillator that is

used to generate a timing reference signal. **CROSSOVER:** A simple electrical network which divides the full bandwidth signal received from the power amplifier, apportioning appropriate parts of the spectrum to the various drive units. **DAC OR DIGITAL-TO-ANALOGUE** 

**CONVERTER:** The stage at which incoming 16-24 bit digital data is used to reconstruct a recognisable analogue (music) waveform.

**DOLBY DIGITAL DD (AC3):** A compressed (10:1) digital audio format that typically contains five or more entirely discrete channels.

**DOLBY PRO-LOGIC DPL:** Forerunner to DD that 'steers' information to the front L/R, centre and mono surround channels via an analogue matrix.

DRIVE UNIT/DRIVER: A transducer which converts electrical energy into acoustic energy, eg main driver, tweeter

DSP OR DIGITAL SIGNAL PROCESSOR: Integrated circuit that handles the decoding of digital audio streams. In 5.1 processors it separates the left from right and front from rear

while managing the various bass options. DTS OR DIGITAL THEATRE SOUNDE: Competitor to Dolby Digital with a reduced 4:1 compression that, ostensibly, promises higher quality. ELECTRICAL DIGITAL: Any digital connection that uses an electrical cable

rather than optical. Includes the balanced ('AES/EBU') interface. **FILTERS:** Intrinsic to digital audio is the

extensive use of filters, both analogue and digital. These are often very sophisticated in design, and in total they probably have rather more to do with the 'personality' of CD player sound than most other factors.

FINALISE (CD-R):The process of copying the Table of Contents from its temporary area on CD-R and RW where it is ignored by CD players, to the final position where it is recognised by CD players. FREQUENCY RESPONSE: The range of frequencies, from low to high, which a loudsneaker will reproduce.

IMPEDANCE: With speakers, the complex electrical load that a loudspeaker presents to the amplifier which is driving it. JITTER: An insidious distortion specific to digital audio whereby the clock, used to regulate the conversion of data into analogue audio, carries a degree of uncertainty.

LINE-LEVÉL: Practically every modern source component (except phono cartridges) give an output in the region of 1-2V, commonly referred to as 'line level'. It follows that all inputs labelled 'CD', 'tuner', 'aux' or 'tape' are usually interchangeable.

LOSSLESS COMPRESSION: A method of reducing the number of data bits (density) without corrupting the original description of the musical signal. LOSSY COMPRESSION: Reduction in data density by recourse to a psychoacoustical model that predicts what is, and what is not, audible within a

sequence of music. MAIN DRIVER: A drive unit which reproduces both bass and midrange frequencies

MASKING EFFECT: The audibility of distortion and/or quieter instruments in a mix depends upon the intensity of the music as whole.

MIDRANGE: The middle three or so octaves of the audio band, where the ear is most sensitive, covering the approximate frequency span from 160Hz up to 3kHz.

NETWORK: see Crossover. OUTPUT IMPEDANCE: A measure of resistance to alternating current, a low output impedance (say, below 100 ohms or so) helps ensure compatibility with most amplifiers, even when using long or unusual designs of interconnect cables. A high impedance, especially in conjunction with an amplifier with a low input impedance (some are as low as eight kOhms, although the standard is 47 kOhms) can

result in audible treble losses. PLL OR PHASE-LOCKED LOOP: A

technique by which a clock of defined characteristics is used to generate a new clock at a different frequency from the original.

PRESENCE: Critical section of the audio band at the point where midrange and treble meet.

**PRESENCE:** Critical section of the band between midrange and treble.

QUANTISATION NOISE: A form of distortion or noise resulting from errors in the description of the musical signal by the digital code.

SAMPLE RATE: The rate at which the musical waveform is sliced up into discrete chunks. For CD this is 44.1kHz or

once every 0.023msec. DVD will also support 48kHz and 96kHz. SENSITIVITY: The relative loudness that a speaker generates for a specific

voltage input. **TOSLINK:** The proprietary name given by Toshiba to the optical fibre system it

invented for consumer applications. The system includes dedicated connectors, transmitters and receivers.

TRANSISTOR/MOSFET: the two main types of power semiconductor used in amplifier output stages. Differences are subtle and much argued over! TREBLE: The top end of the audio band, ea above 3kHz.

TWEETER: Treble driver.

WATTS (PER CHANNEL): the watt is the unit of electrical power and the WPC rating is the maximum average undistorted power that an amp can deliver to a typical speaker. However, speaker sensitivity variations can make more difference than amplifier output in many

WOOFER: Bass driver.

cases

	_			SP	ECII	FICA	TIO	N.
		IFIERS	LINE INPUTS	MM PHONO INPUTS	MC PHONO INPUTS	REMOTE CONTROL	HEADPHONE SOCKET	POWER OUTPUT (W)
STEREU A	WIPL	IFIERS – INTEGRATED	UTS	L I	UTS	ĝ	Ê	3
PRODUCT	£	I COMMENTS		J				
Affordable Valve Co. EL34	650	A real bargain on the face of it, but the sound is oh so soft, warm and old-valve. Too much of a good thing	4					40
Alchemist Kraken APD6A	599	Compact, with Darth Vader styling, yet sound quality is meek and mild, despite strong midband dynamics	5	•				55
AMC 3025a	140	Surprisingly potent and easy on the ear, if not especially analytical — classic bargain-basement material, in fact	4	•	•	•	•	30
AMC 3050a	170	Tremendous value for money, and a full, big, if rather uninformative sound	4	•	•	•	•	45
Arcam Alpha One	230	Rather like an Alpha 7 but without the remote control and what appears to be better sound quality still	6				•	35
Arcam Alpha 7R	300 350	Decent, if slightly system fussy amplifier that no longer pulls all the right strings	5 5	•			•	45
Arcam Alpha 8R Arcam Alpha 9	500	Workmanlike amplifier is well thought through, but is now beginning to show its age. Not quite a match for the Alpha 9/9P combo, the solo integrated is nevertheless colourful and explicitly detailed	7	•			•	70
Arcam Alpha 10	800	Although not the best sounding in its class, the Alpha 10's modular nature demands it be taken seriously	5					100
Arcam FMJ A22	1,000	Powerful, articulate, and expandable into a home cinema or multiroom amp/controller	7				•	100
ATC SIA2-150	1,984	An impressive sounding integrated amp with a dynamic, open and detailed sound	4					150
Aria S2	1,000	Glamorously packaged valve amp produces a real eyes closed, feet up kind of sound	4					12
Audio Analogue Puccini	450	Superbly finished, the entry-level Audio Analogue performs way out of its class	5	•	•			40
Audio Analogue Puccini SE	595	Upgraded, more powerful Puccini is disappointingly sluggish and curiously lacking in musical vitality	5					40
AVI S2000MI	999	Fine, detailed amplifier with excellent timing and strong control of a wide range of loudspeaker loads	5			•		10
Bryston B60R	1,249	Great build, but the lazy bass and opaque treble bracket an articulate midband. Comes with 20 year quarantee	5				•	60
Cambridge Audio A500RC	200	Solid value, decent build and a surfeit of watts make this an attractive proposition, but it can sound slightly loose	6			•		50
Canary Audio CA-608	1,495	If you value the grand scheme of things and appreciate a bit of dynamic vigour this could be the amp for you	4					24
Copland CSA8	945	Sophisticated yet transparent, this is one of those amplifiers that sounds good even when the gloss has worn off	5					60
Copland CSA 28	1,249	Elegant Scandinavian cool, abundantly detailed if somewhat system dependent	5	•		•		60
Copland CTA 402	1,698	A unusually flexible valve amp with an attractive and textured sound	5	•		•		35
CR Developments CR324	569	Solid and capable on paper, this is a bit of a blunt instrument when let loose on the music	5					150
Cymbol CA1	499	Lacklustre amplifier tends to underperform with complex material. Best with straightforward compact loudspeakers	6					40
Creek 4330	279	Diminutive but classy amp will drive anything, and can be specified in various configurations	4	•				40
Creek 4330SE	499	Somewhat perplexing, though always interesting, miniature audiophile amplifier, needs careful system matching	5			•		50
Cyrus 5	500	A enjoyable amp that is assured and unflappable, although detail is unremarkable	7			•	•	45
Cyrus 7	700	Welcome return to form for the Cyrus stable: this is the best sounding audio brick around	6			•	•	60
Denon PMA-255UK	140	Great beer-budget buy, with everything necessary for basic but decent high fidelity operation	5				•	30
Denon PMA-725R;	350	Warm, bold, up-front presentation, but musically unexciting	5	•	•	•	•	97
Denon PMA-1500R	500	Recommended for its outrageous power, especially with problem speakers	5	•	•	•	•	70
Densen Beat B-100 MkII	650	High 'air guitar' factor, and can punch above its weight, but check it will complement your system	5					60
Electrocompaniet EC1-3	1,000	Basically good, but too many rough edges to warrant recommendation	6			•		75
Ezo Aria HE	449	Quick, detailed but aggressive and sometimes coarse sounding amp. Beautifully turned out, though	5				•	40
Graaf Venticinque	1,790	Smart and practical, but it just never seems to shine sonically	6					25
Harman/Kardon HK630	200	Sharp, clean but sometimes slightly raw-sounding budget amp	4	•		•	•	40
Harman/Kardon HK690	530	Bold, dynamic amplifier with plenty of balls, but not the most sophisticated sound on earth	6	•		•	•	100
Holfi Audis Signature	750	A 'no-feedback' circuit giving outstanding resolution, but significant load dependency	4	•				65
JoLida 202	695	Well-built and technically accomplished, affordable valve integrated with subtle refined, if not quite gripping sound	4					40
JVC AX-R5	200	Versatile, and lots of even-handed, articulate detail; but let down by superficiality	5	•	-	•	•	45
Kenwood KAF-3010R	180	Plenty of twiddly bits yet weak on inputs, and basically good, but somewhat uneven sound quality	4	•		•	•	70
Kenwood KAF-3030R	250	Highly capable amp with good treble, bass and fine detail	5	•		•	•	65
Kenwood KA-5090R	300	Large, well equipped and high tech integrated, but TRAITR output still gives a harsh, unsubtle performance	5	•	•	•	•	65
Krell KAV-500i	5,000	More at home in background listening/home cinema applications than out-and-out audio maniac set-ups	5			•	-	25
Lundahl Mag Amp	1,735	Unusual valve/magnetic amp hybrid with relaxed balance and good timbre	5				-	23
Magnum IA120	265 795	Mirror finish amplifier with bold, colourful delivery, but needs careful system matching to avoid loss of clarity A MOSEET amplifier drawing inspiration from the world of values, this is an erratically refined, detailed amplifier	5	•			•	65
Magnum Class A SE		A MOSFET amplifier drawing inspiration from the world of valves, this is an erratically refined, detailed amplifier	5	•		•		80
Marantz PM-6010 OSE	229 300	Good starter amplifier, with characteristic smooth, low key delivery Lots of power for the price, but detail and subtlety seem to have been sacrificed	5	•			•	11
Marantz PM7000 Marantz PM6010 OSE KI Sig	400	Well-made, but somewhat ill-balanced amplifier that doesn't slot into most systems comfortably	6					50
Marantz PM-17	900	Probably worth it for the WBT terminals and other build features alone, but this model doesn't sing as it should	6		•			60
Marantz PM-17 Marantz PM-17 KI-Signature	1,300	Full feature audiophile amp where the end results don't quite justify the fantastic ingredients	6		•	•		60
Monrio Asty	400	Engaging, but ill-disciplined, even OTT amplifier with unpredictable system compatibility	5					55
Musical Fidelity X-A2	500	A chip off the old block; sounds very similar to the X-A1 and XA-100R	6	-				75
Musical Fidelity A3	849	Similar to the XA-100R internally, and a little too relaxed for some	5	•		•		85
Musical Fidelity X-A100R	999	Sings like a thoroughbred, but better with Mozart than Mötörhead	6		1			75
MVL A2	970	Curiously designed, and curious sounding amplifier with Sound Sentinel circuits to address perceived weaknesses	9	•			•	10
Myryad T-40	400	The T-40 is a well built and sensible, but needs more dynamics and finesse	6	•		•	•	50
	600	Well styled, well built: a good, even tempered amplifier, although it can sound rather brittle	6		and the second		•	60
Myrvad MI120								
Myryad Ml120 NAD C320	200	Excellent budget amp from the maker of the seminal 3020 offers better clarity and neutrality and good build	6			•	•	40

A classic NAD amplifier copes with any speaker, delivers plenty of power, and does so with calm decorum

Beautifully made, smooth and easy sounding, and though not overtly detailed or dynamic, is well organised musically

Everything except packaging has changed in Mk II version: but ballsier model has lost none of its refinement

Build quality aside, the current improved version is a real powerhouse, but smooth and detailed too

Low power (in practice) minimalist integrated amp, but the mahogany wings don't help it to fly

Substantial integrated with loads of power and no shortage of finesse, slightly bass-strong

Unusual looks and even more unusual electronic design, but compromised musical potential

Curious blend of high-end attributes and inconsistent, though undeniably detailed sound

It is not often that transistor amplifiers are made to sound so palpably valve-like

Superb build and aesthetics, and undemonstrably musical down to its smallest screw

A typical NAD: refined, warm tonality, adequate detail, and a strong power yield

Clean, consistent, finely detailed sound, good finish and (mainly) good build

Lively, articulate amp with plenty of drive and a hint of brightness

6 •

7

6

5

5 • •

5

5 •

5

5

5

6

5

6

.

.

50 192

100

60 201

55 202

80

100 189

50 208

70 181

100 189

189

192

175

•

60 208

• • 80 196

.

•

• • 45 186

• • 60

.

.

.

.

.

270

300

400

795

995

230

300

999

1,800

500

799

1,499

NAD C340

NAD C350

NAD S300 Opera Aida

Pathos Classic One

Præcisa Acustica Sonoro

Pioneer A-407R

Pioneer A-607R

Pioneer A07

Primare A-10

BB Primare A30.1

Primare A20 Mkll

NAD 317

88

R

R R

	STEREO A	MPLI	FIERS - INTEGRATED (CONTINUED)		MM PHONO INPUTS	MC PHONO INPUTS	REMOTE CONTROL	HEADPHONE SOCKET	POWER OUTPUT (W)	ISSUE NUMBER
STATUS	PRODUCT	£						L		
	Rega Elex	398	Minimalist amplifier, derived from Elicit, is a little uninspiring, although at least it is well behaved	4	•		-		50	162
	Restek Fantasy II	1499	Muscular, but ultimately rather strident amplifier which needs careful system matching	6			•		100	189
R	Roksan Kandy KA-1	475	Power with control, barely compromised by a small degree of dryness	6	•		•	•	120	205
R	Roksan Caspian	795	Mainstream Roksan line level amp works well under most circumstances	6			•		70	201
	Rose Scion	615	Unique two-box integrated gives real subtlety and low level resolution, but the sound lacks scale and weight	5	•	•			65	168
88	Rotel RA-931 Mk II	189	Simple, non-remote amp majors on clarity and transparency, without sounding over-analytical	4	•			•	35	208
88	Rotel RA-971 Mkll	275	Improved AR971 is a chip off the old block: bags of power, but with added precision and clarity	6				•	60	196
	Rotel RA-972	400	Better in the treble than the bass, which is a little too rounded and woolly	6			•	•	90	205
	Sharp SM-SX100	10,000	The world's first stable, 1-bit digital amplifier is a technological milestone that should go from strength to strength	n/a					110	200
R	Sony TA-FB740R	200	Very open and clear sound, comfortable with a wide range of musical styles	5	•		•	•	60	205
	Sony TA-FB940R	300	Technically innovative amplifier fails to cut the mustard with complex material	5	•	•	•	•	70	208
	T+A PA-1220R	1,445	Unique presentation and feature set, but sometimes rather relentless sound quality	7			•	•	100	189
	Tact Millennium Mk II	7,000	This digital class D amplifier represents a bold declaration on the future expansion of digital audio in the home	n/a			•		150	194
	TAG McLaren 60i	500	Clean, slightly antiseptic sound from this beautifully turned out entry level Audiolab 8000LX replacement	6				•	60	189
	TAG McLaren 60iRv	1,000	Looks, feels and sounds better than the Audiolab it supersedes. Smooth, open, refined but lacks body and drive	6			•	•	60	184
R	Talk Electronics Storm 1	500	Good soundstaging and strong detail are provided by this unassuming and not especially powerful model	6					50	162
	Talk Electronics Cyclone 1	550	Much improved build quality and silver finish, but the sound lacks physicality and can sound strained	6			•		65	196
R	Talk Electronics Storm 2	650	Crisp, clean, well defined sound, arguably lacking warmth, but a good midrange purchase overall	6			•		50	175
	Teac A-E2000	180	Has the potential to cause significant damage in the budget amp sector once the wrinkles are ironed out	6					50	195
	Technics SU-A660 Mk 3	200	Plenty of wellie for the price, but the sound can be a tad coarse and lacking in fine detail	5	•			•	37	186
	Technics SU-A808	300	Intriguing amplifier, with abundant detail but dynamically rather flat	6	•		•	•	55	196
R	Token Audio K50	350	Stainless steel finish, others available. Sound is warm and attractive, though a little undynamic	5	10.00				50	186
	Tube Technology Unisis Sig	2,400	A very attractive product which combines many classic valve attributes to good effect	5	•				30	202
	Yamaha AX-392	170	Standard budget fare, and it's easy to pick holes, but in undemanding surroundings it works creditably	6	•		•	•	60	192
	Yamaha AX-496	179	Lacklustre, if well equipped and powerful, amplifier shows some improvements over previous amps, but not enough	6			•	•	85	208
R	Yamaha AX-492	220	Powerful, well equipped amplifier at an attractive price, offers powerful and engaging music-making	5	•		•	•	85	178
	Yamaha AX-592	280	Fine, middle ranking amplifier, with a detailed midband but performance declines at frequency extremes	5		•	•	•	100	171

#### STEREO AMPLIFIERS – PRE/POWER AMPLIFIERS

	Amp Flux System 2	3,000	Three-box affair with a clean, spacious sound and plenty of slam. A touch steely, but undeniably potent	5			•	50	18
	Alchemist Kraken APD7A/8A II	1,098	Unusual looks and unusual sound too, rather rough and lacking detail	6				55	1
R	Arcam Alpha 9C/10P	1,000	Well specified and flexible preamp with sound only just lacking in greatness	6				100	1
B	Arcam Alpha 9P	400	Clear, colourful and well-disciplined, the Arcam is a strong all-rounder that can compete with conviction	1				60	1
	Audio Note M Zero/P Zero	998	Neat shoe box-size components. Able to impart music with real life and soul when partnered with P Zero power amps	5				8	1
c	Border Patrol 300B SE	3,995	Single ended valve power amp with passion, grace and fire, and plenty of grunt to boot	1				8.5	1
	Cary CAD 2A3SE	1,575	Monoblock valve power amp. Low power but gives delightful speed, coherence and transparency	1				5	
	Chord SPM-4000	8,500	Sound is as stylish as its appearance is bold. Probably one of the best amps you are likely to hear	1	100			410	
	Copland CTA-301Mkll/505	2,498	Sweet sounding, but never gets bogged down in audio treacle. Refined yet never over civilised	4	•			67	
B	Creek P43R/A52SE	949	Excellent sound, remote control operation and upgrade options from fine value preamp.	6		•	•	100	
	Crimson 620C	875	Not entirely satisfactory power amp which has dynamic strengths, but underachieves when the volume is raised	1				50	
R	Crimson CS610/CS630	1,250	Good, clear sound, including a decent phono stage, but flexibility is limited. Slimline monoblocks with grunt and finesse	3	• •			100	
	Cyrus Power	498	Detail and midband clarity and stand-out qualities. Smooth and refined with most types of music but bass-soft	1				50	
	Cyrus aCA7/aPA7	2,694	Low feedback power amp design that's a positive departure from the transistor norm, preamp is functional but not as impressive	5		•	•	150	
	Densen Beat B-200	1,000	A versatile preamp with a high 'air-guitar' factor and Densen's characteristic styling	6	• •				
R	Densen B-300	800	Expensive but highly musical. Colourful and and warm sound with strong timing and listener involvement	1				100	
С	Gamut D200	2,995	Single MOSFET pair per side gives tremendous resolution and timing (balanced only). Formerly Sirius	1				200	
С	Levinson 380/334	9,490	Preamplifier combines precision and warmth with unusual configurability, power has refinement, authority and transparency to spare	6		•		125	
	LFD Mistral Linestage/Power	898	Strong ergonomics, generally decent sound, but a little lacking in detail	6				60	
	Meridian 502	1,295	Extremely sophisticated analogue controller with tremendous flexibility and a fast and tidy presentation	7		•			
	Michell Orca/Alecto mono	3,600	Line-level design with a gorgeous remote and focused, spacious sound	6		•		100	
R	Moth 30 Series Monoblocks	879	Tested with Active Preamp. Demonstrated solid balance and proved adept at delivering vital musical qualities	1				100	
	Moth 30 Active LS/60 Stereo	948	Excellent-sounding ultra-simple miniature preamp, power amp lacks finesse and control, however	4				60	1
	Muse Model Three	1,990	Natural sounding tranny preamp with useful audiophile features. Works beautifully with 160 power amp	5		•			
R	Musical Fidelity X-P100	800	Good long-term listening prospects; detailed and a little fruitiness (tested with X-A200 power amp)	6	•	•			
	Musical Fidelity NuVista 300	3,300	Powerful smooth sound with tremendous bass extension. Capacity to fulfil the demands of the most dynamic material	1				350	
	Myryad MA120	450	Based on MI120 integrated – see latter for comments, but sounds significantly better when bi-amped with MI120	1				60	1
R	NAD 114	270	Beer-budget preamp which sounds focused, detailed and consistent	6	• •		•	0.22	
R	NAD Silverline S100/S200	2,000	Beautifully built kit that sounds as good as it looks with heaps of power	7		•		200	
	Naim NAC92R/NAP90	1,080	Upgradeable preamp uses proprietary socketry. Power amp from Nait integrated with some improvements	5		•		30	0
	Naim NAC102/NAP180	2,122	More of a 'character act' than a neutral reproduction system, majors on excitement at the expense of subtlety	6		•		60	
C	Naim NAP500	10,000	Wonderful neutrality, bandwidth and dynamic range, plus Naim's traditional leading edge definition	1				140	
R	Rega Hal/Exon	2,194	Passive line stage dedicated to Exon monoblock power amps, bold outgoing, in-command sound	-	• •	•		125	
B	Roksan Caspian Power	595	Excels musically and in conventional hi-fi terms. A power amp for people with long-term satisfaction in mind	1				70	
	Rotel RC-971	150	Low price is offset by rather coarse sound quality with certain types of music. (Tested with RB-971 power amp)	5			•		
	Samuel Johnson pca100	1,800	Stylish wood and metal facia - precise, clean sound with an emphasis on leading edges	6		•	•		
	TAG McLaren PA20R/125M	1,500	Clean, detailed sound but limited thrill power	6		•	•	145	DOX D
	Talk Hurricane 2L/Tornado 2	1,249	Design of integrity which gets to the heart, if not the soul, of the music	6				65	
	Technics SU-C3000	2,997	Price includes SE-A3000. Supremely clean and even sounding combo, though it could be more musically involving	A STATE OF STATE	•				
	Technics SU-C1010	300	Although the sound's basically all there, it's arguable that a good integrated offers more, for less	6	•	•			

	PHONO ST	TAGE	S	LINE INPUTS	MM PHONO INPUTS	MC PHONO INPUTS	REMOTE CONTROL	HEADPHONE SOCKET	POWER OUTPUT (W)	<b>ISSUE NUMBER</b>
STATUS	PRODUCT	£	COMMENTS						-	
	Clearaudio Symphono	740	Slightly inconsistent balance marrs the performance of this lively performer	0		•				201
R	Creek OBH-9	160	A neat little unit with an essentially neutral and listenable character	0		•				189
	Cyrus aEQ7/PSX-R	826	Very hi-tech product which tends too much towards smoothness except at climaxes, which can be rough	0	•	•				189
	Densen DP-Drive/DP-02	350	Quite unusual design in many ways: sound is mostly good but never quite shakes off a 'synthetic' quality	0		•				189
R	Electrocompaniet ECP-1	495	An excellent phono amp that combines well-rounded balance with detail and low noise	0	•	•	Part &			189
BB	Moth 30 Series Phono	249	Fine sound all round, in any kind of music, from this bargain phono stage	0	•	•				189
	NAD PP-1	40	A basic phono stage that does its job rather coarsely: a bit bass-shy too	0	•					189
R	Pass Labs XOno	2,995	Not absolutely neutral, but the overall result is so beguiling it's hard to resist	0	•	•				201
R	Primare R-20	500	Fights a little shy of densely scored music, but generally an enjoyable and neutral performer	0	•	•				201
R	Pro-Ject Phono Box	40	Moving-coil compatibility is a dubious extra in a way, but MM performance is acceptable at this giveaway price	0	•	•				201
R	QED Discsaver DS-1	35	It's cheap, it's cheerful, it's OK - perfectly adequate for use with a phono-less integrated, though not very refined	0	•					189
	Roksan Artaxerxes X/DS1.5	1,150	Delicate and well balanced, slightly congested at climaxes. Power supply expensive, but runs two Roksan components	0	•	•		and I		189
	TAG McLaren PPA20	1,500	One of the best-equipped phono stages available. Resolution is excellent, but timing is marginally behind the best	0	•	•				187
R	Tom Evans The Groove	1,500	Plenty of detail, excellent imaging and almost flawlessly neutral: a good choice for information retrieval off any LP	0		•				201

					SPE	ECIF	ICA	TIO	NS	
			IFIERS		MM PHONO INPUTS	MC PHONO INPUTS	REMOTE CONTROL	HEADPHONE SOCKET	POWER OUTPUT (W)	ISSUE NUMBER
CTATUC			EL AMPLIFIERS	SLC		SL	ĝ	KET	ŝ	BER
STATUS	PRODUCT	-	COMMENTS	Pro agrico		SCHLOWNS		and serves		
R	Arcam Alpha 10 DAVE/10P	2,500	Packed with a diversity of electronics that against engineering odds sounds extremely good	5			•	•	110	198
BB	Arcam FMJ A22 DAVE/P25	2,850	Powerful, authoritative, great stereo, excellent home cinema - what more can you want?	7			•	•	100	210
	Cyrus AV5	1,000 2,650	Few processors are as adept with music. An effective multi-channel solution for music fans	4	1		•		N/A	201
	Cyrus AV5/SmartPower		Refined, detailed and attractive, but ultimately lacking in balls.	Contraction of the local division of the loc			•		60	210
BB	Denon AVC-A1S0E Denon AVR-3300	1,200 800	State of the art sound quality, a strong feature set and reasonable pricing. What more could you want?	11 4	•		•	•	125	210
R	and the second second second second second second second second second second second second second second second		Not as powerful as Denon claims, but nonetheless capable of impressive high-fidelity multi-channel sound	- Chinese -			•	•	75	198
	Kenwood KRF-V7773D	800 500	Bold, detailed presentation, but there are some technical limitations and a slightly mannered quality, especially with music.	10	•		•	•	120	210
88	Marantz SR5000		Something of a rough diamond, but a powerful and entertaining package	5			•	•	105	198
BB	Marantz SR7000	700	Excellent at the price, and almost equally effective with 2-channel music and multichannel AV.	9			•	•	100	210
_	Musical Fidelity HTP/HT600	3,998	A very well matched pairing with considerable musical talents	8		Side	•		100	207
88	NAD T760	650	More than adequate home cinema receiver that unusually doesn't muck up the music	7			•	•	60	210
	NAD T770	1,000	Lacks both transparency and subtlety while the omission of dts will be a drawback for some at this price	5			•	•	90	198
_	Nakamichi AV-10	1,000	A very powerful AV receiver that's easy to install and set-up with a civilised and subtle performance	4			•	•	140	198
R	Onkyo TX-DS989	2500	Authority personified, excellent AV signal processing, but sound quality a tad unsubtle.	9	•		•	•	160	210
	Pioneer VSA-E08	1,300	THX circuitry gives home cinema material a boost, but this is not an obvious first choice for music.	10	•		•	•	100	210
	Pioneer VSX-908RDS	1,000	A flexible heavyweight AV receiver whose sound is just a little too stodgy and lacking in crispness	4			•	•	80	198
_	Primare P30/A30.5	3,700	No 5.1 channel input for DVD-A/SACD but capable of almost uncomfortable realism with real solidity and drive	8			•		120	210
R	Roksan DSP/5 ch amp/VSU	2,440	Clean, powerful stereo expanded seamlessly, if without distinction, to 5.1 channels.	4			•		80	210
R	Rotel RSP-985/RPB-985 MkII	2,400	The hugely versatile processor is the weaker subjective link in this otherwise impressive combo	3			•	1	130	198
_	Sony TA-E9000ES/N9000ES	2,300	Big, gold, powerful and remarkably versatile but fails to cut the sonic mustard	5	ALC: N		•	•	110	198
R	Sony VA777ES	1,500	Smart circuitry gives this model unusual precision and transparency, and it is a fine all rounder 9	9			•	•	100	210
	Technics SA-DA10	500	Lower mid-market AV amp has all the right ingredients, but fails to stir the soul	5	•		•	•	80	210
	Yamaha DSP-AX1	1,600	An anorak's delight, and one of the most flexible and effective soundfield creators ever conceived	11	•		•	•	110	210

## 

SPECIFICATIONS DIG CABLE TYPE SOLID CORE STRANDED COAXIAL SYMMETRICAL

#### ANALOGUE INTERCONNECTS (PRICES PER TERMINATED METRE PAIR)

STATUS	■ PRODUCT	£						1	
	Acoustic Precision Eikos	89	Not entirely neutral: probably best suited to upbeat music. Very stiff construction		•	•	•		188
	Audio Note AN-A	18	Not especially impressive: warm but well-rounded balance that restricts 'air' but is quite clear	•		•	•		108
	Audio Note AN-C	35	Neutral but lacking in subtle texture and unable to distinguish fine detail				• •		131
R	Audio Note AN-S	99	Up-beat and enthusiastic sound with satisfyingly deep and grumbly bass	•			•	•	131
	Audio Note AN-V	179	15 individually insulated silver strands make up this very clean and dynamically unchallenged cable	•		•			131
R	Audioquest Coral	99	Slightly forward imaging hardly detracts from its excellent tonal qualities and detail	•		•	•		200
R	CableTalk Advanced 2	35	Slight roughness in loud music barely detracts from a well-balanced performance with good imaging	1.1.1		•	•		176
R	Cable Talk Studio 2	65	A first-class performer from tonal, dynamic and rhythmic standpoints	•		•	•		160

I	ANALOGU	E IN	TERCONNECTS (CONTINUED)	SYMMETRICAL		STRANDED		COPPER	SILVER	DIG CABLE TYPE	ISSUE NUMBER
US.	PRODUCT	£									
	Cambridge Pacific	30	Lacks subtlety and bass impact but is otherwise quite serviceable for the price			•		•			17
8	Cambridge Audio Studio Ref	40	Dynamic cable with strong soundstaging and only a slight lack of detail			•		•			16
	Cambridge Silver Spirit 60	100	Good bass but a lack of detail and differentiation of instruments	•		•		•			18
	Chord Cobra 2	50	Good, strong sound with full-bodied music, less happy with smaller forces			•		•			17
	Chord Chameleon 2	90	Deep bass is fine but despite that the sound can be a bit hard and lacking body and resonance	•		•		•			18
R	Connections Midas HD	39	Canary yellow cable with excellent plugs and an open sound. Slight treble glare	•		•		•			1
R	DNM Reson	40	Seemed a little harsh in the test system, but can work well and should be tried	•			•	•			21
1	Goertz M1 Interconnect	145	Soft sound lacking in bite, with excessive and plummy bass (NB sample used in review was only 0.5m)	•				•			17
	Insert Audio IC100 Mkll	47	Mostly good sound is let down by pervasive dryness					•	·	•	1
8	Insert Audio Image 5.1	85	Very good detail and imaging: perhaps a touch bass-light					•			20
	Ixos Gamma 1002	39	Lumpy bass, grainy treble, and poor integration. Nice colour, though	•		•	•	•			1
	Ixos 1000	90	Nothing badly wrong, just a little bit bland and outshone by others at the price	•		•					2
88	Kimber PBJ	68	Assured sound, solid and natural bass and clear treble — excellent performance all round								1
8	Kimber Hero	110	Slight roughness detracts from some music; seems well suited to rock and jazz. Lively and detailed								17
8	Moth Ley Line Black	100	Offers a full sound, neutral yet very solid and confident in delivery. Expansive imaging retains music's energy			•		•	•		1
	Moth Ley Line Grey	200	Detailed, but there's a sense of distance between music and listener: vocals are coarse rather than liquid	•				•			10
1	Nordost Black Knight	60	Flat black cable that is distinctive but slightly coloured – but not in a wholly negative manner					•			1
8	Nordost Solar Wind	85	Good tone and dynamics, with just occasionally a touch of bass-lightness in busy music	•				•			1
8	Nordost Blue Heaven	145	Very good bass and only slightly grainy treble add up to a well integrated, natural-sounding cable	•				•			17
	Precious Metals SS35	50	Extended bass, but dry character suits electronic music better than acoustic								18
8	Prowire Silver	60	A good cable in every way, with just the occasional hint of coloration and coarseness						•		1
88	QED Qnect 2	30	Very well balanced, refined and detailed, this is everything a good cable should be, and excellent value							a stady laws	1
	QED Qnect 4S	70	Some coloration and roughness in the midrange and treble, but bass is gratifyingly solid	•							1
	QED Onex Silver Spiral	90	A great cable for lovers of big sounds	•	1						21
- 1	Reference CS1	75	A moderate performer, with a little coloration and a tendency to lose bass at climaxes								1
1	Silvertone Ex-Static	35	Pleasantly unfatiguing and competitively priced cable that lacks detail and insight	1.00							10
38	SonicLink Silver Pink	35	Dynamically sensitive and muddle-free. We're unsure about the flesh-coloured finish, though						•		1
8	SonicLink Black	49	Nickel-plated copper with a slight dryness in the bass and a hint of treble roll-off don't compromise integration			•		•		-	1
	SonicLink Lilac	65	Some dryness can affect transient sounds, though tone is generally good, especially in the bass							and the second	11
1	SonicLink Violet	85	Better bass than treble – a little dry in the upper octaves								2
*	Straight Wire Chorus	40	A very confident cable with good bass, though perhaps a shade of treble loss								1
	Straight Wire Sonata	80	Tonal balance favours lower frequencies but despite this it's a very listenable cable							- areas	1
-	Straight Wire Encore II	100	Slightly variable bass performance is a weakness in this otherwise capable cable							- Annalista	20
RR	Supra EFF-ISL	80	Excellent sound in all areas — nothing to criticise								18
	Tara Labs Prism 22	64	Mild tendency to plumminess offsets some hardness in complex music with mixed results			- Chiefe					18
-	Tara Labs Prism 55-i	195	Good with laid-back music, but seems lazy with more exciting material								20
88	TCI Viper	55	Fine performance in all areas: just the smallest hint of sibilance. Very good value								2
RR	van den Hul PB5	50	A highly neutral cable with fine dynamic and rhythmic performance too – excellent							-	18
	van den Hul Source HB	65	Price for 0.8m. Hybrid carbon-fibre/copper cable that is a paragon of naturalness							-	16
8	van den Hul D102 Mkill HB	80	A fine cable, but the competition has crept up and it no longer leads the pack							-	20

#### DIGITAL INTERCONNECTS (PRICES PER TERMINATED METRE PAIR)

STATUS	PRODUCT	£	COMMENTS						
*	Audioquest Digital One	35	A neutral and capable cable that adds little or no character to the sound	•		•	•	E	207
	Chord Optilink	40	Beautifully made, but performance is practically indistinguishable from other, cheaper, Toslink leads					0	207
*	Chord Prodac	50	Price for 0.6m length. Lively detailed treble, drives music along confidently with no hint of fizz			•	•	E	131
	Ixos 1051-100	39.95	Plenty of bass, and detail seems good, but there's a loss of involvement	•		•	•	E	207
	Moth Leyline Datalink	140	A thin, coaxial version of Leyline Black with a rather hard and unforgiving character. Too expensive	•	•	•	•	Ε	108
88	QED Qunex P75	25	A superbly capable interconnect that's highly detailed and well balanced	•		•	•	E	207
8	Ross OP004	19.99	Sounds much like most other Toslink leads: slightly lacking detail, but good value					0	207
	SonicLink Digital Optical	30	Possibly slightly more detailed than other opticals, but still no match for a decent electrical digital link					0	207



Tel: 020 8348 5676 (2-7pm) Fax: 020 8341 9368 Email: ConnectionCable@aol.com

### Esoteric High Fidelity Cables

Dealers in: Absolute • Audio Note • Audioquest • Deltec • Electrocompaniet • Harmonix • Kimber • Mandrake • MIT • Siltech • Symo • Transparent • Van den Hul • WBT • and others

... the RIGHT cables ... in YOUR system ... for YOUR ears ... in YOUR home • MIT • Siltech • Symo • Transparent • Van den Hul • WBT • and others

Contact us by phone, fax, or email and we'll do our best to help you achieve your goal. (Auditions may be subject to a handling charge)

**CONNECTIONS** (A division of Connection 90' Travel Ltd.)

	DIGITAL II	NTER	CONNECTS (PRICES PER TERMINATED METRE PAIR)	SYMMETRICAL	COAXIAL	STRANDED	SOLID CORE	COPPER	SILVER	G CABLE TYPE	ISSUE NUMBER
STATUS	PRODUCT	£	COMMENTS								
R	SonicLink Green	60	Spacious, positive and engaging if a bit over-crisp at times — very compelling, however		•		•	•	•	E	131
	Straight Wire Info-Link	300	A good cable, but bass seems a little light and detail suffers a little at climaxes		•		•		•	Ε	207
R	van den Hul Optocoupler	49.95	Noticeably has the edge over other optical leads, but still second best to electrical types							0	207
BB	van den Hul The First	140	Exceptionally natural albeit slightly cautious compared to some. Plenty of subtle information and integration		•	•				E	131

#### LOUDSPEAKER CABLES (PRICES PER METRE LENGTH)

STATUS	PRODUCT	f	COMMENTS	-			
JIAIUJ	ALR Jordan QMM	5	Generally neutral, if sometimes bass-shy, but not very communicative	•		•	183
	Audio Note AN-B	16.50	Well suited to valve systems, elastic bass, methodical but unintrusive and musical				133
	Audio Note AN-L	29.50	Fruity bass and expressive vocal rendition was appreciated by the panel, which was happy to accept its foibles	•	•	•	133
R	Audio Note AN-SP	150	A calm and civilised presentation, very quiet in the way it reveals subtle low level detail. Great poise and clarity	•		•	109
R	Audioquest Slate	150	Capable across the board, with just the smallest degree of dryness, but very listenable	-	-		203
R	Bandridge LC7409	4	Detailed and up-beat cable. A bit too steely for classical strings				157
R	Cable Talk Talk 3.1	2.25	Quite well-balanced but tends to lose bass lines in complex music	•			168
6	Cable Talk Talk 4.1	4.25	Smooth and cultured sound that lacks fine detail and is a bit too restrained				157
	Cable Talk Flat 2	4.23	Rather unexciting sound, with variable bass and dry voices	•			203
	Cable Talk Concert 2.1	8	Can make stereo images recede, and favours the upper bass				192
	DNM LSC350	6.95	Majors on midband and lower treble lucidity at the expense of bass and extreme treble extension		•		168
R	Chord Company Odyssey	17	Relatively vice-free cable with good detail throughout the range and generally neutral bass				192
	Chord Company Rumour 2	10	Performance is listenable enough but fails to excel in any area				203
20	DNM LSCB500	10	High impedance can influence the treble response, but this was a winner on sound per pound. Bi-wire				133
R	Electrofluidics Monolith 2020	45	and and a second s	•			203
n	Gale XL189	45	Excellent bass extension and very fine performance elsewhere - one of the best cables available all round				168
	Gale XL315	2	Slightly bright and not too subtle, but a perfectly acceptable cable for any starter system				157
88			A little lacking in detail but plenty of life and excellent value				
R	Gale XL160-2 Goertz M2	2.50 32	Rhythmic and bouncy-sounding bi-wire cable. Can be slightly manipulative Remarkably detailed, smooth, neutral and with excellent bass; check amplifier compatibility	•	•	-	157
R	Hitachi LC-OFC	7	Very crisp, very clear and very confident. In the right system would be very expensive to better		-		108
		2.99					203
BB	Ixos Gamma 6003 Ixos Gamma 6006	5	A little midrange dryness, but bass is among the best at this price, strong and consistent Bass is better than treble, which can become spitty and sibilant – though only slightly		-	-	192
R	Kimber 4PR	4.90	Considering the price, this cable's very slight dryness is forgivable when everything else is so right	and the second se	• •		192
BB						•	192
R	Kimber 4VS Kimber 4TC	8.50 18.80	A good mix of virtues including particularly fine bass A well-balanced cable with good performance in all areas		-		168
R	Kimber 4TC	348	A wen-balanced cable with good performance in an areas Very capable in all areas, particularly good at imaging and with firm bass. Price for 5m terminated pair				203
86					•		183
	Linn K20	4 5.5	Seems to work best with lively, unsubtle music – can be dry and edgy				183
	Naim NAC A5	3	A 'dinosaur of a cable', this stiff wire rod doesn't belong outside Naim systems, where it works a treat		•		168
	Nordost Octava Nordost Flatline Gold II	3 9.50	Fair bass but confused treble and some coloration Exciting sound but a bit too 'in-ver-face', and bass is not always even		-	-	92
						-	And a state of the
	Ortofon SPK100	3 4.99	Grey-sounding — strips instruments of their natural richness and resonance. A bit bass-shy, too	•			133
×	Ortofon SPK200	4.99 8	Good strong bass and fair detail, only slightly marred by a little dryness		•	-	183
R	Ortofon SPK300	8 10	Tremendously open and atmospheric, with robust, full-blooded bass — if slightly bright at times	•			133
	Precious Metals SL102	4	Unusual construction gives rather strained sound, only really cheering up with simple musical textures				203
	Profigold Silverflex LC8258 Prowire Out of Sight	4	A pretty-looking cable that does little to offend but is let down by some congestion Special-purpose cable for laying under carpets etc. Fair sound across the board		•		203
	Puresonic 7845	1.95	Big, weighty sound — but too messy and bloated for its own good				183
	Puresonic 7891	2.85			-		157
		2.85	Chunky cable design; shame about the sound quality		-	•	57
	QED Qudos		Despite high-tech design and excellent Air-Loc plugs, its music-making failed to gel	•			and the second s
88	QED Qudos Silver QED Profile 4x4	5	A few minor flaws but overall performance is very assured for this price Good midrange and treble balance, but bass is rather slack and detail not outstanding			•	192
		30	Commendable bass, with a little dryness and mildly compromised imaging: good, but not the best at its price	•	•	•	203
	QED Genesis Silver Spiral SonicLink S300				-	•	168
	SonicLink AST50	18 1.95	Happiest with simple music; tends to smudge detail in complex pieces It may look like bell-wire, but AST50 sounds detailed, ordered and balanced				168
R	SonicLink AST75	2.95	Unusual materials and rather unusual performance too, strong on excitement and with plenty of bass	•	-		203
		3.95	Slightly plummy bass and a useful Way of holding musical strands together				157
R	SonicLink AST150 SonicLink AST200x2	5.95	At its best with exciting music, this cable seems shy of subtler details	•			192
	Straight Wire Duo	3.95	Not so subtle and lacking some detail, but sound is consistent with level and musical style				203
	Straight Wire Rhythm	6	Its major flaw seems to be woolly and indistinct bass, which pervades most types of music		-		192
	Straight Wire Quartet	8	A good all-rounder with full tone, clear detail and natural ambience				183
88	Supra Ply 3.4	6.95	Clean sound which stays together well at high levels, with full bass – perhaps a touch of treble restriction			-	183
		7.95	Good in all areas with rich bass and just a touch of treble roughness		-		203
K	Supra Ply 3.4/S Tara Labs Klara	2.95	A good budget cable with an even spread of virtues – and very minor vices – across the board			•	183
к	Tara Labs RSC Prime 500	36	A good budget cable with an even spread of virtues – and very minor vices – across the board More suited to melodious music than anything with bite and drive, with only moderate detail		•		203
	TCI Python	7.99	Nore suited to melodious music than anything with bite and drive, with only moderate detail No single major sin, but detail is not outstanding and rhythm isn't always completely solid		-	-	203
D	Townshend Isolda	50	Superb sound all round, and amplifier compatibility enhanced by included stabilising inductor				203
ĸ	van den Hul The Clearwater	7.99	Despite its evocative title, the Clearwater turns out to be a disappointingly murky-sounding cable				109
	van den Hul Royal Jade	10.99	Lots of technology, but sound suffers from dryness and woolly bass				203
	van den nur noyal Jade	10.33	Loos of technology, but both bullets non-dryness and woony bass			AND DECK	203

#### MAINS CABLES AND CONDITIONERS

STATUS	PRODUCT	£	COMMENTS	
	Clearaudio Accurate Power Gen	1,090	Compact and beautifully finished unit that offers positive sonic benefits that justify the price	206
R	Lynwood Electronics Mega Power	295	Reasonable price model that improves focus while producing a sweet, tight and clean bass	206
R	PS Audio Power Plant	1,200	Power Plant improves the cleanness and separation of individual voices and instruments, giving an impressive 3-D quality	206

**SPECIFICATIONS** 

**SPECIFICATIONS** 

DOLBY HX

DO

AUTO CALIBRA ADJUSTABLE ISSUE NUN

AUTO REVI TWIN D

	MAINS CA	BLES	AND CONDITIONERS (CONTINUED)	SYMMETRICAL	COAXIAL	STRANDED	SILVER	ISSUE NUMBER	
STATUS	PRODUCT	£	COMMENTS					<u> </u>	_
	GTA PHY-HP board	299	Oozing style and quality, the board generates an extremely natural and truthful sound					206	l
88	Russ Andrews Kimber/Power Block	350	Improved version that elevates music to a cleaner and more three-dimensional experience with greater stereo imagery					206	Ľ
	Russ Andrews The Purifier	250	More ambitious version of the Silencer that gives a cleaner, quieter background, allowing more low level detail					206	L
<b>88</b>	Russ Andrews Silencer	40	A cost effect solution to noise-free mains supply that reduces 'hash' without losing brilliance and immediacy					206	Ľ
	SonicLink S-Gold mains	225	Delivers a clean incisive sound with excellent detail, clarity and with no increase in noise				1	206	ł.
R	Trichord Research Powerblock500	300	Isolation transformer that bolsters clarity, openness and gives an increased refinement making for a purer and natural sound					206	L

## CASSETTE DECKS

				BY C	BYS	EAD .	DECK	NOL	
STATUS	PRODUCT	• £	COMMENTS					1 1	
88	Aiwa AD-F450	120	Basic but well-designed deck. Astonishing value; only the poor metering gives the game away	•	•				• 136
88	Aiwa AD-WX727	170	High-class twin for those who want bells, whistles — and music	•	•		• •		• 146
	Harman/Kardon TD420	250	Minor inconsistencies detract from a well-conceived, minimum features design	•	•	-	•		140
	Harman/Kardon TD450	350	Draw loader with poor tape navigation features; good midband but shallow bass	•	•	•			• 164
88	JVC TD-R472	200	Excellent auto-reverse deck which doesn't suffer the usual disadvantages and is very sharply priced	•	•				• 158
88	JVC TD-V662BK	270	Assured, clean and agile-sounding recorder, if not quite the most refined in its class	•	•			•	• 146
	JVC TD-W718	300	Twin deck. Good for creative live recording, but no timer standby. Respectable performance	•	•		• •	•	171
R	Kenwood KX-W6080	200	Modestly decent-sounding twin deck, with some transport instability and ragged bass	•	•		• •		• 171
	Marantz SD455	170	Works well as a single deck, especially on replay, but dubbing at high/low speed compromises sound	•	•		• •		184
	NAD 613	230	Rough and ready, but enjoyable sound, though marred by mechanical motor noise	•	•				• 158
	NAD 616	300	Twin deck with basic features. No Dolby setting memory, transport is too unstable for audiophile use		•		• •		171
	Nakamichi DR-10	800	An ergonomic oddity, but one of the last of the great cassette decks. Worth considering against MD	•	•	•			• 195
R	Onkyo K-611	460	Cute drawer-loading mini-size component with 3 heads and dual capstan transport	•	•			•	• 146
R	Pioneer CT-S550S	250	Great features, good with cheap low bias tapes, but slightly synthetic sound quality	•	• •	•		•	164
	Pioneer CT-W806 DR	300	Had it not been for the iffy transport quality, this sophisticated twin would have been Recommended	•	•		•	•	171
	Teac V-1050	180	One of the cheapest 3-head machines around, but it shows in very 'thick' sound	•	•	•			184
88	Technics RS-AZ6	200	For those who can't afford the RS-AZ7; clarity over the widest bandwidth thanks to AZ thin-film head	•	•	•		•	164
88	Technics RS-AZ7	270	Thin-film head gives a solid, almost CD-like bass and midrange. A clear advance in state-of-the-art	•	•			•	• 158
R	Yamaha KX-490	200	Electrifyingly transparent and capable deck whose only flaw is a trace of audible wow and flutter	•	•			•	• 158
R	Yamaha KX-580SE	250	Subtle, engaging and transparent deck, with a lightweight tonality, but stability and strong detail	•	• •			•	• 171

## CD PLAYERS

#### **ONE-BOX CD PLAYERS**

				SILCINCATIONS
			AYERS	ISSUE NUMBER SACD COMPATIBUTY MULTI-DISC VARIABLE OUTPUT HEADPHONE SOCKET BAL ANALOGUE OUT BAL ANALOGUE OUT ST OPT DIG OUTPUT AESIEBU ELEC DIG OUTPUT
	ONE-BOX	CD P	PLAYERS	IBER IPUT IPUT IPUT IPUT
TUS	PRODUCT	• £		
88	Acurus ACD11	899	First-rate if costly player, which combines a delightful transparency with an uncontrived naturalness	• 166
	Acoustic Precision Eikos	1,850	Seriously customised Pioneer with extraordinary resolution and world beating imaging and bass	• 165
	Advantage CD1S	3,995	A CD player of some stature – what it lacks in dynamics it makes up for in subtlety and flow	• • • • 193
	Alchemist Kraken	1,249	Distinctive looking player likely to suit a Alchemist system, but will result in variable results elsewhere	• 190
R	Alchemist Nexus APD32A	597	Refined treble, constrained yet capable bass and attractive all-round presentation	• 169
	AMC CD8A	150	Has balanced output, but is otherwise rather grey and unremarkable	• • • • 172
88	AMC CD9/DAC8	200	Beer-budget two-box system (player plus DAC) is smooth, attractive and easy on the ear	• 179
	Anthem CD1	1,595	Unusual combination of high-end player, complete with HDCD, and changer. Good, but noisy	• • 178
<b>BB</b>	Arcam Alpha 7SE	300	Sharper, clearer Alpha 7 SE, and more affordable than before	• • 207
R	Arcam Alpha MCD	450	Excellent bass and natural midband, but just a touch of treble dryness, from this very listenable changer	• 178
88	Arcam Alpha 8SE	600	Excellent (and very reasonably priced) HDCD-compatible player is a strong all-rounder	• • 176
R	Arcam Alpha 9	800	Refined, articulate player which employs new DAC technology to great effect	• 188
R	Arcam FMJ CD23	1,100	World class presentation allied with innovative technology to deliver an engaging standard of music making	• • • • 206
	Audio Analogue Paganini	750	Basically good, but sometimes heavy-handed player	• 191
	Audio Note AN-CD1	600	Easy on the ear, and for a valve player, easy on the pocket, but a bit Radio 2-flavoured	• 188
	Audio Note AN-CD2	999	High output impedance makes performance unduly system fussy	• 195
	AVI \$2000MC2	899	A chip off the old block. This model's in-yer-face balance obstructs an otherwise finely detailed sound	• 176
R	AVI S2000MC Reference	1,399	Lean, dry, high resolution player, built to outlast most of us. A fine performer in a sympathetic system	• 169
	Balanced Audio Tech VK-D5	3,995	A valve-infused player with a big and engaging sound. Lacks a little subtlety	• • • 194
	Cambridge Audio D100	120	Hard, clangy and coloured sounding, and with suspect control logic	• 200
88	Cambridge Audio D500	200	Clean and highly articulate player wears well in extended use	• • 202
R	Copland CDA 266	1,199	Simple yet elegant design is unexpectedly sophisticated under the skin, and effective in execution	• 176
	Copland CDA 289	1,898	Beautifully built and musically enjoyable. Lacks some precision, but still among the best below £2,000	• 194
R	Cymbol CDP12	1,299	Clean, detailed and airy HDCD-equipped player with minimalist trappings	• 176
R	Cyrus dAD1.5	395	Improved dAD1 variant has improved digital filter for a more natural, easy on the ear quality	• 191
R	Cyrus dAD3 Q24	900	Bold, lean and lively player demands sympathetic system matching	• 200
R	Denon DCD-435	130	Good low cost player, and a step up from the DCD-425, its predecessor	• • 191

	ELEC DIG OUTPUT	Aes/ebu elec dig out	OPT DIG OUTPUT	ST OPT DIG OUT	BAL ANALOGUE OUT	HEADPHONE SOCKET	VARIABLE OUTPUT	MULTI-DISC	SACD COMPATIBLITY
			r i					r i n	
edgy systems			•			•	•		
-tech player	•	-	•			•	•		
			BALL BA		2	-	1000220	1000	No.

#### **ONE-BOX CD PLAYERS** (CONTINUED)

	ONE-BOX	CD P	LAYERS (CONTINUED)	ELEC DIG OUTPUT	ES/EBU ELEC DIG OUT	OPT DIG OUTPUT	ST OPT DIG OUT	BAL ANALOGUE OUT	EADPHONE SOCKET	VARIABLE OUTPUT	MULTI-DISC	
15	PRODUCT	£	COMMENTS									
_	Denon DCD-655	180	Fine, slightly soft-edged budget player, and a good ameliorative for aggressive, edgy systems	eres:				1				
	Denon DCD-1550AR	350	Disappointing bland and ploddy sound from an immaculately constructed, high-tech player	-			-					
	Harman/Kardon HK720	230				-		-				
-			Sometimes aggressive and ill-disciplined player, but at least it's well built	-					•			
	Harman/Kardon HD740	300	Powerful but subtle and involving player: welcome back, Harman/Kardon	•		•			•			
-	Harman/Kardon HD760	500	Sophisticated internally, but mildly disappointing when treading the boards in anger	•		•			•			
. 1	JVC XV-D723GD	500	Convincing DVD-Audio player that is ultimately let down by poor CD performance	•		•	•	•				調
	Kenwood DVF-3030	180	Solid CD player with straightforward features			•			•	•		
В	Kenwood DP-4090	250	Focuses a clear, wide aperture lens on the music — and has CD Text too	•		•			•	•		
	Kenwood DP-5090	300	Disappointing senior brother to the excellent DP-4090, but surface interface is good	•		•			•	•		
	Kenwood DVF-R9030	800	Kenwood's first DVD-A player suffers from a mild compression of dynamics resulting in a polite yet matter of fact sound	•		•	•	•	•		•	
1	Marantz CD5000	150	Well equipped budget player sounds thin and rough at times				-					
. 1	Marantz CC3000	150	Ragged sounding multidisc player, but it is cheap and well equipped	-					-		•	
-		250		-					•		-	
	Marantz CD6000		Great package with all mod cons, and eminently listenable too			-	-			-		
8	Marantz CD6000 OSE	300	Superbly constructed, slightly emasculated sounding, but smooth and articulate	•		•			•			
۲	Marantz CD-17KI Sig	1,100	Minor QC problems aside, this is a superbly turned-out machine, but ultimately a little bland	•		•				•		
2	Marantz CD-17 Mkli	800	Sophisticated player with a short but attractive feature set, and a new found bounce in its step	•		•	•	•	•			
2	Marantz CD-7	3,500	A superbly designed CD player, both inside and out. Precise and dramatic in equal measure	•		•		•		•		
2	Marantz SA-1	5,000	The brand's first SACD player is a stunning machine that's equally as strong with conventional CD	•		•		•				
	Meracus Tanto	1,395	Believable tonal colours and textures, refinement takes preference over dynamics – but it's not cheap									
8	Meridian 506	1,100	Revised 506 includes MSR remote and a new D/A chip, which makes it livelier and more detailed	-		•						1
- 1	Monrio Asty	695	Well built player has solid, propulsive sound quality that deteriorates towards HF									
-					-							
-	Monrio Privilege	995	Costly and well-engineered, but ultimately rather heavy-handed and dull, if refined player	-		120						
	Musical Fidelity X-RAY	799	Brilliantly packaged and clean but slightly antiseptic sounding player	•						-		
B	Musical Fidelity A3 CD	800	Excellent player has few faults apart from a slight loss of EHF detail	•		•						
	Myryad T-10	400	Rather ordinary player fails to shine with good music recordings	•								
	Myryad T-20	600	Matter of fact styling and sound quality, a tad bright for some systems	•								
	Myryad MCD500	1,300	Well-built, attractive player, showing much promise, but can be a little heavy-going on audition	•								
٦	NAD C520	170	Significantly improved entry level NAD is smooth and dynamic, if slightly dull									
	NAD 524	250	Clean, clear and essentially musical player in the NAD mould									
-	NAD 523	250	Lacklustre musical presentation was disappointing on test; so was the absence of a digital output								•	
											-	
_	NAD C540	330	Not cheap, and disc handling is pedestrian at best, but the C540 is smooth & elegant with just a hint of aggression	-				-	<u> </u>	-		
	NAD Silverline S500	1,100	It sounds as good as it looks, which is notably refined and easy on the ear	•	•	•		•				
÷.	Naim CD5	1,125	Smoother than the CD3.5 but retaining the Naim character of excellent drive and attention grabbing busyness							-		
	Naim Audio CD2	2,000	Provides bags of detail with a solid stereo focus but not all the romanticism we know to be possible									
	Nakamichi MB-10	400	Jewel of a multi-disc player, with crisp sound and superb fuss-free compact packaging	•		•	1.0				•	
ם ו	Naim NACDSII/XPS	5,625	Brings you the Naim sound, but for once doesn't have to rely on Naim ancillaries to get the results	No.								
7	Onkyo DX-7222	150	Competitive following recent price cut, and on the whole a strong performer musically						•			
-	Onkyo DX-7511	300	Earthbound mid-price CD player fails to excite									
	Parasound C/DP-1000	499			-							
-			Comes on like a high end player, but ultimately sounds a bit weak and soft-centred		-					-		
	Philips CD751	150	Inconsistent and occasionally opaque and scrawny sounding cheapie	-		-		-	•	-		
	Pioneer PD-S507	200	Low cost Legato Link implementation sounds gentle but slightly muddled	1		•	·		•	12/2		
	Primare D20	799	Well presented player doesn't quite cut the mustard, though it performs promisingly	•						1		-
	Revox Exception E426	2,250	Very stylish with a light, agile sound that extends superbly and has fine timing	•				•				
	Roksan Kandy	475	Slightly old-fashioned sound quality player available in various colour schemes	•			•					
R	Roksan Caspian	895	Solid, articulate, and fundamentally well-engineered player, but with some subtle low-level limitations	•								
-	Rotel RCD-951	300	Disappointing chopped-down RCD-971 – buy the original	•								
-	Rotel RCD-971	450	Odd disc handling logic, but bold, detailed and refined sound make this a must	•								
0											-	-
8	Rotel RCD-991	750	Confirms Rotel's status as must watch brand: great stuff	-	•			-		-		
_	Sherwood CD1	1,100	A very neutral, even handed sounding player with a rather flat, lifeless sound. Beautiful construction	•				4		-		
	Sony CDP-XE330	100	Unrefined, but lively, detailed and highly affordable	25		•				•		
	Sony CDP-XE530	140	Well equipped, but raw, scrappy sounding player lacks depth and weight			•	1		•	•		
8	Sony CDP-XB930E	300	Yet another first rate UK optimised player with all the bells and whistles	•		•						
8	Sony SCD-XB940	550	First mainstream SACD player that easily outstrips comparable CD players at this price	•			•		•			
c	Sony SCD-777ES	1,700	Beautifully built SACD player that looks like a bit of a CD player bargain									
c	Sony SCD-1	2,500	The first SACD player sounds fabulous but there's not much competition and limited software as yet					-				
5	and a second second second second second second second second second second second second second second second	daraban and the second	Intriguing player with rather pushy basic sound, but has switchable digital filters							-		
	T+A CD1210R	1,185				-				-		200
	Talk Electronics Thunder 1	550	Entry level upgradeable Talk Electronics player sounds slightly muted							-		
	Talk Electronics Thunder 2	699	Fine player, slightly lacking in dynamics, but readily, if expensively upgradable in various ways									
	Talk Electronics Thunder 3	1,000	Clean, fast, and availability of a complete upgrade path make this a good long term proposition									
8	TAG McLaren CD20R	1,249	Dry and unatmospheric, but plenty of presence – recommended with caution	•								
8	Teac CDP-3450SE	200	For once a budget player where gadgets take second place to respectable, budget amp-friendly sonics						•			
-	Teac VRDS-8	600	Superb build quality is matched to good, but not exceptional sound quality									
	Teac VRDS-9	700	Well-presented. This Teac is crisp, yet shallow, and inconsistent in sound quality and partnering skills	-								
	cia terre de la companya de la company	New Conception										
	Teac VRDS-25x	1,000	Excellent, individualistic player with bold, colourful sound, but test sample had iffy CD-R compatibility					-		-		-
	Technics SL-PG390	90	It's very cheap. Very, ve <b>ry</b> cheap				-			-		
-	Technics SL-PS7	200	Strong, but ultimately rather opaque and hard-sounding, high tech CD player	100	•				•			
8	Technics SL-MC7	300	Maximum storage capacity for a minimum price, and presentable sound too (multidisc)			•				•	•	No.
	Thule Spirit CD100	600	Definitely a try before you buy machine, but the bass and mid are excellent	•								
	Trichord Genesis	549	Breathed-on Pioneer is warm and mellifluous, but ultimately lacks drive and authority	•					•			
	Trichord Revelation	799	Well-ordered and clean sound that may be a little too refined for some, images well				-					
	I NAME AND ADDRESS OF TAXABLE ADDRESS OF TAXAB	******		-								
	Tube Technology Fusion Mkll	1,350	Improvements over the original model but still remains too inconsistent for its own good							-		
		2,800	An imaginative two-box player with a smooth sound that lacks some lustre	-			and the second		<b>A</b>	2 mars		
	Tube Technology Fulcrum			CONTRACT.	1000	1.000						
	Wadia 830 Wadia 860x	3,000 7,450	Envelope busting dynamics, power and imaging in a rather unexciting box (digital volume control) If you want to discover what CDs are really capable of, this has few peers				-	•		•		

#### CD PLAYERS THE DIRECTORY

	ONE-BOX	CD P	PLAYERS (CONTINUED)	ELEC DIG OUTPUT	Aes/ebu elec dig out	OPT DIG OUTPUT	ST OPT DIG OUT	BAL ANALOGUE OUT	HEADPHONE SOCKET	MULTI-DISC	SACD COMPATIBLITY
TUS	PRODUCT	∎ £									
	Yamaha CDX-596	230	Well-priced and attractive-sounding, this player can read CD-RW	•		•			• •		
	Yamaha CD-X993	400	A bit of a lush, though the sound is singularly free of grain, and equipment levels are strong	•		•			• •		
_	YBA Spécial	695	There is nothing here to justify the pricing or the high-end parentage. Avoid								
R	YBA CD1a	3,895	A remarkably fluid and graceful sound – one of the best we've heard below £5,000	•							
	CD TRANS	SPOR	TS								
rus	PRODUCT	£	COMMENTS							ι.	
	Audio Note CDT Zero	399	Neat shoe box size transport sounds smooth and fluid in the right system. (Tested with DAC Zero)	•							
	Linn Karik	1,850	Based on early Linn transport, the Karik is dry but very positive, detailed and engrossing	•		•					
	Roksan Attessa ATT-DP3	1,295	Not the most detailed or refined but capable of sounding exciting with the right material	•		•					
	Teac VRDS-T1	550	Superb quality engineering is mated to tidy and composed sound. (Tested with D-T1)	•		•					
	Theta Carmen	3,299	A well equipped and extremely upgradable CD/DVD transport. Right now, the finest of its type	•				1			
	Theta Data Basic II	2,397	Uses a Philips CDM9 Pro mechanism and works a treat with more lively DACs	•							
	Thorens TCD2000	999	Lively presentation not helped by rather loose bass and splashy treble. (Tested with TDA 2000 DAC)	•		•					
R	Trichord Digital Turntable	699	Very detailed, precise, controlled yet involving; a first-rank performer	•		•					
	DACs										
- - 2U1	PRODUCT	• £	COMMENTS	-							
55	Alchemist TS-D-1	300	24/96-equipped DAC sounds tidy but a little shut-in with both 16-bit CDs and 24-bit/96kHz DVDs								
	Audio Note DAC Zero	369	Neat valve-equipped DAC sounds smooth and fluid in the right system. (Tested with CDT Zero transport)		-						
	Audionote DAC 5	18,500	Astonishingly natural and realistic in the right system, the only problem being the extravagant price								
EC	dCS Delius	5,000	State-of-the-art resolution with considerably greater flexibility than anything else, hard to beat	•	•		•	•		•	
	dCS Purcell	3,500	The first upsampler on the market adds significant depth and increased bass resolve with a suitable DAC	•	•		•				•
	DVD	) F	PLAYERS	ELEC DIG OUT	00000000				H	ON:	20233
				ELEC DIG OUTPUT	AES/EBU ELEC DIG OUT	OPT DIG OUTPUT	ST OPT DIG OUT				2223
_	PRODUCT Denon DVD-1500	) <b>F</b>	COMMENTS	ELEC DIG OUTPUT	00000000			BAL ANALOGUE OUT	H		2223
R	PRODUCT	f f		ELEC DIG OUTPUT	00000000			BAL ANALOGUE OUT			2223
R	PRODUCT Denon DVD-1500	<u>£</u> 400	COMMENTS Colourful and engaging (if lightweight) sound, with excellent picture quality	ELEC DIG OUTPUT	00000000			BAL ANALOGUE OUT	HEADPHONE SOCKET	MULTI-DISC	2223
R R EC	PRODUCT Denon DVD-1500 Denon DVM-3700	■ <u>f</u> 400 1,000	COMMENTS Colourful and engaging (if lightweight) sound, with excellent picture quality One of the first multi-DVD players, and a fine all rounder, with average to good pictures, and better sound	ELEC DIG OUTPUT	00000000			BAL ANALOGUE OUT	HEADPHONE SOCKET	MULTI-DISC	2023
R R EC	PRODUCT Denon DVD-1500 Denon DVM-3700 Denon DVD-5000	<u>f</u> 400 1,000 1,600	COMMENTS Colourful and engaging (if lightweight) sound, with excellent picture quality One of the first multi-DVD players, and a fine all rounder, with average to good pictures, and better sound The first DVD-V player that ain't bad as a CD player. A fine musical device	ELEC DIG OUTPUT	00000000			BAL ANALOGUE OUT		MULTI-DISC	2223
R R EC	PRODUCT Denon DVD-1500 Denon DVM-3700 Denon DVD-5000 Encore DV-450	<u> </u>	COMMENTS Colourful and engaging (if lightweight) sound, with excellent picture quality One of the first multi-DVD players, and a fine all rounder, with average to good pictures, and better sound The first DVD-V player that ain't bad as a CD player. A fine musical device Superb value for money, though mainly of interest to the videophile on a shoestring	ELEC DIG OUTPUT	00000000			BAL ANALOGUE OUT		MULTI-DISC	2223
R R EC	PRODUCT Denon DVD-1500 Denon DVD-3700 Denon DVD-5000 Encore DV-450 Hitachi DVP-505 JVC XV-D701 JVC XV-523	<ul> <li><u>f</u></li> <li>400</li> <li>1,000</li> <li>1,600</li> <li>200</li> <li>300</li> <li>500</li> <li>280</li> </ul>	COMMENTS Colourful and engaging (if lightweight) sound, with excellent picture quality One of the first multi-DVD players, and a fine all rounder, with average to good pictures, and better sound The first DVD-V player that ain't bad as a CD player. A fine musical device Superb value for money, though mainly of interest to the videophile on a shoestring DVD player has rather dark, unexpansive sound, but good picture quality Good video player, but rather undeveloped musically – CD Text is neat, though Looking impressive on screen, but lacks resolution and consistency when pushed hard		00000000			BAL ANALOGUE OUT		MULTI-DISC	2223
R R EC	PRODUCT Denon DVD-1500 Denon DVD-5000 Encore DV-4500 Hitachi DVP-505 JVC XV-505 JVC XV-501 JVC XV-515GD	<u>f</u> 400 1,000 1,600 200 300 500 280 300	COMMENTS Colourful and engaging (if lightweight) sound, with excellent picture quality One of the first multi-DVD players, and a fine all rounder, with average to good pictures, and better sound The first DVD-V player that ain't bad as a CD player. A fine musical device Superb value for money, though mainly of interest to the videophile on a shoestring DVD player has rather dark, unexpansive sound, but good picture quality Good video player, but rather undeveloped musically – CD Text is neat, though Looking impressive on screen, but lacks resolution and consistency when pushed hard Musically soft as a baby's bottom, and as surprising as yesterday's news	ELEC DIG OUTPUT	00000000	OPT DIG OUTPUT		BAL ANALOGUE OUT		MULTI-DISC	2223
R R EC	PRODUCT Denon DVD-1500 Denon DVM-3700 Denon DVD-5000 Encore DV-450 Hitachi DVP-505 JVC XV-501 JVC XV-513 JVC XV-515GD JVC XV-D723	<u>f</u> 400 1,000 1,600 200 300 500 280 300 500	COMMENTS Colourful and engaging (if lightweight) sound, with excellent picture quality One of the first multi-DVD players, and a fine all rounder, with average to good pictures, and better sound The first DVD-V player that ain't bad as a CD player. A fine musical device Superb value for money, though mainly of interest to the videophile on a shoestring DVD player har ather dark, unexpansive sound, but good picture quality Good video player, but rather undeveloped musically – CD Text is neat, though Looking impressive on screen, but lacks resolution and consistency when pushed hard Musically soft as a baby's bottom, and as surprising as yesterday's news The first DVD-A player is more of a DVD-V with A added rather than the next generation of hi-fi	ELEC DIG OUTPUT	00000000			BAL ANALOGUE OUT		MULTI-DISC	2023
R R R	PRODUCT Denon DVD-1500 Denon DVM-3700 Denon DVD-5000 Encore DV-450 Hitachi DVP-505 JVC XV-505 JVC XV-505 JVC XV-515GD JVC XV-515GD JVC XV-513 Kenwood DVF-R9030	<u>f</u> 400 1,000 1,600 200 300 500 280 300 500 900	COMMENTS Colourful and engaging (if lightweight) sound, with excellent picture quality One of the first multi-DVD players, and a fine all rounder, with average to good pictures, and better sound The first DVD-V player that ain't bad as a CD player. A fine musical device Superb value for money, though mainly of interest to the videophile on a shoestring DVD player has rather dark, unexpansive sound, but good picture quality Good video player, but rather undeveloped musically – CD Text is neat, though Looking impressive on screen, but lacks resolution and consistency when pushed hard Musically soft as a baby's bottom, and as surprising as ysetreday's news The first DVD-A player is more of a DVD-V with A added rather than the next generation of hi-fi Kenwood's entrie into DVD-A is a multi-disc machine with great potential (pre-production)	ELEC DIG OUTPUT	00000000			BAL ANALOGUE OUT		MULTI-DISC	2023
R R R	PRODUCT           Denon DVD-1500           Denon DVM-3700           Denon DVD-5000           Encore DV-450           Hitachi DVP-505           JVC XV-D701           JVC XV-515GD           JVC XV-515GD           JVC XV-723           Kenwood DVF-89030           Kenwood DVF-9010	_ £ 400 1,000 1,600 200 300 500 280 300 500 280 300 500 900 1,000	COMMENTS Colourful and engaging (if lightweight) sound, with excellent picture quality One of the first multi-DVD players, and a fine all rounder, with average to good pictures, and better sound The first DVD-V player that ain't bad as a CD player. A fine musical device Superb value for money, though mainly of interest to the videophile on a shoestring DVD player has rather dark, unexpansive sound, but good picture quality Good video player, but rather undeveloped musically – CD Text is neat, though Looking impressive on screen, but lacks resolution and consistency when pushed hard Musically soft as a baby's bottom, and as surprising as yesterday's news The first DVD-A player is more of a DVD-V with A added rather than the next generation of hi-fi Kenwood's entrée into DVD-A is a multi-disc machine with great potential (pre-production) DVD player with brilliant picture and clean, lively sound		00000000			BAL ANALOGUE OUT		MULTI-DISC	2023
R R R	PRODUCT Denon DVD-1500 Denon DVD-3700 Denon DVD-5000 Encore DV450 Hitachi DVP-505 JVC XV-D701 JVC XV-523 JVC XV-515GD JVC XV-515GD JVC XV-5723 Kenwood DVF-89030 Kenwood DVF-9010 NAD T-550	£           400           1,000           200           300           500           280           300           500           900           900           1,000           500	COMMENTS Colourful and engaging (if lightweight) sound, with excellent picture quality One of the first multi-DVD players, and a fine all rounder, with average to good pictures, and better sound The first DVD-V player that ain't bad as a CD player. A fine musical device Superb value for money, though mainly of interest to the videophile on a shoestring DVD player thas rather dark, unexpansive sound, but good picture quality Good video player, but rather undeveloped musically – CD Text is neat, though Looking impressive on screen, but lacks resolution and consistency when pushed hard Musically soft as a baby's bottom, and as surprising as yesterday's news The first DVD-A player is more of a DVD-V with A added rather than the next generation of hi-fi Kerwood's entée into DVD-A is a multi-disc machine with great potential (pre-production) DVD player with brilliant picture and clean, lively sound Soft-centred but likeable player in the classic NAD mould		00000000			BAL ANALOGUE OUT		MULTI-DISC	2223
R R R	PRODUCT           Denon DVD-1500           Denon DVM-3700           Denon DVD-5000           Encore DV-450           Hitachi DVP-505           JVC XV-D701           JVC XV-515GD           JVC XV-515GD           JVC XV-723           Kenwood DVF-89030           Kenwood DVF-9010	£           400           1,000           1600           200           300           500           280           300           500           900           1,000           500           900           500           800	COMMENTS         Colourful and engaging (if lightweight) sound, with excellent picture quality         One of the first multi-DVD players, and a fine all rounder, with average to good pictures, and better sound         The first DVD-V player that ain't bad as a CD player. A fine musical device         Superb value for money, though mainly of interest to the videophile on a shoestring         DVD player has rather dark, unexpansive sound, but good picture quality         Good video player, but rather undeveloped musically – CD Text is neat, though         Looking impressive on screen, but lacks resolution and consistency when pushed hard         Musically soft as a baby's bottom, and as surprising as yesterday's news         The first DVD-A player is more of a DVD-V with A added rather than the next generation of hi-fi         Kenwood's entrie into DVD-A is a multi-disc machine with great potential (pre-production)         DVD player with brilliant picture and clean, lively sound         Soft-centred but likeable player in the classic NAD mould         Not the most compelling model in the resurrected Nakamichi line-up		00000000			BAL ANALOGUE OUT		MULTI-DISC	2223
R R R	PRODUCT           Denon DVD-1500           Denon DVD-5000           Encore DV-450           Hitachi DVP-505           JVC XV-D701           JVC XV-515GD           JVC XV-515GD           JVC XV-713           Kenwood DVF-89030           Kenwood DVF-9010           NAD T-550           Nakamichi DVD-10	£           400           1,000           200           300           500           280           300           500           900           900           1,000           500	COMMENTS         Colourful and engaging (fl lightweight) sound, with excellent picture quality         One of the first multi-DVD players, and a fine all rounder, with average to good pictures, and better sound         The first DVD-V player that ain't bad as a CD player. A fine musical device         Superb value for money, though mainly of interest to the videophile on a shoestring         DVD player has rather dark, unexpansive sound, but good picture quality         Good video player, but rather undeveloped musically – CD Text is neat, though         Looking impressive on screen, but lacks resolution and consistency when pushed hard         Musically soft as a baby's bottom, and as surprising as yesterday's news         The first DVD-A player is more of a DVD-V with A added rather than the next generation of hi-fi         Kenwood's entrée into DVD-A is a multi-disc machine with great potential (pre-production)         DVD Dyaer with brilliant picture and clean, lively sound         Soft-centred but likeable player in the classic NAD mould         Not the most compelling model in the resurrected Nakamichi line-up         Modestly equipped, gives good pictures, but is musically unengaging		00000000			BAL ANALOGUE OUT		MULTI-DISC	2223
R R R R	PRODUCT Denon DVD-1500 Denon DVD-5000 Encore DV-450 Hitachi DVP-505 JVC XV-D701 JVC XV-523 JVC XV-515GD JVC XV-515GD JVC XV-7723 Kenwood DVF-R9030 Kenwood DVF-R9030 NaD 7-550 Nakamichi DVD-10 Panasonic DVD-RV40	£           400           1,000           200           300           500           280           300           500           900           1,000           1,000           1,000           800           350	COMMENTS         Colourful and engaging (if lightweight) sound, with excellent picture quality         One of the first multi-DVD players, and a fine all rounder, with average to good pictures, and better sound         The first DVD-V player that ain't bad as a CD player. A fine musical device         Superb value for money, though mainly of interest to the videophile on a shoestring         DVD player has rather dark, unexpansive sound, but good picture quality         Good video player, but rather undeveloped musically – CD Text is neat, though         Looking impressive on screen, but lacks resolution and consistency when pushed hard         Musically soft as a baby's bottom, and as surprising as yesterday's news         The first DVD-A player is more of a DVD-V with A added rather than the next generation of hi-fi         Kenwood's entrie into DVD-A is a multi-disc machine with great potential (pre-production)         DVD player with brilliant picture and clean, lively sound         Soft-centred but likeable player in the classic NAD mould         Not the most compelling model in the resurrected Nakamichi line-up		00000000			BAL ANALOGUE OUT	HEADPHONE SOCKET	MULTI-DISC	2023
R R R R	PRODUCT Denon DVD-1500 Denon DVD-500 Denon DVD-500 Encore DV-450 Hitachi DVP-505 JVC XV-0701 JVC XV-515GD JVC XV-5010 XC XV-5	£           400           1,000           200           300           500           280           300           500           900           1,000           500           900           350           550           800           350           580	COMMENTS         Colourful and engaging (if lightweight) sound, with excellent picture quality         One of the first multi-DVD players, and a fine all rounder, with average to good pictures, and better sound         The first DVD-V player that ain't bad as a CD player. A fine musical device         Superb value for money, though mainly of interest to the videophile on a shoestring         DVD player has rather dark, unexpansive sound, but good picture quality         Good video player, but rather undeveloped musically – CD Text is neat, though         Looking impressive on screen, but lacks resolution and consistency when pushed hard         Musically soft as a baby's bottom, and as surprising as yesterday's news         The first DVD-A player is more of a DVD-V with A added rather than the next generation of hi-fi         Kenwood's entrée into DVD-A is a multi-disc machine with great potential (pre-production)         DVD player with brilliant picture and clean, lively sound         Soft-centred but likeable player in the classic NAD mould         Not the most compelling model in the resurrected Nakamichi line-up         Modestly equipped, gives good pictures, but is musically unengaging         Powerful equipment, and unthrottled digital output notwithstanding, sound quality is modest at best		00000000			BAL ANALOGUE OUT	HEADPHONE SOCKET	MULTI-DISC	2023
R R R R R 88 88	PRODUCT Denon DVD-500 Denon DVM-3700 Denon DVD-5000 Encore DV-450 Hitachi DVP-505 JVC XV-505 JVC XV-515GD JVC XV-515GD JVC XV-515GD JVC XV-515GD JVC XV-515GD MAUT-550 NAD T-550 NAAmichi DVD-10 Panasonic DVD-RV40 Panasonic DVD-R360E Philips DVD750	£           400           1,600           200           300           500           280           300           500           900           1,000           500           900           1,000           500           500           900           1,000           500           580           400	COMMENTS         Colourful and engaging (if lightweight) sound, with excellent picture quality         One of the first multi-DVD players, and a fine all rounder, with average to good pictures, and better sound         The first DVD-V player that ain't bad as a CD player. A fine musical device         Superb value for money, though mainly of interest to the videophile on a shoestring         DVD player has rather dark, unexpansive sound, but good picture quality         Good video playe, but rather undeveloped musically – CD Text is neat, though         Looking impressive on screen, but lacks resolution and consistency when pushed hard         Musically soft as a baby's bottom, and as surprising as yesterday's news         The first DVD-A player is more of a DVD-V with A added rather than the next generation of hi-fi         Kenwood's entrie into DVD-A is a multi-disc machine with great potential (pre-production)         DVD player with brilliant picture and clean, lively sound         Soft-centred but likeable player in the classic NAD mould         Not the most compelling model in the resurrected Nakamichi line-up         Modestly equipped, gives good pictures, but is musically unengaging         Powerful equipment, and unthrottled digital output notwithstanding, sound quality is modest at best         Clever DVD with CD-R/CD-RW compatibility and surprisingly keen sound	ELEC DIG OUTPUT	00000000			BAL ANALOGUE OUT	HEADPHONE SOCKET	MULTI-DISC	2223
R R R R	PRODUCT           Denon DVD-1500           Denon DVM-3700           Denon DVD-5000           Encore DV-450           Hitachi DVP-505           JVC XV-D701           JVC XV-523           JVC XV-515GD           JVC XV-515GD           JVC XV-523           Kenwood DVF-89030           Kenwood DVF-9010           NAD T-550           Nakamichi DVD-10           Panasonic DVD-84360E           Philips DVD750           Pioneer DV-525	f           400           1,000           1,600           200           300           500           280           300           500           900           1,000           500           300           500           300           500           300           500           300           500           300           500           300           500           300           500           800           350           580           400           399	COMMENTS         Colourful and engaging (if lightweight) sound, with excellent picture quality         One of the first multi-DVD players, and a fine all rounder, with average to good pictures, and better sound         The first DV-V player that ain't bad as a CD player. A fine musical device         Superb value for money, though mainly of interest to the videophile on a shoestring         DVD player that ain't bad as a CD player. A fine musical device         Superb value for money, though mainly of interest to the videophile on a shoestring         DVD player has rather dark, unexpansive sound, but good picture quality         Good video player, but rather undeveloped musically – CD Text is neat, though         Looking impressive on screen, but lacks resolution and consistency when pushed hard         Musically soft as a baby's bottom, and as surprising as yesterday's news         The first DVD-A player is more of a DVD-V with A added rather than the next generation of hi-fi         Kenwood's entrée into DVD-A is a multi-disc machine with great potential (pre-production)         DVD player with brilliant picture and clean, lively sound         Soft-centred but likeable player in the classic NAD mould         Not the most compelling model in the resurrected Nakamichi line-up         Modestly equipped, gives good pictures, but is musically unengaging         Powerful equipment, and unthrottled digital output notwithstanding, sound quality is modest at best         Clever DVD with CD-RW compatibility and surprisingly keen	ELEC DIG OUTPUT	00000000			BAL ANALOGUE OUT		MULTI-DISC	2023
R R R R R R R R R R R R R R R R R R	PRODUCT           Denon DVD-1500           Denon DVD-3700           Denon DVD-5000           Encore DV-450           Hitachi DVP-505           JVC XV-D701           JVC XV-523           JVC XV-515GD           Pioneer DV-8000           Panasonic DVD-RV400           Panasonic DVD-750           Pioneer DV-525           Pioneer DV-525	£           400           1,000           200           300           500           280           300           500           280           300           500           280           300           500           280           300           500           900           1,000           500           800           350           580           400           399           450	COMMENTS         Coloutful and engaging (fl lightweight) sound, with excellent picture quality         One of the first multi-DVD players, and a fine all rounder, with average to good pictures, and better sound         The first DVD-V player that ain't bad as a CD player. A fine musical device         Superb value for money, though mainly of interest to the videophile on a shoestring         DVD player that rather dark, unexpansive sound, but good picture quality         Good video player, but rather undeveloped musically – CD Text is neat, though         Looking impressive on screen, but lacks resolution and consistency when pushed hard         Musically soft as a baby's bottom, and as surprising as yesterday's news         The first DVD-A player is more of a DVD-V with A added rather than the next generation of hi-fi         Kerwood's entrée into DVD-A is a multi-disc machine with great potential (pre-production)         DVD player with brilliant picture and clean, lively sound         Soft-centred but likeable player in the classic NAD mould         Not the most compelling model in the resurrected Nakamichi line-up         Modestly equipped, gives good pictures, but is musically unengaging         Powerful equipment, and unthrottled digital output notwithstanding, sound quality is modest at best         Clever DVD with CD-RW compatibility and surprisingly keen sound         Lean, clean and lively sound quality. CD-R and 24/96 compatible, too         Superbly equipped, and more than respectable sound quality </td <td></td> <td>00000000</td> <td></td> <td></td> <td>BAL ANALOGUE OUT</td> <td></td> <td>MULTI-DISC</td> <td>2223</td>		00000000			BAL ANALOGUE OUT		MULTI-DISC	2223
R R R R R R R R R R R R R R R R R R R	PRODUCT           Denon DVD-1500           Denon DVD-5000           Encore DV-500           Encore DV-500           Hitachi DVP-505           JVC XV-D701           JVC XV-523           JVC XV-515GD           JVC XV-510           Panasonic DVF-8010           NAAD T-550           Nakamichi DVD-10           Panasonic DVD-RX400           Panasonic DVD-RX40           Pinilips DVD750           Pioneer DV-525           Pioneer DV-525           Pioneer DV-525D           Philips DVD960	£           400           1,000           200           300           500           280           300           500           900           900           1,000           500           900           500           900           500           900           350           580           400           399           450           530	COMMENTS         Colouful and engaging (if lightweight) sound, with excellent picture quality         One of the first multi-DVD players, and a fine all rounder, with average to good pictures, and better sound         The first DVD-V player that ain't bad as a CD player. A fine musical device         Superb value for money, though mainly of interest to the videophile on a shoestring         DVD player that ain't bad as a CD player. A fine musical device         Superb value for money, though mainly of interest to the videophile on a shoestring         DVD player has rather dark, unexpansive sound, but good picture quality         Good video player, but rather undeveloped musically – CD Text is neat, though         Looking impressive on screen, but lacks resolution and consistency when pushed hard         Musically soft as a baby's bottom, and as surprising as yesterday's news         The first DVD-A player with brilliant picture and clean, lively sound         Soft-centred but likeable player in the classic NAD mould         Not the most compelling model in the resurrected Nakamichi line-up         Modestly equipped, gives good pictures, but is musically unengaging         Powerful equipment, and unthrottled digital output notwithstanding, sound quality is modest at best         Clever DVD with CD-R/CD-RW compatibility and surprisingly keen sound         Lean, clean and lively sound quality. CD-R and 24/96 compatible, too         Superby equipped, and more than respectable sound quality         D		00000000			BAL ANALOGUE OUT		MULTI-DISC	2023
R R R R BB BB BB BB BB BB	PRODUCT Denon DVD-1500 Denon DVD-500 Encore DV-4500 Hitachi DVP-505 JVC XV-507 JVC XV-515GD JVC XV-515GD JVC XV-515GD JVC XV-515GD JVC XV-523 JVC XV-515GD JVC XV-523 Macmichi DVD-800 Nabor 1550 Nabor 10V-79010 Panasonic DVD-10 Panasonic DVD-10 Panasonic DVD-10 Panasonic DVD-10 Panasonic DVD-10 Panasonic DVD-10 Pioneer DV-525 Pioneer DV-525 Pioneer DV-525 Pioneer DV-526 Pioneer DV-717 Primare V20 Samsung DVD-907	£           400           1,000           200           300           500           280           300           500           900           1,000           500           900           1,000           500           900           1,000           580           400           399           450           530           1,000           500	COMMENTS         Colourful and engaging (if lightweight) sound, with excellent picture quality         One of the first multi-DVD players, and a fine all rounder, with average to good pictures, and better sound         The first DVD-V player that ain't bad as a CD player. A fine musical device         Superb value for money, though mainly of interest to the videophile on a shoestring         DVD player has rather dark, unexpansive sound, but good picture quality         Good video player, but rather undeveloped musically – CD Text is neat, though         Looking impressive on screen, but lacks resolution and consistency when pushed hard         Musically soft as a baby's bottom, and as surprising as yesterday's news         The first DVD-A player is more of a DVD-V with A added rather than the next generation of hi-fi         Kenwood's entrée into DVD-A is a multi-disc machine with great potential (pre-production)         DVD player with brilliant picture and clean, lively sound         Soft-centred but likeable player in the classic NAD mould         Not the most compelling model in the resurceted Nakamichi line-up         Modestly equipped, gives good pictures, but is musically unengaging         Powerful equipment, and unthrottled digital output notwithstanding, sound quality is modest at best         Cleare DVD with CD-RLO-RW compatibility and surprisingly keen sound         Lear, clean and lively sound quality CD-R and 24/96 compatible, too         Superb DVD player with bood picture quality and which really knows ho	ELEC DIG OUTPUT	00000000			BAL ANALOGUE OUT			2223
R R R R R R R R R R R R R R R R R R R	PRODUCT           Denon DVD-1500           Denon DVM-3700           Denon DVD-5000           Encore DV-450           Hitachi DVP-505           JVC XV-D701           JVC XV-523           JVC XV-515GD           JVC XV-515GD           JVC XV-523           Kenwood DVF-89030           Kenwood DVF-9010           NAD T-550           Nakanichi DVD-10           Panasonic DVD-8460E           Philips DVD750           Pioneer DV-525           Pioneer DV-525           Pioneer DV-525           Pioneer DV-717           Primare V20           Samsung DVD-907           Sony DVP-CX850D	£           400           1,000           300           500           280           300           500           280           300           500           900           1,000           500           800           350           580           400           399           450           530           550           1,000           500           600	COMMENTS         Colourful and engaging (if lightweight) sound, with excellent picture quality         One of the first multi-DVD players, and a fine all rounder, with average to good pictures, and better sound         The first DVD-V player that ain't bad as a CD player. A fine musical device         Superb value for money, though mainly of interest to the videophile on a shoestring         DVD player has rather dark, unexpansive sound, but good picture quality         Good video player, but rather undeveloped musically – CD Text is neat, though         Looking impressive on screen, but lacks resolution and consistency when pushed hard         Musically soft as a baby's bottom, and as surprising as yesterday's news         The first DVD-A player is more of a DVD-V with A added rather than the next generation of hi-fi         Kenwood's entrie into DVD-A is a multi-disc machine with great potential (pre-production)         DVD player with brilliant picture and clean, lively sound         Soft-centred but likeable player in the classic NAD mould         Not the most compelling model in the resurrected Nakamichi line-up         Modestly equipped, gives good pictures, but is musically unengaging         Powerful equipment, and unthrottled digital output notwithstanding, sound quality is modest at best         Clever DVD with CD-R/CD-RW compatibility and surprisingly keen sound         Lean, clean and lively sound quality. CD-R and 24/96 compatible, too         Superb DVD player with good picture quality and dyoid, though slig	ELEC DIG OUTPUT	00000000			BAL ANALOGUE OUT		MULTI-DISC	2223
R R R R R R R R R R R R R R R R R R R	PRODUCT Denon DVD-1500 Denon DVD-3700 Denon DVD-5000 Encore DV450 Hitachi DVP-505 JVC XV-D701 JVC XV-523 JVC XV-523 JVC XV-515GD JVC XV-515GD JVC XV-515GD JVC XV-523 Kenwood DVF-89030 Kenwood DVF-89030 Kenwood DVF-89030 NAD T-550 Nakamichi DVD-10 Panasonic DVD-RV40 Panasonic DVD-RV40 Panasonic DVD-RV40 Panasonic DVD-RV40 Pioneer DV-710 Pioneer DV-525 Pioneer DV-525 Pioneer DV-525 Pioneer DV-717 Primare V20 Samsung DVD-907 Sony DVP-CX850D	£           400           1,000           200           300           500           280           300           500           280           300           500           280           300           500           900           1,000           500           800           350           580           400           399           450           530           550           1,000           500           600           950	COMMENTS         Colourful and engaging (fl lightweight) sound, with excellent picture quality         One of the first multi-DVD players, and a fine all rounder, with average to good pictures, and better sound         The first DVD-V player that ain't bad as a CD player. A fine musical device         Superb value for money, though mainly of interest to the videophile on a shoestring         DVD player that rather dark, unexpansive sound, but good picture quality         Good video player, but rather undeveloped musically – CD Text is neat, though         Looking impressive on screen, but lacks resolution and consistency when pushed hard         Musically soft as a baby's bottom, and as surprising as yesterday's news         The first DVD-A player is more of a DVD-V with A added rather than the next generation of hi-fi         Kernwood's entrée into DVD-A is a multi-disc machine with great potential (pre-production)         DVD player with brilliant picture and clean, lively sound         Soft-centred but likeable player in the classic NAD mould         Not the most compelling model in the resurrected Nakamichi line-up         Modestly equipped, gives good pictures, but is musically unengaging         Powerful equipment, and unthrottled digital output notwithstanding, sound quality is modest at best         Clever DVD with CD-RNC onpatibility and surprisingly keen sound         Lean, clean and lively sound quality. CD-R and 24/96 compatible, too         Superb DVD player with good picture quality and dyood, though slighth	ELEC DIG OUTPUT	00000000			BAL ANALOGUE OUT			2223
R R R R R R R R R R R R R R R R R R R	PRODUCT Denon DVD-1500 Denon DVD-3700 Denon DVD-5000 Encore DV450 Hitachi DVP-505 JVC XV-D701 JVC XV-523 JVC XV-515GD JVC XV-515GD JVC XV-515GD JVC XV-515GD JVC XV-515GD JVC XV-515GD JVC XV-515GD JVC XV-5170 Nakamichi DVD-10 Panasonic DVD-RV40 Panasonic DVD-800 Pinips DVD750 Pineer DV-525 Pioneer DV-525 Pioneer DV-525 Pioneer DV-525 Pioneer DV-525 Pioneer DV-525 Pioneer DV-525 Pioneer DV-525 Pioneer DV-525 Pioneer DV-525 Song DVP-CX850D Song DVP-CX850D	£           400           1,000           300           500           280           300           500           280           300           500           900           900           300           500           900           300           500           900           300           500           800           350           580           400           399           450           530           550           1,000           500           950           1,200	COMMENTS         Colourful and engaging (if lightweight) sound, with excellent picture quality         One of the first multi-DVD players, and a fine all rounder, with average to good pictures, and better sound         The first DVD-V player that ain't bad as a CD player. A fine musical device         Superb value for money, though mainly of interest to the videophile on a shoestring         DVD player that ain't bad as a CD player. A fine musical device         Superb value for money, though mainly of interest to the videophile on a shoestring         DVD player thas rather dark, unexpansive sound, but good picture quality         Good video player, but rather undeveloped musically – CD Text is neat, though         Looking impressive on screen, but lacks resolution and consistency when pushed hard         Musically soft as a baby's bottom, and as surprising as yesterday's news         The first DVD-A player is more of a DVD-V with A added rather than the next generation of hi-fi         Kernwood's entrie into DVD-A is a multi-disc machine with great potential (pre-production)         DVD player with brilliant picture and clean, lively sound         Soft-centred but likeable player in the classic NAD mould         Not the most compelling model in the resurrected Nakamichi line-up         Modestly equipped, gives good pictures, but is musically unengaging         Powerful equipment, and unthrottled digital output notwithstanding, sound quality is modest at best         Clever DVD with CD-RVCD-RW compatibility and surprisin	ELEC DIG OUTPUT	00000000			BAL ANALOGUE OUT			2223
R R R R R R R R R R R R R R R R R R R	PRODUCT Denon DVD-1500 Denon DVD-1500 Denon DVD-5000 Encore DV-450 Hitachi DVP-505 JVC XV-D701 JVC XV-523 JVC XV-515GD JVC XV-515GD JVC XV-515GD JVC XV-515GD JVC XV-515GD JVC XV-515GD JVC XV-515GD JVC XV-515GD Nakamichi DVD-10 Panasonic DVF-89030 Kenwood DVF-89030 NAD T-550 Nakamichi DVD-10 Panasonic DVD-8460E Philips DVD-50 Pioneer DV-525 Pioneer DV-525 Pioneer DV-525 Pioneer DV-525 Pioneer DV-525 Pioneer DV-525 Pioneer DV-525 Pioneer DV-525 Pioneer DV-525 Pioneer DV-525 Song DVP-S700 Song DVP-S700 Song DVD-59000ES	£           400           1,000           300           200           300           500           280           300           500           900           1,000           500           900           300           500           900           350           500           800           350           580           400           399           450           530           550           1,000           500           600           950           1,200	COMMENTS         Colordul and engaging (if lightweight) sound, with excellent picture quality         One of the first multi-DVD players, and a fine all rounder, with average to good pictures, and better sound         The first DVD-V player that ain't bad as a CD player. A fine musical device         Superb value for money, though mainly of interest to the videophile on a shoestring         DVD player has rather dark, unexpansive sound, but good picture quality         Good video player, but rather undeveloped musically – CD Text is neat, though         Looking impressive on screen, but lacks resolution and consistency when pushed hard         Musically soft as a baby's bottom, and as surprising as yesterday's news         The first DVD-A player with brilliant picture and clean, lively sound         Soft-centred but likeable player in the classic NAD mould         Not the most compelling model in the resurrected Nakamichi line-up         Modestly equipped, gives good pictures, but is musically unengaging         Powerful equipment, and unthrotted digital output notwithstanding, sound quality is modest at best         Clever DVD with CD-R/CD-RW compatibility and surprisingly keen sound         Lean, clean and lively sound quality. CD-R and 24/96 compatible, too         Superbly equipped, and more than respectable sound quality         DVD-V player with good picture quality and which really knows how to play 24/96 discs         Elegant and well built DVD performer that possess a strong picture quality and decent CD player </td <td>ELEC DIG OUTPUT</td> <td>00000000</td> <td></td> <td></td> <td>BAL ANALOGUE OUT</td> <td></td> <td></td> <td>2023</td>	ELEC DIG OUTPUT	00000000			BAL ANALOGUE OUT			2023
R R R R R R R R R R R R R R R R R R R	PRODUCT Denon DVD-1500 Denon DVD-1500 Denon DVD-5000 Encore DV-450 Hitachi DVP-505 JVC XV-D701 JVC XV-523 JVC XV-515GD JVC XV-515GD JVC XV-515GD JVC XV-515GD JVC XV-515GD JVC XV-515GD JVC XV-515GD JVC XV-515GD JVC XV-773 Kenwood DVF-89030 Kenwood DVF-89030 NAD T-550 Nakamichi DVD-10 Panasonic DVD-10 Panasonic DVD-10 Panasonic DVD-10 Panasonic DVD-10 Panasonic DVD-10 Panasonic DVD-10 Piniegr DV-550 Pioneer DV-525 Pioneer DV-525 Pioneer DV-525 Pioneer DV-626D Philips DVD960 Pioneer DV-717 Primare V20 Samsung DVD-907 Sony DVP-S7000 Sony DVP-S9000ES Sharp DV-760 T+A DVD 1210R	£           400           1,000           300           500           280           300           500           280           300           500           900           1,000           500           900           350           580           400           399           450           530           550           1,000           500           600           950           1,200           500           1,699	COMMENTS         Colourful and engaging (if lightweight) sound, with excellent picture quality         One of the first multi-DVD players, and a fine all rounder, with average to good pictures, and better sound         The first DVD-V player that ain't bad as a CD player. A fine musical device         Superb value for money, though mainly of interest to the videophile on a shoestring         DVD player that rather dark, unexpansive sound, but good picture quality         Good video player, but rather undeveloped musically – CD Text is neat, though         Looking impressive on screen, but lacks resolution and consistency when pushed hard         Musically soft as a baby's bottom, and as surprising as yesterday's news         The first DVD-A player is more of a DVD-V with A added rather than the next generation of hi-fi         Kenwood's entrée into DVD-A is a multi-disc machine with great potential (pre-production)         DVD player with brilliant picture and clean, lively sound         Soft-centred but likeable player in the classic NAD mould         Not the most compelling model in the resurrected Nakamichi line-up         Modestly equipped, gives good pictures, but is musically unengaging         Powerful equipment, and unthrottled digital output notwithstanding, sound quality is modest at best         Clever DVD with CD-R/CD-RW compatibility and surprisingly keen sound         Lean, clean and lively sound quality and sold, though slightly washed out, pictures         Superb DVD player with good opicture quality and w	ELEC DIG OUTPUT	00000000			BAL ANALOGUE OUT			2023
R R R R R R	PRODUCT Denon DVD-1500 Denon DVD-500 Encore DV-450 Encore DV-450 Hitachi DVP-505 JVC XV-D701 JVC XV-523 JVC XV-515GD JVC XV-515GD JVC XV-515GD JVC XV-515GD JVC XV-573 Kenwood DVF-R9030 Kenwood DVF-R9030 Nakamichi DVD-10 Panasonic DVD-R9030 Nakamichi DVD-10 Panasonic DVD-10 Panasonic DVD-10 Panasonic DVD-10 Panasonic DVD-10 Panasonic DVD-10 Pineer DV-525 Pioneer DV-525 Pioneer DV-525 Pioneer DV-525 Pioneer DV-525 Pioneer DV-525 Pioneer DV-525 Pioneer DV-525 Pioneer DV-525 Somy DVD-S00 Somy DVD-S00 Somy DVD-S00 Sony DVD-S00 Sony DVD-S00 Sony DVD-500 T+A DVD 1210R Teac DV-1000	£           400           1,000           200           200           300           500           280           300           500           900           1,000           500           900           1,000           550           1,000           550           1,000           500           600           950           1,200           500           1,200           500           1,699           400	COMMENTS         Coloufful and engaging (if lightweight) sound, with excellent picture quality         One of the first multi-DVD players, and a fine all rounder, with average to good pictures, and better sound         The first DVD-V player that ain't bad as a CD player. A fine musical device         Superb value for money, though mainly of interest to the videophile on a shoestring         DVD player has rather dark, unexpansive sound, but good picture quality         Good video player, but rather undeveloped musically – CD Text is neat, though         Looking impressive on screen, but lacks resolution and consistency when pushed hard         Musically soft as a baby's bottom, and as surprising as yesterday's news         The first DVD-A player is more of a DVD-V with A added rather than the next generation of hi-fi         Kerwood's entriee into DVD-A is a multi-disc machine with great potential (pre-production)         DVD player with brilliant picture and clean, lively sound         Soft-centred but likeable player in the classic NAD mould         Not the most compelling model in the resurrected Nakamichi line-up         Modestly equipped, gives good pictures, but is musically unengaging         Powerful equipment, and unthrottled digital output notwithstanding, sound quality is modest at best         Clever DVD with CD-R/CD-RW compatibility and surprisingly keen sound         Lean, clean and lively sound quality. CD-R and 24/96 compatible, too         Superb DVD player with good picture quality and which really know	ELEC DIG OUTPUT	00000000			BAL ANALOGUE OUT			2223
R R R R R R	PRODUCT           Denon DVD-1500           Denon DVD-3700           Denon DVD-5000           Encore DV-450           Hitachi DVP-505           JVC XV-D701           JVC XV-523           VVC XV-515GD           JVC XV-701           JVC XV-523           Kenwood DVF-89030           Kenwood DVF-9010           NAD T-550           Nakanichi DVD-10           Panasonic DVD-8460E           Philips DVD750           Pioneer DV-525           Pioneer DV-525           Pioneer DV-525           Pioneer DV-717           Primare V20           Samsung DVD-907           Sony DVP-S7700           Sony DVD-S9000ES           Sharp DV-760           T-4A DVD 1210R           Teac DV-1000           Technics DVD-A10	£           400           1,000           300           500           280           300           500           280           300           500           900           1,000           500           800           350           580           400           399           450           530           550           600           950           1,000           500           600           950           1,200           500           900	COMMENTS         Colourful and engaging (if lightweight) sound, with excellent picture quality         One of the first multi-DVD players, and a fine all rounder, with average to good pictures, and better sound         The first DVD-V player that ain't bad as a CD player. A fine musical device         Superb value for money, though mainly of interest to the videophile on a shoestring         DVD player has rather dark, unexpansive sound, but good picture quality         Good video player, but rather undeveloped musically – CD Text is neat, though         Looking impressive on screen, but lacks resolution and consistency when pushed hard         Musically soft as a baby's bottom, and as suprising as yesterday's news         The first DVD-A player is more of a DVD-V with A added rather than the next generation of hi-fi         Kenwood's entrée into DVD-A is a multi-disc machine with great potential (pre-production)         DVD player with billiant picture and clean, lively sound         Soft-centred but likeable player in the classic NAD mould         Not the most compelling model in the resurrected Nakamichi line-up         Modestly equipped, gives good pictures, but is musically unengaging         Powerful equipment, and unthrotted digital output notwithstanding, sound quality is modest at best         Clever DVD with CD-R/CD-RW compatibility and supprisingly keen sound         Lean, clean and lively sound quality, CD-R and 24/96 compatible, too         Superbt Quipped, and more than respectable sound quality <td>ELEC DIG OUTPUT</td> <td></td> <td></td> <td></td> <td>BAL ANALOGUE OUT</td> <td></td> <td></td> <td>2223</td>	ELEC DIG OUTPUT				BAL ANALOGUE OUT			2223
R R 888 88 R R R R R R R R R R R R R R	PRODUCT           Denon DVD-1500           Denon DVD-3700           Denon DVD-500           Encore DV450           Hitachi DVP-505           JVC XV-D701           JVC XV-523           JVC XV-515GD           JVC XV-515GD           JVC XV-515GD           JVC XV-515GD           JVC XV-515GD           JVC XV-513           Kenwood DVF-89030           Kenwood DVF-9010           NAD T-550           Nakamichi DVD-10           Panasonic DVD-RV400           Panasonic DVD-RV40           Panasonic DVD-RV40           Panasonic DVD-RV40           Panasonic DVD-S0           Pilips DVD50           Pioneer DV-525           Pioneer DV-525           Pioneer DV-717           Primare V20           Samsung DVD-907           Sony DVP-S7700           Sony DVD-S9000ES           Sharp DV-760           +A DVD 1210R           Teac DV-1000           Technics DVD-A10           Theta DaVD	£           400           1,000           300           500           280           300           500           280           300           500           280           300           500           280           300           500           800           350           500           800           350           500           500           500           500           600           950           1,200           500           1,699           400           900           1,690           900           1,690           900           4,650	COMMENTS Colourful and engaging (if lightweight) sound, with excellent picture quality One of the first multi-DVD players, and a fine all rounder, with average to good pictures, and better sound The first DVD-V player that ain't bad as a CD player. A fine musical device Superb value for money, though mainly of interest to the videophile on a shoestring DVD player has rather dark, unexpansive sound, but good picture quality Good video playe, but rather undeveloped musically – CD Text is neat, though Looking impressive on screen, but lacks resolution and consistercy when pushed hard Musically soft as a baby's bottom, and as surprising as yesterday's news The first DVD-A player is more of a DVD- With A added rather than the next generation of hi-fi Kenwood's entrée into DVD-A is a multi-disc machine with great potential (pre-production) DVD player with brilliant picture and clean, lively sound Soft-centred but likeable player in the classic NAD mould Not the most compelling model in the resurrected Nakamich line-up Modestly equipped, gives good pictures, but is musically unengaging Powerful equipment, and unthredid digital output notwithstanding, sound quality is modest at best Clever DVD with CD-RVC D-RW compatibility and surprisingly keen sound Lean, clean and lively sound quality. CD-R and 24/96 compatible, too Superbly equipped, and more than respectable sound quality DVD-V player has stong sound quality and good, though slightly washed out, pictures Superb DVD player with below average picture, and lacklustre sound quality Lacklustre sound quality is a disapointment, but the price is appealing for a 200-disc DVD player Powerful endowed player offers articulate and believable sound First DVD machine to play SACD has a 'Lexus' sound syle that never really gets its hands dirty Reasonable picture, but sonically bings new meaning to the term rough and ready. Operationally quirky but an excellent DVD player that does a decent if not spectacular job with CD Bloway, and occasionally satingent sounding, but otherwis s	ELEC DIG OUTPUT	00000000			BAL ANALOGUE OUT			2223
R R R R R R	PRODUCT           Denon DVD-1500           Denon DVD-3700           Denon DVD-5000           Encore DV450           Hitachi DVP-505           JVC XV-D701           JVC XV-515GD           Nakamichi DVD-10           Panasonic DVD-RV400           Panasonic DVD-804060           Philips DVD500           Pioneer DV-525           Pioneer DV-525           Pioneer DV-525           Pioneer DV-717           Primare V20           Samsung DVD-907           Sony DVP-S7700           Sony DVP-S7700           Sony DVP-S7700           Sony DVD-S9000ES           Sharp DV-760           T+A DVD 1210R           Teach V1000           Technics DVD-A10           Theta DaWD           Toshiba SD-100E	£           400           1,000           300           500           280           300           500           280           300           500           280           300           500           500           900           900           900           350           500           400           399           450           530           550           1,000           500           600           950           1,200           500           1,200           500           1,200           500           1,200           500           1,650           250	COMMENTS Colourful and engaging (if lightweight) sound, with excellent picture quality One of the first multi-DVD players, and a fine all rounder, with average to good pictures, and better sound The first DVD-V player that ain't bad as a CD player. A fine musical device Superb value for money, though mainly of interest to the videophile on a shoestring DVD player has rather dark, unexpansive sound, but good picture quality Good video playet, but rather undeveloped musically – CD Text is neat, though Looking impressive on screen, but lacks resolution and consistency when pushed hard Musically soft as a baby's bottom, and as surprising as yesterday's news The first DVD-A player is more of a DVD-V with A added rather than the next generation of hi-fi Kerwood's entrée into DVD-A is a multi-disc machine with great potential (pre-production) DVD player white player in the classic NAD mould Not the most compelling model in the resurrected Nakamichi line-up Modestly equipped, gives good pictures, but is musically unengaging Powerful equipment, and unthrottled digital output notwithstanding, sound quality is modest at best Clever DVD with CD-R/CD-RW compatibility and surprisingly keen sound Lean, clean and lively sound quality. CD-R and 24/96 compatible, too Superbly equipped, and more than respectable sound quality DVD-D player with good picture, that equality and which really knows how to play 24/96 dass Elegant and well built DVD performer that posses a strong picture quality and Vecent CD player PVD player with below average picture, and lackluste sound quality Reasonable picture, but sprise and lowed sound specific th never really gets is hands dirty Reasonable picture, but sonically that here really gets is hands dirty Reasonable picture, but sonically to there straightforward and reasonably priced The best Technics CD player offers arciculate and believable sound First DVD machine to play SACD has a 'Lewa's sound syste that never really gets is hands dirty Reasonable picture, But aphay and which realy knows how t	ELEC DIG OUTPUT				BAL ANALOGUE OUT			2223
R R R 88 88 88 88 88 88 88 88 88 88 88 8	PRODUCT           Denon DVD-1500           Denon DVD-3700           Denon DVD-500           Encore DV450           Hitachi DVP-505           JVC XV-D701           JVC XV-523           JVC XV-515GD           JVC XV-515GD           JVC XV-515GD           JVC XV-515GD           JVC XV-515GD           JVC XV-513           Kenwood DVF-89030           Kenwood DVF-9010           NAD T-550           Nakamichi DVD-10           Panasonic DVD-RV400           Panasonic DVD-RV40           Panasonic DVD-RV40           Panasonic DVD-RV40           Panasonic DVD-S0           Pilips DVD50           Pioneer DV-525           Pioneer DV-525           Pioneer DV-717           Primare V20           Samsung DVD-907           Sony DVP-S7700           Sony DVD-S9000ES           Sharp DV-760           +A DVD 1210R           Teac DV-1000           Technics DVD-A10           Theta DaVD	£           400           1,000           300           500           280           300           500           280           300           500           280           300           500           280           300           500           800           350           500           800           350           500           500           500           500           600           950           1,200           500           1,699           400           900           1,690           900           1,690           900           4,650	COMMENTS Colourful and engaging (if lightweight) sound, with excellent picture quality One of the first multi-DVD players, and a fine all rounder, with average to good pictures, and better sound The first DVD-V player that ain't bad as a CD player. A fine musical device Superb value for money, though mainly of interest to the videophile on a shoestring DVD player has rather dark, unexpansive sound, but good picture quality Good video playe, but rather undeveloped musically – CD Text is neat, though Looking impressive on screen, but lacks resolution and consistercy when pushed hard Musically soft as a baby's bottom, and as surprising as yesterday's news The first DVD-A player is more of a DVD- With A added rather than the next generation of hi-fi Kenwood's entrée into DVD-A is a multi-disc machine with great potential (pre-production) DVD player with brilliant picture and clean, lively sound Soft-centred but likeable player in the classic NAD mould Not the most compelling model in the resurrected Nakamich line-up Modestly equipped, gives good pictures, but is musically unengaging Powerful equipment, and unthredid digital output notwithstanding, sound quality is modest at best Clever DVD with CD-RVC D-RW compatibility and surprisingly keen sound Lean, clean and lively sound quality. CD-R and 24/96 compatible, too Superbly equipped, and more than respectable sound quality DVD-V player has stong sound quality and good, though slightly washed out, pictures Superb DVD player with below average picture, and lacklustre sound quality Lacklustre sound quality is a disapointment, but the price is appealing for a 200-disc DVD player Powerful endowed player offers articulate and believable sound First DVD machine to play SACD has a 'Lexus' sound syle that never really gets its hands dirty Reasonable picture, but sonically bings new meaning to the term rough and ready. Operationally quirky but an excellent DVD player that does a decent if not spectacular job with CD Bloway, and occasionally satingent sounding, but otherwis s	ELEC DIG OUTPUT				BAL ANALOGUE OUT			

### DTCTTA DECODDEDC

#### **SPECIFICATIONS**

**SPECIFICATIONS** 

S.Smn

	DIG		IAL RELURDERS		РО	PTICAL IN/O	ELEC IN/O	ISSUE N
	MINIDISC	CS S		FORMAT	ORTABLE			
STATUS	PRODUCT	£		_				
	JVC XM-448	220	An hidden keyboard is a great idea, but musically it sounds rather cool and strident	MD		•	•	205
	Kenwood DMF-5020	250	it may be high-tech but nothing conceals the caricatured sound	MD		•	•	205
R	Kenwood DMF-9020	500	One of the best MD decks yet for sound quality, and the first to make titling a practical proposition	MD		•	•	191
	Marantz CM635	500	CD player and MD recorder in one box: a practical idea but sound and features don't really match the asking price	MD		•	•	191
	Onkyo MD-121	450	Midi-sized deck that sounds slightly coloured at times, though immediate and lively	MD		•		177
R	Pioneer MJ-D508	200	Well equipped but musically sleep inducing player that deserves its recommendation due to price	MD		•	•	205
R	Pioneer MJ-D707	250	A handy set of features for the price, though sound is not outstanding	MD		•	•	191
	Sharp MDR3H	300	Nifty machine combining a 3-disc CD changer with a MD recorder. Sound on both is rather below par, though	MD		•	•	184
R	Sony MDS-JA555ES	650	Powerful demonstration of Sony's proficiency, it delivers the best MD can offer	MD		•	•	205
	Teac MD-8	600	Womanlike choice, but sound-wise it is middle ranking, despite the price	MD		•	•	205
	Yamaha MDX-793	300	Nice machine to use and has some useful features, but sound quality a little wanting	MD		•	•	191

#### **CD RECORDERS**

ATUS	PRODUCT	£	COMMENTS			
	JVC XL-R5000	450	Flexible, rattly build, and attractive sound, but it's a little expensive compared to other rivals	CD-R(W)	•	205
	LG ADR-620	350	A powerfully equipped machine with useful multi-room capabilities, but sound quality is rough and ready	CD-R(W)	•	• 205
	Marantz DR700	600	Dearer than Philips and Traxdata equivalents, with apparently only a smarter front panel to show for it	CD-R	•	• 191
R	Marantz DR-17	1,500	Highly recommended, but with a jitter problem that, resolved, would improve sound quality	CD-R(W)	•	205
88	Philips CDR951	380	An improvement on previous models, it delivers the musical goods in some style	CD-R(W)	•	205
R	Pioneer PDR-509	300	Straightforward design and excellent recording properties that are slightly dulled by the replay chain	CD-R(W)	•	205
R	Pioneer PDR-W739	400	Flexible multi-disc that has everything including respectable sound and pricing	CD-R(W)	•	• 205
1.1	TEAC RW-800	350	Capable recording tool, but a little rough and ready as a player	CD-R(W)	•	• 205
R	Traxdata Traxaudio 900	399	Identical to Philips and Marantz models: it makes bit-perfect copies of CDs and has perfectly acceptable replay	CD-R	•	• 191

## HEADPHONES



### ESEA for a lifetime of musical enjoyment

SR1 Integrated amplifier The perfect combination The grace of triode values The power and control of solid state 80 watts dynamic Class-A Radiowave remote control

for more information on the range of Unison Research products please contact:



23 Richings Way, Iver, Bucks SL0 9DA England Tel: 01753 652669 / 07000 853443 Fax: 01753 654531 www.ukd.co.uk e-mail: nick@ukd.co.uk

	HEADPHO	NES	(CONTINUED)	ELECTROSTATIC	SUPRA-AURAL	CIRCUMAURAL	OPEN BACK	CLOSED BACK	MASS (g)	IMPEDANCE (Ω)	3.5mm JACK ADAPTOR	ISSUE NUMBER
US	PRODUCT	£	COMMENTS				i i	(		P	<u> </u>	
	Grado SR-40	45	Cheap and nasty appearance largely redeemed by cheerful, up-beat sound. Very comfortable		•		•		120	32	•	172
BB	Grado SR-60	79	For sheer musical enjoyment these are hard to beat. Retro styling may not be to everyone's taste		•		•		200	32	•	194
	Grado SR-80	100	Open and dynamic with pedantically open mid-band. Crude physical design, rough frequency extremes		•		•		60	8	•	157
R	Grado SR-125	150	What these 'phones lack in style they make up for ten-fold in musical quality		•		•	1	200	32	_	186
R	Grado SR-225	200	Warm, darkly-coloured tonally and ultimately lacking in clarity, but true to the spirit of the music		•		•		200	32		163
	Grado SR-325	300	Elegant sound across the frequency spectrum; let down by old fashioned ear-piece design		•	•	•		200	32	•	205
BB	Jecklin Float Model 1	79	While very unusual in appearance, the Floats give remarkable sound quality and openness			•	•		400	200		55
	JVC HA-W60	49	Remarkable lack of interference and hiss ameliorates adequate sound of this cordless design	AL SOL	•			•	165	VR	•	172
R	JVC HA-W200RF	75	Distinct lack of hiss from these FM cordless 'phones ensures that detail and depth are easily heard			•		•	280	20,000	•	186
R	JVC HA-DX3	200	Great headphone with a rich bass, careful mid-range and high comfort factor			•		•	340	90	•	205
	Koss TD/80	50	Oodles of bass but with a recessed midband; tiresome on the head with prolonged wearing			•		•	250	60	•	194
	Koss R/100	100	Rather cheap looking 'phones that supply good detail but are severely lacking in midrange excitement			•		•	215	60	•	186
	Precide Ergo Model 2	140	Still has much of the spaciousness of the Float from which it is derived, but coarse mid/top				•		380	100		163
	Philips HP910	80	Ergonomically good but suffers from a muffled mid-range and over excited bass			•	•		247	32	•	205
	Sennheiser IS 380	55	As close as you'll get to real hi-fi with infra-red phones at this price. Inevitable hiss spoils the illusion		•			•	192	I/R	•	172
R	Sennheiser HD 570 Symph	90	Comfortable, light-weight 'phones with a detailed and open sound but lacks bass depth on weightier music			•	•		210	64	•	194
R	Sennheiser HD 545	125	Fine all-rounder that takes all styles of music in its stride. Ear-clamping headband			•	•		255	150	•	172
BB	Sennheiser HD 565 Ovation	150	Wide bandwidth design which is refined, expressive and extremely comfortable			•	•		255	150	•	157
	Sennheiser HD590	160	Assured and confident player with very low colouration and great comfort			•	•		270	120	•	205
	Sennheiser HE 60/HEV70/UK	998	Very nearly a superb electrostatic, with a pure midband, but top end is sibilant and edgy	•		•	•		260	N/A		163
	Sony MDR-V700DJ	100	Great looking fold-away 'phones with exceptional build quality. Kickin' bass		•			•	300	24	•	194
	Sony MDR-CD 2000	200	Large pads make for sweaty listening. Pure mid-tones, but weightless bass			•	•		300	32	•	205
88	Technics RP-F800	50	Comfortable budget model that sounds sublime with great dynamics		•			•	160	40	•	205
	Technics RP-DJ1200	130	Functional design with head-pulping bass and muggy tonal balance. Good job they're sweat-proof	100.00	•			•	230	32	•	172
R	Stax System II	400	Luxury option at its price, but the sound delivery is five star quality all the way	•		•			295	50	•	205
88	Stax Lambda Nova Basic	395	Refined, articulate, yet with real presence – and a notable bargain by electrostatic standards	•		•			347	N/A		163
_	Vivanco SR322	30	Weak design and uncomfortable, but redeems itself with substantial sound quali y		•				248	32	•	205
	Vivanco Cyberwave FMH3000	40	The only cordless 'phone to offer genuine walkabout freedom, but sounds like a cheap FM tuner		•			•	210	FM	•	172
	Vivanco IR5800	50	Consistently musical infra-red design. Doesn't reach for sonic heights so hiss can be forgiven			1	1/2		226	I/R	•	172
R	Vivanco SR650	50	Unusually comfortable 'phone with excellent detail resolution but aggressive		•		•		175		•	157
BB	Vivanco SR750	60	Cossetting physical design, attractive sound, though suffers overhang and lacks ultimate dynamics		•		•		188			157
R	Vivanco SR 950	80	Cuddly feel and sound make these an enjoyable pair of 'phones						252	32		194
_	Vivanco FM7980	80	A fair amount of whine and crackle detracts from 'phones which are otherwise very listenable		•			•	280	9,000	•	186
	Vivanco FM8180	99	Well thought-out features and a better than average sound are, at times, marred by intrusive hiss					•		9.000		186

## LOUDSPEAKERS

#### **STEREO SPEAKERS**

	LOU STEREO SI		SPEAKERS	SIZE WxHxD (cm)	FLOORSTANDER	SENSITIVITY (db/W)	IMPEDANCE $(\Omega)$	BASS FROM (HZ)	FREE SPACE	CLOSE TO WALL	ISSUE NUMBER
				<u> </u>	5	3	12	Ñ	n I	F	<b>1</b> 🛱
-	PRODUCT		COMMENTS				<u> </u>				
R	Acoustic Energy Aegis One	150	At a new low price, this has a very natural and transparent midband, erring a little on the dull side	19,36.5,24		87	6	40	•		187
R	Acoustic Energy Aegis Two	250	Floorstanding variation on the Aegis One theme, with a neutral, even and detailed if slightly shiny sound	19,87,24	•	89	8	40			20
_	Acoustic Energy AE120SE	500	Attractive styling and good sonic headroom, but a heavy, uneven overall balance, and a difficult amp load	18,97,28	•	89.5	10	25	•		199
R	Acoustic Energy AE520	1,000	Could be more neutral, but high-class build is reflected in a high-class sound. Very elegant too	21,98,30	•	91	3	25	•		190
	ALR Entry 2	250	Metal cone stand-mount has a generous performance envelope, but sound quality was controversial	20,33,29		90	4	22	•		201
	ALR Jordan Note 7	2,500	A beguiling Anglo-German collaboration delivers metal-cone precision with fine dynamic range	25,107,32	•	92	4	25	•		196
	AR 15	275	Neat and chunky wall/stand-mount certainly knows how to rock and roll, less convincing on the delicate stuff	22,37,22		90	4	45	•		20
	ATC SCM10	1,000	A compact speaker with good transparency but lightweight bass	18,38,25.5	-	80	8	65		•	192
_	ATC SCM70ASL	10,500	Stylish aluminium casework disguises dynamic grip, tracking and precision that equals the very best	127,40,46	•	A	A	20	•		205
R	Audio Gem Emerald	540	Pretty, compact floorstander with lively if lightweight sound	18,94,21	•	87	6	40	•		16
R	Audio NoteAN-E/D	1,520	This classic large stand-mount might have throwback aesthetics, but it delivers an exceptional allround sound	36,79,28		92	4	20	•		20
	Audio Physic Tempo	1,999	Tall and unusually-styled floorstander has stunning stereo but suspect bass tuning	22,107,47	•	88	8	28	•	•	143
R	Audiovector C2	799	Elegant two-and-a-half-way has a big, full bandwidth sound, but midband seemed a little underdeveloped	19,106,27	•	90	4	20	•		190
R	Audiovector M2	1,399	High-class, smooth and slightly laid-back performer has driving bass. It's upgradable, too	20,102,30	•	89	4	22	•		180
R	AVI NuNeutron	500	A smooth and subtle though pricey sub-miniature, albeit with the inevitable limitations of the breed	14,27,23		86	4	50		•	19
	AVI Positron	899	This 'mini-floorstander' is capable of great precision and delicacy, but in a rather small-scale way	17.5,74,24.5	•	85	6	40	•		17
R	B&W 601 S2	200	A smooth and sophisticated stand-mount combines good drive with fine neutrality	20.5,36,23		89	4	30	•		20
88	B&W 602 S2	300	Large stand-mount has fine dynamic literacy and good communication skills at a very competitive price	23.5,49,29		90	5	28	•		20
R	B&W 603 S2	550	Capable of being driven seriously loud, but the cautious balance seems less happy playing at low levels	23.5,87,29	•	91	4	22	•		19
	B&W CDM-1NT	750	An uncommonly stylish and sonically self-effacing stand-mount that should be very easy to live with	22,40,29		89	7	30	•		20
	B&W CDM-7NT	1,250	A very classy floorstander, in sound as well as looks, with fine bass drive, authority and overall neutrality	22,95,29	•	90	6	20			20
R	B&W Nautilus 805	1,400	A small-sounding loudspeaker dynamically, but very stylish, clean and 'unboxy', delivering loads of detail	24,42,31		89	12	28	•		199
	B&W Nautilus 803	3,500	Classy looking three-way with impressively deep bass, wide dynamic range and a laid-back balance	29,108,42	•	89	3	20	•		21
	B&W Nautilus 804	2,500	The prettiest Nautilus has tremendous clarity and imaging but lacks the welly of bigger models	24,101.5,24.	5 •	89	8	38	•		200
EC	B&W Nautilus 802	6,000	Outstanding example of the high-tech speaker builder's art, needs real power but gives real sound	39,111,55	•	91	8	34	•		183
R	B&W Nautilus 801	8,500	The 801 is a magnificent loudspeaker in nearly every respect, but it is one that likes to play loud	52,111,69	•	91	8	34	•		186
R	Blueroom Minipod	249	The Minipod can show its competitors a thing or two about freedom from boxiness and looks fab	18,34,17		91	4	50		•	193
R	BC Acoustique Araxe	1,300	Neat compact floorstander is a very lively communicator, if a little short of deep bass grunt	21,92,30	•	94	3	40			204
R	Cabasse Farella 400	950	Exciting but very upfront-and-in-yer-face sound. High sensitivity, fine build and good dynamic drive	26,92,32	•	92	5	28		•	180
	Carlsson OA52.2	1,500	Ultra-discreet design integrates cleverly with the listening room. Impressively unboxy, but sounds a bit thin	41,54,37	•	90	8	20		•	195
R	Castle Richmond	250	Tiny real-wood miniature has a lightweight but very coherent sound, a bit in-yer-face but plenty of fun	17,33,20		90	5	50			201

**SPECIFICATIONS** 

-

œ.			ERS (CONTINUED)	SIZE WxHxD (cm)	FLOORSTANDER	SENSITIVITY (db/W)	IMPEDANCE (Ω)	BASS FROM (HZ)	FREE SPACE	CLOSE TO WALL	
<b>.</b>	IEREO SP	EAN		Cm)	×.	₹	(Ω)	Ę	Â	P P	1
PRODUC		£	COMMENTS		1			<u> </u>	<b></b> )	<u> </u>	_
Castle Inv		425	This striking looking standmount is a good all-rounder, commendably free from boxiness	22,42,25		91	4	30		•	
Castle Sev		700	Pretty little floorstander is lively and communicative, if a little coloured in the voice band	Contraction of the local division of the loc	•	88	6	28		•	
Castle Har		880	Handsome big-sounding floorstander, great value and dynamic midrange		•	88	8	28	•		
	version 100	1,975	Large semi-omni design with gorgeous Art Deco styling, sounds open but bass alignment is ill-tuned	26.5,111,45	•	91	8	20		•	
	A Compact	600	Provided the room isn't too large and your tastes not too heavy, this is a charming little number	17,24,21		90	3	45		•	
Celestion	A1	899	Rich, warm and laid-back, but a true quality sound; lovely build	24,41,35		88	6	25	•		
Celestion	A2	1,500	Full-scale, big sound from ultra-elegant floorstander. Smooth and slightly laid back presentation	24,93,39	•	89	6	22		•	
Chario Syr	ntar 100	249	Pretty with a pleasantly easygoing balance, but not the most communicative or exciting sound around	18,32,27		87	6	45	•		
Chario Hip	per 1000	300	Classy looking standmount has a sweet, easygoing sound with fine midband voicing	18,35,28		87	4	45	•		
Chario Cor	onstellation Lynx	550	Beautiful near-miniature is let down by a midband too laid back for its own good	20, 36, 26		87	3	40	•		
Chario Aca	ademy Millennium 2	2,100	Price includes stands. A showy speaker that lives up to its own hype	22,53,35		90	4	55	•		
Dali 606		400	A big bruiser at a tempting price. Sounds refined and polite, but also packs some punch	22,97,32	•	91	4	25	•		
Dali Royal	Menuet Mkll	400	Classy sub-miniature with a beautiful box and fine ingredients, but a little lacking in subtlety and excitement	16,26,18		87	3	50		•	
Dali Evide		1,300	A real heavyweight, sonically and physically, and good for movies as well as music	Contraction of the local division of the loc	•	93	2.5	20			
	Contour 1.8 Mkll	1,842	Wonderful voice-band delicacy and loads of deep bass from a very elegant and compact box	Statistics and a statistics	•	85	4	20	•		
Elac CL102		599	Chunky floorstander with classy drivers has a neutral, slightly 'shiny' character, and could have more punch	and the second se	•	88	9	23			
Elac CL 102	and a second second second second second second second second second second second second second second second			Contraction of the local distance of the loc	•			Contraction of the local division of the loc		-	
		800	It's pricey, and you can buy better performance for the money. Small speaker, good sound	12.3,20.8,28.2	-	86	4	42	•		
Eltax Liber		150	Bright, bassy, laid back and attractively evenhanded, but dynamically challenged. Big box for your dosh	20.5,38,34		86	4	25	•		
	ar Response	249	A curiously dumpy shape, but smooth, laid-back performer is easy on the ears, with fine tonal accuracy	25,35,32		85	4	40	•	-	
Eltax Chro	oma Front	300	Gorgeous shiny styling package at an ultra-competitive price, suffers from an excess of rather flabby bass		•	87	4	25	•		
Energy e:X	XL 25	400	Neat slimline design delivers a fine all round performance for the price, but could sound smoother	15,87,31	•	90	4	25	•		
Epos ES12	2	499	High quality luxury standmount has great midband and stereo imaging	20,38,25		85	8	45	•		
Epos ES25	5	1,655	Handsome floorstander with a rather uneven and bass heavy balance	24,90,35	•	88	6	22	•		
Gale 2i		140	Unspectacular sound and appearance fail to help this solid little miniature stand out from the crowd	22,40,27		88	7	40		•	
Heybrook	Prima 2	159	Great openness, speed and timing. Sounds fresh and vital, though sometimes lacks scale and weight	20,29,18		87	6	50		•	
Heybrook		180	Good value but an uneven performer, the HB1 provides plenty of fun with the volume turned well up	21,38,25		88	3	50	•		
Heybrook		200	Attractive traditional-style near-miniature with classy main driver now has fine overall balance to match	19.5,30,22		88	4	45			
Heybrook		259	A dumpy ugly duckling with a heart of gold. Deserves a better tweeter, but communicates well	The sub- second s	•	94	4	30	•		
		269			-	89	6	25	•		
Heybrook			Classically styled stand-mount has a fine balance of smoothness and dynamics, plus real wood veneer	23.5,36,27	-			Contraction of the second			
Heybrook		649	Has the bass wallop to justify its dual hi-fi/home cinema roles, but doesn't excite	and a second second second second second second second second second second second second second second second	•	89	6	45	•		
Heybrook		750	Looks slightly old-fashioned, sounds a bit coloured but its fine timing and liveliness serve music well	23,43,30	_	88	11	27	•		
Heybrook		1,800	Good-looking but pricey floorstander with novel drivers and a fine ceramic-enclosure midband	All sole and the second second second second second second second second second second second second second se	•	90	6	25		•	
Indigo Thr		500	Cute 'n' chunky standmount is an entertaining communicator. Great fun, despite some sonic weirdness	23,30.5,32		86	17	24		•	
Infinity De	elta 60	700	Striking and massive floorstander, lots of speaker for the price, but seems a victim of its own complexity	29,115,41	•	90	4	25	•		
Infinity Ka	appa 70	795	Fine material value. Sonically big, smooth and even, but lacking in coherence and dynamics	26,96,27	•	87	4	25	•		
Jamo E800	0	200	Nicely voiced, open midband but bottom end is a bit strong and amorphous	17.5,33,29		87	3	30	•		
JBL LX2		250	Invigorating, if a touch crude, this good-hearted speaker reproduces music with enthusiasm	22,40,27		87	8	40	•		
JBL Ti200		400	Very substantial standmount knows how to rock and roll, but can sound uncouth on more delicate material	21,41,30		92	5	40	•		
JBL L20		700	Pricey, heavy and a bit laid-back, but this is a fine rock n'roller which is dynamic and communicative	26,42,28		86	8	30	•		
JBL SVA15	500	700	A distinctive Pro-style bi-radial horn tweeter, with a fun sound, enlivened by a juicy bass thump	17.5.51.31		86	8	40	•		
JBL L40	200	1,000	Classic, large, three-way standmount is full of vim and vigour, with a superb sense of balance	30.65.31		88	4	23	•		
					-	94	4	25	-	•	
JBL 4312 I		1,000	Crude but startlingly effective dynamics. The original party animal knows just how to rock'n'roll	36,60,30	-			Long Cont	-		
JBL SVA 2	2100	1,250	Monstrously large and brutish styling, goes very loud as well as deep. Fine focus but some boxiness		•	91	8	<20	•		
JBL L90		1,500	A classic monitor which communicates with gusto and enthusiasm, though it can sound a bit crude	24,94,35	•	91	6	23	•		
JBL LX70		550	Bassmeister supreme, shame the rest doesn't match up. Fine sensitivity but an itchy, scratchy treble	26.5,94,30	•	91	4	33	•		
JBL Xti40		500	Real wood and a cute shape, with a punchy driving bass, and a restrained overall balance	23,82,31	•	88	6	40	٠		
JMLab Col	balt 815	999	Hefty real-wood floorstander has a slight 'boom'n'tizz' character but delivers big speaker grip and dynamics	22,100,31	•	90.5	9.5	22	•		
JMLab Ele	ectra 905	1,200	Compact but massively engineered, delivers a very classy sound with exceptional dynamic range	23.5,47,28		90	4	40	•		
JMLab Ele		1,795	Fine headroom and bass, and classy engineering too, but also a tricky amp load which lacks delicacy		•	92	4	20	•		
	ezzo Utopia	7,250	Looks good and sounds even better. A genuinely big speaker with fantastic coherence	Contraction of the second second	•	92	4	30	•		
JPW ML51		130	Lots of good quality speaker for the price, but not an ideal match for cheap budget components	20,34,22		88	5	50	•		
JPW ML91		330	Loads of speaker for the money, plenty of headroom and loudness capability, but sounds dull	Contraction of the Contraction o	•	91	4	43	•		
				PERCENT OF THE OWNER OF THE OWNER OF THE OWNER OF THE OWNER OF THE OWNER OF THE OWNER OF THE OWNER OF THE OWNER	-	91	6	25	•		
JPW ML10		400	A seriously substantial speaker for the price, and an obvious choice for those who like their music loud		•			Construction of	•		
KEF Cresta		149	A good looking/value package but sonically disappointing, and no match for the Q15	20.5,37,24		91	4	40		•	
KEF Q15.2	2	200	A vigorous and entertaining compact speaker that remains particularly well aligned for close-to-wall siting	20.5,31,27		89	3	30		•	
KEF Q-55.	.2	500	Beefy vinyl-finished UniQ delivers loads of bass, but might have more control	and the second s	•	90	4	25	•	R.S.	
KEF RDM	hree	1,500	Definitely a speaker aimed at long-term satisfaction rather than immediate impressiveness. Nice	24,100,27	•	90	4	40	•		
KEF Refer	rence Model 2	1,599	Classy, large floorstander that has massive headroom and clean mid-to-treble, but limited deep bass	23,103,34	•	89	4	30	•		
and the second s	Audio Aria II	379	Confident and dynamic sound, if a little crude and shut in	21,42,24		89	8	20	•		
	Audio Torino	999	Good value, lively contender with distinctive styling. Goes loud and deep but could be smoother	California & Southern and	•	90	4	20	•		
Linn Kan		295	Great bass discrimination from size, ensuring a very informative, if slightly shut-in experience	19,31,19	-	86	4	45		•	
		750	Stear bass discrimination non size, ensuing a very informative, it singing structure perience	Contraction of the local division of the loc	•	87	4	22			
	dh Passive			the second second second second second second second second second second second second second second second se				ALC: NO.	-	-	
	ice Auditorium	1,500	Pretty, compact floorstander has wonderful coherence, high sensitivity and fine dynamic integrity	and the second s	•	91	4	25	•		
	ice Avatar OBX-R	4,000	Discreet but extremely fine design with external crossover and an affinity with valves	a land the second second	•	89	8	45	•	-	
Magnat Vi	/intage 320	350	Loads of speaker for your money, but the sound is thick, heavy and lacking in presence and authority	25,102,30	•	90	4	20	•		
Magnat Ve	lector 77	450	Tall, dark and a lot of speaker for the money. Beautiful balance, but lacking in subtlety and transparency	22,115,29	•	89	5	30	•		
Magnat V	/intage 720	1,200	Slightly crude in some respects but lots of heart, fine scale, decent dynamic coherence and integrity	29,113,32	•	88	4	20	•		
	ogan Prodigy	8,967	Combines the finesse of an electrostatic with the grunt of cleverly engineered cone bass to good effect	42,179,71	•	91	4	28	•		
Mirage FR		550	Neat slim floorstander has a heavy, laid back balance, probably better suited to movie than music reproduction		•	90	4	25			
Mirage Of		3,000	A meaty model that goes loud without distortion, digs deep with aplomb and creates plenty of depth of image	Contraction of the International Contraction of the	•	90	6	22	•		
	contraction of the second second second second second second second second second second second second second s	approximation of the second second second second second second second second second second second second second		and the second s			4	20			
Mirage Of	in the second second second second second second second second second second second second second second second	2,000	Tall black omni-bi-pole has plenty of bounce and dynamic vigour, but is more room sensitive than most		•	88		- and the second	-		
Mission 7		130	A lot of speaker for the money. Good bass weight and extension and goes loud with ease	18,34,26		87	8	40		•	
	716	200	Beautifully styled miniature has a delightfully voiced midband, and real wood finish too	17,31,22		86 .	6	45		•	
Mission 7 Mission 7	the second second second second second second second second second second second second second second second s	299	Gorgeous miniature has a fine midband and clean, bright treble, slightly odd bottom end	16.5,28,27		86	6	40			

		EAK		SIZE WxHxD (cm	FLOORSTANDER	SENSITIVITY (db/W)	IMPEDANCE (Ω)	BASS FROM (HZ)	FREE SPACE	CLOSE TO WALL	
	STEREU SP	EAK	ERS (CONTINUED)	(in	Ŗ	3	<u></u> 2	Ē.	Ê	É	
S	PRODUCT	£	COMMENTS		U	THE OWNER		1			
	Mission 774	500	Gorgeous floorstander is an entertaining communicator, despite some balance oddities (bright treble)	18,95,31	•	90	4	40	•		
	Mission 782	699	Ultra-compact floorstander has a glorious midband and slightly odd bass. Good communication skills	16.5,82,28	•	86	9.5	25		•	
	Mission 775e	800	Lots of speaker for the money, and musically involving too, if a little short of serious weight and authority	23,115,30	•	93	3	25		•	
	Monitor Audio Bronze 2	180	A real corker, which combines solid material value for money with a fine all round sonic performance	18.5,35,27		89	3	30		•	
	Monitor Audio Silver 5i	450	Great looking, sharply priced real wood floorstander, but bottom end lacks drive and tension	20,81,21	•	87	5	30	•		
	Mordaunt-Short MS902	200	Gorgeous metal-finished budget stand-mount has a shiny sound to match its looks	18,31,25		87	4	45	•		
	Musical Tech Kestrel Evolution	315	Cutely styled, cleverly compact and a smooth, subtle and coherent performer, best suited to smaller rooms	20,85,19	•	86	4	40	•		
]	Musical Technology Harrier	400	Very pretty package, good measured performance and even sound. Sensitivity is low, and dynamics limp	25,80,23	•	86	8	25	•		
	Musical Technology PM15	450	A subtle, understated but very involving example of the 'classic' luxury-finish compact standmount	20,41,27		88	5	38			
	Musical Technology Falcon	680	Big speaker has a big but also surprisingly smooth and civilised sound. Fine material value too	33,117,30	•	89	4	22	•		
	Musical Technology Condor	1,000	Lots of clever ideas in a floorstander, which places transparency and smoothness ahead of dynamic drama	25,91,23	•	85	4	28	•		
i	Naim Intro	660	Great dynamic range and info retrieval, but thin, lacks warmth	24,89,27	•	89	6	30	•		
1	Naim Credo	1,060	Involving sound, but rather forward and cold. Good clarity, but some coloration and a lack of richness	24,89,30	•	88	8	28	•		
1	Naim SBL Passive	1,970	Lively and punchy – smoother but more upfront than before	27,89,27	•	88	6	25	1.00		
i	Naim NBL	6,648	Elegant, large floorstander is exceptionally informative with an awesome dynamic range and dry, forward balance	29,116,47	•	89	4	20	•		
1	Neat Critique 2	445	Contemporary standmount has a clean, crisp sound with lovely natural midband voicing	22,32,24		86	6	50		•	
i	Neat Mystique Mk2	575	This elegant package delivers a fine overall sound quality; some might find the top end too insistent	20,86,18	•	85	6	23	•		
1	Neat Elite	1,195	A highly entertaining all-rounder, has a planar tweeter that sounds sweet, if not particularly smooth	20,88,18	•	88.5	-	25	•	12.3	
1	NHT Super One	250	A fine compromise between size and performance, sensitivity and hence loudness capability is modest	18.5,29.5,23		85	8	30	•		
i	NHT 1.5	400	This compact standmount sounds much bigger than it has any right to. Good timing and communication skills	18,42,26		85	6	40	•		
	NHT Super Two	550	Black and shiny compact three-way floorstander has marvellously even balance and good coherence	18,5,100,26		87	8.5	-			ļ
-	Opera Prima	495	Good-looking hardwood enclosure, plus fine mid and treble, but less satisfactory bass	19,34,31		90	4	40	•		ļ
	Origin Live Conqueror	1,650	Chunky floorstanding three-way has lovely cabinetwork and lively sound, but limited deep bass	24,94,27	•	90 88	8	30			
	Orelle Swing	1,200		18,101,28	•	87	8	45		1	
	PMC TB1S	430	A superb example of what an essentially small loudspeaker can do, with bags of brio and enthusiasm		-	87	6	45			
	PMC IB1S PMC TB1	430	Pro-audio version of TB1, cheaper because of black paint finish	20,41,30		87	8	40			
			A classy, laid-back performer that likes going loud and loves the bass guitar	20,40,31	-	-		and the second division of the			
	PMC LB1	999	Still fully competitive eight years after our original review, this genuine compact monitor is now a modern classic	17.5,53,26		87	6.5	40	•		
	PMC FB1	1,275	Handsome floorstander has the lively coherence of a simple two-way alongside impressive bass weight and extension	20,105,31	•	88	6	20	•		
	Polk LS50	800	No enthusiast tweaks here, but powerful and beautiful balance	27,83,29	•	89	8	25	•		
	Polk RT16	799	Bass rich, lively and powerful, but suspect top end; big and not very pretty	22,105,39	•	91	4	22	•		
	ProAc Response 2.5	2,700	For aspirant high-enders looking for seriously good boxes, this speaker should be first port of call	22,107,25	•	86	8	30	•		
	ProAc Tablette 2000 Sig.	899	Beautifully veneered compact stand-mount is classically balanced, if a little on the bright side of neutral	19,36,26		87	6	30	•		
	ProAc Studio 125	1,000	Pretty if pricey compact floorstander with a beautifully natural and neutral midband, and some bass thump	20,94,28	•	87	8	28	•		
	QLN Signature	1,000	Attractive pyramidal standmount with heavy, laid-back balance but remarkably unboxy sound	27,37,36	•	83	4	25	•		
	Rega Jura	450	Beefy sounding, chunky floorstander sounds very 'direct coupled' to the music, if a touch 'boom'n'tizz'	22.5,92.5,2	100	90	5	25	•		
]	Rega ELA Mk II	498	Pretty and smooth, the latest incarnation has a superb midband and excellent communicative skills	30,80,20	•	87	8	40	•		
	Rega XEL	1,040	Looks and sounds great: balance bright but even, with delightful coherence and timing	20,82,30	•	89	6	40	•		
	Rehdeko RK 115a	1,700	Single-driver system has limited bandwidth and obvious coloration, but wondrous dynamic coherence	34,42,27		95	8	55		•	
	RMS Revelation Series 1	1,299	Innovative metal-box compact with integral port/stand - clean with good timing but very laid-back balance	20,99,24	٠	81	8	22	•		
	Roksan ROKone	595	Large standmount is musically very communicative, if a little coloured	21,45,33		89	6	30			
	Roksan Ojan 3 Black	795	Squat, stylish and black, great bass extension and somewhat uneven balance	28,76,46	•	88	8	20	•		
	Roksan OJ3X Black	995	Innovative low-line, two-way floorstander with decoupled tweeter; great bass and fine dynamic range	28,79,46	•	84	8	20	•		
	Royd Minstrel	275	Not much welly or loudness, but fine coherence and timing; a bit bright	18,69,12	2	86	8	30	•		
3	Royd Doublet	485	Great value compact floorstander: lively and very informative, if a little uneven	18,93,19	•	90	4	28	•		
i	Royd The Sorcerer	595	Extremely musical and communicative speaker that's fun to listen to. Aesthetics could be better, though	20,31,18		86	8	35	•		
i	Ruark Epilogue	269	Beautifully finished miniature with a lively balance and plenty of charm; best suited to smaller rooms	17,29,23		87	8	47			
-	Ruark Sceptre	599	'Traditional' cabinetwork with classy veneer and shiny gilt fixings, hampered by rather wayward sound balance	21,38,31		87	8	40	•		
	Ruark Prologue One R	949	Strikingly contemporary compact floorstander is well voiced but a little lean in overall balance	17.5,93,28		Contractor		25			
	Ruark Equinox	1,849	The primary strength of this speaker is its ability to vanish behind the music	25,88,34		88		45			
	Ruark Excalibur	7,000	A big, handsome speaker with a big, laid-back but open sound, rocking bass and loads of headroom	30,125,53		1 10000	AL 17	30		Contraction of the local division of the loc	
	Sequence 400	329	Clever hang-on-wall panel is well voiced, though bass isn't too great	25,100,7		86		THE BROOM		•	
			Clever hang-on-wall panel is well voiced, though bass isn't too great Beautifully built audiophile compact: neutral if bright, tough work for amps			80	-	Concernence of the local division of the loc			
	Silverado Raider	695		20,40,25					-		ļ
	Snell K.5	795	Classy AV-ready stand mount is very solidly engineered. Sound is neutral but lacks excitement	22,46,30	-	87		Contraction of the	•	Colorester	
	Snell XA75ps	4,500	Active bass floorstander with marvellous mid coherence, slightly suspect bass integration.	28,117,50	1000	-	6	the state of	•		
	Soliloquy SM 2A3	1,095	Fine match in balance, coherence, transparency and speed. Intended for use with Cary CAD 2A3SE	35.5, 19, 30		91	al and a second		•		
	Sonus Faber Concertino	599	A beautifully neutral loudspeaker in a beautiful Italian suit of clothes. Classy, if quite pricey	21,32,29		87	5		•	-	
	South Coast Speakers Lancelot	895	Pretty compact standmount has nice ribbon tweeter but sounds a bit soft and lacks dynamic vigour	19,36,26		84	100	Contract of the	•		
1	Spendor 2030	599	Discreet slimline floorstander with delicately coherent, laid-back sound	18,89,27	•	-	and the state of the		•	and the owner of	
C	TAG McLaren F1	15,000	Oddball aesthetics with accurate, unflappable, controlled and consistent sonic neutrality	40,127,48	•	- Recal		25	•		
3	Tannoy mX2	150	Surprisingly refined considering its very modest price: very communicative with outstanding midband delicacy	18.5,33,25		89			•		
	Tannoy Revolution 1	200	Pretty little mini-monitor is smooth, well mannered and polite to a fault, lacks dynamic expression	17,30,22		86	4	30	•		
3	Tannoy mX3	300	A great all-round compromise at a very modest price, combining good looks with fine midband voicing	18.5,87,26	•	90	5	40			
	Tannoy mX4	350	Lacks dynamic grip and authority, but delivers great bass extension and a classy overall balance at a sharp price	18.5,96,26	•	88	4	20	•		
3	Tannoy Revolution R2	350	Bargain price real wood floorstander is beautifully voiced and very even-handed, if a tad laid back	17,94,24	•	-	1000	and the second	•		
1	Tannoy Revolution R3	550	Handsome real-wood floorstander does a decent job, but lacks the evenness of its smaller R2 brother	18.5,103,28		-	100		•		
2	Tannoy D300	999	Gorgeous-looking compact floorstander. And a fine all-round performer, too	24,85,23	•		100			-	
	Tannoy ST-100	1,200	This supertweeter adds a subtle and delicate effect while also broadening the soundstage at a price	15,10.5,6		1 100000	1000				
	Tannoy D500	1,999	Plenty of muscle and stereo, but short of poise and delicacy. Hard work for amps	31,93,34		Carlotte		-			
	Technics SB-M20	200	Well-balanced with natural perspectives and fine midband coherence, but bass is a bit boxy and uneven	20,32,23		70	100				
	Technics SB-M20			10 10 10 10 10 10 10 10 10 10 10 10 10 1			-				
		450	This model offers a clean, open sound, offset by midbass, heavy balance and low sensitivity	25,78,37	H	-		and the second de		hielde	
_	Triangle Cometes	359	Communicative standmount has great midband dynamics, but the very bright top end might be intrusive	22,40,29		91		the second second second second second second second second second second second second second second second se		•	1
8	Triangle Zephyr II	599	Loads of fun. Dramatic dynamics and righteous timing will give any hi-fi system a wake-up call	22,94,29	•	-	and a state of the		•		
2	Totem Model One	1,195	Utterly delightful but exasperatingly expensive luxury miniature sets the benchmark for its size	17,31,23		87	4	28	•	1	

	STEREO SF	PEAK	ERS (CONTINUED)	SIZE WxHxD (cm)	FLOORSTANDER	SENSITIVITY (db/W)	IMPEDANCE $(\Omega)$	BASS FROM (HZ)	FREE SPACE	CLOSE TO WALL	ISSUE NUMBER
STATUS	PRODUCT	£	COMMENTS								
R	Vienna Acoustics Mozart	1,500	Gorgeous slimline floorstander sounds very laid-back but very charming, and musically literate	17,97,30	•	88	7.5	25	•		199
EC	Wilson benesch Bishop	20,000	Deep and even bass sets new standards for cleanliness and clarity; lovely open midband too	23,161,561	•	89	4	S20	•		189
	Wharfedale Diamond 7.2	140	A good-hearted, lively and up-front performer that's a little lacking in subtle y and smoothness	19,29.5,23		88	4	45	•		169
	Widale Diamond 7.2 Anniversary	200	Lively and exuberant, but a tad untidy with it; can sound a bit cold and hard	19,29,5,24		88	4	40	•		187
	Wharfedale Valdus 400	200	Very loud with a minimum of amplification, but the sound is thick and uneven, with a heavy upper bass	25,80,26	•	91	8	30	•		148
88	Wharfedale Valdus 500	300	These rock boxes can move plenty of air, albeit not as subtly as alternatives	25,108,26.5	•	91	4	40	•		155
R	Zingali Overture 25	1,975	Gorgeous, pricey, imposing standmount has a horn tweeter of great delicacy. Impressively weighty	30,57,38		90	8	25	•		195

#### **SUBWOOFERS**

STATUS	PRODUCT	£	COMMENTS							
	Acoustic Energy AE1085	299	Lots of loud subwoofer for your money, though ultimately more film than music oriented	50,42,43			20		•	179
R	B&W ASW1000	499	Bulky heavyweight is a high quality item, able to generate more bass output than music is likely to need	54,47,50	•	А	A20	•		198
	Jamo D8SUB	950	Pretty but pricey, the D8SUB packs plenty of punch (for movie fans), but doesn't delve deep enough for music replay	45.5,41,45.5		A	30			210
R	JPW SW60	349	A real heavyweight, sounds clean and transparent, if perhaps a little understated. Usefully flexible	55,47,39			20		•	179
	KEF Model 30B	499	(Active) Commendably discreet with good sense of timing but limited extension	38.5,37,43	•	A	45			154
	M&K MX70	795	Cutely compact and entertaining too, but lacks the ultimate extension to justify its high price	37,32,30	•	A	25			210
	Mission 7AS2	399	Ugly if very effective at supplying very low bass, but filter could do with more flexibility higher up	56,30,31	•		<20	•		198
R	Paradigm PDR-10	150	Not much grip, drive or authority, but it doesn't get in the way and it is very cheap	34.5,36,42	•	А	25			210
	Polk PSW430	400	A lot of subwoofer for your money, but lacks deep grunt and is more movie than music oriented	38.5,45,46	•	A	25	1		210
R	REL Q50	375	This good looking if bulky sub does the business with impressive flexibility and sonic self-effacement	42,53,31			20			210
R	Ruark Log-Rhythm	775	Adds weight and scale with commendable discretion, making a positive contribution to the whole musical exposition	43,43,43	•	А	<20		77	210
	Soliloguy S10	1,050	(Active) Pretty subwoofer, cosmetically matching SM 2A3 speakers, pricey and mid-bass a bit strong	51,30.5,46	•	A	25	•		19

#### ITER LOUDCDEA

#### **SPECIFICATIONS**

			SPEAKERS	SIZE WxHxD (cm)	FLOORSTANDER	SENSITIVITY (db/W)	IMPEDANCE (Ω)	BASS FROM (HZ)	FREE SPACE	CLOSE TO WALL	ISSUE NUMBER
	MULTI-CHA	NN	EL SURROUND PACKAGES	(cm)	NDER	db/w)	ΞΕ (Ω)	A (HZ)	SPACE	WALL	MBER
ATUS	PRODUCT	£	COMMENTS								
R	Acoustic Energy Aegis Centre	140	Good value centre-front speaker but a tad shut in and with a slightly obvious top end (price per speaker)	46, 17, 20		89	5	50	•		198
BB	Acoustic Energy Aegis Three	350	High value floorstander has deep and even bass and a smooth neutrality thereafter	19,90,25	•	90	5	22	•		198
R	B&W LCR6	349	Large, gutsy standmount intended for all-round AV use delivers fine performance as a stereo pair too	20.5,55,32		90	5	20	•		198
	B&W Nautilus package	6,500	This classy, laid-back package is arguably too good for current programming. Very bulky centre speaker	var	var	n/a	3	20		•	210
	Castle Keep	250	Substantial centre-front speaker based on Harlech drivers but with rather brighter voicing	48,17,29		88	8	45	•		198
	Definitive Technology BP2X	595	Pricey but effective bi-polar surround speaker, with unusually high sensitivity	23,37,15		94	4	120		•	198
	Definitive Technology BP2004	1,700	Pricey bi-polar floorstander has a fine midband, let down by its built-in powered subwoofer	19,104,31	•	91	5	28	•		198
	Dynaudio LR/C 120	439	Slim centre and front standmount, has an evenhanded but rather laid back balance but lacks drive	16.5,57,31		89	5	25	•		198
	Jamo Concert package	2,500	Lovely main speakers sonically overshadow the centre, while surrounds are a bit obvious too	var	var	n/a	5	30		•	210
88	JBL Xti-series package	1,100	Hexagonal boxes all round, this package has decent authority and all round tension	var	var	n/a	5	40		•	210
	KEF Q-series package	880	Cleverly designed, vinyl-finished UniQ package packs a goodly thump but centre and surrounds stand out	var	var	n/a	3	25		•	210
	Mirage OM-series package	2,000	Big black and bouncy package with omni fronts has plenty of vigour but some coloration var	var	var	n/a	4	20		•	210
R	Mission 77DS	199	Neat lush-mount surround speaker has no bass but a smooth midband and nicely restrained treble	34,26,12		92	4	120		•	198
	Mission Cinema 8 package	1,400	Beautifully styled and cleverly designed package, but could have more grunt and drive for the price	var	var	n/a	4	30		•	210
	Polk RTE 1000p	1,300	Tall elegant tower with built-in powered bass 'subwoofer' that needs using with discretion. Bright but engaging	20,110,35	•	91	4	25	•		198
	Monitor Audio Silver series	1,000	Great looking conventionally styled package lacks something in dynamic drive and tension	var	var	n/a	4	30		•	210
R	Mordaunt-Short Declaration 500	1,600	Good value vinyl THX Select package with Power Towers. Good authority but must be 5,1-connec ed var	var	n/a	n/a	3	25		•	210
R	PMC FB1/TB2 package	2,200	Classy if bulky and pricey package has good transparency, coherence and weight	var	var	n/a	6	20		•	210
R	Rega Jura/Ara/Senta	920	Classy real wood package does a good all round job, but sounds bright and might have more surround weight	var	var	n/a	4	25		•	210
88	Tannoy mXAV4 package	500	Lacks grunt, grip and authority, but smooth and refined with seamless surround coherence	var	var	n/a	4	20		•	210
88	Tannoy Saturn S6LCR	400	A punchy compact standmount based on a serious cast-frame, pro-style dual-concentric driver	21,38,29		89	6	25			198
88	Tannoy Saturn S6	500	Fine value vinyl floorstander offers plenty of genuine grunt and real dynamic tension	21,89,29	•	91	4	20	•		198

#### **CENTRE CHANNEL SPEAKERS**

TUS	PRODUCT	£	COMMENTS		1		i			
R	Acoustic Energy Aegis Centre	140	Good value centre-front speaker but a tad shut in and with a slightly obvious top end (price per speaker)	46,17,20	89	5	50	•		198
	B&W Nautilus HTM1	1,500	Very bulky for a centre speaker, though very capable too - a little less laid back than its siblings	76,37,30	89	4	30		•	210
R	Definitive Technology CLR2002	595	Pricey, but undoubtedly one of the better centre-front speakers around, with fine timing and open voicing	55.5,17.5,31	90	4	40	•		198
	Jamo Concert Center	550	A decent balance match but lacks the class and grip of the Concert 8s, and is bulky and pricey too	55,22,30	87	5	100		•	210
88	JBL Xti10C	200	An elegant, cleverly designed centre and a good match for the 40s. Better value than most too	51,19.5,27	88	5	50		•	210
	KEF Q95C	200	This artfully designed UniQ centre looks much better than most on top of the TV set	40,17.17	89	3	120		•	210
	Mirage OM-C2	600	Large but discreet omni-bi-pole matches OM-10-1 well but lacks tight focus, and seems expensive	64,18.5,31	88	4	50		•	210
R	Mission 77C	199	A good centre-front match for 77-series, the triple tweeter might be a curiosity, but voicing is very good	42,17,21	91	4	100		•	198
	Mission 78C	350	Makes a good visual and sonic match for the 782, but quite pricey by comparison, given the ingredients	45,17,19	86	3	100		•	210
	Monitor Audio Silver Centre 10i	300	Neat and good looking partner to the Silver 5is, but a little more forward, and quite expensive too	50,17,21	87	4	100		•	210
R	Mordaunt-Short MS 504	200	Smart yet discreet and a good match for the 502. Sounds clean and expressive, and is well priced	50,19,20	88	3	120		•	210
R	PMC TB2M/C	325	This bulky centre speaker is quite pricey, but it combines good transparency with some authority	40,20,31	87	6	50		•	210
	Polk CS 1000p	999	Monstrously large and heavy centre-front speaker, presumably for those with monstrous intentions	87,22,35	92	4	25	•		198
R	Rega Senta	185	The very compact Senta is sensibly priced, a bit bright maybe, but articulate and expressive	32,16,21	89	4	120		•	210

	PRODUCT	- F							
BB	Tannoy mXC	100	Could be more exciting, but a very impressive centre speaker at an unusually reasonable price	42,16,21	88 4	120	1		
88	Tannoy Saturn S6C	200	A punchy compact standmount based on a serious cast-frame, pro-style dual-concentric driver	38,21,29	89 6	25	•		
	PER	RS	ONAL/INTERNE		PECIFI	IN-LINE F			STANDARD CAPACITY
	PERSONA		REOS	ORM	RDIN	EMO	ODE	OIL	PACIT
TUS .	PERSONA			ORMAT	RECORDING		CODEC		PACITY
TUS .	PERSONA PRODUCT Aiwa HS-PX307			Cassette					PACITY
	PRODUCT	f	COMMENTS						PACITY
	PRODUCT Aiwa HS-PX307	■ <u>f</u> 30	COMMENTS So-so sound but an impressive features roster. Decent value overall	Cassette					PACITY
R	PRODUCT Aiwa HS-PX307 Aiwa AM-HX50	■ <u>f</u> 30 180	COMMENTS So-so sound but an impressive features roster. Decent value overall Neat play-back only personal with an impressively full-bodied sound, though short on detail	Cassette MiniDisc					PACITY
	PRODUCT Aiwa HS-PX307 Aiwa AM-HX50 JVC XL-PG7	■ <u>f</u> 30 180 100	COMMENTS So-so sound but an impressive features roster. Decent value overall Neat play-back only personal with an impressively full-bodied sound, though short on detail Undistinguished CD model, with tacky build and below-par sound	Cassette MiniDisc CD				TION	PACITY
R	PRODUCT Aiwa HS-PX307 Aiwa AM-HX50 JVC XL-PG7 Panasonic RQ-SX71	■ <u>f</u> 30 180 100 70	COMMENTS So-so sound but an impressive features roster. Decent value overall Neat play-back only personal with an impressively full-bodied sound, though short on detail Undistinguished CD model, with tacky build and below-par sound A sleek aluminium body, decent sound and superb features	Cassette MiniDisc CD Cassette	RDING	EMOTE			PACITY
R	PRODUCT Aiwa HS-PX307 Aiwa AM-HX50 JVC XL-PG7 Panasonic RQ-SX71 Panasonic RQ-SX91	■ <u>f</u> 30 180 100 70 80	COMMENTS So-so sound but an impressive features roster. Decent value overall Neat play-back only personal with an impressively full-bodied sound, though short on detail Undistinguished CD model, with tacky build and below-par sound A sleek aluminium body, decent sound and superb features A super-slick personal for well-heeled cassette users. Sound is rather bright	Cassette MiniDisc CD Cassette Cassette		EMOTE		TION	PACITY
R	PRODUCT Aiwa HS-PX307 Aiwa AM-HX50 JVC XL-PG7 Panasonic RQ-SX71 Panasonic RQ-SX91 Panasonic SJ-MR100	f     30     180     100     70     80     250	COMMENTS So-so sound but an impressive features roster. Decent value overall Neat play-back only personal with an impressively full-bodied sound, though short on detail Undistinguished CD model, with tacky build and below-par sound A sleek aluminium body, decent sound and superb features A super-slick personal for well-heeled cassette users. Sound is rather bright Well built and nicely appointed, though performance is unremarkable at the price	Cassette MiniDisc CD Cassette Cassette MiniDisc		EMOTE		NOIL	PACITY
R	PRODUCT Aiwa HS-PX307 Aiwa AM-HX50 JVC XL-PG7 Panasonic RQ-SX71 Panasonic RQ-SX91 Panasonic SJ-MR100 Philips ACT7582	f 30 180 100 70 80 250 115	COMMENTS           So-so sound but an impressive features roster. Decent value overall           Neat play-back only personal with an impressively full-bodied sound, though short on detail           Undistinguished CD model, with tacky build and below-par sound           A sleek aluminium body, decent sound and superb features           A super-slick personal for well-heeled cassette users. Sound is rather bright           Well built and nicely appointed, though performance is unremarkable at the price           A splash-proof body and an entertaining sound – the perfect CD personal for holiday japes	Cassette MiniDisc CD Cassette Cassette MiniDisc CD	•	EMOTE		NOIL	PACITY
R	PRODUCT Aiwa HS-PX307 Aiwa AM-HX50 JVC XL-PG7 Panasonic RQ-SX71 Panasonic RQ-SX91 Panasonic SJ-MR100 Philips ACT7582 Sharp MD-MT831H	f 30 180 100 70 80 250 115 250	COMMENTS           So-so sound but an impressive features roster. Decent value overall           Neat play-back only personal with an impressively full-bodied sound, though short on detail           Undistinguished CD model, with tacky build and below-par sound           A sleek aluminium body, decent sound and superb features           A super-slick personal for well-heeled cassette users. Sound is rather bright           Well built and nicely appointed, though performance is unremarkable at the price           A splash-proof body and an entertaining sound – the perfect CD personal for holiday japes           Smart design, sprightly sound and a well featured package	Cassette MiniDisc CD Cassette Cassette MiniDisc CD MiniDisc	•	EMOTE • • • • • • • •		NOIL	PACITY
R R BB	PRODUCT Aiwa HS-PX307 Aiwa AM-HX50 JVC XL-PG7 Panasonic RQ-SX71 Panasonic RQ-SX91 Panasonic SJ-MR100 Philips ACT7582 Sharp MD-MT831H Sony WM-EX404	<ul> <li>€</li> <li>30</li> <li>180</li> <li>100</li> <li>70</li> <li>80</li> <li>250</li> <li>115</li> <li>250</li> <li>35</li> </ul>	COMMENTS           So-so sound but an impressive features roster. Decent value overall           Neat play-back only personal with an impressively full-bodied sound, though short on detail           Undistinguished CD model, with tacky build and below-par sound           A sleek aluminium body, decent sound and superb features           A super-slick personal for well-heeled cassette users. Sound is rather bright           Well built and nicely appointed, though performance is unremarkable at the price           A splash-proof body and an entertaining sound – the perfect CD personal for holiday japes           Smart design, sprightly sound and a well featured package           Super-stylish but sonically flawed, with particularly uncomfortable earphones	Cassette MiniDisc CD Cassette Cassette MiniDisc CD MiniDisc Cassette	•	EMOTE		NOIL	PACITY

	Aiwa MM-VX100	130	Aiwa's expertise in the personal stereo field is visible, but performance is only average	Solid State	•	•	MP3	PRL	32MB	204
	Audio ReQuest ARQ1	568	Full size separate containing CD player, hard drive and PC connection. Sign of things to come?	CD/HD	•		мралли	APRIAUSE	17GB	208
88	Creative Labs Digital Jukebox	349	Smartly designed high-capacity portable with storage for over 1,000 tracks	Hard Drive	•		Agnostic	USB	5.7GB	208
R	DigMedia Music Store	350	Innovative CD/hard drive combo with optional solid state portable. MP3 with or without a computer	CD/HD	•		MP3	USB	5.4GB	208
	JazPiper MV32P	125	First wave player that looks good but sounds bright. Includes voice recording and phone book features	Solid State			MP3	PRL	32MB	195
	LG MF-PD360	130	Good looking and temptingly affordable, but features and performance are nothing special	Solid State	•		MP3	USB	32MB	208
	LG AHA-FD770	200	Cassette and solid state personal in one – novel idea, poor execution	SS/Cass	•	•	MP3	PRL	32MB	204
R	Pine D'Music	120	Good build, solid sound and a voice recording mode make this a good first-time buy	Solid State	•		MP3	PRL	32MB	195
	Pontis SP504	158	Not the best aesthetically, but exceptionally good MP3 sound	Solid State	•		MP3	USB	32MB	204
R	Rio 500	190	Well featured and a strong performer, though new generation Rios have now arrived	Solid State	•		MP3	USB	64MB	195
R	Rio 600	169	Neat design, strong future-proofing, good features and sound. Only its memory lets it down	Solid State	•		Agnostic	USB	32MB	208
	Schneider MPMan F20	99	The world's first MP3 personal. Basic but still good value	Solid State	•		MP3	PRL	32MB	195
	Smart Portable MP3 Disc Player	119	CD personal that also plays MP3 tracks burnt onto CD-R discs	CD			MP3			208
	Sony NW-MS7	249	A gorgeous little personal using Sony's Memory Stick storage. Good but pricey	Solid State	•	M	P3/ATRAC-3	USB	64MB	208

#### SPECIFICATIONS

			RD PLAYERS	MA		SEMI-AUTO	Sb	SUSP SUBCHASSIS	EXTERNAL PSU	SUPPLIED WITH ARM	SUPPLIED WITH CART	
	TURNTABL	ES		MANUAL	AUTO	AUTO	SPEEDS	ASSIS	L PSU	ARM	CART	
US	PRODUCT	£	COMMENTS				-					
BB	Audio Note TT1/ARM1	594	Simple and unpretentious, it delivers a real taste of true high end performance at an affordable price	•	100		33/45	•	•	•		20
	Avid Acutus	4,995	Extremely capable design with no apparent shortcomings, don't sell your vinyl 'til you've heard it on this!	•			33/45	•	•			1
	Clearaudio Reference	3,990	Opulent beast tested with Souther TQ-1 arm. Tends to gloss over detail, but can sound bold	•			33/45					1/
R	DNM Rota 2	5,600	Tonally slightly bleached, but extracts detail like few others. Works well on its own table	•			33/45	•		• 1	•	1.
	Dual CS 455.1	220	Neat record player with automatic convenience (and 78rpm), but doesn't match simpler manual rivals sonically		•	3	3/45/78	•	•	• •	•	21
2	Dual 505-4 UK	250	Consistent sounding and well isolated turntable. It is slightly lacking in oomph			•	33/45	•		• 1	•	1
	Kuzma Stabi/PS	1,950	(Tested with Stogi Reference) Solid oak plinth; sound is very clear, detailed and extended	•			33/45	•	•	•		1000
R	Linn LP12 Basik	1,100	Trails the full LP12 significantly, but pace, rhythm, timing etc. still top rank	•			33	•		•		1
	Linn LP12 Lingo	1,750	he classic reference is improved by the Lingo, but charming character remains	•			33/45	•	•			
2	Michell Gyrodec	875	Sweet and natural-sounding player, well matched to Rega RB300 arm	•			33/45	•	•			
c	Michell Gyro SE	775	A stunningly desirable combination of looks, solidity and sound make this a tempting turntable	•			33/45	•				1
8	Michell Orbe SE	1,725	A Superb turntable, able to mix it with the best at virtually any price	•			33/45	•				1
	Moth Kanoot	329	Rather coarse-sounding deck that requires decent isolation and comes with a Rega RB300 arm	•			33/45			•		1
8	NAD 533	220	Sonically a little crude, but musically satisfying results at a very modest price	•			33/45		•	• 1	•	2
B	Notts Analogue Spacedeck/Arm	750	No frills, just a first-rate, outstandingly natural-sounding deck that will last forever	•			33/45		•	•		1
2	Pink Triangle Tarantella II	850	A turntable that looks unlike any other, with rare ability too. Quirky, but sound is immensely likeable	•			33/45	•	•			1
в	Pro-ject 2	300	Remarkably effective at the price, with decent timing and a generally well defined sound	•			33/45			• (	•	11
	Pro-ject Classic Cherry	450	A great looking turntable with a generous and dynamic sound, but lacks something in overall coherence	•			33/45		•	•		20
	Pro-ject Perspective	750	Flexible facilities and competitive package, but performance of turntable alone is behind the best	•			33/45	•		•		19
R	Pro-ject 6/Sumiko	850	Don't think of this as a deck with a good arm, but as a scaled-down Oracle Delphi — it's that good	•			33/45	•	•	•		13
88	Rega Planar 2	214	A remarkable product at the price, surprisingly articulate and confident	•			33/45			•		4

R R R S S S T T T T T T V V W W	TURNTABL RODUCT ega Planar 3 ega Planar 25 eson RS1 oksan Radius 3/Tabriz zi ME Model 10A ME Model 20.2A horens TD166 VI/VK/RB horens TD166 VI/VK/RB horens TD146 VI horens TD146 VI horens TD2001 PI HW19 Junior fell Tempered Record Player fell Tempered Reference filson benesch The Circle	£           274           619           600           890           3,333           4,863           400           550           700           650           850	COMMENTS     Sounds musical in a balanced manner, needs decent isolation and suffers a little pitch instability     Great looking turntable has a silky smooth sound with exceptional midband coherence     Supplied set-up and ready-tuned, this unconventional deck is packed with mid-band detail     Elegant-looking turntable with a tidy, ordered sound. Bright and breezy if a shade lightweight     Elegant and extremely capable design with Series V/309 hybrid arm, superbly built     Beautifully built, extremely neutral damped and suspended deck with superb sound. Inc V arm	UAL	AUTO		33/45 33/45	EXTERNAL PSU	SUPPLIED WITH ARM
R R R S S S T T T T T T V V W W	ega Planar 3 ega Planar 25 eson RS1 oksan Radius 3/Tabriz zi ME Model 10A ME Model 20.2A horens TD166 VI/UK/RB horens TD146 VI norens TD146 VI horens TD146 VI HW19 Junior PI HW19 Junior lell Tempered Reference	274 619 600 890 3,333 4,863 400 550 700 650	Sounds musical in a balanced manner, needs decent isolation and suffers a little pitch instability Great looking turntable has a silky smooth sound with exceptional midband coherence Supplied set-up and ready-tuned, this unconventional deck is packed with mid-band detail Elegant-looking turntable with a tidy, ordered sound. Bright and breezy if a shade lightweight Elegant and extremely capable design with Series V/309 hybrid arm, superbly built	•			33/45		•
R R S S T T T T V V W W	ega Planar 25 eson RS1 oksan Radius 3/Tabriz zi ME Model 10A ME Model 20.2A horens TD166 VI/UK/RB horens TD146 VI horens TD2001 PI HW19 Junior Vell Tempered Record Player fell Tempered Reference	619 600 890 3,333 4,863 400 550 700 650	Great looking turntable has a silky smooth sound with exceptional midband coherence Supplied set-up and ready-tuned, this unconventional deck is packed with mid-band detail Elegant-looking turntable with a tidy, ordered sound. Bright and breezy if a shade lightweight Elegant and extremely capable design with Series V/309 hybrid arm, superbly built				33/45	•	•
R S S T T T T V V W W	eson RS1 oksan Radius 3/Tabriz zi ME Model 10A ME Model 20.2A horens TD166 VI/UK/RB horens TD146 VI horens TD2001 PI HW19 Junior Kell Tempered Record Player Kell Tempered Reference	600 890 3,333 4,863 400 550 700 650	Supplied set-up and ready-tuned, this unconventional deck is packed with mid-band detail Elegant-looking turntable with a tidy, ordered sound. Bright and breezy if a shade lightweight Elegant and extremely capable design with Series VI309 hybrid arm, superbly built					•	
R Si Ti Ti Ti V W W	oksan Radius 3/Tabriz zi ME Model 10A ME Model 20.2A horens TD166 VI/UK/RB horens TD146 VI horens TD2001 PI HW19 Junior Vell Tempered Record Player Vell Tempered Reference	890 3,333 4,863 400 550 700 650	Elegant-looking turntable with a tidy, ordered sound. Bright and breezy if a shade lightweight Elegant and extremely capable design with Series VI309 hybrid arm, superbly built	•					
S SI TI TI TI V W W	ME Model 10A ME Model 20.2A horens TD166 VI/UK/RB horens TD146 VI horens TD2001 PI HW19 Junior Hell Tempered Record Player fell Tempered Reference	3,333 4,863 400 550 700 650	Elegant and extremely capable design with Series V/309 hybrid arm, superbly built	•		STORES OF	33/45	•	•
SI TI TI V W W	ME Model 20.2A horens TD166 VI/UK/RB horens TD146 VI horens TD2001 PI HW19 Junior Hell Tempered Record Player Hell Tempered Reference	4,863 400 550 700 650		-			33/45	• •	
T T T V W W	horens TD166 VI/UK/RB horens TD146 VI horens TD2001 PI HW19 Junior fell Tempered Record Player fell Tempered Reference	400 550 700 650	Reputifully built, extremely poutral damped and suspended deck with superhispath for Viam				33/45	• •	•
TI TI V M M	horens TD146 VI horens TD2001 PI HW19 Junior Kell Tempered Record Player Kell Tempered Reference	550 700 650	beautiony built, extremely redutal damped and suspended deck with superb sound, inc v ann	•			33/45/78	• •	•
T V W W	horens TD2001 PI HW19 Junior Kell Tempered Record Player Kell Tempered Reference	700 650	Refined, solid sound with well-focused image y; suitable for use with good MM/MC budget cartridges	•			33/45	•	•
v v v	PI HW19 Junior Iell Tempered Record Player Iell Tempered Reference	650	Tonearm not quite up to turntable's potential; this semi-auto is much pricier than manual TD166	•			33/45	• •	•
W W	lell Tempered Record Player lell Tempered Reference		Balances convenience and sound well, but deck lacks detail and bass could be better controlled			•	33/45	•	•
N	lell Tempered Reference	850	A notably large and handsome turntable with good sound quality and considerable upgrade potential	•			33/45	• •	•
			Intriguing and challenging. Musically not ideal, but its limpid quality and lack of artificiality set standards	•			33/45	• •	
V	lison benesch The Circle	5,500 795	Superb mechanical stability and unflappability result in a clean reproduction A beautiful turntable with a sumptuous sound, all at a very reasonable price – a clear Best Buy	•			33/45 33/45	• •	•
							REPLACEABLE STYLUS	OUTPUT (mV)	MASS (g)
	CARTRIDG	ES		MM		MC		. (m	e) s
		C	COMMENTS		-			. ~	
1000	RODUCT	1 205	COMMENTS		-			0.5	
-	llaerts MC1B udio Technica AT-95E	1,295 20	Highly capable and entertaining Belgian cartridge that warrants the finest turntable and phono stage you can afford	•		•	•	0.5	
-	udio lechnica Al-95E udio Technica AT-0C9ML	330	Clear and dynamic, though richly balanced A well-finished cartridge with a sound that's smoothly detailed, but also rather unexciting	-		•		0.4	8
	learaudio Signature	1,495	A well-finished cartridge with a sound that's smoothly detailed, but also rather unexciting A great all-round performer with fine dynamic vitality and a seductive midband intimacy			•		0.4	8
	enon DL110	70	A great all-round performer with line dynamic vitality and a seducive midband intimacy A fine all-rounder, this high output MC model is likely to perform well					1.0	6
-	enon DL103	100	A line all-rounder, this high output MC model is likely to perform well Good performance in bass and good 'life'. Is seriously let down by its spherical stylus which kills subtle detail			-		0.1	6
-	enon DL304	200	Uncoloured, detailed, tracks superbly. Top notch altogether, and a bargain at the price			•		0.1	J
-	ynavector DV-20X L	200	Articulate-sounding, with impressive treble resolve, though lightweight at times. Needs a high quality turntable and arm					0.25	8.6
	ynavector Karat 17D2 mk2	450	Clean and controlled sound with taut, tuneful bass. Detailed and musically cogent					0.25	5.3
-	ynavector XX-1L	998	Very clear, very detailed; a response lift around 20kHz seems to do no harm			-		0.15	12
	ynavector Te-Kaitora	1,698	A real smoothie, but pricey. Worth checking out for its delicate laid-back transparency and low needle-talk					0.25	8.5
	ynavector DRT XV-1	2,500	Capable of conjuring one of the most tactile, three dimensional sound stages on the vinyl planet. Extremely entertaining					0.3	13
-	oldring Elan	19	A lightweight and frisky-sounding MM apparently based on Nagaoka MM4 body	•			•	5.0	7
-	oldring 1012GX	79	Slightly harsh but plenty of life and detail. Some high frequency coloration apparent		Contraction of the second			6.5	7
_	oldring 1022GX	99	As with 1012, a touch harsh; detail and transient purity improved					6.5	7
-	oldring Eroica LX	110	Not the most subtle cartridge in the world: can sound edgy at times, but lively and informative			•	-	0.5	8
-	oldring 1042	120	Not terribly subtle, and not such good value alongside 1012 and 1022. Quite lively, though			-	•	6.5	6
-	oldring Elite	220	The basics are right, and it will cheerfully tackle any source material, but its sound is not the cleanest			•		0.5	8
-	oldring Excel VX	525	Good bass drive but dull and imprecise higher up. An old-fashioned sound that falls short of the true high end					0.45	8
-	rado Prestige Gold	149	Rich sounding with an unusually refined top-end for a moving magnet-type cartridge			-	•	4	6
-	rado Reference	995	Loads of tracking headroom but treble is limited. A prospect for mid-oriented valve amp users					1.7	6.5
L	inn K9	125	Linn improved this model by beefing up the Basik's bodywork and adding a super stylus	•	,		•	4.5	5
-	ondon Decca Maroon	259	Now manufactured under the London brand name, this Decca cartridge is as iconoclastic as ever	•				50	6
-	ondon Decca S Gold	399	Immediate and detailed, but coloured and nonlinear, with a questionable effect on records					50	6
-	yra Lydian Beta	599	A thoroughly enjoyable cartridge – smooth, agile and dynamic in character					05	8
1	yra Lydian	649	Superbly capable all-round musical performer that improves markedly when its body cover is removed			•		0.3	7
1000	yra Clavis Da Capo	995	A stable tracker, and one of the finest cartridges we've heard			•		0.1	7
-	yra Parnassus D.C.t	1,895	A real little jewel of a cartridge, with many good qualities, but handicapped by a rather too obvious treble peak			•		0.22	10.5
C	rtofon 510/P	38	For the price, a good blend of virtues - weight, clarity and neutrality	•	1		•	3.0	5
_	rtofon 520/P	65	Sensitive to load capacitance, but the 520/P has a lively, effervescent sound	•			•	3.0	5
-	rtofon MC3 Turbo	130	The 3 Turbo is bright, cheerful and bouncy, but unsubtle – take it as it comes			•		3.3	4
1 1 1 1	rtofon MC15 Super II	130	A good all-rounder, with outstanding resolution, if slightly bright and close up			•		0.35	7
	rtofon MC25E	180	An excellent upgrade for a mid-price turntable			•		C.5	11
C	rtofon MC25FL	250	A bit too stark and honest, but faithful to what's on the LP			•		C.5	11
C	rtofon MC 10 Supreme	300	A full and cultured-sounding cartridge, with collective attributes far outweighing its shortcomings			•		0.5	10.7
C	rtofon MC30 Supreme	525	Highly detailed and even-sounding cartridge that has a special affinity with female vocal recordings					0.5	10.7
-	rtofon Rohmann	1,000	A class act in nearly every respect, with fine groove security and a very smooth and even-handed sound			•		0.25	8.5
-	rtofon MC3000II	1,100	A real ear-opener. Nothing to criticise anywhere — one of the very best			•		0.12	10
-	rtofon MC5000	1,500	Limited tracking ability, bright and forward sound, but good stereo			•		0.12	10
-	ega Bias	39	Difficult to mount in some arms due to its shallow body, but the Bias offers a gentle, refined sound	•	x 100000		•	5	4
-	ega Elys	85	Clearly superior to the Blas, the Elys is more detailed, accurate and convincing	•	10000		•	5.0	5
-	eson Reca	250	If you're after a high quality moving magnet cartridge, they don't get much better than this	•			•	6.5	6.3
	oksan Corus Black	130	Recognisably related to the Corus Blue, but smoother and more civilised	•			•	6.5	5
-	umiko Blue Point Special	250	A no-nonsense performer with engaging musical properties - one of the best around for less than £300			•		2.5	9
v	an den Hul MM-1	250	If woody midrange could be tamed, imaging and security would pull it through	•	,		•	5.5	6
v	an den Hul DDT-II	600	Outstanding stereo imaging and neutral balance are appealing, but rhythmically the DDT-I is a bit lazy			•		0.35	7.6
-	an den Hul MC-10	750	A neutral, balanced performer, gives fine depth and focus and a firm, extended bass			•		0.4	6
	an den Hul MC-One	900	This extends all the positive qualities of the 10, but adds greater authority and scale - worth all the extra money			•		0.4	6
-	an den Hul MC-Two	1,200	MC-Two rewards with a highly detailed yet fluid and musically convincing portrayal			•		0.4	6
-	an den Hul Frog	1,500	Seems to control/suppress surface noise better than its rivals. This delicate and subtle performer has great charm			•		0.65	7
<b>v</b>	an den Hul G' hopper IIIGLA	2,800	Undoubtedly one of the finest cartridges available. It has tremendous bandwidth, energy and finesse			•		0.4	6
1000	Vilson benesch Matrix	786	Extraordinarily well balanced cartridge: neutral and detailed yet lively and rhythmically assertive			•		0.58	6

#### TONEARMS / STANDS AND SUPPORTS THE DIRECTORY

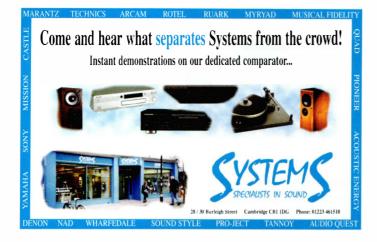
	TONEAR	MS		EFFECTIVE MASS	PARALLEL TRACKING		UNI-PIVOT	EFFECTIVE LENGHT (cm)	ISSUE NUMBER
STATUS	PRODUCT	£	COMMENTS		1				L
R	Kuzma Stogi Ref	1,250	Large, solid and well made arm, gives exceptionally clear sound with just a hint of brightness	High		•			79
R	Linn Ekos	1,500	Superb, state-of-the-art design which builds significantly on predecessor's strengths	Med		•		229	67
BB	Moth/RB250	109	The ultimate budget arm? Refined, sweet, detailed and natural	Low		•		237	60
BB	Rega RB300	174	Despite its modest price it sets exceptional standards and could be used on many high-end turntables	Low		•		237	60
R	Roksan Tabriz Basic	350	Targeted at the Xerxes, this is a good alternative to the Rega arm in many cases - a touch bright though	Low		•		240	91
R	SME Series IV	983	Superb engineering and finish with a finely balanced sound, impressive stereo focus and low coloration	Low		•		233	60
R	SME Series V	1,461	Excellent in all respects, this arm arguably sets the standards for pivoted arms, regardless of price	Low		•		233	60

	СТЛ			<b>F</b>		ECIF	ICA		NS	
			DS & SUPPORTS	HEIGHT	TOP PLATE SIZE (cm)	FILLABLE	WELDED	NUMBER OF SHELVES	SHELF TYPE	
US 🛛	PRODUCT	£			<u> </u>	<u> </u>			ı	
_	Aavik C4	200	Attractive wood finish stand with a very large footprint but sound is a little coloured	77	47	3		4	MDF	20
R	Aavik Furniture A4	350	Good sound and stylish Scandinavian looks at an affordable price	80.5	47		-	4	Wood	19
	Alphason GR 17/17-AS	275	Great looks but sound can be bettered for the money	36	60,39		-	4	Glass	18
	Apollo Symphony	245	Simple steel and glass stand which majors in excitement factor but lacks precision	73	46.5	-	•	4	Glass	20
_	Apollo Soprano	275	Uninspiring looks and sonic performance that can be beaten at this price	68.5	45.5			4	Glass	19
R	Atacama Europa	240	Stylish, expandable modular design with agreeable full-bodied sound – great value	67	48.6			4	Wood	19
88	Audiophile Furniture Base	615	Price is justified by its earth-shattering sonic abilities – a worthy upgrade	82	43	-		4	MDF	19
R	Avid Isoschelf	1,100	An enthusiasts equipment support stand free from coloration if a little fiddly to set up	87.5	48			5	MDF	19
R	Custom Design Aspect650	270	Smart looks and practical thanks to adjustable shelves. Sound is fair with some loss of detail	66	46		•	4	Glass	20
R	Elemental Isotube x 4/Ref	1,199	Blockbusting size and build. Super sound quality	92	45,49		•	4	Marb	18
R	Elemental Audio Isotube X4	849	A hefty stand that demonstrates just how much difference a good support can make	90	49	1	•	4	Glass	19
3 <del>0</del>	Frameworks H500/H175	404	Two-shelf stand and isolation platform combo in tubular steel – made a spectacular impression on audition	70	52,34		•	3	Glass	16
	Ixos Deadrock 704	250	Looks unassuming but sound is full and inviting		46,39			4	Resin	18
_	Mana 4-tier	500	The ultimate statement in steel and glass; adds resonance in a way you'll love or hate	87	45	±	•	4	Glass	20
R	Optimum Int 2000 OPT490	299	25kg stand with shelves between variable-height tubular uprights. Sounds smooth and relaxed with sturdy bass	50	60,40	<u> </u>		4	Glass	16
R	Optimum Int 2000 OPT660	349	Glitzy style isn't reflected in sound, which is wholesome	82	60,52			5	Glass	18
_	Projekt Furniture A4	215	An elegant support stand that blends in to any home environment with a laid-back sound	56	48	1		4	Wood	19
R	Quadraspire Q4	280	Simple but modestly effective and very attractive	52	49			4	MDF	20
_	Sonus System Elite	330	Rather ugly and seems to offer little over and above cheaper steel and glass stands	68	50	-	•	4	Glass	20
88	Sound Organisation Z560	160	Welded and bolted members give structural integrity. While performance is not up with the best, it's great value	90	46,36		•	5	Wood	16
_	Sound Organisation Z545	160	Budget price and great looks make this a great value stand	73	46		•	4	Glass	19
R	Soundstyle X100	230	Looks lovely, sounds lively but slightly bright	64	49,28		•	4	Glass	18
-	Soundstyle XS100	270	Less character than other similar strands, but sound is somewhat short on transparency	72.5	49.5			4	Glass	20
-	Soundstyle Radius SR100	280	Stylish looks and a smooth sound	63.5	49.5		•	4	Glass	19
_	Soundstyle Finewoods W105	320	Veneered shelves clamped between tubular uprights. Delivers with classical material	82	48,27			4	Wood	16
88	Standesign Design 4	190	An all-in-one support at a budget price with good sonic performance	88.5	50.8	-	•	4	Glass	19
к	Townshend Seismic Sink AV1-4 Townshend Seismic Stand	600	Gives significant isolation for turntables and seems to add little character otherwise	74.5	45			4	MDF	20
88	Wilson benesch Asside	1,245	It's big, it wobbles and it's pricey. But this is the ultimate equipment support Sounds even better than it looks. And it looks wonderful	72 72	58,45 37,50		-	3	Wood Wood	18

#### SPEAKER STANDS

ATUS	PRODUCT	£	COMMENTS				
	Alphason Akros II	65	A well-specified budget stand but the sound is as subtle as a house party	60,45	16.5		202
	Alphason HDS	85	A reasonable stand with a smooth but rather bland sound balance. Good finish options	45-60	15.5,15.5	•	189
	Apollo Olympus	75	A popular stand and a decent performer, but unremarkable by today's standards	40-60	15,12.5	•	189
	Apollo A4/6	82	A pretty and robust design that sonically fails to stand out from the crowd	51,40.5	18	•	202
88	Atacama Nexus 6	50	An excellent all round performer and a genuine hi-fi bargain	60,50	14.5,18	•	202
R	Atacama R724	150	Atacama uses its market strength to deliver a superbly appointed product at a very reasonable price	60	15,17	•	189
R	Custom Design R/S300 MkII	100	A solid stand improving on the original with better focus and detail	61,56,51	16.5,18	•	202
R	Elemental Isotube SZse	599	Stands of distinction, able to free the speaker's sound from its box in a way budget stands simply can't	61	23,27	• •	189
R	JPW HS1	120	A purposeful stand, a touch dry-sounding but particularly strong with bass. Great for rock and dance music	61	19,21	•	189
R	Mana Sound Base	175	The Sound Base plinth simply improves the sound of every speaker placed on it	8	29,32		202
	Mission Stance	100	Detailed and open but needs a firm foundation to give its best	60	19,15	•	202
88	Partington A-4	119	An oddball stand with a sound that's sheer class. More open and focused than almost anything below £150	50-100	19,22	• •	189
R	Partington Dreadnought Ult.	299	Super heavyweight stand that is an open window to the speaker placed on it	63	20.5,23.5	•	202
	Russ Andrews Torlyte	599	Subtle and musical-sounding stands, though a touch more 'pizzazz' is need for Recommendation at this price	61	33.5,24		189
	Sonus Systems Excel	110	Strong performance when filled with sand but design flaws let it down	65,45	20,22.5	•	202
	Sound Organisation Z524	69	A coherent-sounding stand with particular strengths in the midband, though quality drops at the frequency extremes	61	16,17		189
88	Sound Organisation Z522	89	Easy going and likeable performer straight out of the box	59	16,17	•	202
	Sound Style Select	95	OK but not as good as its cheaper brother the Z522	59	16,17	•	202
	Target HM60	106	A solid and well-built stand laid-back to the point of coma	40-70	16.5,19	•	202
R	Townshend Seismic Sink	499	Unique inflatable plinth that works well with decent floorstanders as well as standmounted speakers	4	38,48		202

## Award-Winning Speakers available from:







### **Practical Hi-Fi** 0% Finance available on selected items

MANCHESTER: 65 Bridge Street - 0161 839-8869
 PRESTON: 43 Friargate - 01772 883958
 WARRINGTON: 88 Bridge Street - 01925 632179
 BOLTON: 33 Knowsley Street - 01204 395789

- CARLISLE: 106 English Street 01204 395789
  - BLACKPOOL: 81 Whitegate Drive 01253 300599
- LANCASTER: 84 Penny Street 01524 39657

### Richard's Audio Visual

#### Stockists of all Mission ranges

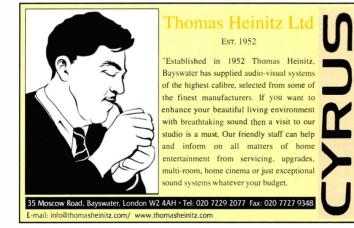
0% finance subject to status

"Expert, friendly service" - Listening Rooms

**4 Greyfriars, Bedford Tel: 01234 365165** Mon - Sat 9.30 - 5.30

85 St Peters Street, St Albans Tel: 01727 868700 Mon - Sat 10.00 - 6.00, Sun 11.00 - 5.00





### THE LEAMINGTON HI-FI COMPANY

23a Regent Street Leamington Spa Warwickshire CV32 5EJ

#### Phone: 01926 888644 Fax: 01926 887486 E-mail:thehi-ficompany@dial-pipex-com

THE LEADING HI-FI SPECIALIST

ARCAM AUDIOLAB QUAD MERIDIAN MARANTZ DENON PIONEER YAMAHA NAD MICROMEGA MISSION KEF ACOUSTIC ENERGY CELESTION ATACAMA TECHNICS TRICHORD TDL RELEXOS

Single speaker dem room. We do not use any comparetors. We also have full demonstration of projection tv with laserdisc and full prologic systems.

Part exchange welcome please phone or e-mail for prices. We have in stock over 200 laserdiscs call for our latest catalogue.

	TUN		Contra sullet stores when	WAVEBANDS			REMOTE CONTRO	TIO SIG. STRENGTH METER	ROT. TUNING KNOB	ISSUE NUMBER
	ANALOGI	JE TL	JNERS	ANDS	PRESETS	RDS	TROL	ETER	NOB	ABER
TUS	PRODUCT	• £	COMMENTS							
R	Cambridge T500	180	Very capable tuner suited to good and less good reception conditions	FM,M,Ł	64			•	•	193
R	Creek T43	399	Quality UK-made tuner offering classy sound in all areas at a very fair price	FM,M,L	64		•	•	•	193
BB	Denon TU-260L II	130	The return of the all-time favourite, now enhanced with RDS and sounding as fine as ever	FM,M,L	40	•			•	193
R	Denon TU-1500RD	250	A well balanced and clean sound with good bass and treble extension	FM,M	40	•			•	184
	Magnum Dynalab FT11	499	All-analogue tuner: receives weak or tightly packed stations but loses out on noise and sonic neutrality	FM	3			•	•	184
BB	Harman/Kardon TU950	200	Bulky but effective, delivering fine RF performance an'd good sound for the price	FM,M,L	30	•			•	166
	Leak Trough Line - GTA	300	A renovated classic with a style all of its own coupled with an emotive and gutsy performance	FM	0			•	•	206
R	Linn Kremlin	2,600	Controversially good sound at a very high price	FM	80		•	•		142
BB	Marantz ST-48	120	A classic budget model which manages a performance only just behind much more expensive models	FM,M	60	•				184
R	Myryad T-30	400	Attractive product that produces attractive sounds too: capable of very musical performance with a good aerial	FM	29		•	•		193
	Myryad T-10	530	A very smart unit which works well and offers good rhythmic drive and vitality, albeit at a price	FM	20			•	•	184
	NAD C440	200	Rather polite sound, a little vague at times, that seldom offends but never excites	FM,M	30	•				193
	Pioneer F-504RDS	250	Cable-friendly with advanced RDS and excellent RF performance; slightly disappointing sound	FM,M	40	•		•	•	166
	Roksan Caspian	595	Neat facia with great ergonomics, but sound is not really any better than models at half the price	FM	50		•	•	•	184
	Sony ST-SE500	140	A lot of features for the money, but sound lacks detail and has some coloration	FM,M,L	30	•	1.1.4	•	•	193
	Rotel RT-935AX	160	Good ergonomics and sound quality at a realistic price, but limited features and RF selectivity	FM,M	20					166
	Sony ST-SA3ES	250	Clean, lean presentation but needs a quality aerial to perform at its best	FM,M,L	30	•		•	•	157
R	Sony STS-B9205	180	A little hiss and image compression don't detract from the clean performance of this feature-packed tuner	FM,M,L	30	•		•	•	184
	Thorens TRT2000	499	Not exactly neutral sounding, but nonetheless makes listening fun	FM,M	59	•	•	•	•	157

	DIGITAL TUNERS							
US	PRODUCT	£	COMMENTS					
R	Arcam Alpha 10 DRT	800	The first DAB tuner and arguably still the best, but the system's still not perfect	DAB	7	•	•	•
	Cymbol C-DAB 1	1,000	The first 'high-end' DAB tuner, although format is the ultimate limitation. Gorgeous finish	DAB	8	•	•	•
R	Technics ST-GT1000	500	Handy tuner that combines DAB, FM and AM in one unit and substantially lowers the price bar for DAB entry	DAB, FM, M	97	•	•	•

# SUBSCRIBE TO HI-FI CHOICE NOW! AND SAVE HI-FICHOICE HI-FICHOICE HI-FICHOICE

OVER 25% ON THE COVER PRICE

+44 (0) 1458 271147

STATU







199 199



"for the best cables, CDs and accessories"

#### Mail Order Direct on UK Freephone 0800 373 467

quoting ref: ACH1200 and request a catalogue Cable Upgrade Scheme Lifetime Guarantee 30 Day Home Trial Expert Advice

RUSS ANDREWS ACCESSORIES LTD., FREEPOST NWW881A, KENDAL, LA8 9ZA. Tel:+44 (0)1539 825500

Fax: +44 (0)1539 825540 E-mail: ACH1200@russandrews.com www.russandrews.com

Choosing a good hi-fi dealer is the most vital step in acquiring the system that is right for you. This unique directory gives full information on dealers able to help in your area.

## D 7 A I Directory

#### Members of the British Audio BADA Dealers Association are able to offer:

- Two year guarantee,
  - transferable to another BADA dealer should the purchaser move more than 30 miles from his/her original address
- low cost five year guarantee option
- proper demonstration facilities
- seven day exchange or refund scheme if the dealer's advice is taken on product selection
- fully guaranteed service work
- customer complaints procedure in the event of problems

For more information contact BADA on **2 020 7226 4044** 

#### **BATH/BRISTOL**

THE RIGHT NOTE, tel: 01225 874728. Give your ears a new reference point for the best sounds at any price. Forget reviews and trying to put together a system like a patchwork quilt with the 'best' bits around. It's our job to do the assessing, you judge the results. Come here, or we'll come to you, and plan a system for the future, even if you spread the purchases. Leave "upgrade-itis" behind, save money and behind, save money and enjoy music. Just listen, and you'll know. Ask also about our ex-dem and mint used items if you must Our credentials - CD: Acurus, Audio Synthesis, Classé, Enlightened Audio Design, Meracus, Orelle, Wadia, XTC. Vinyl: Basis, Graham, Michell, Sumiko. Amps: Arcurus, Audio Sculpture, CAT, Classé, DNM, Kora, Lumley, Meracus, Michell, Orelle, Sirius, Sonneteer, XTC. Speakers: Audio Artistry, Audio Physic, Ethos, Harbeth, Lumley, Magneplanar, Mirage, NEAT, Spendor, Totem. Tuners: Fanfare, Magnum Dynalab. Cables: Chord, DNM, Silver Sounds, SonicLink, Tice.

V' AUDIO, 36 Druid Hill, Stoke Bishop, Bristol BS9 1FJ Website www.vaudio.co.uk. Tel: 0117 968 6005 Alon, ATC, Audiomeca, AVI, Cable Talk, Cadence Valve, Chord Amps, Electrocompaniet, Goldring, Harman Kardon, Heybrook, Inner Sound, Jamo, Leider, LFD, Lyra, Mark Levinson, Michell, Nakamichi, Opera, Oracle, Ortofon, Parasound, Pink Triangle, Primare, Project, REL, Ruark, Shearne Audio, SME, Sonic Link, Stax, Townshend, Triangle, Trichord, Unison Research. Home Cinema including video projectors by Davis, Seleco, Sony, plus screens by Owl, Da-Lite and Stewart. Demos by appointment only. Home trial facilities, free installation, service facilities. Mastercard, Visa

#### BEDFORDSHIRE

RICHARDS AUDIO VISUAL, 4 Greyfriars, Bedford MK40 1HP. Tel: 01234 365165. richavbed@aol.com. FRIENDLY Email: richavbed@aol.com. FRIENDLY PERSONAL SERVICE. MULTI-ROOM HOME INSTALL SPECIALISTS. FREE HOME SURVEYS. Stockists of Arcam FMJ, Audioquest, B&W, Bose, Cabletalk, Cyrus, Denon, Marantz, Mission, Moth, Optimum, Ortofon, Pioneer, Pro-Ject, QED, REL, Rotel, Ruark, Sennheiser, Soundstyle, Stands Unique, Talk Electronics, Tannoy, Target, Teac, Van den Hul, Yamaha and more. LISTENING ROOM. 0% FINANCE. Open 6 days 9.30-5.30. CAR PARK AT REAR OF SHOP. Email:

#### BIRMINGHAM

MUSIC MATTERS, 351 Hagley Road, Edgbaston, Birmingham B17 8DL. Tel: 0121 429 2811. Arcam, Audioquest, Audio Research, B & W, Castle, Celestion, Chard, Charle, Charles, Cherger, Duran, Duran, Duran, Charles, Cherger, Che Chord, Cyrus, Denon, Dynaudio, Jamo,

KEF, Kenwood, Krell, Marantz, Martin QED, Rega, Sony, Tag Mclaren, Yamaha. Logan, Meridan, Michel, Mission, Monitor Audio, Musical Fidelity, Panasonic Pioneer, Pok, ProAc, Project, Quad, REL Audio. Rogers, Rotel, Ruark, Sennheiser, SME, Sonus Faber, TagMcLaren, Tannoy, TEAC, Technics, Theta, Thorens, Yamaha. Excellent\_demonstration and home trial facilities. Free installation. All major credit cards accepted. Full credit facilities available. Tue-Sat 10-5.30, Thurs 10-7 BADA

MUSIC MATTERS, 10 Boldmere Road, Sutton Coldfield, West Midlands B73 5TD. Tel: 0121 354 2311. See above for full details BADA

#### BUCKINGHAMSHIRE

NORTHWOOD AUDIO, 98 Cambridge St, Aylesbury, Bucks HP20 1BA. Tel: 01296 428790 (A/P), fax: 01296 421282. Selected 428/90 (A/P), tax: 01296 421282: Selected sounds from Acoustic Energy, Alchemist, Audiomeca, Audio Note, Boston, B&W, Cabletalk, Castle, Chord, Chord Company, CR Development, Davis, Denon, DNM, D.P.A., Epos, Exposure, Harman Kardon, Heart, KEF, Klipsch, Linn, Magnat, Marantz, Michell, Micromega, Monitor Audio, Musical Technology, NAD, Pioneer, DMC, Brode, Oudroppire, Boop, BEI PMC, ProAc, Quadraspire, Rega, REL, Rose, Rotel, Ruark, Sony, Stax, System Audio, Talk Electronics, Tannoy, Target, Teac, UKD. Nobody ever regretted purchasing the best. Export orders welcome. 2 demo rooms. Credit facilities available.

**TECHNOSOUND and AUDIO INSIGHT**, 7-8 Granville Square, Willen, MILTON KEYNES, Bucks MK15 9JL. Tel: 01908 604949, fax: 01908 672760. Open Mon-Thurs & Sat I0am-6pm, Fri 10am-7.30pm. 79 West Street, DUNSTABLE. Tel: 01582 663297, fax: 01582 471078. Open Mon-9.30am-5.30pm Sat www technosound.co.uk, E-mail: hifi@tech-nosound.co.uk. Hi-Fi, home cinema, custom installation & multi-room specialists. Main lines include Meridian (500 & 800 series), Arcam, Musical Fidelity, B&W, Ruark, Mission, Bang & Olufsen, Pioneer & Yamaha. Dedicated demo rooms (4 at Milton Keynes, 3 at Dunstable).

#### CAMBRIDGESHIRE

SYSTEMS - Specialists in Sound. 28-30 Burleigh Street, Cambridge CB1 1DG. Tel: 01223 461518. Open Mon-Sat 9am-5.30pm. Stockists of Arcam, REL, Denon, Mission, Yamaha, NAD, Marantz, Technics, Rotel, Sony, Project, Musical Fidelity, Ruark, Castle, Acoustic Energy, Wharfdale, Myryad, Audioquest, Soundstyle and much more. Demonstration room available.

THE AUDIO FILE, 41 Victoria Road. Cambridge CB4 3BW. Tel: 01223 368305, fax: 01223 354975. Open Mon-Sat 9-Sstreater@aol.com. Interest free 5.30pm credit. Absolute Sounds, Acoustic Energy, Arcam, Bose, B&W Nautilus, Cyrus, Denon, KEF, Linn, Loewe, Marantz, Mission, M & K, Onkyo, Pioneer, ProAc,

#### CHESHIRE

ACOUSTICA, 17 Hoole Rd, Chester CH2 3NH. Tel: 01244 344227. Quality Home Cinema systems from reputable manufacturers including projectors from Seleco, amplification from Naim, Rega, Rotel, Arcam, Musical Fidelity & Teac, and loudspeakers from Kef, Ruark, Celestion, JM Lab and many more. We offer friendly, helpful advice, interest-free credit and trade-in facilities, and deliver and install systems throughout Cheshire, Merseyside and North Wales. Open Tues. - Sat. 10evenings arrangement. 5.30. by www.acoustica.co.uk.

ACTON GATE AUDIO, 4 Ruabon Rd, Wrexham. Tel: 01978 364500. Audio Visual specialists. Arcam, Bose, Boston, B&W, Celestion, Castle, Denon, GLL, Harman-Kardon, Jamo, JBL, Marantz, Michell, Mission, Mordaunt-Short, Musical Fidelity, Myryad, NAD, Micromega, Quad, Rotel, Rogers, Roksan, Ruark, Tannoy, Teac, TDL, UKD, Yamaha DSP member. Demonstration room, installation service. Easy parking and motorway access. Mastercard, Visa etc.

AUDIO COUNSEL, 14 Stockport Rd, Cheadle, Cheshire. Tel: 0161 428 7887. Please see entry under Greater Manchester.

CHRIS BROOKS AUDIO, 29 Gaskell St Stockton Heath, Cheshire. Tel: 01925 Stockton Heath, Cheshire. Tel: 01925 261212, fax: 01925 264001. E-mail: chris.brooks@audio.u-net.com. Tues-Fri 9.30-5.30, Sat 9-5. 3 demo rooms. Credit facilities. All credit cards. Hi-Fi, A/V, multi-room. Total absence of bull\*\*\*\*.

#### CEDIA BADA

DOUG BRADY HI-FI, Kingsway Studios, Kingsway North, Warrington WA1 3NU. Tel: 01925 828009, fax: 01925 825773. For the widest range of high quality hi-fi in the Northwest. Family business est. 35 years. 3 demo rooms, inc-home cinema, home trials; deliveries throughout NW; Mastercard, Visa, credit facilities. Open 10-6; Send for free map and/or 5 page sale list BADA

FORTISSIMO, 2 Bold Street, Hale, Cheshire WA14 2ER. Tel: 0161 929 0834 Retailers of high quality audio and visual equipment. Naim & Bose specialists. Stockists of Royd, NAD, Creek, Arcam, Castle, Quad, Yamaha, Onkyo, Ruark, Teac, Marantz, Ash Designs, Panasonic and Sky Digital. Full demonstration facilities and service department. Professional installation.

INPUT AUDIO, Dukinfield, Cheshire. Tel: 0161 304 7494 (Mobile) 077147 58109. We have the time, we have the patience, we have the desire and we have the products to help you reach your goals. Featuring ART, Audiogram, Audio Analogue Puccini, Audiomeca, Audio Physic, Audio Vector, Base, Chord Cables, Clearaudio,



PRACTICAL HIFI, 88 Bridge Street, Warrington. Tel: 01925 632179. The audio Warrington. Tel: 01925 632179. The audio video specialist, expert advice, instant demonstrations, best prices, interest-free credit, part-exchange welcome. Extended warranty. Stockists of Yamaha, Kenwood, Denon, Sony, Technics, Onkyo, Marantz, Pioneer, Mission, KEF, Jamo, Celestion, B&W. Also stockists of LaserDiscs.

THX

THE HI-FI SHOWROOMS, 12A West Str, off West St Car Park, Congleton, Cheshire. Tel: 01260 280017. E-mail: mail@hifishowrooms.co.uk. Web site: hifishowrooms.co.uk. hifishowrooms.co.uk. Naim Audio, Audiolab, Rega, REL, Arcam, Technics, KEF, NAD, Harman-Kardon, Yamaha, Rotel, Lexicon, RCF, Millennium, NHT, JBL, Onkyo, Sony, Marantz, Toshiba, Panasonic, Ruark, Jamo, Celestion, Qed, Teac, Castle. Front and rear projection sys-tems, 3 demonstration rooms, 1 A/V with 8tf screen, customer car park. The North West's Premier Audio Visual Specialist. Mastercard Visa Amex JCB 9 15-5:30 Naim Audio, Mastercard, Visa, Amex, JCB. 9.15-5:30, Closed Sun/Mon.

#### CORNWALL

SOUNDS PERFECTION, Nightree House, Mawgan, Helston, Cornwall, TR12 6AX. Tel/fax: 01326 221372. Email: nigel@soundsperfection.co.uk. www.soundsperfection.co.uk. Alchemist, Audio-note, Audio Spectrum, Avid Audio Design (The Groove), Border Patrol, Boston Acoustics, Cable Talk, Henley Designs, Lexicon, Michell, Nordost Parasound, Monitor Audio, Musical Fidelity, Primare, Project Turntables, REL, Roksan, SME, Sonic Frontiers, Stands Unique, Philosophy, Audioquest, Tannoy, Target, Teac, Thorens, V-Damp Isolation, Unison Research, Audio Analogue, J.M. Labs, Electrocompaniet, Triangle, Trichord, Sugden, Tara-Labs. Open 6 days a week Mon-Thurs 10-7, Fri 10-6, Sat 9-5.

#### **CUMBRIA**

PRACTICAL HIFI, 106 English Street, Carlisle. Tel: 01228 44792. The audio video specialist. expert advice. instant specialist, expert advice, instanti demonstrations, best prices, interest-free credit, part-exchange welcome. Extended warranty. Stockists of Yamaha, Kenwood, Denon, Sony, Technics, Onkyo, Marantz, Pioneer, Mission, KEF, Jamo, Celestion, B&W. Also stockists of LaserDiscs.



INDICATES MEMBERSHIP **OF THE BRITISH AUDIO** DEALERS ASSOCIATION



#### DORSET

DAWSONS, 74 Poole Road, Westbourne, Bournemouth, Dorset, Tel: 01202 764965. Bang & Olufsen, JBL, Lexicon, Myryad, Sony, Technics. Suppliers and installers of complete home cinema systems. Cedia member. Various credit facilities available. open 9-5.30 Monday to Saturday.

MOVEMENT AUDIO, 588 Ashley Road, Parkstone, Poole. Tel: 01202 730865/380018. Arcam, Audio Vector, B&W, Castle, Cyrus, Denon, Marantz, Mission (inc. FS series), NAD, Pioneer, Roksan, REL, Rotel, Shearne, Tannoy, Yamaha. 3 demo rooms, Home Cinema and Wi E precivities can exiting an eith and Hi Fi specialists, easy parking on site, high quality used equipment, massive range of audio and video leads and con-nectors etc. Credit facilities. Visit us on www.movement-audio.co.uk. Open Tues-Sat 10-5.30. BADA

MOVEMENT AUDIO, 926 Wimborne Road, Moordown, Bournemouth, Dorset. Tel: 01202 529988/ 520066. Arcam, B&W, Celestion, Denon, Marantz, Musical Fidelity, NAD, Opera, Pioneer, Project, REL, Rotel, Tannoy, Teac, Yamaha. Home cinema and Hi Fi specialists, full demo facilities, friendly expert advice, home demo and installation, easy parking, credit facilities, Visa/Mastercard. Open Tues-Sat 9.30-5.30. BADA

SUTTONS HI-FI, 18 Westover Road, Bournemouth. Tel: 01202 555512. Acoustic Energy, Arcam, Atacama, Celestion, Cable Talk, Denon, Definitive Audio, KEF, Linn, Meridian, Mission, M+K, QED, Rotel, Sennheiser, Teac, Sony, Talk Electronics, Tag Mclaren, Wharfedale, Yamaha, DTS & Dolby Digital, DVD. 2 single speaker listening rooms, home demonstrations, installations.Open Mon-Sat 9-5:30. Ca free details BADA

WEYMOUTH HI-FI, 33-35 Maiden Street, Weymouth. Tel: 01305 785729/766345. Arcam, B&W, Castle, Celestion, Denon, KEF, Musical Fidelity, Panasonic, Pioneer, Project, Quad, Rotel, Technics, Yamaha plus large range of P.A. and DJ audio and lighting, multi room and commercial installation specialists. Home Cinema and DVD. Projection TV and plasma, 2 demo rooms, credit facilities, Visa/ Mastercard. Open Mon-Sat 9.30-5.30 BADA

#### **CO. DURHAM**

#### DARLINGTON

HI-FI EXPERIENCE, 17 Coniscliffe Road, Darlington DL3 7EE. Tel: 01325 481418, fax: 01325 382982. Agencies include: Arcam, Bang & Olufsen, Cyrus, Denon, Dynaudio, KEF, Marantz, Mission, Musical Fidelity, Meridian, NAD, Quad, Rotel, Audio Shearne, TDL, Teac, Yamaha. 3 listening rooms. 3 years guarantee. Free delivery and simple installation North Yorks/South Durham. Opening hours Mon-Sat 9-5.30pm Closed Tues. Home cinema specialist. BADA

#### ESSEX

CHEW AND OSBORNE, 148 High Street. Epping, Essex CM16 4AG. Tel: 01992 574242. 26 King Street, Saffron Walden, Essex CB10 1ES. Tel: 01799 523728. Specialists in home entertainment equipment for over 30 years. Demo facilities in all branches with extensive range of Hi-Fi &

A/V products including Yamaha, Pione Sony, Arcam, Bang and Olufsen, B&W, Marantz, Tannoy, Cable Talk, Pro-Ject, Nakamichi, NAD, Sennheiser, Loewe, Full installation service available. Interest free credit facilities. Service department.

RAYLEIGH HI-FI, 44a High Street, Rayleigh, Essex. Tel: 01268 779762. Arcam, Atacama, Bose, Chord, Copland, Cyrus, Denon, KEF, Krell, Lexicon, Linn, Loewe TVs, Marantz, Micromega, Mission, Miller & Kreisel, Naim, Ortofon, Parasound, Pioneer, Proceed, Quad, QED, Rega, Roksan, Rotel, Ruark, Revox, Seleco, Sennheiser, Stands Unique, Stax, Sugden, Tag McLaren, Target, Van Den Hul, Wilson Sanaeck, VI O, Vamaba XLO Yamaha. Benesch www.rayleighhifi.com BADA

RAYLEIGH HI-FI, 216 Moulsham St, Onthe-Parkway, Chelmsford. Tel: 01245 265245.

BADA

RAYLEIGH HI-FI, 132-134 London Road, Southend-on-Sea. Tel: 01702 435255. BADA

**RAYLEIGH HI-FI**, at Dansk International Furniture World, Lakeside Retail West Thurrock. Tel: 01708 680551 Lakeside Retail Park, Open on Sundays. BADA

#### HAMPSHIRE

#### PORTSMOUTH

JEFFRIES HI-FI 29 Road, London Portsmouth PO2 0BH. Tel: 023 9256 3604. Email: sales@jeffries.co.uk. Hi-fi, home cinema and custom install specialists. Range includes Acoustic Energy, AKG, Range includes Acoustic Energy, AKG, Apollo, Arcam, Audio Technica, Audiophile, Beyer, Chord, Cura, Denon, Goldring, Grado, Ixos, Jamo, JBL, KEF, Linn, Linn Knekt, Loewe, Miller & Kreisel, MusiQ, Musicworks, Naim, Nordost, Ortofon, Panasonic, Partington, Projekt, OED, Quadraspire, Rega, Rotel, Ruark, Sennheiser, Sonance, Soundstyle, Sound Organization Surfacilize Teca Tec Organisation, Systemline, Teac, Top Tape, Traxdata, Yamaha. 2 demo rooms. Open Tues-Sat. Free parking, bus route, credit facilities. Winner Sony/Hi-Fi News Best Southers Depart Dealer. Southern 1935 Est 13/AD/A www.jeffries.co.uk

PHONOGRAPHY, Star Lane, Market Place, Ringwood BH24 1AL. Tel: 01425 461230. Contributions to music from Dynaudio, Cura, Rega, Naim, Rotel, Dynaudio, Cura, Rega, Naim, Rotel, Densen, Shahinian, Dynavector, Chord Co., Quadraspire, Ortofon. Relaxed and friendly service, two demonstration rooms, long guarantees, delivery and installation.

#### **HEREFORDSHIRE**

ENGLISH AUDIO, 37 Whitecross Road, Hereford HR4 0DE. Tel: 01432 355081. Arcam, ATC, B&W, Castle, Cura, Cyrus, Denon, KEF, JM Labs, Marantz, Mission, Denon, KEF, JM Laos, Maraniz, Mussion, Musical Fidelity, Naim, Pink Triangle, Pioneer, Pro-ject, REL, Rotel, Ruark, Stax, System Audio, Tag Mclaren, Teac, Vienna Acoustics, Wadia, Yamaha and others. Acoustics, Wadia, Yamaha and others. Single speaker demo room. Home trial. Free install. Service dept. Mastercard, Visa, Credit arranged. Open Mon-Sat 9.30am-5.30pm. BADA

#### HERTFORDSHIRE

THE AUDIO FILE, 27 Hockerill St, Bishops Stortford, Herts CM23 2DH. Tel: 01279 506576. 9-5.30 open 6 days,9-8pm open 6 days,9-8pm

DA

the symbol of security

Thursdays. Absolute Sounds, Acoustic Energy, Arcam, Bose, B & W Nautilus, Cyrus, Denon, KEF, Linn, Loewe, Marantz, Mission, Miller & Kreisel, Naim, Onkyo, Pioneer, ProAc, QED, Rega, Sony, Tag McLaren, Yamaha. 0% credit. Web site: www.audiofile.co.uk BADA

RICHARDS AUDIO VISUAL, 85 St Peter's Street, St. Albans AL1 3EG. Tel: 01727 868700. Email: richavst@aol.com. FRIENDLY PERSONAL SERVICE. MULTI-ROOM HOME INSTALL SPECIALISTS. FREE HOME SURVEYS. Stockists of Arcam FMJ, Audioquest, B&W, Bose, Chord Company, Cyrus, Denon, Marantz, Mission, Moth, Optimum, Ortofon, Pioneer, Pro-Ject, QED, REL, Rotel, Ruark, Sennheiser, Soundstyle, Stands Unique, Tannoy, Target, Teac, Van den Hul,
 Yamaha and more. LISTENING ROOM.
 % FINANCE. Open 7 days Monday to
 Saturday 10.00-6.00, Sundays 11.00-5.00. MULTI-STOREY CAR PARK NEARBY.

ACOUSTIC ARTS, four demo rooms, 2 home cinema, impartial advice on system building, multiroom design and installation, free parking, home trials on cables, home demos, custom install and after sales service, credit, mail order, 5 minutes from M25 and MI, est over 20 years. No nonsense, just good advice. Call Tony, Kingsley or Fraser on 01923 245250/ 233011, fax: E-mail: 01923 230798 Acoustic Arts@FreeNet.co.uk. 101 St Albans Rd, Watford, Herts WD1 1RD. Apollo, Audio Research, Audio Analogue, Audioquest, B&W (inc. Naut 800), Beyer, Bose, Boston, Castle, Celestion, Copland, Denon, Castle, Celestion, Copland, Denon, Densen, DPA, Grado, Jadis, KEF, Koetsu, Denon. Densen, DPA, Grado, Jadis, KEF, Koetsu, Krell, Marantz, Martin Logan, Michell, Micromega, Nordost, Ortofon, Projekt, Quadraspire, QED, REL, Rotel, Ruark, Sennheiser, Sonus Faber, Sound Style, Sumiko, Target, Theta, Transparent Audio, Vidikron, Wilson. Open Tuesday to Saturday 10-5.30 Thursday until 8 by conscient appointment. BADA

DARBY'S OF ST. ALBANS, 6 Market Place, St. Albans, Herts. Tel: 01727 851596. Hert's premier Hi-Fi/AV special-ists, est. 1946. Full home cinema demonstration suite. Whether your needs are large or small, we stock it all: Arcam, Yamaha, Quad, Denon, Sony, B&O, Pioneer, REL, JVC, KEF Reference, Mission-Cyrus, Ruark, Celestion, Polk, and many more. Free delivery and installation. BADA Open 9-6 Mon-Sat.

**DAVID ORTON AUDIO VISUAL**, 6-8 Bancroft, Hitchin, Herts SG5 1JQ. Tel: 01462 452248, fax: 01462 458424. Stockists of Apollo, Arcam, B&W, Cyrus, Denon, Marantz, Mission, Pioneer, Quad, Rotel, Ruark, Soundstyle, Teac, and many others. Hi-Fi listening room and A/V demo room. Workshop off premises. Mastercard, Amex, Visa, Diners. Interest free and instant credit. Open 9.30-5.30 Mon-Sat. Edavidortonaudiovisual@commail puserve.com

#### KENT

ASHFORD SOUNDCRAFT HI-FI, 40 High Street, Ashford. Seeking music lovers, male or female any age, to share common interest in musical Pro-aktiv Hi-Fi systems, multiroom or home cinema. Attractive unusual equipment in unusual setting, your place or ours, we guarantee lasting pleasure Open Mon-Sat appointment service Just pop in. Tel: 01233 624441. BADA

HOME MEDIA, 24-26 Union Street, Maidstone MEI4 1ED. Tel: 01622 676703.



Open Mon-Sat 9.30 to 5.30. Fed up of not being listened to? Visit a store with a different approach. Expert staff and extensive demonstration facilities mean that the best in Hi-Fi, home cinema and multi-room can be demonstrated for you to make an informed choice. Credit facilities. Major credit cards accepted. Delivery and instal lation service available. BADA

HOME MEDIA, 6 High Street, Tunbridge Wells, Kent TN1 1UX. Tel: 01892 525666, fax: 01892 527666. Open Mon-Sat I0am-6pm. Knowledgeable, trained and enthusi-astic staff who listen and will assist in finding the proper solution for you. Hi-Fi, Home Cinema and Multi Room expertly catered for. Demonstration facilities on three floors! Credit facilities. Major credit cards accepted. Delivery and installation service available. BADA

MUSICAL IMAGES LTD, Beckenham MUSICAL IMAGES LTD, Beckenham, Branch, 126 High St, Beckenham, Kent BR3 1ED. Tel: 020 8663 3777, fax: 020 8663 3555. Musical Images is a main authorised dealer for over 100 leading Audio Visual manufacturers. For multi-room, home automation and audiophile installations plus unsurpassed service, our award-winning stores are recognised cen-tres of excellence. Over the past 15 years Musical Images has established a unique reputation for customer care and we ensure all the latest Hi-Fi technology is on permanent demonstration in luxurious surroundings. Open seven days a week and with 0% finance available (subject to status), to experience the best team in the business, make sure you visit Musical Images. Opening times: Mon-Sat I0am-6pm, Sun I0am-4.30pm. SOUNDS OF MUSIC, 10/12 Chapel Place,

Tun bridge Wells, Kent TN1 1YQ. Tel: 01892 547003, fax: 01892 547004. Highend department on 01892 616383. Wisdom, Advantage, Zingali, Primare, Jamo, Quad, Marantz, Tannoy, REL, Magnum, Ruark, Musical Technology, Maghuni, Huark, Musical Technology Micromega, Acoustic Energy, Anthem Audio Note, Pink Triangle, AVI AVI Electrocompaniet, Teac, Audion, KEF, Pro-Ac, Michell, Copland, Trichord, Thorens, Pass, Lumley, Woodside, BAT, CAT, Osborn, Wadia, Krell, Audio Research and many more. We offer the very best service and advice along with some very special deals. 1 month's trial exchange, good prices and free delivery, the widest range of equipment, systems from £300-£100K, valve + vinyl specialist. All major credit accepted. www.sounds-ofcards music.co.uk.

JOHN MARLEY HI-FI CENTRES L.D., DOVER HI-FI, 43 High Street, Dover. Tel: 01304 207562. Acoustic Energy, Arcam, Denon, JBL, KEF, Musical Fidelity, NAD, Discour Panasonic, Rotel, Ruark, Tannoy, JOHN MARLEY HI-FI CENTRES LTD, Pioneer, Panasonic, Rotel, Ruark, Tannoy, TDL, Technics, Yamaha. A/V demo room. Full service department. Mon-Sat 9-5.30. Free installation. Credit to £1000. Mastercard, Visa, Switch, Electron. Established 29 years. Expert advice. Friendly service.

#### LANCASHIRE

PRACTICAL HI-FI, 43 Friargate, Preston. Tel: 01772 883958. The audio specialist, expert advice, instant demonstrations, best prices, interest-free credit, part-exchange welcome. Extended warranty. Stockist of rranty. C. Denon, Sony, Az Pioneer, Yamaha, Kenwood, Denon, Sony, Technics, Onkyo, Marantz, Pioneer, Mission, KEF, Jamo, Celestion, B&W. Also stockists of LaserDiscs.



PRACTICAL HIFI, (also in) 81 Whitegate Drive, Blackpool. Tel: 01253 300599.

33 Knowsley Street, Bolton. Tel: 01204 395789

84 Penny Street, Lancaster. Tel: 01524 39657.

#### LEICESTERSHIRE

CYMBIOSIS, 6 Hotel Street, Leicester LE1 5AW. Tel: 0116 262 3754, E-mail shop@cymbiosis.com. Acoustic Energy, Arcam, Castle, Chord Company, Cure, Denon, Linn Hi-Fi, Linn Knekt, Loewe Televisions, Lutron Lighting, Musical Technology, Naim, Nordost, Rage, Revox, Rotel, System Audio, Tag McIaren. Multiroom Design and Installation Service. 4 Listening Lounges. Finance available. Open 6 days 10am-5.30pm.

LEICESTER HI FI CO, 6 Silver Walk, St Martins Square, Leicester LE1 5EW. Tel: 0116 253 9753, fax: 0116 262 6097. Website: www.leicesterhifi.co.uk. Email: info@leicesterhifi.co.uk. Arcam, B&W, Bryston, Chord Electronics, Copland, Cyrus, Denon, Greig IK Loudspeakers, KEF, Marantz, Michell, Miller & Kreisel, Mission, Musical Fidelity, NAD, Nakamichi, Musical Fidelity, NAD, Nakamichi, Nautilus, Pioneer, PMC, Project, Quad, Rotel, Roksan, Sony, Talk Electronics, Tannoy, Teac, Technics, Yamaha, etc. 4 listening areas/rooms over 3 floors, we can demonstrate, deliver and install, Hi/A/V and multiroom. Credit facilities. All cards taken open Mon - Sat 9.30-5.30 BADA

#### LINCOLNSHIRE

STAMFORD HI-FI, 9 Red Lion Square, Stamford, Lincs PE9 2AJ. Tel: 01780 762128. Aiwa, Denon, KEF, Kenwood, Marantz, Mission, NAD, Pioneer, Quad, Technics, Yamaha, plus all major speaker manufacturers. Expert advice, comparator demonstrations on two floors, part exchange, Hi-Fi purchased for cash. No appointments necessary, home trial facilities, free installation, service department. Mastercard, Visa & credit charge, finance available. Mon-Sat 9-5.30pm, closed Thursdays.

#### LONDON

AUDIOJOY Co, Now on demonstration as a complete system: new Michell Delphini phono stage, Alectos and Orca amplifiers, P3P7 Harbeth speakers, Clearaudio turntables, Graham tonearm, Transfiguration cartridge, Trichord Research transport/Dac, Nordost, Argento and VDH cables. For an audition tel. 020 8363 4963. Enfield, North London.

CHOICE HI-FI, London SW14. Tel: 020 8392 1959/1963, fax: 020 8392 1994, E-mail: Choice\_hifi@msn.com. The most comprehensive range of new and second hand equipment anywhere in the country. Unique knowledge and experience in midto high-end systems and equipment matching. Part exchange welcome, upgrade ser-vice and interest free credit available. Home installation and multiroom specialists. Brands include, but not limited to: Michell, Lavardin, Trichord, Krell, Audio Research, Wadia, Musical Fidelity, Audible Illusions, Boulder, SME, Alon, Tara Labs, ATC, XLO, Van den Hul, Bryston, Target, Naim, Quad, Sonus Faber, Wilson Audio, Martin Logan, Meridian. If it's high-end and it's good, we've got it. Others may sell you hi-fi, at Choice we sell solutions.

KAMLA, 251 Tottenham Court Rd, London W1P 9AD. Tel: 020 7323 2747. Kenwood, Pioneer, JVC, Philips, Toshiba, Boston, B&W, AR, Mitsubishi. Demonstration room available. Appts required. Service dept. Mastercard, Visa, Amex, Diners. Open Mon-Sat 9-6

DEALER

Directory

BILLY VEE SOUND SYSTEMS, 248 Lee High Road, Lewisham, London SE13 5PL. Tel: 020 8318 5755/ 020 8852 1321. Arcam, AVI, Denon, Linn, Marantz, Mission, Naim, Pioneer, Rega, Rotel, etc. Two domestic style listening lounges. Appts required, service dept, home trial facilities, interest free credit, instant credit. Mastercard, Visa. Open Mon-Sat 10-6.30 Closed Thurs. BADA THE CORNFLAKE SHOP, 37 Windmill Street, London W1P 1HH. Tel: 020 7631 0472, fax: 020 7436 7165. E-mail: corn-flake@dial.pipex.com. Open Tues-Sat 10-6, Thurs 10-7. The specialists for high qual-tic sound be it for one room or many more ity sound, be it for one room or many more. They offer friendly advice, and a full delivery and installation service is available. Two listening rooms with full A/V facilities demonstrating Arcam, ATC, AVI, Barco, Bryston, Dynaudio, Mark Levinson, Linn Knekt, Naim, Origin Live, Proceed, Pro Monitor Co, Rega, Royd, Yamaha and more. Service department. Amex, Mastercard, Switch, Visa and worldwide mail order service. They used to be the coolest Hi-Fi shop in London, now they're the hottest

GRAHAMS HI-FI, Canonbury Yard, 190a New North Rd, London N1. Tel: 020 7226 5500. Winner Sony/HFN Greater London Dealer Award 1986/89/90. "One of the 5 best hi-fi shops in the world". Arcam, Linn, Meridian, Naim, Rega, etc. Systems from £500. Free parking, 4 demo rooms, service dept, open Tues-Sat. Ring for appointment. BADA

HI-FI & COMPONENTS, 84 Battersea Rise, London SW11 1FH. Tel: 020 7223 1110. Established 33 years. Beyer, Celestion, Cerwin Vega, Denon, nce, Goodmans, Harman Kardon, Jamo, Kenwood, NAD, Ortofon, Eminence, KAM QED, Sennheiser, Shure, Stanton, Tannoy, Project, Marantz, Vivanco. Wide range of accessories & styles. Appts nec, service dept. Mastercard, Switch, Visa, Diners, Amex, Open 10-6. Closed Wed.

HI-FI WAY HI-FI LTD, 318-324 Edgware Road, London W2 1DY, Tel: 020 7723 5251, fax: 020 7258 1682. Email: Sales@hiwaygroup.co.uk. Also at 242 Tottenham Court Road, London W1 9AD. All major brands stocked established since 1978, price match policy, extended guarantees, mail order service, home cinema equipment, hi-fi separates, midi, mini & micro systems, portable audio video recorders for home & export, televisions for home & export, full range of video accessories, digital camcorders, VHS 8mm camcorders, video editing equipment, digital still cameras, 35mm & APS photo cameras.

HI-FI EXPERIENCE, 227 Tottenham Court Road, London W1P 0HX. Tel: 0171-580 3535, fax: 0171-436 4733. Agencies 3535, tax: 0171-436 4/33. Agencies include: Acoustic Energy, Arcam, Audio Alchemy, Bang & Olufsen, Castle, Celestion, Chord, Cyrus, Denon, KEF, M&K, Marantz, Mission, Musical Fidelity, Meridian, NAD, Naim, Quad, REL, Rotel, Ruark, Tag McIaren, Tannoy, TDL, Teac, Wharfdale, Yamaha. 8 listening rooms, 3 years guarantee. Free delivery and simple installation (M25 periphery), opening hours Mon-Fri 10am-7pm, Sat 9am-6pm. Home cinema specialist.

BADA

MUSICAL IMAGES LTD, Covent Garden Branch, 18 Monmouth Street, Covent Garden, London WC2H 9HB. Tel: 020 7497 1346, fax: 020 7497 9205, Musical Images is a main authorised dealer for over leading Audio Visual manufacturers. For multi-room, home automation and audiophile installations plus unsurpassed ser-vice, our award-winning stores are recognised centres of excellence. Over the past 15 years Musical Images has established a unique reputation for customer care and Musical Images Covent Garden has distinction of being the first Sony ES Centre of Excellence in the world. Open seven days a week and with 0% finance available (subject to status), to experience the best team in the business make sure you visit Musical Images. Opening times: Mon-Sat 10am-6pm, Sun 10am-4.30pm

THX BADA

MUSICAL IMAGES LTD, 173 Station Road, Edgware HA8 7JX. Tel: 020 8952 5535, fax: 020 8951 5864. E-mail: sales@musical-images.co.uk See main THX BADA entry above. ORANGES & LEMONS, 61-63 Webbs

Road, Battersea SW11. Tel: 020 7924 2040. Juicy fruit from London's newest, freshest hi-fi/home cinema retailer. Telephone for demonstrations or just pop in. All the usual, ie friendly and efficient service free home installation credit cards 0% finance available, plus all the very best from: Arcam, Cable Talk, Chord Co, Demion, Denon Lifestyle, Epos, NAD, Naim, Neat, QED Multiroom, Quad, Rega, Roksan, Rotel, Royd, Ruark, Soundstyle, Stands Unique, Wilson Benesch, Yamaha more to come. The innovative AudioVisual retailer. BADA

STUDIO 99, 79-81 Fairfax Road, Swiss Cottage, London NW6. Tel: 020 7624 8855, fax: 020 7624 5315. Naim. Meridian. Quad. ATC, Mission, Creek, Cyrus, Denon, KEF. Arcam, Acoustic Energy, Yamaha, Philips, Royd, Rotel, Bang & Olufsen, Para Sound, Project, Vienna, Lexicon. High quality demonstrations. Home cinema. Multi-room. Service dept. Visa/Mastercard, credit facilities. Mon-Fri 10am-7pm, Sat 10am-6pm BADA

THOMAS HEINITZ, 35 Moscow Road, Bayswater, London W2 4AH. Tel: 020 7229 2077, fax: 020 7727 9348. Tube Stations Queensway & Bayswater. Parking meters available. Demonstration room by appoint-ment. Stockists of Acoustic Energy, Energy Bryston, Cura, Linn, Loewe, Naim, Neat Acoustics, Pioneer, PMC, Proac, Rega, Teac, Cyrus, Denon. Payment via Mastercard, Visa, cheques, cash and interest free credit facilities (details on request). Open 10.30am-6pm, Tuesday-Saturday.

#### **GREATER MANCHESTER**

AUDIO COUNSEL 14 Shaw Boad Oldham OL1 3LQ. Tel: 0161 633 2602, fax: 0161 633 2502. Arcam, Audiolab, Rega, Naim, Rotel, Royd, Marantz, Sonus Faber, Ruark, Epos, Denon, Yamaha, Bang & Olufsen. Free installation. Major credit cards and credit facilities. Open Tuesday-Saturday 10-5.30, 8pm on Thurs.

FORTISSIMO. 237 Deansgate. Manchester City Centre M3 4EN. Tel: 0161 834 2545, fax: 0161 834 2535. Retailers of high quality audio & visual equipment. & Bose specialists. Stockists of Naim Royd, NAD, Creek, Arcam, Castle, Quad, Yamaha, Onkyo, Ruark, Teac, Marantz, Ash Designs & Panasonic. Full demonstra-tion facilities and service department. Professional installation.

PRACTICAL HIFI, 65 Bridge Street, Manchester. Tel: 0161 839 8869. See main listing under Lancashire for details.

#### MERSEYSIDE

ACOUSTICA, 17 Hoole Rd, Chester CH2 3NH. Tel: 01244 344227. See our main entry under Cheshire.

#### MIDDLESEX

MUSICAL IMAGES LTD, Edgware Branch, 173 Station Rd, Edgware, Middlesex HA8 7JX. Tel: 020 8952 5535, fax 020 8951 5864. Opening times: Mon-Sat 10am-6pm Sun 10am-4.30pm. See main entry under London.

#### THX BADA

IMAGES LTD, Hounslow MUSICAL Branch, 45 High Street, Hounslow, Middlesex TW3 1RH. Tel: 020 8569 5802, fax: 020 8569 6353. Opening times: Mon-Sat 10am-6pm Sun 10am-4.30pm. See main entry under London.

#### THX BADA

#### WEST MIDLANDS

MUSIC MATTERS, 93-95 Hobs Moat Road, Solihull, W. Midlands B92 8JL. Tel: 0121 742 0254. Arcam, Audioquest, Audio Research, B & W, Castle, Celestion, Chord, Cyrus, Denon, Dynaudio, Jamo, KEF, Kenwood, Krell, Marantz, Martin Logan, Meridan, Michel, Mission, Monitor Audio, Musical Fidelity, Panasonic, Pioneer, Pok, ProAc, Project, Quad, REL, Rogers, Rotel, Ruark, Sennheiser, SME, Sonus Faber, Tag McLaren, Tannoy, TEAC, Technics, Theta, Thorens, Yamaha. Excellent demonstration and home trial facilities. Free installation. Customised multi-room systems. All major credit cards accepted. Full credit facilities available. Tues - Sat 10-5.30, Thurs 10-7. BADA

MUSIC MATTERS, 9 Market Street, Stourbridge, W Midlands DY8 1AB. Tel: 01384 444184. See above for full details Tue - Sat 10-5.30, Thurs 10-7, BADA

MUSIC MATTERS, 10 Boldmere Road, Sutton Coldfield, West Midlands B73 5TD. Tel: 0121 354 2311. See above for full details. BADA

ACOUSTICA, 114 Wolverhampton Road, Stafford ST17 4AH. Tel: 01785 258216. See our main entry under Staffordshire.

#### NORFOLK

BASICALLY SOUND, The Old School, School Rd, Bracon Ash, Norwich NR14 8HG. Tel: 01508 570829. Arcam, Audio Analogue, Bayer, Bryston, Cabletalk, Chord Co., Opera Speakers, Denon, Dynavector, Epos, Grado, Heybrook, Naim, Opera, ProAc, PMC, Sound Organisation, Rega, Royd, Soundstyle, Teac, etc. 2 comprehensive demo rooms. Home trial. Free installation. Visa, Mastercard, HP facilities. 0% Finance. Tues-Fri 9.30-1, 2-5.30. All day Sat.

#### BADA

RIVER CROSSING AUDIO. The Old Barn. Glandford, Holt, Norfolk NR25 7JP. Tel: 01263 741230. Open Tues-Sat 9am-6pm. Other times by appointment. Leave the noise of the city behind! Our showroom is a converted barn, situated in a picturesque north Norfolk village with ample off-road parking. We are pleased to demonstrate systems including Canary, Chord, CR



**INDICATES MEMBERSHIP OF THE BRITISH AUDIO** DEALERS ASSOCIATION

Developments, Densen, Fi-Rax, Michell, MVL, Myryad, Rothwell, Veritas Loudspeakers (including the award-winning H3) and many others.

#### NORTHAMPTONSHIRE

CLASSIC HI-FI & VIDEO, School Lane, Kettering, Northants. Tel: 01536 310855. Call us for all your hi-fi and home cinema. Denon, Sony, Lexicon, REL, Yamaha, Acoustic Energy, KEF, Tannoy, Rotel, Roxsan, Pioneer, Monitor Audio and many more. All major credit cards accepted. Interest FREE credit. FREE delivery and installation. Open 9.30am-5.30pm Mon -Sat.

LISTEN INN, 32 Gold Street, Northampton NN1 1RS. Tel: 01604 637871. The world's finest hi-fi equipment: Arcam, Audio Analogue, Castle, Chario, Copland, Denon, KEF, Krell, Linn, Marantz, Martin Logan, Mission, Musical Fidelity, NAD, Naim, Rega, Rotel, Sennheiser, Shahinian, Sonus Faber, Yamaha. 2 listening rooms. Appointments recommended. Part exchange welcome. Finance available, subject to status, written quotations available on request, Open 10am-5.30pm Mon-Sat (Closed Thursday).

#### NOTTINGHAMSHIRE

**DEFINITVE AUDIO** serves the first time buyer and the seasoned audiophile with the same high level of care and interest. Our aim is long term customer satisfaction. We achieve this with impartial advice, quality back-up service and a genuine interest in your needs. We have an established reputation for delivering sound quality benchmarks with innovation. Our range of carefully selected brands includes Art Audio, Border Patrol, Living Voice, Musical Fidelity, Wadia and many more. We have extensive part-exchanged stock. Open Mon-Fri 9.30-6.30, Sat 10.00-1.30. Visa/Mastercard /Switch/Amex. For more information call 0115 973 3222 or fax 0115 973 3666.

NOTTINGHAM HI-FI CENTRE, 120-122 Alfreton Road, Nottingham. Tel: 0115 978 6919. The area's oldest established specialist (Est. 1969). Two superb demonstration rooms, easy free parking. Home cinema and multiroom. Stockists of: Arcam, Audiolab, Celestion, Denon, KEF, Linn, Loewe T.V., Marantz, Micromega, Michell, Mission-Cyrus, Rotel, Sennheiser, Yamaha. Mon-Sat 9-5:30.

#### **OXFORDSHIRE**

ASTLEY AUDIO LTD, 3 Marketplace, Wallingford OX10 0EG, Tel: 01491 839305, fax: 01491 825024. Founded 1975. Great deals on Aura, B&W, Denon, Dual, KEF, Kenwood, Marantz, Mission, Mordaunt Short, Panasonic, Pioneer, Sony, Tannoy, Technics, Yamaha. Home trial, installation and delivery service. Service dept on site. 2 yr guarantee on most products. Interest free credit on selected items. 1 home cinema room, 2 listening rooms. Mastercard, Visa, Amex, Diners. Instant credit. Tues-Fri 9-5.30, Sat 9-5. Tapes & C.Ds stocked.

**OVERTURE HI-FI,** 3 Church Lane, Banbury OX16 8LR. Tel: 01295 272158. Arcam, Bose, Cura, Denon, Linn Products, Mission, Naim Audio, Quad, Yamaha. For sensible unbiased advice, call Oxfordshire's audio experts. Superb demo facilities. Home cinema, multiroom & commercial installations. No appts nec, service dept, free install, home trial. Mastercard, Visa, instant credit. Mon-Fri 10-6, Sat 9.30-5.30.

DEALER

Directory

OXFORD AUDIO CONSULTANTS, Cantay Hse, Park End Street, Oxford OX1 1JE. Tel: 01865 790879, fax: 01865 791665. E-mail: oxford.audio@btinternet.com. Quad, Denon, B&W, Pink Triangle, Krell, Sonus Faber, NAD, Rotel, Musical Fidelity, Pioneer, Marantz, Copland, Teac, Audio Analogue, Castle, Yamaha, Proac, REL. Demo room. Home trial and free installation. Instant credit, Mastercard, Amex, Visa. 10-6 Mon-Sat.

#### SHROPSHIRE

**CREATIVE AUDIO,** 9 Dogpole, Shrewsbury SY1 1EN. Tel: 01743 236055. Email sales@creative-audio.co.uk, www.creative-audio.co.uk. One of the largest ranges of quality HiFi/Audio Visual equipment outside of London. Arcam, Ash, Atacama, Cabletalk, Celestion, Chord, Cura, Cyrus, Denon, Dual, Heybrook, KEF, Mission, Onkyo, Optimum, NAD, Naim, QED, Quad, Rega, Soundstyle, Stands Unique, Teac, Wharfedale. Large selection of bargain special purchases available on most makes. Comfortable listening room, expert installation (including multiroom and DVD home cinema), free 2 & 5 year warranties, selected used equipment, partexchange welcome, specialist workshop facilities. Mastercard/Visa/Switch/Amex and low cost finance from £250 up to £15,000.

#### SOMERSET

MIKE MANNING AUDIO, 110 Middle Street, Yeovil, Somerset BA20 1NE. Tel: 01935 479361. 54 Bridge Street, Taunton. Tel: 01823 326688. www.mikemanning audio.co.uk. The HiFi and A/V specialists. The best in HiFi form: Arcam, B&W, Castle, Denon, Densen, Heybrook, JM Lab, KEF, Loewe TV & Video, Marantz, Naim Audio, NAD, Pioneer, PMC, Rega, Rotel, Royd, Shahinian, TDL, Teac. Dedicated listening lounge for relaxed and unpressured demonstrations. Home installations on most systems. Full service department. Mastercard, Visa, Instant Credit Closed Mondays.

#### STAFFORDSHIRE

ACOUSTICA, 114 Wolverhampton Road, Stafford ST17 4AH. Tel: 01785 258216. Quality Home Cinema systems from reputable manufacturers including projectors from Seleco, amplification from Naim, Rega, Rotel, Arcam, Musical Fidelity & Teac, and loudspeakers from Kef, Ruark, Celestion, JM Lab and many more. We offer friendly, helpful advice, interest-free credit and trade-in facilities, and deliver and install systems throughout Staffordshire and the Midlands. Open Tues. - Sat. 10-5.30, evenings by arrangement. www.acoustica.co.uk.

#### SUFFOLK

ANGLIA AUDIO, The Street, Hessett, Bury St Edmonds, Suffolk IP30 9AZ. Tel: 01359 270212. Hi-Fi and speaker centre dedicated to quality hi-fi since 1971. Open 10-6. Closed Wednesdays and Sundays. Evening and Sunday demos by appointment.

AUDIO IMAGES, 128 London Road North, Lowestoft NR32 1HB. Tel: 01502 582853.



The shop for real Hi-Fi separates and home cinema. Refreshingly different range as well as established manufacturers. Hi-Fi from budget to high-end, transistor & valve. AV from £100 to a £100,000 custom install. Projection systems, DVD players and movies. Separate demo room, range of credit facilities, free fitting & the best and friendliest service available.

FXDA EASTERN AUDIO, 41 Bramford Rd, Ipswich. Tel: 01473 217217. Easy parking. Demo room. Giving sound advice for over

21 years. Arcam, Audiolab, Meridian, Denon, B&W, Technics, Quad, Castle, Celestion, Top Tape, plus all the usual headphones, leads, racks etc. EADA STOWSOUNDS, Stone Farm, Borough

STOWSOUNDS, Stone Farm, Borough Lane, Gt Finborough, Suffolk IP14 3AS. Tel: 01449 675060 Specialist Hi-Fi dealer with great products from Acoustic Solutions, Alchemist, Atacama, Audioquest, Beyer, Cable Talk, DPA, Electrocompaniet, Exposure, Grado, JM Labs, Kimber, Magnat, Neat, Nordost, QED, SonicLink, Sonneteer, Sound Organisation, Soundstyle, Stands Unique, Van den Hul, other makes and used equipment available, call us for more details.

#### SURREY

COSMIC HI-FI SUPERSTORE, Est 1962, 244-256 Station Road, Addlestone, Weybridge, Surrey KT15 2PS. Tel: 01932 854522/ 832400/851753, fax 01932 832432. Open 7 Days a week, Mon-Sat 9-6pm, Fri till 8pm, Sun 10-4pm. Large free car park, fully equipped service depart, massive showroom. Arcam, Audio Quest, B&W, Cable Talk, Denon, Dual, Jamo, Kenwood, Marantz, Mission, NAD, Pioneer, Quad, Rogers, Sennheiser, Sony, Tannoy, Target, TDL, Technics, Thorens, Yamaha home cinema, widescreen TV, projection TV, Laserdisc. Int. free credit. All major credit cards.

INFIDELITY, 9 High Street, Hampton Wick, Kingston Upon Thames, Surrey. Tel: 020 8943 3530. Arcam, Densen, B&W Nautilus, Musical Technology, Meridian, Linn, Naim Audio, Neat Acoustics, Royd, Rega Research, Rotel, Shahinian, Proceed & more. Single speaker listening room. Appts pref, free installation, service dept. Major credit cards. Closed Mon, Tues-Fri 10.30-7. Sat 10-6.

PJ HI-FI, 3 Bridge Street, Guildford GU1 4RY. Tel: 01483 504801/ 304756. Mon-Sat 9am-6pm. Arcam, B&W, Denon, Linn, Meridian, Mission/Cyrus, Kef, Marantz, NAD, Pioneer, Primare, Proac, Quad, REL, Rega, Rotel, Tag Mclaren, Yamaha. Demo rooms for Hi-Fi/home cinema, parking, delivery & installation. Service department on premises. Call now.

ROGERS HI-FI, The Old House, 18 & 20 Church Street, Godalming, Surrey GU7 1EW. Tel: 01483 425252. Castle, Denon, Marantz, Musical Fidelity, Myryad, NAD, Ruark, Tannoy, Teac and many more. Free installation. Service department. Mastercard/Visa. Monday-Saturday 9.30am-6pm, later by appointment

SPALDINGS HI-FI, (Established 30 years), 352-4 Lower Addiscombe Rd, Croydon, Surrey CR0 7AF. Tel: 020 8654 1231/2040. Linn, Naim, Quad, Meridian, Mission, Marantz, Denon, Ruark, Tag Mclaren, Tannoy, Arcam, KEF, Castle, Musical Fidelity. 3 demo rooms including A/V room. Service dept, free install, home trial facilities, appointments advisable. Mastercard, Visa, Amex, interest free credit, instant

INDICATES MEMBERSHIP OF THE BRITISH AUDIO DEALERS ASSOCIATION credit. Mon-Sat 9-5.45. Tues-8. Service dept. BADA

UNILET SOUND & VISION LTD, The Hidden Hi-Fi Store, 35 High Street (Opposite Waitrose), New Malden, Surrey KT3 4BY. Tel 020 8942 9567. Open Mon-Sat 9am-6pm. 6 well appointed Hi-Fi and AV demonstration rooms. Agencies covering all the best brands available worldwide. Knowledgeable friendly enthusiastic staff. Fully equipped service department. Instore custom cable service outlet supplying tailor made cables to your specific requirements. Stockist of hundreds of specialist cables, accessories, headphones and terminations. Free parking. Interest free finance. All major credit cards accepted. Worldwide mail order service. Part exchange welcome. Legendary Blue List special offers. Full equipment and cable price lists available on request. With over 30 years experience in demonstrating, retailing and servicing high quality Audio Visual equipment, from budget mini-sytems to high-end exotica, is there really any need to go elsewhere?

#### SUSSEX (EAST)

ADAMS & JARRETT, 6-18 Norman Road, St. Leonard's-on-Sea, East Sussex TN37 6NH. Tel: 01424 437165/432398. Stockists of B&W, Cabletalk, KEF, Marantz, Meridian, Micromega, NAD, REL, Rotel, Ruark, Sennheiser, Tannoy, Target, Yamaha, Talk Electronics, Stands Unique, Dynaudio, Musical Fidelity, Denon, Dali, Myryad, Onkyo, Aura. Two demo rooms, home trial, A/V specialists. Instant and interest-free credit available. Open Mon-Sat 9-5.30.

JEFFRIES HI-FI, 69 London Road, Brighton BN1 4JE. Tel: 01273 609431. Email sales @jeffries.co.uk Hi-Fi, home cinema and custom install specialists. Range includes Acoustic Energy, Arcam, Atacama, Audio Technica, Beyer, Chord, Cura, Denon, Dynavector, Goldring, Grado, Ixos, Jamo, JBL, KEF, Linn, Linn Knekt, Loewe, Miller & Kreisel, MusiQ, Musicworks, Naim, Nakamichi, Ortofon, Panasonic, Partington, Projekt, OED, Quadraspire, Rega, REL, Rotel, Sennheiser, Shahinian, Sonance, Soundstyle, Sound Organisation, Systemline, Teac, Top Tape, Traxdata, Yamaha. 2 demo rooms. Open Tues-Sat. Free parking, bus route, credit facilities. Winner Sony/Hi-Fi News Best Southern Dealer. Est 1935. www.jeffries.co.uk

#### BADA

JEFFRIES HI-FI, 4 Albert Parade, Green Street, Eastbourne BN21 ISD. Tei: 01323 731336, fax: 01323 416005. E-mail sales@jeffries.co.uk Hi-Fi, home cinema and custom install specialists. Range includes Acoustic Energy, AKG, Apollo, Arcam, Atacama, Audio Technica, Beyer, Chord, Denon, Goldring, Grado, Ixos, Jamo, JBL, KEF, Linn, Linn Knekt, Loewe, Miller & Kreisel, MusiQ, Musicworks, Naim, Nakamichi, Ortofon, Panasonic, Partington, Projekt, QED, Quadraspire, Rega, REL, Rotel, Ruark, Seleco, Sennheiser, Sonance, Soundstyle, Sound Organisation, Systemline, Teac, Top Tape, Traxdata, Yamaha. 2 demo rooms. Open Tues-Sat. Free parking, bus route, credit facilities Winner Sony/Hi-FI News Best Southern Dealer. Est 1935. www.jeffries.co.uk

#### BADA

THE POWERPLANT, 66/67 Upper North Street, Brighton BN1 3FL. Tel: 01273 775978, fax: 01273 748419 E-mail email@powerplant.co.uk Whatever your **DEALER** Directory

budget we can help you choose from our carefully selected range of today's finest Hi-Fi and home cinema equipment. Recommended agencies include Arcam, Audiolab, ATC, B&W, B&O, Cyrus, Exposure, Epos, Linn, Marantz, Micromega, Mark Levinson, ProAc, Rega, QED, Systemline, Yamaha. Excellent demonstration facilities, knowledgeable and friendly staff. Multiroom specialist, CEDIA member. Open Tues -Sat 10am-6pm. Late evenings by appointment. All major credit cards. Full credit facilities.

BADA

#### SUSSEX (WEST)

AUDIO DESIGNS, 26 High Street, East Grinstead, West Sussex RH19 3AS. Tel/fax: 01342 314569. www.audiodesigns.co.uk. Hi-Fi, home cinema & multiroom specialists. Authorised stockists of: Arcam, Audiolab, Cabletalk, Castle, Cyrus, Epos, KEF (inc. Reference), Linn (inc. AV51), Loewe, Marantz, Mission, Naim, Pioneer, Quad, Rel, Rotel, Sennheiser, Sony, Soundstyle, Stands Unique, Tag Mclaren, Target, Thorens, Yamaha & more. 3 dedicated demonstration rooms - Hi-Fi & home cinema. Service dept. 0% finance available. 9.30-6 Mon-Sat.

BOWERS & WILKINS LTD, (Est 1945), 1 Becket Buildings, Littlehampton Road, Worthing, (near Thomas a Becket). Tel: 01903 264141. E-mail: sales@bowersandwilkins.co.uk. Web site: www.bowersandwilkins.co.uk. 1 minute from A24 & A27. Free local parking. B&W, Denon, Harman-Kardon, JBL, Jamo, Marantz, NAD, Philips, Solid, Tannoy, TDL, Technics, Thorens and many more in 4 demo rooms. Systems, Hi-Fi and home cinema, DVD and projection TV. Service dept, installations. Open 6 days a week. Mastercard, Visa, instant credit to £1,000 subject to status.

#### **TYNE AND WEAR**

GLOBAL HI-FI CENTRE, 87 CLAYTON STREET, NEWCASTLE-UPON-TYNE NE1 5PY. TEL 0191 230 3600 FAX: 0191 222 0286. Email: info@ globalhificentre.com www.globalhificentre.com. FOR THE ULTI-MATE SOLUTION IN HI-FI, CUSTOM DESIGN, INSTALLATION OF HOME CIN-& MULTI-ROOM SYSTEMS, IT'S TO BE GLOBAL HI-FI CENTRE. EMA & GOT COMPLIMENTARY CONSULTANCY SER-VICE OFFERING QUALIFIED ADVICE FROM CONCEPT TO DESIGN. THREE STATE-OF-THE-ART SHOWROOMS, INCLUDING A SUPERB MULTI-ROOM FACILITY. AUTHORISED DEALER FOR MAJOR MANUFACTURERS INCLUDING ALL THE LATEST GREATEST DOLBY DIGITAL, D.T.S., THX AND EX SUR-ROUND SOUND SYSTEMS. BRING THE BIG SCREEN HOME WITH PLASMA SCREENS, REAR PROJECTION, SCREENS, REAR PROJECTION, WIDESCREEN TV'S, AND LCD/DLP/CRT/ WIDESCREEN IV'S, AND LCD/DLP/CH1/ PROJECTION SYSTEMS. ACOUSTIC ENERGY, AUDIO ANALOGUE, BOSE, BOSTON ACOUSTICS, CURA, CREEK, CHORD ELECTRONICS, DAVIS PROJECTORS, DENON, ELAC, FUJITSU DIASMA HEYBOOK, IPL 100 KEE PLASMA, HEYBROOK, JBL, JVC, KEF, (INC. THX & KEF REFERENCE), LINN, MARANTZ, MYRIAD, NAKAMICHI, NAD, NHT, OPTIMUM, PANASONIC, PARASOUND, PIONEER, PROJECT AUDIO, REL, ROKSAN, ROTEL, SELECO PROJECTORS SONY TALK SONY, TANNOY, PROJECTORS, TALK **FLECTRONICS** TEAC TECHNICS, VESTAX, VIENNA ACOUSTICS, YAMAHA, FOR THE ULTI-VIENNA MATE HI-FI & HOME CINEMA SOLUTION

GO GLOBAL, WE'RE WITH YOU ALL THE WAY, FROM STARTER KITS TO STATE-OF-THE-ART SYSTEMS. (CEDIA)

#### WILTSHIRE

SALISBURY HI-FI, 15 Catherine Street, Salisbury. Tel: 01722 322169/330841. Arcam, Audio Analogue, B&W, Celestion, Chord Company, Denon, KEF, Marantz, Meridian (inc. Digital theatre), Mission, Michell, Musical Fidelity, NAD, Naim, Nordost, Opera, Project, QED, Rotel, REL, Teac, Yamaha. Home Cinema and Hi Fi specialists, multi room and commercial installation specialists, service dept. on site, high quality used equipment, projection TV and plasma. 2 demo rooms, credit facilities, Visa/Mastercard. Open Mon-Sat 9.30-5.30

BADA

#### YORKSHIRE (EAST)

THE AUDIO ROOM, 2 George Street, Hedon, Hull HU12 &JN. Tel: 01482 891375 or visit www.audioroom.karoo.net. Superior quality Hi-Fi, home cinema and multi-room. Authorised agents for Linn Hi-Fi, Linn AV51, Loewe TV, Cyrus, Musical Fidelity, Copland, Marantz (inc. Premium), Denon, Nakamichi, B & W, Sonus Faber, PMC, Tannoy, AVI, QED, Sonic Link, Ecosse, Quadraspire, Stands Unique, Soundstyle, Atacama, Dual, Project. Open Mon-Sat 9am-7pm (later if required). Credit facilities home demonstrations available. Free car parking and a warm welcome with impartial advice guaranteed. East Yorkshire's friendliest Hi-Fi dealer.

ZEN AUDIO, 35 George St, Hull HU1 3BA. Tel: 01482 587397. Hull's best Hi-Fi storel From entry-level systems to high-end exotica. Friendly service, impartial advice, home demonstrations, free installations, car parking, and the best range of quality products including...Audio Analogue, Acoustic Energy, Audio Note, Audion, Densen, Denon, Dynaudio, EAR, Graff, NAD, Naim Audio, Musical Fidelity, Musical Technology, Michell, Pioneer, Pro-Ac, Rega, REL, Ruark, Sugden, Teac, Unison Research, Yamaha and many others. Open Mon-Sat. Instant credit facilities available. Feel free to call for more details.

#### YORKSHIRE (SOUTH)

#### DONCASTER

HI-FI STUDIOS, Sunnyfields, Doncaster DN5 8SA. Tel: 01302 781387/391193, fax: 01302 781387, Hi-Fi, home cinema and multi-room experts. Musical Fidelity, Tag McLaren, Electrocompaniet, ProAc, Ruark, Castle, Teac, Unison Research, John Shearne, T&A, Impulse Horns, Monitor Audio, Harbeth, Alchemist, Michell Turntables, Nottingham Analogue Studios, Blueprint, Audio Analogue, Exposure, Living Voice, Densen, Celestion (A Series only), Opera, Audio Physic, Trichord Research, Nordost, Stands Unique, Stax Electrostatics, Ortofon, Goldring, REL Subwoofers, Yamaha AVV, Proceed Digital Cinema. Viewing and demonstration by appointment. Home trials and free installation. Mastercard, Visa and credit facilities. Phone for more information. 10am-8pm Tues-Fri, 10am-6pm Sat. Closed Monday.

THX BADA



#### ANTRIM

AUDIO AUDIO, Audio Hi-Fi Specialists. Tel: 028 9082 2128, fax: 028 9082 2128. Arcam, Rega, Denon, Sugden, Alchemist, Totem, Acoustic Energy, Tangent, Ortofon, Audioquest, QED, Ixos, Chord Co., Apollo, Soundstyle. Demonstrations by appointment. Evening demos our speciality. Ask for our free customer care package. We can also be contacted in the evening at the above telephone number.

#### BELFAST

LYRIC HI-FI, 161/3 Stranmills Road, Belfast. Tel: 028 9038 1296. Demonstration and installation of the finest Hi-Fi, home cinema and multiroom systems, including Arcam, Cyrus, Denon, Linn, Loewe, Mission, Naim, Yamaha and many more. Our experience will help you to choose the right system for your needs. Open Mon-Sat 10-6, Late night Thurs, closed all day Wednesday.

THE HI-FI SHOP, Bruce House, Bruce Street, Belfast BT2 7JD. Tel: 028 9032 7604. Product lines include Arcam, Audiolab, B&O, B&W, Castle, Chario, Keswick Audio, Micromega and Rotel. Demo room and Earl Gray available. Service dept, free installation, home trial facilities. Mastercard and Visa, instant and interest free credit. Open Tues-Sat I0am-6pm.

#### CO. TYRONE

KRONOS HI-FI, 8/9 Scotch Centre, Dungannon BT70 1AR. Tel: 028 8775 3606, fax: 753006 and 19F high St., Omagh BT78 1BA. E-mail: David@KronosHi-Fi.co.uk, website: www.KronosHi-Fi.co.uk, website: www.KronosHi-Fi.co.uk, website: www.KronosHi-Fi.co.uk, We have one of the largest and best ranges of Hi-Fi and Home Cinema equipment in Ireland. Our agencies include Absolute Sounds, Acoustic Energy, Arcam, Arion, Audion, Audio Analogue, Audiomeca, Audio Physic, AVID, Cadence, Copland, Cyrus, Denon, Densen, Eltax, Helios, Jamo, JBL, Krell, Klipsch, Living Voice, Lyra, Marantz, Meracus, Michell, Mission, Musical Fidelity, Nottingham Analogue, Opera, Oracle, Quadral, Rega, Rotel, Roksan, Ruark, SME, Sonus Faber, Triangle, Teac, Tannoy, THX, Unison, UKD, Yamaha, YBA. TVs and Projectors: Akai, Davis, Loewe, Revox, Runco, Panasonic, Philips, Seleco, Sony. Demo rooms for Hi-Fi and Home Cinema. Free installation, home demos and home trials. Mastercard and Visa. Credit including instant and interest free. Multiroom and custom installation specialists. Open Mon-Fri 9.30-5.30. Closed Wed. Sat 9.30-5.30. Open any evening by appointment.

#### SCOTLAND

LOUD & CLEAR, now in Glasgow and Edinburgh, find out more at www.loudclear.co.uk. Scotland's finest and friendliest Hi-Fi stores, combining knowledgeable advice with specially selected products and exceptional customer service. Comfortable hi-fi and home cinema demonstration rooms, dedicated multi-room and home cinema installation team, full service and repair facilities. Naim Audio, DNM, Crimson, Primare, Musical Fidelity, Tag McLaren, Rega, NAD, Marantz, Denon, ProAc, Kef Reference, Living Voice, Ruark, Dali, Monitor Audio, Tannoy, JM Labs, VDH, Nordost, Chord Co, Ash Design, Optimum, Quadraspire, etc, etc. Open Tues-Sat I0am-6pm. Thurs till 7pm. 520 St Vincent St, Finnieston, Glasgow. Tel: 0141 221 0221 and 26 Hamilton Place, Stockbridge, Edinburgh. Tel: 0131 226 6500.

#### EDINBURGH

MUSIC MILL, 72 Newhaven Rd., Edinburgh EH6 5QG. Tel: 0131 555 3963, fax 0131 555 3964. Audio Research, Copland, Krell, Marantz, AVI, Rotel, Grado, Transparent Audio, Theta Digital, Wilson Benesch, Quadrospire, Stands Unique, Sequence, Target, Ortofon, Ringmat, Michell, Project, Jecklin Float, Crimson, Sonus Faber, Wilson Audio, ProAc, Alchemist, Teac, Martin Logan, Revox, Goldring, Koetsu, Stax, Bon Horns, JBL, Loewe. Listening rooms, free parking, workshop, delivery and installation. Open Tuesday to Saturday 10am-6pm. Call Mark, Stuart, Raoul or Mike for information or directions.

#### DUNDEE

SOUNDS PERFECT. Hi-Fi at it's best. 26 St. Andrews Street, Dundee. Tel: 01382 266592, fax: 01382 229994, E-mail: sales@sounds-perfect.co.uk. Exceptional quality and professional service at Dundee's premier Hi-Fi store. Open 6 days a week. 10 - 7 Mon - Thurs, 10 - 6 Fri & Sat. Demonstrations are available outside of these hours by appointment. Main dealers for Arcam, Rotel, Marantz, Technics, Roksan, Sony, Musical Fidelity, Tannoy, Mission & B&W.

#### WALES

#### NORTH WALES

ACOUSTICA, 17 Hoole Rd, Chester CH2 3NH. Tel: 01244 344227. See our main entry under Cheshire.

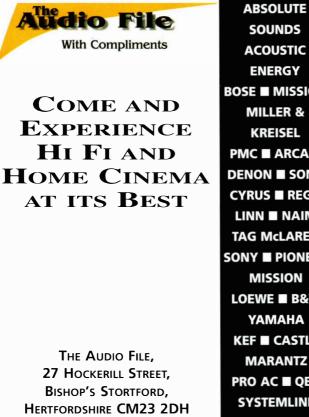
ACTON GATE AUDIO, 4 Ruabon Rd, Wrexham. Tel: 01978 364500. Demonstration room, installation service. Easy parking and motorway access. Mastercard, Visa etc. See main entry under Cheshire.

Want to be in our Dealer Directory? Want to advertise in any one of our many specialist sections? Call the Ad Team now on 020 7317 2600



INDICATES MEMBERSHIP OF THE BRITISH AUDIO DEALERS ASSOCIATION

### Award – Winning Speakers available from:



TEL: 01279 506576 FAX: 01279 506638

WEBSITE: www.audiofile.co.uk

ACOUSTIC ENERGY BOSE MISSION **MILLER &** KREISEL PMC ARCAM DENON SONY CYRUS REGA LINN NAIM TAG McLAREN SONY PIONEER MISSION LOEWE B&W YAMAHA KEF CASTLE MARANTZ PRO AC 🔳 QED SYSTEMLINE WHARFEDALE NAKAMICHI NAUTILUS

### INFORMED, INDEPENDENT, **EXPERIENCE & ESTABLISHED** FOR OVER 17 YEARS

Audio Visual Specialists...2 Demo Rooms SEE & HEAR THE BEST TODAY • DVD • THX/AC-3 PROJECTION • WIDESCREEN •

 ARCAM • CASTLE • DENON • MARANTZ • YAMAHA • PIONEER • SONY • CASTLE • KEF • REL • PRO-JECT • NAD • TANNOY • NAKAMICHI and lots more

**0% FINANCE** AVAILABLE ON SELECTED ITEMS

Unit 35, Observatory Centre, High Street, Slough, Berkshire SL1 1LE Tel: (01753) 531785

**AUTHORISED DEALER FOR:** 

- Frasers-



### It costs the same to get it right as it does to get it wrong

At the Listening Rooms, we pride ourselves on matching your needs with exactly the right equipment, whatever your budget, and because we only stock the best, that's what you'll get. What you'll also get is sound

professional advice and a chance to relax and listen to some of the world's finest Hi-Fi equipment.

> 35 years combined experience. Two Fully equipped listening rooms. Home installation service. Multi-room design and installation. 2 years Parts and Labour guarantee. Home cinema surround-sound Export and Credit facilities.

0% FINANCE SUBJECT TO STATUS

 ACOUSTIC ENERGY 
 ARCAM 
 AUDIO RESEARCH ACOUSTIC ENROLT ARCAIL & ADDIO RESEARCH
 AUDIOLAB - AURA · BOSE • CELESTION • COPLAND
 •CIRUS · DENON • EPOS • HARMAN KARDON
 •JBL • KEF • KRELL • LINN • MARANTZ
 MARTIN LOGAN • MERIDIAN • MICHELL • MICROMEGA MISSION MONITOR ADDIO • MUSIC FIDELITY X SERIES • NEAT PETITE • PINK TRIANGLE • PIONER • PROAC • QUAD • REL • ROGERS • SME • SONUS FABER • STAX • THETA • WILSON AUDIO • YAMAHA •



Monday - Saturday 10am - 6pm. Nearest Tube: South Kensington or Gloucester Road



range of Cyrus Electronics on demonstration inc aCA7 Pre-Amplifier and aPA7 150w Monobloc Amps

227 TOTTENHAM COURT ROAD, LONDON TEL: 0171 580 3535 · FAX: 0171 436 4733 17 CONISCLIFFE ROAD, DARLINGTON, CO. DURHAM TEL: 01325 481418 • FAX: 01325 382982

Do you want to choose your hifi in a comfortable and relaxing environment . . ? Do you want friendly and helpful advice (and a cup of tea) . . ?

Do you want to buy your system based on what you hear (and not what somebody tells you) . . ?

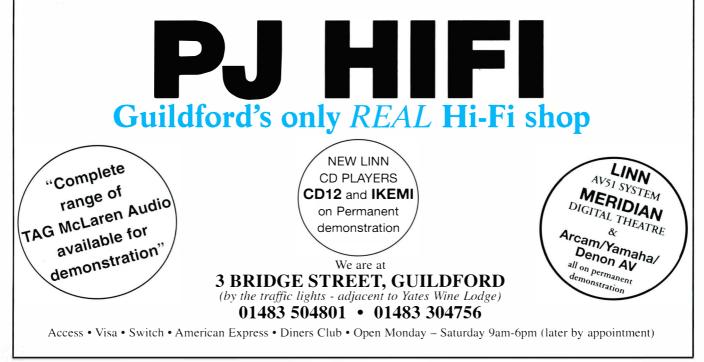
Do you live in GUILDFORD . . ?

... or Addlestone, Aldershot, Ashford (Middx), Ashstead, Bagshot, Basingstoke, Bracknell, Camberley, Chertsey, Crowthorne, Cranleigh, Dorking, Epsom, Esher, Farnborough, Farnham, Fleet, Frimley, Godalming, Hartley Wintney, Haslemere, Hook, Horsham, Kingston, Liphook, Leatherhead, Molesey (East & West), New Malden, Odiham, Petersfield, Reading, Reigate, Redhill, Richmond, Shepperton, Virginia Water, Walton-on-Thames, West Byfleet, Weybridge, Windsor, Woking, Wokingham, Yateley?

Nobody else in these areas stocks all the following major brands: Acoustic Energy, Arcam, B&W, Castle, Cyrus, Denon, Epos, Harman Kardon, Infinity, KEF (Reference), Linn Products (including records), Marantz, Meridian, Mission, NAD, Nakamichi, Pioneer, Primare, PROAC, QED (Systemline), Quad, Rega, Revox, Rotel, Tag McLaren, Target, T.D.L., Yamaha (including Home Cinema Systems) & Top Tape.

Visit us first and you won't need to go anywhere else, we have superb demonstration rooms where you can decide in comfort, and we will deliver and install free of charge (and part exchange is possible).

**Complete service** – We are the only outlet in the area to offer the complete service. As well as stocking selected items from the above manufacturers we are able to service and/or repair on the premises all the above brands (and others also).



## **BACK ISSUES**

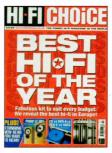


SEPT 2000/ISSUE 205 CD-R & MiniDisc £200 - £1,500 Amplifiers £200 - £500 Headphones £20 - £400 IVC's first DVD-Audio plave

### HI-FICHO



DEC 2000/ISSUE 208 Amps Mega Test, all sub-£500
 One-brand CD/amp systems MP3: Revolution or bust? Marantz SA-1 SACD/CD player



OCT 2000/ISSUE 206 an Hi-Fi Awards 2000-2001 E F CD/DVD/SACD Showdown Equipment supports Mains cables and conditioners



 The best products of the year
 Best Buys, Recommendeds Records of the year Room acoustics feature



NOV 2000/ISSUE 207 CD and DVD players Mega Test Budget Speakers, all sub-f200 Digital interconnects tested ■ Naim CD5 - the best CD player?

# **HI-FICHOICE**

JAN 2001/ISSUE 210 Surround sound amps Bench Test
 Multichannel speaker packages

Subwoofers on test
 Technics DVD-A10: best DVD-A yet?

#### BACK ISSUES

Back issues from 1999 onwards are available by mail order. They cost £4.00 (UK) or £6.95 (overseas). Both prices include p&p. Order by phone on (01458) 271147 or e-mail: entertainment.subs @futurenet.co.uk.

We accept Mastercard and Visa credit. or Switch debit cards. Or send a cheque or PO made out to Future Publishing using the form on the right.

ORDER A REVIEW REPRINT If you are interested in a HFC review of an older component and the back issue has sold out, we can usually send photocopies of old reviews to any UK address for a flat fee (inc. p&p) of £5.00 per review. You must know in which issue the original review appeared; we are unable to search back issues for old reviews. Send a written request, enclosing a cheque for £5 made payable to Future Publishing Ltd, to: Hi-Fi Choice Reprint Service, Future

Publishing Ltd, 99 Baker Street, LONDON W1M 1FB. PLEASE NOTE: THIS SERVICE IS ONLY FOR OTHERWISE UNOBTAINABLE REPRINTS.

### NEXT MONTH ....

#### COMBAT DISCS

With new digital formats creeping up on us, let's not forget the granddaddy of them all. Compact Disc is not in any danger of disappearing any time soon, as next issue's Bench Test of hardcore players will show. Featuring some of the best from manufacturers such as Arcam, Cyrus, Marantz, Rotel and Roksan, ranging in price from £400 to £1,200, this test will show exactly who's leading the Digital Derby.

#### **TWO-BOX BONANZA**

For some serious sound, check out our test of these pre/power amplifier combos. With some of the latest models from Cyrus, Creek, Linn and Myryad, among others, make this test your first port of call if you're after some high-end welly for your system.

#### FOR POSTERITY ....

We're all being seduced by the lure of digital recording. Whether you like the bit-perfect accuracy of CD-R or the powerful flexibility and portability of MiniDisc, make sure you hang around for our review of the best recording media for both formats.

#### PLUS!

Nakamichi SoundSpace 9: the most beautiful system in the world. Probably.

Mark Levinson's first integrated amplifier. The best one-box amp ever devised?

Quad valves and electrostatic speakers. Classic technology reborn.



### TO ORDER YOUR BACK ISSUES

YOUR DETAILS Name Address Postcode E-mail address Male/Female Card Number Expiry Date Signed UK READERS Future Publishing Ltd, Freepost BS4 900, Somerton, Somerset TA11 6BR OVERSEAS READERS Future Publishing Ltd, Freepost BS4 900, Somerton, Somerset TA11 6TB, UK

#### WHICH ISSUE/S DO YOU REQUIRE?

MONTH & YEAR	ISSUE NUMBER		AMOUNT		
HOW W	ILL YOU E	BE PAYING	?		
Make cheques/POs to Future Publishi (PLEASE TICK RELI	ng Ltd.	CHEQUE MASTERCARD SWITCH VISA POSTAL ORDEF			
HOW M	UCH WIL	L IT COST	?		

UK £4 (per issue), Overseas £6.95 (per issue)

PLEASE PHOTOCOPY

## Stop the rot!

PAUL IS NOT CONVINCED ABOUT THE HI-FI CAPABILITIES OF MULTICHANNEL AMPLIFIERS AND HAS AN ANSWER TO THE CONUNDRUM OF MIXING STEREO WITH SURROUND SOUND.

ast month's delve into the world of multichannel speakers brought me up against some of the peculiarities of integrating stereo and multichannel systems. Serious hi-fi dealers are selling loads of AV equipment these days, but I'm not sure that any of us truly appreciate some of the implications of this insidious revolution. I understand the appeal of a multichannel system to movie fans. What gets me worried is the assumption that you can treat a multichannel system just like you would a regular stereo system.

If music is important in your life, hang on to your stereo system. You might want to add a multichannel dimension, either for movie watching, or to explore the multichannel music recordings that are starting to appear. You might even believe that multichannel music represents the future and you may well be right, given the amount of effort the recording industry is currently putting in. But you've probably got a substantial collection of stereo music recordings, and will want to go on playing these for years to come. And even though the biz might be gearing itself to release multichannel music, it's never going to stop mixing and releasing stereo material.

#### THE SIMPLE LIFE

But surely all those AV amplifiers, receivers and processors are stereo compatible? Well, yes, but... Stereo doesn't necessarily mean hi-fi, and in my (admittedly limited) experience, these AV processor/amps fall a long way short of serious 'real' hi-fi stereo amplification. Chatting to various industry people over the last few weeks, at least two (both sitting firmly on the stereo/hi-fi side of the fence) observed that as soon as you feed a stereo signal into one of the current processor chips, you immediately throw away layers of subtle musical information.

It sounds an extreme position, but we've been here before. Let's turn the clock back 25 years to the mid-1970s. Stereo amplifiers had been getting more and more complex for the previous decade, some even featuring full multiband equalisation, when the whole process came to a head with the arrival of multichannel quadraphonic behemoths. At the same time a much quieter revolution began when Naim Audio and Mark Levinson both introduced 'minimalist' preamps which ditched even the simplest tone controls in the interests of sound.

Now we have the wisdom of hindsight. Tone controls have become the exception rather than the rule on any amplifier with audiophile pretensions. The minimalist approach is now firmly established as best practice for stereo reproduction, but minimalism is essentially incompatible with multichannel processing.

#### **CHANGING CHANNELS**

If music plays second fiddle to movies, by all means junk the stereo system and take the surround option. But if music matters, there's an alternative scenario, which makes more sense – and will continue to do so until quality multichannel sources become a commercial reality. It effectively keeps the stereo hi-fi as the heart of the system, adding on the multichannel bits in a more subsidiary role. The stereo amplifier handles all the stereo audio-only sources. It also uses its 'aux' input to take over responsibility for the main left and right channel signals from the AV processor/amp. The AV amp is only switched on when the multichannel sources are in use, and only its centre-front and surround channel power amp stages are used. It's a somewhat more complicated approach, for sure, but it does avoid the compromise of feeding precious music signals through an AV processor.

It also provides flexibility in the budget. I rarely use multichannel sources at present, so I'd be inclined to do these bits on the cheap and allocate more money to the stereo bits. As and when multichannel hi-fi starts to get its act together, I'd start thinking about upgrading the multichannel bits...

Paul Messenger lives in a two-channel world, and he's not moving until there's a genuinely better alternative.

#### "THE MINIMALIST APPROACH IS NOW FIRMLY ESTABLISHED AS BEST PRACTICE FOR STEREO REPRODUCTION"



# **NE KNOW Abut Power**

Our advanced drivers are designed with controlled dispersion patterns and significantly improved off-axis performance. The MSP one-piece woofer diaphragm is geometrically optimized for controlled roll off and a high dynamic range. The extremely flat membrane geometry creates minimal phase lag. And the glued and thermically bonded high-grade SBR surround ensures excellent power control and eternal durability. That's why there will be no forces beyond your Dynaudio's control, whatever you choose to listen to. We know. Do you?

DUNAUDIC

#### bwspeakers.com

Explore the B&W 600 Series 2



The tip.



#### The iceberg.

**The 600 Series 2.** For many the B&W 601 S2 is the peak of audiophile excellence in its category. But look beneath the surface and you'll find a complete hi-fi and home cinema speaker range of considerable stature. From the 602, 603, 605 and LCR6 (all What Hi-Fi five-star products in their own right), to our acclaimed 600 Series 2 home cinema package, there's much, much more to discover. To reveal all, book an audition at your B&W dealer. Or Call +44 (0)1903 750750 for details.



NAUTILUS<sup>™</sup> TECHNOLOGY

The 600 52 tube-loaded tweeter is derived from the world-leading technology found on our flagship Nautilus™ speaker, widely acknowledged as the best loudspeaker money can buy.



