TWIN PEAKS

Is Meridian's 800/861 DVD-A player & processor combination the pinnacle of digital audio?

plus: affordable tubes - we test four entry level integrated valve amps

• Quad 22L speakers
• Marantz DV-12 DVD-A player
• Beaufort B2 speakers
• Philips DVD763SA DVD/SACD player

COMPETITION

Win a pair of superb Wilson Benesch Arc loudspeakers

• Computer Audio World
  • MuVo Creative Labs MP3 player
  • ST Audio's Media 7.1

+ 100s of classified ads full of secondhand bargains!!!
"Sets a new standard at the price"
- Hi-Fi World (August 2002)

"The scale and authority of their performance is breathtaking"
- What Hi-Fi? (August 2002)
the crew

Contact Numbers
Mon-Fri 9am-5pm

Editor
Simon Pope
tel/fax: +44 (0) 1908 614 996
e-mail: editorial@hi-fiworld.co.uk

Computer Audio World Editor
David Price
e-mail: editorial@computeraudio.co.uk

Design & Layout Editor
Face Churara
tel: +44 (020) 7625 3134
e-mail: adproduction@hi-fiworld.co.uk

Production/Photography Editor
David Noble
tel: +44 (020) 7625 3134
e-mail: classifieds@hi-fiworld.co.uk

Contributors
Dominic Todd
Aidan Sircum
Paul Miller

Advertising
Amanda Sweeney
tel/fax: +44 (020) 8864 4760
e-mail: advertising@hi-fiworld.co.uk

Accounts
Louise Palrey
tel: +44 (020) 7328 1844
e-mail: subscriptions@hi-fiworld.co.uk

Credit Control
Louise Palrey
tel: +44 (020) 1923 270 833
fax: +44 (020) 7328 1844
e-mail: subscriptions@hi-fiworld.co.uk

WORLD AUDIO DESIGN
Technical Manager – Nick Lucas
www.worldaudiodesign.co.uk
tel/fax: +44 (0) 1908 218 836
e-mail: publisher@hi-fiworld.co.uk

Publisher
Neil Keywood
e-mail: publisher@hi-fiworld.co.uk

Private & Trade Classified Ads
tel: +44 (020) 7625 3134
fax: +44 (020) 7328 1844
e-mail: classifieds@hi-fiworld.co.uk

Subscriptions & Back Issues
9.30am - 12.00 noon
tel: +44 (0) 1923 270 833
fax: +44 (0) 1923 260 588
e-mail: subscriptions@hi-fiworld.co.uk

how we test the products

Hi-Fi World has its own advanced test laboratory and acoustically treated listening room.

Hi-Fi World has a dedicated in-house team of experienced listeners. We review thoroughly by extensive auditioning, rather than by quick-fire group listening tests.

Hi-Fi World’s engineering team designs a wide range of products in-house. No other hi-fi magazine is so expert and dedicated.

• Hi-Fi World’s engineering team designs a wide range of products in-house. No other hi-fi magazine is so expert and dedicated.

• Hi-Fi World has a dedicated in-house team of experienced listeners. We review thoroughly by extensive auditioning, rather than by quick-fire group listening tests.

• Hi-Fi World has its own advanced test laboratory and acoustically treated listening room.

£

NICE PRICE - Represents excellent value for money.

EXCELLENT - Superb sound, among the best available.

GOOD - Well worth a listen.

ADEQUATE - Room for improvement.

POOR - Seriously flawed. Forget it!

Half-gaps are added for those products that we feel are between categories.

No material may be reproduced from this magazine without the publisher’s written permission. © Audio Publishing Ltd
**reviews**

**digital**

**MERIDIAN 800/861 DVD-A PLAYER AND PROCESSOR**

Described as the most advanced optical disc player on the planet. Simon Pope listens to the 800 DVD-Audio player and its matching 861 surround-sound processor.

**ARCAM CD82 CD PLAYER**

Arcam attempt to lead the midprice CD player market with this new CD spinner. How will Dominic Todd find it?

**PHILIPS DVD763SA DVD-V/SACD PLAYER**

This new 'budget' player from Philips brings DVD and SACD players down to a new low price. David Price listens in.

**MARANTZ DV-12SI DVD-AUDIO PLAYER**

Marantz follow up their SACD player with a DVD-Audio player. Hi-Fi World finds out how it compares to its stablemate.

**amplifiers**

**INTEGRATED VALVE AMPLIFIER GROUP TEST**

We gather in four stylish and affordable integrated valve amplifiers for those who wish to take the tube without breaking the bank or their backs!

**CYRUS AV8 SURROUND PREAMP**

This is the latest attempt from the Huntingdon company to bring audiophile quality to multichannel equipment. Will it complete the task successfully?

**loudspeakers**

**BEAUHORN B2**

The B2 is a highly distinctive horn loaded design from the makers of the Virtuoso. Simon Pope looks at style and content.

**QUAD 22L**

Quad’s reputation is back with a vengeance. Noel Keywood listens to the top range floorstander in the successful L Series.

**system**

**RED ROSE SPIRIT SYSTEM**

A ribbon loudspeaker and amplifier package conceived by US hi-fi guru Mark Levinson for under £2,000! You’d better believe it, says Alan Sircom.

**accessories**

**TOASTED AND CONNECTED**

Simon Pope listens to a new affordable interconnect and tries a unique way of burning-in your wires.

**TURNTABLE TUNE UPS**

David Price suggests three ways of making your vinyl sing even more sweetly.

**CLASSIC CUTS**

Andy Giles chooses Sir Thomas Beecham’s selection of Delius’ orchestral pieces as this month’s classic disc.

**OLDE WORLDE**

Goldmund’s awesome Reference Turntable is this month’s classic statement product of choice.
We listen to the new MuVo mp3 player from Creative Labs.

ST Audio's Media 7.1 soundcard offers advanced audio at a budget price.

All the latest from the weird and wonderful world of Do-It-Yourself hi-fi.

Nick Lucas and Andy Grove guide you through our new bargain priced integrated valve amp, the Kec182.

Correspondence and queries from our DIY readership.

Solder in one hand, glue in the other, satisfy your creative urges with a World kit.

A comprehensive selection of titles covering audio, valve amplifiers, loudspeakers, solid state electronics and more.

The perfect mix - excellent coffee, a comfortable sofa, and someone who really knows how to guide you through the world of hi-fi.

Columbia get to grips with issues facing both the industry and hi-fi alike.

Look before you leap, or alternatively listen before you buy. These are the people to talk to.

Not a call to the spiritual, but a list of manufacturers detailing who makes what, and how to get in touch.

Thinking of an upgrade or even a new system? Here's where to find our recommendations from the mass of hi-fi we've reviewed.

Our list of products that have stood the test of time.

The definitive place to find classic audio components.
CHORD'S CHORAL SYMPHONY

Three incredibly stylish new products were unveiled by Chord Electronics at the AV EXPO Show at Heathrow. The products join the DAC64 in the so-called Choral range which amalgamate Chord's traditional high-end look and sound in a smaller package with a more affordable price tag.

The first product is the £2,750 Prima preamplifier which comes supplied with the superb looking system touch screen remote. The preamp operates Chord's new dual bus system which allows taping from any source whilst listening to another and also features the new UHF designed power supply. The audio circuit uses fully balanced line internal architecture with six input gain adjustments for the five line inputs (one of which is balanced XLR) and low impedance outputs.

The matching £2,300 Mezzo power amplifier also features the same slimline casework and weight (8kgs) as the Prima. Based on Chord's existing power supply technologies, along with additional unique drive circuitry operating at over 1.2MHz, the Mezzo delivers 30W per channel into 8ohms and can be used in bridged mono mode for 60W of power.

The pre and power amps are complimented by Chord's latest phono stage, the Symphonic. This is an update of the long-standing existing model and is designed for moving coil cartridges only. It offers a vast range of impedance and gain options as well as balanced and unbalanced input options. It also features a new rumble filter, and is priced at £1,900.

FURTHER EXPOSURE

Re-vitalised Exposure Electronics have now launched their next range of products, known as the Classic Series. The new Exposure 22 CD player, priced £1,175, is available in either black or titanium silver and it comes with a full system remote control.

The new CD is accompanied by the Exposure 23 line level pre-amplifier and the 80W Exposure 28 power amplifier; price £1,275. The range also includes the 26 dedicated phono stage and an optional phono card for use with the 23 preamp; price to be confirmed.

Chord Electronics
Tel +44 (0)1622 721444
www.chord-electronics.co.uk

Exposure Electronics Ltd
Tel: +44 (0)1273 430619
www.exposurehifi.com
**AE’S LATEST MARK**

The latest version of the classic AEI high-end mini monitor has been unveiled by Acoustic Energy after three years research and development work. The new MkIII is available in a glass and metallic finish with a 10mm thick alloy plate baffle and duo-wall MDF/steel plate construction for the cabinet. This is further strengthened by tensioned steel cross bolts and a screwed-in rear panel. The drive units consist of a 120mm custom built bass/mid unit with a 105mm anodised alloy cone and a magnesium die cast chassis.

The tweeter is also custom built for AE and is a “Ring Dome” radiator with a doped fabric diaphragm and metal chassis. The tweeter is directly interfaced with the metal baffle for low vibration. At the rear are heavy duty WBT terminals and a low resonance port.

The black gloss version is priced at £1990, with wood veneers at £1790 and black ash £1690.

---

**EVOLUTIONARY WHARFEDALES**

Wharfedale have introduced their latest range of speakers, the Pacific Evo. This range is the successor to the Pacific Series and bears little resemblance to the previous set of designs. The most discernable difference to the new range is the introduction of a curved cabinet in an effort to combat standing waves. There is also a curved baffle which aims to improve the speaker’s dispersion characteristics. The in-house drive units consist of Kevlar polymer mid/bass units, plus neodymium tweeters housed in integral aluminium pods.

---

The range consists of a total of five ‘conventional’ loudspeakers, plus a centre channel, a dedicated surround speaker and two subwoofer models. For the main models there are two standmounts, the EVO and EVO-10. The former uses a 5” bass/midrange drive unit and the latter a 6.5” version.

There are three floorstanding models, the two-way EVO-20 and two three-way models, the EVO-30 and larger EVO-40. Prices range from £249.95 for the EVO-8 to £749.95 for the top of the range EVO-40.

Here’s a little taster of what we hope to bring you in January’s issue

**WHARFEDALE EVO-8**

This is the entry level standmount speaker in the stylish new midrange Pacific EVO series.

**SONY RCD-W1**

Shock, horror - a CD recorder from the champions of MiniDisc? Find out what all the fuss is about next month.

**PIONEER DV-656A**

With capability for SACD and DVD-A, as well as DVD-V and CD, this is perhaps the first affordable truly universal player to hit the UK shelves.
<table>
<thead>
<tr>
<th>Town</th>
<th>Dealer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aberdeen</td>
<td>Sevenoaks Hi-Fi</td>
</tr>
<tr>
<td>Aldridge (West Mids)</td>
<td>Cinergy</td>
</tr>
<tr>
<td>Ashby De La Zouch</td>
<td>Zouch Audio</td>
</tr>
<tr>
<td>Bedford</td>
<td>Richards A/V</td>
</tr>
<tr>
<td>Birmingham (Solihull)</td>
<td>Music Matters</td>
</tr>
<tr>
<td>Birmingham (Edgbaston)</td>
<td>Audio T</td>
</tr>
<tr>
<td>Bracknell</td>
<td>Raddford HiFi</td>
</tr>
<tr>
<td>Bristol</td>
<td>Audio Excellence</td>
</tr>
<tr>
<td>Cambridge</td>
<td>The Audiofile</td>
</tr>
<tr>
<td>Cardif</td>
<td>Sevenoaks S&amp;V</td>
</tr>
<tr>
<td>Castleford</td>
<td>Eric Wiley</td>
</tr>
<tr>
<td>Chester</td>
<td>Audio Excellence</td>
</tr>
<tr>
<td>Colchester</td>
<td>Grayston S&amp;V</td>
</tr>
<tr>
<td>Darlington</td>
<td>Hi-Fi Experience</td>
</tr>
<tr>
<td>Darlington</td>
<td>The Hi-Fi Studios</td>
</tr>
<tr>
<td>Doncaster</td>
<td>Technosound</td>
</tr>
<tr>
<td>Dunstable</td>
<td>Audio Designs**</td>
</tr>
<tr>
<td>Edinburgh</td>
<td>Hi-Fi Corner</td>
</tr>
<tr>
<td>Exeter</td>
<td>Russ Andrews*</td>
</tr>
<tr>
<td>East Grinstead</td>
<td>Sevenoaks S&amp;V**</td>
</tr>
<tr>
<td>Exeter</td>
<td>Glasgow Audio</td>
</tr>
<tr>
<td>Glasgow</td>
<td>Harrow Audio</td>
</tr>
<tr>
<td>Harrow</td>
<td>Sounds Perfection</td>
</tr>
<tr>
<td>Helston, Cornwall</td>
<td>David Orton A/V</td>
</tr>
<tr>
<td>Hitchin, Herts</td>
<td>Huddersfield Hi-Fi</td>
</tr>
<tr>
<td>Hull</td>
<td>Sevenoaks S&amp;V</td>
</tr>
<tr>
<td>Ipswich</td>
<td>Sevenoaks S&amp;V</td>
</tr>
<tr>
<td>Irwell (Dungannon)</td>
<td>Kronos Hi-Fi</td>
</tr>
<tr>
<td>Kildare</td>
<td>Midland Audio*</td>
</tr>
</tbody>
</table>

For a full dealer list and more information contact:
Hunley Designs Ltd, Unit 11, Moortown, Southmead Industrial Park, Didcot, Oxon, OX11 7HP
Tel: 01235 511166, Fax: 01235 511266, E-mail info@hunleydesigns.co.uk, WWW.hunleydesigns.co.uk
David Price rounds up a quartet of entry level integrated valve amplifiers - perfect partners for those yearning for something more than what mere solid-state can deliver.

It's a familiar tale. Schooled on transistor amps, after a while many up-and-coming audiophiles find themselves wanting something more from their amplification. At the £1,000 to £2,000 price point, they have a choice of buying into the bottom rung of high-end transistor options from the likes of Linn or Naim et al - or going out on a limb and getting into valves. The problem is that, while many may like the idea of greatly enhanced musicality, tonal colour and warmth - not to mention the real style cachet that tubes offer - most aspiring audiophiles are all at sea when it comes to going the way of the thermionic valve.

Solid-state's most ardent fans dismiss valve amps as being soft and woolly. This test shows why this kind of talk is patent nonsense. For every warm, soggy tube amp there's a big, punchy headbanger as an alternative. With tubes as with solid-state, it's very much a case of it ain't what you do, it's the way that you do it. Of course, valve amps tend to be warmer and smoother than transistors, but that doesn't mean to say there aren't tremendous differences between the various brands on offer.

The group here all represent a logical step up from a mid to high end integrated transistor amp - such as, say, the Audiolab 8000A you may have bought five or so years ago. Although fairly pricey, they're not prohibitively expensive for those wishing to have something they're going to use everyday for the next decade or so. Indeed, a couple here represent an excellent investment, with resale values higher than an equivalent transistor design simply because of their relative scarcity and novelty.

The beauty of modern valve amps is that they're all well made and likely to give many years of sterling service, with just a change of valves (costing some £20 or so) about five years away. Gone are the days of them catching fire or leaking onto your carpet!

The challenge for each member of this group is to offer something tangibly superior to the equivalent budget transistor pre-power or super-integrated, without falling down in other areas too conspicuously. These contestants should be able to outperform solid-state in terms of musicality and sense of occasion, without giving too much away in traditional 'hi-fi' areas like imaging and grip. It's perfectly possible - as this test shows - to give that doesn't mean to say there aren't more musically enjoyable sound differences between the various brands on offer.

Before we launch into the test however, it's important to underline that none of these contenders will drive your 1987 Acoustic Energy AE1 standmounters to nightclub levels - you'll have to partner them with a good pair of modern, high efficiency loudspeakers having a non-reactive load. They don't have to be esoteric horns - for the purposes of the test, I used my Mission 752s - a brilliant mid-nineties design with a sensitivity of 91 dB and very benign load characteristics. The message is partner carefully, and be prepared to tune your system around your amp, rather than vice versa.
CANARY AUDIO CSA608
£2000

It's made in the USA, don't you know. Lugging this thing up the stairs, the thought wouldn't even cross your mind that this hails from the land of mile-long Sports Utility Vehicles that require their own personal oil field in Texas to run. Yes, this is made in California alright - and just in case you didn't realise, there's a tasteful italicised legend on the front panel to remind you! Aside from the volume control, there's just a power switch and a four position input selector to look at up front, complete with one input marked LD (LaserDisc) - how quaint! Round the back are a brace of the largest loudspeaker binding posts I've ever seen - this is American, of course.

Under the gargantuan hood - measuring 19x19.5x6 inches (in old USA money) and weighing 58lbs - you'll find four EL 34 tubes working in push-pull mode. Input signals are routed through pure silver/Teflon coaxial cable to an ALPS volume control. In conjunction with the two 6SN7GTB and one 12AX7 input tubes, the result is a quoted 40W RMS per channel. As well as causing your neighbour's lights to flicker, its 265W power will impart a hard, bright sound. It's as if someone's pressed an imaginary loudness button, the result being that the CSA608 does 'quantity' rather than 'quality' in the nether regions. While this makes for a fun, classically valve-like sound, it's an acquired taste. Fun Lovin' Criminals' 'King of New York' was big and expansive, yet at the same time falling into the classic traps (lack of detail, air, space) which was smooth to the point of wearing off, it began to sound rhythmically plodding. This wasn't helped by a distinctly curtailed treble which was smooth to the point of sucking all the extension out of the music. Midband wasn't bad - it imaged with confidence - but nor was it anywhere near as detailed as, say, a Cyrus 7/PSX-R solid-state amplifier. At lower levels the Canary was linear enough, luckily, so if used at modest volumes it may well sound as clean and clear as any. However, this sort of problem is purely down to poor design and is unnecessary. It will give the CSA608 a particular sound, likely one that some might like, finding it fast and well defined (i.e. sharpened). It isn't accurate though.

Otherwise the CSA608 measured well enough in all areas. NK

The Canary uses EL34 output pentodes, which give it an easy 21W of power. Unlike the Graaf though, the CA608 amplifier looked decidedly unhappy at higher power levels. Its output waveform started to triangulate quite severely - a sign of strong third harmonic distortion. This suggests output transformer overload due to saturation, magnetic saturation typically producing excessive third harmonic and being level dependent. The spectrum analyzer revealed around 2% distortion at high output comprising mainly third harmonic. This will impart a hard, bright sound to the amplifier if it is pushed hard.

At lower levels the Canary was linear enough, luckily, so if used at modest volumes it may well sound as clean and clear as any. However, this sort of problem is purely down to poor design and is unnecessary. It will give the CA608 a particular sound, likely one that some might like, finding it fast and well defined (i.e. sharpened). It isn't accurate though.

Otherwise the CA608 measured well enough in all areas. NK

Canary Audio CSA608 £2000

Definitive Audio
Tel: +44 (0) 115 9733222
www.definitiveaudio.co.uk

MEASURED PERFORMANCE

The Canary uses EL34 output pentodes, which give it an easy 21W of power. Unlike the Graaf though, the CA608 amplifier looked decidedly unhappy at higher power levels. Its output waveform started to triangulate quite severely - a sign of strong third harmonic distortion. This suggests output transformer overload due to saturation, magnetic saturation typically producing excessive third harmonic and being level dependent. The spectrum analyzer revealed around 2% distortion at high output comprising mainly third harmonic. This will impart a hard, bright sound to the amplifier if it is pushed hard.

At lower levels the Canary was linear enough, luckily, so if used at modest volumes it may well sound as clean and clear as any. However, this sort of problem is purely down to poor design and is unnecessary. It will give the CA608 a particular sound, likely one that some might like, finding it fast and well defined (i.e. sharpened). It isn't accurate though.

Otherwise the CA608 measured well enough in all areas. NK

Canary Audio CSA608 £2000

Definitive Audio
Tel: +44 (0) 115 9733222
www.definitiveaudio.co.uk

MEASURED PERFORMANCE

The Canary uses EL34 output pentodes, which give it an easy 21W of power. Unlike the Graaf though, the CA608 amplifier looked decidedly unhappy at higher power levels. Its output waveform started to triangulate quite severely - a sign of strong third harmonic distortion. This suggests output transformer overload due to saturation, magnetic saturation typically producing excessive third harmonic and being level dependent. The spectrum analyzer revealed around 2% distortion at high output comprising mainly third harmonic. This will impart a hard, bright sound to the amplifier if it is pushed hard.

At lower levels the Canary was linear enough, luckily, so if used at modest volumes it may well sound as clean and clear as any. However, this sort of problem is purely down to poor design and is unnecessary. It will give the CA608 a particular sound, likely one that some might like, finding it fast and well defined (i.e. sharpened). It isn't accurate though.

Otherwise the CA608 measured well enough in all areas. NK

Canary Audio CSA608 £2000

Definitive Audio
Tel: +44 (0) 115 9733222
www.definitiveaudio.co.uk

MEASURED PERFORMANCE

The Canary uses EL34 output pentodes, which give it an easy 21W of power. Unlike the Graaf though, the CA608 amplifier looked decidedly unhappy at higher power levels. Its output waveform started to triangulate quite severely - a sign of strong third harmonic distortion. This suggests output transformer overload due to saturation, magnetic saturation typically producing excessive third harmonic and being level dependent. The spectrum analyzer revealed around 2% distortion at high output comprising mainly third harmonic. This will impart a hard, bright sound to the amplifier if it is pushed hard.

At lower levels the Canary was linear enough, luckily, so if used at modest volumes it may well sound as clean and clear as any. However, this sort of problem is purely down to poor design and is unnecessary. It will give the CA608 a particular sound, likely one that some might like, finding it fast and well defined (i.e. sharpened). It isn't accurate though.

Otherwise the CA608 measured well enough in all areas. NK

Canary Audio CSA608 £2000

Definitive Audio
Tel: +44 (0) 115 9733222
www.definitiveaudio.co.uk

MEASURED PERFORMANCE

The Canary uses EL34 output pentodes, which give it an easy 21W of power. Unlike the Graaf though, the CA608 amplifier looked decidedly unhappy at higher power levels. Its output waveform started to triangulate quite severely - a sign of strong third harmonic distortion. This suggests output transformer overload due to saturation, magnetic saturation typically producing excessive third harmonic and being level dependent. The spectrum analyzer revealed around 2% distortion at high output comprising mainly third harmonic. This will impart a hard, bright sound to the amplifier if it is pushed hard.

At lower levels the Canary was linear enough, luckily, so if used at modest volumes it may well sound as clean and clear as any. However, this sort of problem is purely down to poor design and is unnecessary. It will give the CA608 a particular sound, likely one that some might like, finding it fast and well defined (i.e. sharpened). It isn't accurate though.

Otherwise the CA608 measured well enough in all areas. NK

Canary Audio CSA608 £2000

Definitive Audio
Tel: +44 (0) 115 9733222
www.definitiveaudio.co.uk

MEASURED PERFORMANCE

The Canary uses EL34 output pentodes, which give it an easy 21W of power. Unlike the Graaf though, the CA608 amplifier looked decidedly unhappy at higher power levels. Its output waveform started to triangulate quite severely - a sign of strong third harmonic distortion. This suggests output transformer overload due to saturation, magnetic saturation typically producing excessive third harmonic and being level dependent. The spectrum analyzer revealed around 2% distortion at high output comprising mainly third harmonic. This will impart a hard, bright sound to the amplifier if it is pushed hard.
GRAAF VENTICINQUE
£1700

This amplifier is pure European sports car - made in Modena, home of Ferrari, it is sleek and purposeful in its smooth satin black finish. The smoked Perspex front panel strip is the only concession to frippery - like the aforementioned supercar, it lets you see inside to remind you why you bought it!

The fascia boasts knobs for volume, balance, tape monitor plus a five-step input selector, one position of which can be set to switch the optional phono stage. In marked contrast to the Canary, the rear panel has two pairs of very low rent speaker binding posts - shame!

Switch the Venticinque on and you’ll see four 5881 valves, plus the two 6922 (ECC88) and single 6922 input drivers glowing through the aforementioned front panel window - more worth watching than most things on telly, in my humble opinion.

The compact 410x145x385mm case lifts to reveal a conventional Class A push-pull design kicking out 25W RMS per side. Unlike the company's larger designs, it’s not output transformerless (OTL), but features a bespoke GRAAF design. Interestingly, there's a toroidal mains transformer, plus two PC-style cooling fans to prevent it popping its head gasket. These turn slowly at low volumes but cleverly speed up when you hit the loud pedal - curious as it’s Class A then it should run at a constant (high) temperature, regardless of volume!

Anyway, these didn’t present any distraction during the listening session, and were often quieter than the Canary’s mains hum!

Although still satisfyingly warm, bass was less obviously overblown and far tighter than from the Canary. This made for an instantly more rhythmically engaging sound which proved a joy to set ears on. Although a bit down on power, the Venticinque was satisfyingly firm and strong, and didn’t wheeze until called upon to deliver quite high levels.

Dynamics were also impressive - not in the large scale solid-state amp sense, but in the amp’s ability to follow the tiny ‘microdynamic’ inflections in the music. It made for a very bouncy, musical sound which made me come back for more. Indeed, its midband proved very impressive - considerably more transparent than the Canary, it also did tonal colour and texturality far better too. Rather than making everything sound ‘warm’, it gave a real sense of the different flavours of all instruments used. Of course, it still erred on the sweet side - no shattering wine glasses here! Treble was also very good - sweet and clean, it faithfully recreated the air and space of the recorded acoustic in Joan Armatrading’s ‘Me Myself I’. Although lacking the hypnotic rhythmic swing of the AudioNote OTO SE, the GRAAF proved an extremely capable performer due to its high all round competency. Its strong, wide, clearly defined stereo imaging and excellent sense of depth perspective put it at the top of the class in this respect, making for a very even overall performance with few obvious weak points to detract from its genuinely endearing nature. It’s the sort of valve amp you can use straight after a Cyrus 7/PSX-R solid-stater and not feel short-changed in any particular respect, while still enjoying its obvious ‘valve sound’.

Graaf Venticinque £1700

MEASURED PERFORMANCE

The Graaf produces a useful 21W per channel from 5881 output tetrodes, about as expected. It has unusually extended treble due to some peaking out at 100kHz, but in spite of this high frequency distortion was quite low, measuring around 0.1% at 1W output. Run within its limits the Graaf was fairly linear and behaved itself, producing relatively low amounts of distortion until it approached full output, and even then it was cleaner than many. Our distortion analysis shows low amounts of second and third harmonic and these rose together as output neared maximum. With good sensitivity and low noise the Graaf measures well, turning in the sort of results expected for the type. It should sound clean enough and produce reasonable volume from sensitive loudspeakers. NK
AUDIONOTE OTO SE
£1200

This AudioNote is in the style of a late eighties Mercedes Benz. A big slab of piano black gloss on the fascia and some dubiously tasteful gold knobs (handling variously, power, source, balance, volume and tape monitor) is what you get, while the back panel sports four pairs of basic RCA phons (CD1, CD2, aux and tuner) and low rent loudspeaker binding posts. Still, it’s barely smaller than the Canary at 440x140x410mm and not an awful lot lighter at lighter at 17kg - plenty of metal for the money, then.

Inside you’ll see neatly laid out circuitry, with separate PCBs for the preamp, driver and output stages. A pair of double triode valves plus a pair of 7025/12AX7sAs drive two pairs of parallel-linked EL84 triode-connected pentodes in single-ended configuration. Pure class A operation, valve rectification and zero negative feedback are claimed features of the design. AudioNote claims 10W RMS per channel into 8 ohms. Switch this beast on and it’s near silent - no cooling fans and only a slight mains hum. It runs cooler than the Canary or GRAAF - with a modest 100W power consumption it doesn’t super-heat the listening room, so you won’t have to strip down to your Calvin Kleins after one LP side.

Having heard the original OTO many years ago, I was deeply suspicious of this amplifier. I’m happy to report that it sounds quite unlike its predecessor, which had a bass line like a blancmange perched on a jelly.

By contrast, the OTO SE is extremely impressive throughout - obviously more open, clean and detailed than even the GRAAF, it takes you a step back from the microphone and gives a more panoramic, widescreen view of things. It’s obviously lighter and weaker in the bass - but is still generous by solid-state standards - yet extremely tuneful. Treble is sweeter and more open, with yet more atmosphere and a wonderful (albeit not strictly accurate) silkiness that’s hard to live without after a while.

Prefab Sprout’s ‘Electric Guitars’ showed the OTO SE to be a consummately musical performer - it set up a decently large acoustic, served up some beautifully bouncy bass, plenty of midband detailing and a decently defined stereo image. It’s obvious that this amp is far from neutral - tonally it does the old valve trick of investing everything with a deliciously sugary texture. Unlike the GRAAF, it can’t really do ‘rough’ or ‘raw’, meaning you get ‘that old valve magic’ in everything you play. Whereas the Canary introduces a fuzzy, muzzy valve haze, the AudioNote’s coloration is actually nice to have. No need for transparent fascias here - your ears tell you you’re tubed as soon as the music starts. As for female vocals, they’re positively sublime.

The great thing about the OTO SE though is its combination of brilliant rhythmic ability and the aforementioned sepia tinged tonal colouring. This thing doesn’t rock so much as ‘slink’ - it lacks any real large scale dynamics but makes up for it with incredibly liquid, visceral ‘microdynamics’, letting the music’s accents and phrasing shine through.

In this respect it’s a textbook example of single-ended tubes, and it’s so hypnotic that you begin to wonder why you ever liked your Naim six pack. It gets into the groove like no other equivalently priced amp of any type can - even at low volumes it’s an utterly addictive listen - well worth the title of ‘budget esoterica’.

Audionote OTO SE £1200
Audionote (UK) Ltd
Tel: +44 (0) 1273 220511
www.audionote.co.uk

MEASURED PERFORMANCE

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power</td>
<td>8 watts</td>
</tr>
<tr>
<td>CD/tuner/aux.</td>
<td></td>
</tr>
<tr>
<td>Frequency response</td>
<td>16Hz-57kHz</td>
</tr>
<tr>
<td>Separation</td>
<td>62dB</td>
</tr>
<tr>
<td>Noise</td>
<td>-95dB</td>
</tr>
<tr>
<td>Distortion</td>
<td>0.45%</td>
</tr>
<tr>
<td>Sensitivity</td>
<td>220mV</td>
</tr>
</tbody>
</table>

Audionote use parallel EL84 output pentodes for the OTO SE. They are known to have a very sweet sound, are in plentiful supply and are therefore inexpensive. However, EL84s do not handle large amounts of power and even in parallel the OTO SE only manages 8W output. As a result it will need very sensitive loudspeakers if it is to go loud and generally this means floorsanders. Obviously, the Oto is no headbanger; it has been designed to deliver a sound that is very valve like, with a smoothness impossible from solid-state. The distortion characteristics reflect this to quite some extent, second harmonic dominating from low output right up to full output. The distortion characteristic changes less with level than many of the designs here, which is a good sign, since the ear readily detects changes in distortion patterns. Absolute distortion levels weren’t low but being primarily second harmonic they were satisfactory.

In all other respects the Oto measured well. It has low noise, good sensitivity and plenty of bandwidth. This is a design for those who want valve sweetness over all else.

NK

Power
CD/tuner/aux.
Frequency response
Separation
Noise
Distortion
Sensitivity

Audionote OTO SE £1200
Audionote (UK) Ltd
Tel: +44 (0) 1273 220511
www.audionote.co.uk
UNISON RESEARCH S2K £1100

And finally we have this exotic creation, its styling the work of Claudio Chiarello. The smallest model of the ARIA range, it eschews the GRAAF’s busy fascia for the bare minimum of (stainless steel machined) knobs and buttons set into the relatively small ($75\times375\times165\text{mm}$) casing which weighs in at a back-friendly 14kg. Still, round the back there’s enough room for five pairs of RCA phono inputs plus tape out, and brilliantly chunky speaker binding posts. Factor in the cute little wooden radio frequency remote (you can use it in another room!) and it’s a small but perfectly formed package.

Beyond the sumptuous cherry wood adorned fascia panel lurk the S2K’s crown jewels - one pair of ECC82 (12AU7A) and one pair of KT88 tubes running in parallel single-ended pure Class-A mode. Using 10dB of negative feedback, this has allowed the designers to squeeze a quoted 12W RMS from each channel, with an environmentally friendly power consumption of just 85W. Under the ironwork behind the valves are the massive Unison transformers (single-ended amps need chunkier output trannies) and the silver soldered (and wired) PCB complete with gold plated input and output connections.

The Dandy Warhols’ ‘Bohemian Like You’ showed the Unison to have a truly big-hearted, punchy sound with a good deal less coloration than the OTO SE. Whereas the AudioNote gives you three sugars and double cream with your coffee, this amp proved tonally altogether more neutral. It brought the stereo image forward and closer to the plane of the speakers, making for a more immediate feel, and pushed it out wider, with more energy. This effect, combined with an obviously less coloured midband, made for a more upfront, ‘out there’ sound. Treble seemed more airy than the AudioNote, although I still think the GRAAF was better in terms of clarity and focus.

Bass was lighter and tighter than the OTO SE, but less well articulated nevertheless. The fact that the AudioNote’s low frequencies could be both looser yet more tuneful would seem to be a contradiction in terms, yet it was true all the same. It simply had a musical ‘swing’ to it right across its entire frequency range that the S2K didn’t. This is not to say that the latter wasn’t musical, but that it forsook some bounce for a good deal more punch. The trade-off is actually an extremely successful one, because the Unison can still really boogie. Despite its meagre power output it’s able to summon up boundless energy and enthusiasm for any kind of music you care to feed it. The result is a joyfully rousing, emotive sound that those reared on big, powerful transistor integrated will love.

Downsides? The S2K isn’t big on subtlety and doesn’t have the visceral, organic quality that many would call ‘the magic of valves’. Instead of charming and beguiling its way to your affections, its character is upfront and immediate yet still open in the true single-ended way. Whatever music you play through it - from the quiet strains of Herbie Hancock’s ‘The Prisoner’ to the rock histrionics of Rainbow’s ‘Since You’ve Been Gone’, the Unison belts it out with gusto and drama. It does one hell of a lot for just £1100, making it superb value for money. It’s an incredibly honest product that would make a superb first valve amp for converts.

Measured Performance

The S2K is a modest single-ended design. As such it is limited in power output and exhibits quite high distortion, but single-ended is as pure and simple as it gets and many people love the sound. With just 4W to play with from the S2K however, sensitive loudspeakers are needed if it’s to deliver any volume – and this usually means using big floorstanders. The distortion it produced was primarily second harmonic, so although the figures don’t look so good in truth they are perfectly acceptable, since correlated second harmonic is totally inoffensive to the ear at these levels. Also, single-endeds overload gently, becoming progressively muddled and muddier, rather than harsh. This allows them to be pushed harder than the power figures would suggest.

With adequate bandwidth, acceptable dynamic distortion characteristics and low noise the S2K measures well enough as S.E.s go. NK

Unison Research S2K £1100
UKD
Tel: +44 (0) 1753 652669
www.ukd.co.uk

MEASURED PERFORMANCE

<table>
<thead>
<tr>
<th>Frequency [Hz]</th>
<th>Distortion [%]</th>
</tr>
</thead>
<tbody>
<tr>
<td>10k</td>
<td>0.5</td>
</tr>
<tr>
<td>60k</td>
<td>1.0</td>
</tr>
<tr>
<td>8Hz</td>
<td>0.1</td>
</tr>
<tr>
<td>52kHz</td>
<td>0.01</td>
</tr>
</tbody>
</table>

Power: 4watts
CD/tuner/aux.
Frequency response: 8Hz–52kHz

<table>
<thead>
<tr>
<th>Power</th>
<th>4watts</th>
</tr>
</thead>
<tbody>
<tr>
<td>CD/tuner/aux.</td>
<td>8Hz–52kHz</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Separation</th>
<th>70dB</th>
</tr>
</thead>
<tbody>
<tr>
<td>Noise</td>
<td>-94dB</td>
</tr>
<tr>
<td>Distortion</td>
<td>1.4%</td>
</tr>
<tr>
<td>Sensitivity</td>
<td>110mV</td>
</tr>
</tbody>
</table>

World Verdict £1>iiet

A steal at the price. Fast and open but not the last word in finesse. Great styling, too.
Cyrus' legendary amplifiers have evolved!

Back in 2001, Cyrus began a project to evolve our integrated amplifier designs to incorporate technologies researched over the last five years. After many months of acoustic tuning and detailed electrical re-evaluation lasting more than a year, we are proud to announce the arrival of our evolutionary new Cyrus 8. This extraordinary amplifier sets new standards and strengthens Cyrus' position at the leading edge of what's possible in audio design today.

For the full story on how our amplifiers have evolved, please visit our website at www.cyrusaudio.com.
It always amuses me how solid-state's most ardent advocates manage to dismiss valve amps so summarily. The point is of course that - as this group test makes crystal clear - not all valve amplifiers are created equal. As the breed has been around so long - and was already well developed by the nineteen fifties - there's nothing particularly radical here in terms of engineering. The differences come from the particular circuits, components and output transformers the designers have opted to go for, and how well they've implemented them. Therein lies the crux!

Firstly, the Canary was both the most powerful by far. It gives what the breed's detractors would consider a quintessentially 'valve sound' - big, fat and powerful, with deep bass but rhythmically ponderous. However, it will work with a wide range of loudspeakers that the others here could only dream of.

Next the GRAAF. A product I could happily live with, it has a less generous bass than the Canary but is still well endowed downstairs. Across the midband and treble however, there's a whole load more detail and grip. Although it has that characteristic 'tube' warmth, this amp is incisive enough to communicate the tonal differences between, say, different recording studios being used across the tracks of a single album. It has subtlety and incision, but still does the traditional valve thing of warming up and smoothing out everything it touches - in this sense, it's a fine working compromise. The downside is its lack of power - although not anemic, you'll need to match it carefully to speakers of 91 dB or more - and the price, which is a little on the high side.

Having reviewed the original OTO way back in 1995 and been utterly unimpressed, the SE was a joyous surprise - the sound of the former's output transformers saturating at 'transistor radio' volumes was depressing to say the least. Now it's an extremely musical amp that's undoubtedly the most rhythmically beguiling here. It is brilliant at communicating those all-important gaps between the notes. The sugary treble is a joy (if not strictly accurate), and there's a good degree of detail right across the frequency band. The only downsides are the lack of power (you'll need speakers of over 91 dB sensitivity, or a very small room) and the tonal homogeneity - everything sounds laced with saccharin, even if it was originally sour. Still, at just £1,200 it's stonking value for money.

Last is the Unison Research S2K. An interesting one, this. In a sense it's the ultimate entry level valve amplifier - offering exotic styling, an obviously sweet and open valve sound and a decently strong loudspeaker driving ability. It'll give something that solid-state never will - a tremendously enthusiastic and unselfish sound that's unconcerned with the quality of the recording and doesn't mind modest ancillaries. Whatever you feed it, you get a big, breezy, musical and involving sound coming out the other end! However, it isn't as subtle as either the GRAAF or the AudioNote. Superb value all the same. Overall then - for poise go for the AudioNote, for punch get the Unison Research, and for a nicely judged halfway house between the two then get the GRAAF. The Canary is for those with big and bold tastes, as opposed to detail- and-dynamics freaks.
Massive sales of DVD players have catapulted the format forward. At present DVD means 'video' to most people, but a new generation of players capable of producing super quality audio are now available. You might be surprised to know that one classic British hi-fi manufacturer has made a significant contribution to this technology: Meridian. If you want to know about what to expect from hi-fi tomorrow there's no need to go to Japan; just drive to Huntingdon, the spiritual home of British hi-fi. That's what I did to find out about DVD-Audio and the sort of hi-fi system we can expect to be using tomorrow, or perhaps a day after.

That the Japan based DVD Forum (www.dvdforum.org) should adopt an obscure piece of British audio coding in the shape of MLP (Meridian Lossless Packing) for mandatory inclusion in the DVD format is a surprise perhaps. But whilst the video side of DVD is complex and of course very demanding in terms of storage space, data rate and what have you, audio exerted an undue influence on DVD in the days of its formulation. It was as if the DVD forum were scared that if they didn't get audio right the whole thing would founder, irrespective of the fact that DVD is primarily a video carrier.

As a result DVD Video can be accompanied by a variety of differing audio tracks and DVD Audio, where the disc effectively becomes a very high quality CD carrying little video, gets even more complex and advanced. It promises to be the hi-fi medium that supersedes Compact Disc.

Talking to Bob Stuart, founder of Meridian, about DVD technology and the future brought up at least one major surprise - that an idea first worked on in the late 1970s, that of sound field encoding to perfectly reproduce an entire acoustic environment complete with height information, could well be revived. You might either be horrified or excited by this, because it means loudspeakers in the ceiling. But it also means perfectly reproducing any venue, from cathedral to rock stadium, in the home.

More dramatically, it also means being able to approximately recreate the acoustic environment of a scene in a film in your own living room, which could be startling. People's voices would take up a specific position around you and of course aircraft, helicopters - or anything else that takes to the skies - would whiz overhead. If height information was incorporated into an updated surround-sound standard movies would take on new impact.

Because DVD-Audio is almost infinitely complex let me recap on the simple basics of what to expect from it in terms of sound quality. Bear in mind that unlike CD, which just offers two channels of audio at 16bit resolution and 44.1kHz sampling rate, DVD can carry music in different configurations and sampling rates, plus still pictures. This is why it is seemingly so complicated.

Players must provide a certain minimum of functions, mandated by the DVD Forum specification (i.e. they must be fitted). They may carry additional functions too. But what discs carry is up to their producers. Not surprisingly DVD discs usually carry at least one of the mandated formats, so they will play on any player.

A DVD-Audio player must reproduce linear PCM (i.e. normal digital, not data reduced Dolby or DTS digital) from 16bit to 24bit, at sampling rates from 44.1kHz (CD standard) up to 192kHz. Up to 96kHz sample rate, six channels are possible, but above this DVD-A currently reverts to two channels. A critical point here is that 6 channels at 96kHz give a data rate of 13.8Mbps, which exceeds DVD's maximum rate of 9.4Mbps. Because DVD-Audio is a high quality audio carrier, a way of reducing data rate...
without discarding data (data reduction or compression) was needed and in the end the DVD Forum chose Meridian Lossless Packing. It provides a critical 2:1 reduction, enough to squeeze in six channels of 24/96 audio, which offers a level of sound quality well above CD.

If the thought of 24bit resolution at 96kHz sampling rate sounds good (well OK, it actually sounds like tech. twaddle, but in practice it really does sound good, I can assure you), then 24/192 should be nirvana. Technically, it’s meant to be. 24bit resolution and 192kHz sampling rate is not only meant to provide a level of quality way beyond criticism or dispute, but also allow a degree of leeway in design to accommodate hardware limitations, such as phase shift in filters.

However, at present few studios can record at such resolution, since 24/192 analogue-to-digital converters are only just becoming available, so whilst DVD-A discs currently carry re-mastered analogue material, old digital (16/48) or 24/96 surround-sound, in future we can expect them to offer even better quality. Listeners not interested in surround-sound may be delighted to know that the best DVD-A can do will likely be in stereo only.

It is likely that most DVD Audio players will be able to decode Dolby Digital surround-sound, which accompanies most video, although they do not have to; it’s not mandatory. Up to ninety nine still pictures per track are possible.

From the outset US film studios demanded surround-sound for their movies if they were to support DVD, introducing a need for six channels. As it is, the video on a DVD video disc is heavily compressed using MPEG 2 coding, to get a reasonable (2hrs) playing time. Six channels of accompanying audio are compressed most commonly by Dolby Digital. Both are lossy techniques. They remove data from the signal that, supposedly, we cannot perceive and do not need. But lossy systems have problems, conceptually as well as in practice. Artists, copyright owners, libraries and national museum sound archives and such like are not happy about the idea of storing mutilated versions of original recordings. And irrespective of how adamant proponents are about the inaudibility of their compression techniques, in practice they can be detected.

Even a robust low compression system like Sony’s ATRAC will fall apart if an appropriately difficult multi-tone, full level test signal is applied. This translates in practice to an orchestra or rock band playing at full volume with every type of instrument being used. In my experience it is violin sections that seem to fall apart most perceptibly in compressed data channels, as DAB (Digital Audio Broadcasting) so readily demonstrates.

Meridian Lossless Packing answers all these problems. It can double playing time, reduce data rate and provide a digital signal of perfect fidelity, because nothing has been taken away. Being lossless it is acceptable for archival purposes.

Meridian were aware of the desire expressed by everyone, from musicians to studios to libraries, that they wanted the original digits to remain intact all the way to the consumer, so MLP also possesses other crucial abilities. It can validate the final data stream to ensure it is a perfect copy of the original, and it makes it resistant to dropouts from disc damage. MLP also provides cueing points so that in the event of data loss, recovery is perfect.

Unlike lossy compression systems, MLP is ‘cascadable’, so a signal can be compressed and re-compressed without problem. At present, lossy systems do not cascade well; recording DAB radio or mp3 onto MiniDisc can result in audible degradation. In fact, MLP is sort of what you might expect a proper hi-fi company to do with digital - make it high fidelity!

When you buy a DVD-Audio player it will contain an MLP decoder, since it is mandatory. So DVD Audio is hi-fi not just because it is high data rate digital, but also because it has Meridian Lossless Packing to guarantee the integrity of the data stream. That makes it high fidelity.
Acknowledgements from so many customers and specialists confirm why M J Acoustics make the definitive smart subwoofers.

The Pro 50 & Pro 100 have uniquely achieved outstanding tributes from many respected reviewers for, Audiophile Musicality, Compactness, and as Discreet and powerful performers. They are the choice of Audiophiles and Home Cinema Enthusiasts! - Worldwide.

Pro 50 from £299

Pro 100 from £599

June 2002

"At £299 the Pro 50 is a serious bit of kit for the money." "Sound wise its a fine performer with both movies, and especially music"..."Best Buy 2002"

March 2002

"indeed, the joy of this sub is its ability to blend in sonically and visually..." "Put your sound into focus..." "from this..." "to this"

NOW, FOR THE FIRST TIME, HEAR SOUND REPRODUCED AS IT WAS MEANT TO BE

VINYL IMPERATIVE
Correct alignment and support of the LP on the platter is the most important aspect of vinyl reproduction. The new Anniversary Ringmat, at £70, is THE pre-eminent record mat for virtually all turntables. Further improvements can then be achieved by using:
- LP Blue Statmat and Statcap, at £45, to remove static;
- Ringcap MkII, at £15, to remove vibrations emanating from the centre of the record;
- Ringmat Spacers to provide an improved interface between platter and record, to remove resonance from your turntable and platter and to fine tune stylus rake angle/VTA.

All these can also be purchased in one fell swoop as the Ringmat Support System for £210.

DRAMATICALLY IMPROVE YOUR CD, SACD and DVD SOUND
For digital sources, the CDi Blue Statmat, at £37.50, will totally transform playback.

FROM ILLUSION TO REALITY WITH RINGMAT AUDIOPHILE CABLES
SIMPLY, THE FINEST CABLES FOR LINKING-UP YOUR HI-FI SYSTEM
Our Pure Signal Interconnects from £105 per stereo pair and Pure Power Speaker Cable from £25 per mono metre are the finest, most affordable cables available to you. "So dropping them straight in... immediately after the Valhallals probably wasn't the kindest thing I could have done! Surprisingly, the Ringmat leads stood up remarkably well, which speaks volumes for their musical balance, eveness and coherence...and that's quite a feat when you consider the extent to which the Valhallals embarrass the vast majority of even the most expensive competition."
Roy Gregory Hi-Fi+ Issue 19 Sept-Oct 2002

PLUS, THE BEST ISOLATION PRODUCTS AVAILABLE
Protect all your equipment, including your TV and speakers, from static, by using a Statfoot, from £10, underneath each one. Ringmat Feet and/or Ringmat Domes, our isolation "soft feet" approach from £17.45, must also be used if you want the best sound (and picture).

NEW PRODUCT LINE-UP, PRICE LIST and MONEY-BACK GUARANTEE
Call us for details or visit our Website: www.ringmat.com.

RINGMAT DEVELOPMENTS
PO Box 200 Brentwood Essex CM15 9FB GB
Call 01277 200 210 visit www.ringmat.com or e-mail ems@ringmat.com

SEE YOU AT THE MANCHESTER HI-FI SHOW 16 - 17 NOVEMBER
Meridian Audio have been at the forefront of DVD-A development since its inception, so who better to produce the format's ultimate system? Simon Pope sits agog at the 800/861 V3 DVD-A player and surround sound controller.

Under Bob Stuart perhaps no other company has done more to perfect the sound of digital audio than Meridian. Their ability with digital audio has led them to the forefront of DVD-Audio development and the only UK hi-fi manufacturer on the DVD Forum Working Group 4. It's only to be expected then, that Meridian have in their considerable arsenal the 800 Series of DVD products, featured here in Version 3 form, that are undoubtedly the pinnacle of DVD-Audio replay.

Very little equipment that enters the HFVV portals is greeted with a stunned silence as it emerges from the box but the 800/861 combination almost demands it. The look, never mind the theory, behind the 800/861 combination is awesome. It's only when you start to even comprehend a mere fraction of what's going on inside that you realise just how awesome it is. Here is one very, very serious example of both high fidelity and digital engineering - the 800 DVD-Audio/Video player is quite possibly the most technically advanced optical disc player in existence.

BUILDING BLOCKS

The point to note here is that the whole system, or "architecture", is modular. The 800 and 861 are, as Bob Stuart puts it, "built like a computer", with a combination of cards that provide the customers own configuration. All of these cards and drives are removable and replaceable. This can range from additional digital outputs or progressive video output on the 800 player to component video cards and even an MC phono card (!) for the 816 controller. Future software upgrades will be available to download for customers from the company's website.

The V3 (Version 3) 800 player uses a ROM drive (there are actually two drive bays in the machine), so chosen by Meridian for its reliability in recovering data accurately. Meridian then use their proven audio
The World's Finest Sound and Vision Systems

Expert Multi-Channel and Multi-Room Installations - Nationwide

Visit our West End store to see an incomparable selection of hi-fi components, plasma screens and projection systems.

West kjOne

KJ WEST ONE
26 New Cavendish Street, London W1G 8TY Phone: 020 7486 8262/3
BRANCHES IN NORTHAMPTON (01604) 637871 & PETERBOROUGH (01733) 341755

www.kjwestone.com
The 800/861 is configured via a computer program.

The 800 is its upsampling capability where a complex digital filter doubles the rate of samples from the source so that the system that follows can produce the sound more accurately. So CD information, for example, starts at 44.1kHz/16-bit and the Meridian proprietary DSP upsamples this to 88.2kHz and 24-bit. DVDs with 48kHz sampling are upsampled to 96kHz and 24-bit. It can handle sampling frequencies of up to 192kHz and the output analogue cards use a very high quality, studio-grade digital-to-analogue conversion system.

Any 24/192 DVD-A information will be downsampled by the 800 to 24/96. However, as Bob Stuart is at pains to point out, there is as yet no industry standard digital interface for 192kHz, hence the need to downsample for an external digitally connected unit like the 816. When a standardised interface is agreed then Meridian will configure a suitable card.

The 800 is, of course, a very high quality DVD video player which has an optional progressive output card for improved picture quality with less shimmer, and it also has a translation feature for PAL or NTSC for those displays that don’t support one of the formats. It will decode Dolby Digital and DTS DVD video discs and provide both multichannel and two-channel outputs.

If you intend to use an all-

Meridian system, then the 800 can be used alone, with the player simply feeding straight into the company's DSP loudspeakers. We used alternative transducers in the form of Quad electrostatics (actually, a fine match!) and the cheaper L Series loudspeakers. Therefore we put the 861 processor into use.

This beast, when used in combination with the 800, uses Meridian’s Smart Link connection which, very importantly, transfers high-band data digitally for optimum sound quality - necessary for use with Meridian’s bass and time delay management. The 861 is multiroom capable and can be configured with up to ten 24/96 outputs, with bass management available for all formats. There’s a mind boggling variety of DSP modes (fourteen in all) for personal preference. If you require 7.1 Dolby EX decoding, then a Dolby bitstream connection must be made from the 800 to the 861 for full decoding.

SETTING THE SCENE

This equipment isn’t something you merely chuck in the boot of your car from the retailer’s loading bay; it needs expert installation. You even need to consult the retailer about your particular system requirements before anything arrives at the house. Installation needs to be carried out by a Meridian trained installer and a laptop PC is required for this process. The system is built with bi-directional computer control via the RS232 interface. Simply taking the things out of the box and plugging them won’t work if you actually want to hear and see something! Even the most hardened gadget freak would balk at this combination, so leave it to a professional, as I wisely did. Once completed this apparent minefield of technology is -amazingly - a doddle to use.

I started by using the 800/861 in good old stereo CD mode, with a pair of Quad ESL 988 electrostatics and an MJ Acoustics Pro100 sub used very subtly. Power was supplied by Meridian’s own stereo 557 power amp and speaker cables were Chord Company Odyssey and Anthem interconnects. With a variety of discs ranging from Taverner’s unaccompanied chorals, via Bruckner symphonies, right up to the aural onslaught of Rage Against The Machine, the combination simply couldn’t fail. I use a Meridian 506.24 as my reference CD player and the 800 had all the traits of the sound of it’s humbler brother, but magnified them a hundredfold.

I was first struck by the amount of musical detail present. It was combined, essentially, with a beautifully inherent smoothness that few players of any kind provide with Compact Disc. There was a great balance between intricacy and warmth, one that makes for extremely easy listening over a long period of time - and let’s face it, when you pay this kind of money you expect things out of the box and plugging them won’t work if you actually want to hear and see something! Even the most hardened gadget freak would balk at this combination, so leave it to a professional, as I wisely did. Once completed this apparent minefield of technology is -amazingly - a doddle to use.

I started by using the 800/861 in good old stereo CD mode, with a pair of Quad ESL 988 electrostatics and an MJ Acoustics Pro100 sub used very subtly. Power was supplied by Meridian’s own stereo 557 power amp and speaker cables were Chord Company Odyssey and Anthem interconnects. With a variety of discs ranging from Taverner’s unaccompanied chorals, via Bruckner symphonies, right up to the aural onslaught of Rage Against The Machine, the combination simply couldn’t fail. I use a Meridian 506.24 as my reference CD player and the 800 had all the traits of the sound of it’s humbler brother, but magnified them a hundredfold.

I was first struck by the amount of musical detail present. It was combined, essentially, with a beautifully inherent smoothness that few players of any kind provide with Compact Disc. There was a great balance between intricacy and warmth, one that makes for extremely easy listening over a long period of time - and let’s face it, when you pay this kind of money,
EXPERIENCE THE CHORD EFFECT!

The first time you hear your sound system with Chord interconnecting cables will be the first time you’ve really heard it.

Be warned - the effect can be shattering.

Your eyes and ears will be opened. Your music will never sound the same again.

Specify Chord cables - Hear the light!
you should aim to get your money's worth out of it!

The Meridian combo doesn't have the organic 'whole' of Linn's similarly priced Sondek CD12 but concentrates more on the layers of the music to create its beguiling appeal. Despite this warmth, there's plenty of bass and attack, as heavy rock and dance music discs revealed.

**YOU'RE SURROUNDED**

Already enamoured with the 800 as a CD player alone, turning the configuration to multichannel really showed the stellar heights to which this Meridian pair can soar. At its best the system literally took my breath away with its performance. The 861 has a list of configurable settings far too long to go into, but once the 800 player is set up in two channel mode (via the on-screen menu) then the 861 was configured to switch into Triffleid mode with two-channel (stereo) discs.

Triffleid mode uses the two main left and right loudspeakers, along with the centre and subwoofer, to create an impressive enhanced form of 'stereo' replay which brings a new take to the format. The sound is naturally stretched way back into the room and there's a superb sense of three-dimensionality to it all, creating literally (with the Quads anyway) a curve wall of sound studded with images.

Let's not forget that whilst this is ultimately, and primarily, a system for the music lover it also plays movies, and very well too. The superbly choreographed fight scenes in Crouching Tiger, Hidden Dragon had awesome impact, with near perfect picture quality. It also made me realise that, as daft as it may sound, the Quad electrostatic is a damn fine A/V 'speaker'. There's no boom and tizz, of course, but what you do get, especially through the Meridian kit, is a fast, natural and dynamic sound with great dispersion.

Where the Meridian gear really came into its own though was with multichannel DVD-Audio discs where it showed what exactly can be achieved, sound wise, with the format. A range of different types of music showed that it can handle dexterity, delicacy and sheer clout in equal measures. And all with indisputably superior sound quality. I've never heard the Teldec series of Beethoven symphonies sound so real. When the opening bars of the fifth symphony sprung into action there was a sense of realistic drive and sheer energy that is a light year away from Compact Disc, no matter how good the recording. String tones were exceptionally natural and the violin section sounded like I've rarely heard it in the home, muscular and sinuous.

Where the format shows what it can do in a pure audiophile way is in the space and lightness that accompanies any woodwind passage, which can be simply jaw-dropping. The rear channel 'speakers, in the shape of Quad's fast and detailed IlIs acted as natural surrounds, creating ambience and space in, again, a highly realistic manner.

Moving on to the Debussy preludes for piano, the Meridian delivered a well balanced and fluid sound that also had oodles of presence and good detail. Again, the way the recording acoustic was captured was especially impressive.

**Both the 800 and 861 are configured like a computer with removable cards.**

With multichannel studio mix rock from in- yer-face bands like Stone Temple Pilots the sound was big and all-encompassing, with full-on attack and plenty of taut, deep bass. Indeed, so good is the sound in multichannel DVD-A that I would challenge any seasoned listener or critic of either DVD-A or multichannel to find fault. It certainly changed my outlook on everything both sonically and domestically - analogue watermarking, intrusive rear channel 'speakers, extra bulky amps etc. all became irrelevant, as the sound was simply breathtaking at times and took audio to another level.

**END BITS**

It's both very easy to sum this system up, yet very difficult! Obviously, it's frighteningly expensive, but then again, lest we forget, so are many cars that you get shot of in three years and will have depreciated by an equivalent amount.

This isn't a transitory gadget - it's more an investment for the soul! Soundwise, it's perhaps not ultimately as ultra-detailed and intricate as the very top, similarly priced super high-end hi-fi I've heard, but to me it's more musical. What's important is that you never lose sight of the fact that this is for edification and enjoyment, as opposed to hi-fi for hi-fi's sake - 'techo-religion where the 'listener' kneels at the shrine of the blessed rack and pays more attention to the manual than the music.

Overall, the 800 is perhaps the finest overall CD player I've ever laid ears on. When you consider that there are some CD-only players round that demand this outlay, the price tag doesn't seem all that eye-watering. In the past I've been lucky
Faithful to your music

Music as it was meant to be heard • Systems start from £3000

For your nearest stockist call +44 (0)1722 332266. Or visit www.naim-audio.com
enough to be in close proximity to top class orchestras banging out the best music, and at times this combination with DVD-Audio discs honestly brought me the closest to the experience than any other hi-fi system I’ve encountered. And that is no mean feat.

With the enjoyment I’ve experienced from using this system, I’d buy it tomorrow if I was in the position to. However, like many others, I can’t. Unless I become President of the World Bank overnight, sell my family into slavery or poison any wealthy relatives!

MEASURED PERFORMANCE

In common with most DVD-A players, the 800-series accommodates all 5.1 channel decode modes (except dts 96/24), while the enhanced offboard processing of the 861 delivers the full 7.1 channels possible with Dolby EX.

Digital data is transferred from 800 to 861 in two ways. Compressed Dolby and dts bitstreams are passed in the usual fashion while, uniquely, up to 6 channels of uncompressed digital audio may be transferred via three S/PDIF links using the encrypted MHR (Meridian High Resolution) protocol. Depending on your choice of software, the 800 decodes up to 5.1 channels and then either upsamples (in the case of 44.1kHz CD or 48kHz DVD) or downsamples this data (in the case of 192kHz DVD-A) to a common 96kHz/24bit format recognised by the 861 external processor. This limits 192kHz sampled DVD-A audio to 45kHz analogue bandwidth maximum, instead of 95kHz.

The performance of the 861 is clearly optimized for 96kHz/24bit data, for while 44kHz/16bit CD replay is very good, there are clear reductions in distortion and gains in low-level linearity with 96kHz/24bit DVD-A. For example, although Meridian’s digital inputs are all crystal-locked and buffered for incoming sample rates from 44.1khz to 192kHz, jitter falls from a mere 130ps with 44.1kHz CD to an astonishingly low 30ps with 96kHz DVD-A.

With 44.1kHz and (multi-channel) 48kHz data, distortion ranges from 0.002-0.0008% from 20Hz-20kHz at full signal level, increasing slightly to 0.004-0.007% at -20dB below full level. However, with true 24bit data, Figure (1) shows distortion falling to a minimum of 0.0005% at 1kHz, with best-case figures of 0.001% and 0.0015% at -20dB and -30dB below full level, respectively. This results in an exceptionally clean looking spectrum at levels where there’s plenty of musical action taking place.

Regardless of data, care must be taken with the volume setting: If peak digital levels are present on the source material then the 800/861’s volume should not exceed “93”. This is equivalent to a 3V maximum analogue output, beyond which it is immediately plunged into clipping.

The next graph (figure 2) demonstrates the 861’s superb low-level linearity that, despite its A-wtd S/N amounting to just 106dB, remains true to -110dB down, with averaged errors of <1dB from -115dB to an astonishing -120dB.

Of course, true 24bit data holds the promise of a 146dB dynamic range, but this is never realised in practice because of limitations in associated analogue circuitry.

With 96kHz sampled digital sources, the 800/861’s analogue response is -0.3dB down at 20Hz but flat to 45kHz unless “HS Output” is selected on the 861, which provides a roll off beyond -32kHz amounting to -18dB at 45kHz.

DVD-A players typically offer far lower levels of ultrasonic noise than their SACD cousins, but the 800/861 is particularly impressive in this regard. Figure (3) illustrates the low noise and distortion (~0.004%) associated with a 40kHz signal, derived from 24bit/96kHz data (indigo trace). The equivalent output from Philips’ DVD-763SA (bright blue trace), also tested in this issue, in SACD mode is included for reference.

Figure (3) also reveals a digital image that escapes the 861’s digital filter with 96kHz DVD-A data. As this appears well above the audio range, it’s unlikely to have any impact, though images associated with 44.1kHz and 48kHz digital audio are better suppressed at ~105dB.

Overall, the 800/861 represents a technical reference in many areas of performance, continuing the tradition of the marque. PM

<table>
<thead>
<tr>
<th>CD</th>
<th>DVD-A</th>
</tr>
</thead>
<tbody>
<tr>
<td>frequency response 8Hz-21kHz</td>
<td>8Hz-45kHz</td>
</tr>
<tr>
<td>distortion 0dB 0.001</td>
<td>0.0005</td>
</tr>
<tr>
<td>-30dB 0.008</td>
<td>0.0005</td>
</tr>
<tr>
<td>noise (Awtd) -106</td>
<td>-106</td>
</tr>
</tbody>
</table>

Figure 1

Figure 2

Figure 3

World Verdict £

Takes audio to another level, if you can afford it. Without doubt the finest optical disc playing system we’ve encountered. Smooth and cohesive, it plays anything you chuck at it with ultimate finesse.
Smith of Eastbourne, the winners of our October competition. A pair of Quad 11L loudspeakers are on their way to you!

26...to Mr. M Tracey, Gloucester, B Flatman of Cambs, Dr. B McAdam of Baddesley, Mr A. Green of London, and David HI-FI WORLD & COMPUTER AUDIO DECEMBER 2002 www.hi-fiworld.co.uk

...to Mr. M Tracey of Gloucester, B Flatman of Cambs, Dr. B McAdam of Baddesley, Mr A. Green of London, and David

HI-FI WORLD’S
GREAT COMPETITION
GIVEAWAY

WIN A PAIR OF WILSON BENESCH ARC LOUDSPEAKERS WORTH £2400 IN THIS MONTH’S SUPERB COMPETITION

There are actually very few hi-fi companies based in the UK that can be truly described as being ‘high-end’ but Wilson Benesch are one such outfit. Acclaimed for their design status, superior sonic attributes and superlative build quality, the company produce some of the best looking and sounding gear on the market.

Wilson Benesch, founded in 1989, are based in one of the country’s most traditional locations for British manufacturing – once famous for its Stainless Steel production – Sheffield in Yorkshire. The UK sales and public relations side of the business is currently run by husband and wife director team Craig and Christina Milnes. These two have presided over a steady growth in the company’s homeland over the past few years due to the audiophile’s demand for quality ever increases.

Although a manufacturer of select high-end loudspeaker designs over the past seven years, the company also have a little audiophile ace up their sleeve in the shape of their Odyssey range, which ranges from the standmounting Arc to the flagship loudspeaker, the £15,000 Chimera.

There are many new things in the pipeline for Wilson Benesch, such as a new version of the company’s classic ACT One ‘speaker which was shown at the recent London Hi-Fi Show and is due for release in December. This lays claim to being the stiffest and most inert loudspeaker enclosure ever assembled by a manufacturer.

The superb Arc loudspeakers that we have to give away here are simply one of the finest sounding and built standmount ‘speakers money can buy.

In our review of the Arc, we noticed that the ‘speaker was “a very dynamic, low coloration and high-resolution design” and that they “are also superb at rendering depth, atmosphere and ambiance, bringing recordings to life”.

There’s little to touch these little ‘speakers when it comes to fineness, detail and sophistication, they’re simply stunning.

If you want to benefit from the enjoyment the Arcs could bring to your system, then here’s your opportunity! Winning a pair of these fantastic ‘speakers couldn’t be easier. Simply answer the following questions on a postcard and send it to the address below by November 30th. The first correct entry out of the bag will receive these superb speakers.

**Competition Questions**

1. In which year was the company founded?
   - [a] 1989
   - [b] 1990
   - [c] 1991
   - [d] 1999

2. Where is the company based?
   - [a] Leeds
   - [b] Bradford
   - [c] Sheffield
   - [d] Batley

3. What is the name of the turntable/tonarm/cartridge package?
   - [a] The Camera
   - [b] The Chamade
   - [c] The Chimera
   - [d] The Capri

4. What is the name of the company’s flagship loudspeaker?
   - [a] The Camera
   - [b] The Chamade
   - [c] The Chimera
   - [d] The Capri

**Hi-Fi & Computer Audio World Competition rules and conditions of entry**

1. Only one entry per house hold.
2. Multiple entries will be automatically disqualified.
3. Purchase of the magazine is not a pre-condition of entry.
4. No correspondence will be entered into.
5. The Editor’s decision is final.
6. No employees of Audio Publishing Limited, or of any companies associated with the production or distribution of the prizes may enter.

HI-FI & COMPUTER AUDIO
December Competition
Hi-Fi World Magazine
Unit G4 Argo House
The Park Business Centre
Kilburn Park Rd.
London NW6 5LF

CONGRATULATIONS

...to Mr. M Tracey of Gloucester, B Flatman of Cambs, Dr. B McAdam of Baddesley, Mr. A. Green of London, and David Smith of Eastbourne, the winners of our October competition. A pair of Quad 11L loudspeakers are on their way to you!
Sevenoaks Sound & Vision
Stocks a comprehensive range of DVD players, amplifiers, speakers, plasma monitors, televisions and projection systems from all the leading manufacturers.

From starter systems to custom designed multi-room and home cinema installations, our friendly staff are available in all outlets to advise, demonstrate and guide you through the home entertainment jungle.

If you're interested in home entertainment and want to avoid the confusion, contact your local Sevenoaks Sound & Vision outlet on freephone 0800 587 9909 and experience more.

0% interest free option* is available on most products. *Written details on request, Licensed credit brokers. Minimum balance £400. Subject to status.

Hi-Fi Separates & Systems • Home Cinema
Plasma & Projection • Multi-Room Systems

MUSICAL FIDELITY Tri-Vista 300

In celebration of the company's twentieth anniversary, Musical Fidelity are introducing the limited edition (500 only) Tri-Vista 300 'super' integrated amplifier. Delivering an enormous 340W per channel, the 300 uses Tri-Vista mini-tubes similar to the Nu-Vista tubes previously used in Musical Fidelity's highly acclaimed, limited edition, Nu-Vista series of products. The Tri-Vista Series will shortly be enhanced with the addition of 800 Tri-Vista SACD/CD Players, 300 Tri-Vista Pre-Amplifiers and Power Amplifiers.

Tri-Vista 300 Integrated Amplifier £3994.95

New Outlets in Poole, Shirley (Solihull), Swindon and Wolverhampton

We are delighted to announce that towards the end of October our new store at Latimer House, 44-46 High Street, Poole will be opening - please call 01202 671677 to confirm before travelling. Additional new outlets in Shirley (Solihull), Swindon and Wolverhampton are due to open* over the next few months. For further details please see our outlets listing on Page 7.

*Subject to legal completion.

Outlets Nationwide
Aberdeen • Bedford • Birmingham • Brighton • Bristol • Bromley • Cambridge • Cardiff • Chelsea • Cheltenham • Crawley • Croydon • Edinburgh • Epsom • Exeter • Glasgow • Guildford • Holborn • Hull • Ipswich • Kingston • Leicester • Leeds • Lincoln • Liverpool • Maidstone • Manchester • Newcastle • Norwich • Nottingham • Oxford • Peterborough • Plymouth • Poole • Preston • Reading • Sevenoaks • Sheffield • Southampton • Southgate • Swansea • Swiss Cottage • Tunbridge Wells • Watford • Witham (Essex)

www.sevenoaksoundandvision.co.uk

experience more

By combining technologies from their Reference and Q Series, KFF have introduced the new XQ speaker range. Featuring KEF Uni-Q® 'point source' arrays for unrivalled off-axis performance and 'super audio' Hyper tweeters™, the XQ range fully exploits the wide bandwidth of digital formats like SACD and DVD-A. The range comprises the XQ one and three stand mounters, the XQ five floorstanders and XQ two c centre speaker, All XQ models are available in a variety of finishes.
**Turntables & Tuners**

- Arcam Diva T61 Tuner £249.95
- Denon TU260L MKI Tuner £109.95
- Marantz ST4000 Tuner £119.95
- Michell Gyro SE/RB300 Turntable £1017.95
- Project Debut Phono SB Turntable £159.95
- Project Debut III Turntable £129.95
- Project RPM4 Turntable £324.95
- Sony D777ES FM/DAB Tuner £549.95
- Videologic DRX-601E DAB Tuner £249.95

**Arcam DIVA Tuner**

- £249.95

**Denon TU260L MKI Tuner**

- £109.95

**Marantz ST4000 Tuner**

- £119.95

**Michell Gyro SE/RB300 Turntable**

- £1017.95

**Project Debut Phono SB Turntable**

- £159.95

**Project Debut III Turntable**

- £129.95

**Project RPM4 Turntable**

- £324.95

**Sony D777ES FM/DAB Tuner**

- £549.95

**Videologic DRX-601E DAB Tuner**

- £249.95

**Project Debut II Turntable**

- £119.95

- The original Debut turntable romped away with a Product of the Year Award in 1999, and the MKII version continues the extremely good work. It's a simple affair, that's easy to set up, but don't let the price fool you. It sounds a whole lot more expensive than that. This is a fine turntable, and it clearly reveals the benefits of listening to vinyl with a rich and detailed soundstage, and a good dynamic response. It's available in six funky colours, so you should find one to suit your decor. and at just a smidge over £100 you can have no excuse not to keep that old vinyl collection in employment for a good few years yet.

**Rotel RCD-02 CD Player**

- £379.95

**Rotel RA-02 Amplifier**

- £349.95

- Whether it's the raw, and sometimes just plain barking vocals of Tom Waits, or the stinging guitar stabs of Pete Townsend on some old Who tracks, the Rotel is one of those players that can't help but bring a smile to the face - it's a breath of fresh air.

**AE AEGIS EVO Series**

- £179.95

- The original Aegis Ones were great speakers, to the extent that they were category winners in our 1998 awards. Since then a host of new models have raised the standards in the sub-£200 category, and the Aegis Ones soon went from stunner to also ran. AE's response to that is an EVO version.

- The Aegis One genre are clearly evident. The original's refinement and bass weight are preserved and backed up with better openness and more free-flowing dynamics. The old speakers would have delivered a cool and calmer version of Pink's Missundaztood set - they'd be enjoyable, but would lack a little drive and excitement. The new speakers however, address those limitations. Add authority and good stereo imaging to the list of pluses plus and it comes as no surprise to find these speakers at home with classical, too. Indeed, running through our test room's extensive CD library we couldn't find a genre that these AE's weren't happy playing.
Amplifier Selection

<table>
<thead>
<tr>
<th>Brand</th>
<th>Model</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arcam</td>
<td>DIVA A65 Plus Amplifier</td>
<td>£369.95</td>
</tr>
<tr>
<td>Arcam</td>
<td>DIVA A75 Plus Amplifier</td>
<td>£469.95</td>
</tr>
<tr>
<td>Arcam</td>
<td>FMJ A32 Amplifier</td>
<td>£1149.95</td>
</tr>
<tr>
<td>Cyrus</td>
<td>ACA7.5 Pre Amplifier</td>
<td>£699.95</td>
</tr>
<tr>
<td>Cyrus</td>
<td>Silver Power Amplifier</td>
<td>£999.95</td>
</tr>
<tr>
<td>Cyrus</td>
<td>A5 Amplifier</td>
<td>£499.95</td>
</tr>
<tr>
<td>Denon</td>
<td>PMA355 Amplifier</td>
<td>£229.95</td>
</tr>
<tr>
<td>Linn</td>
<td>Krolek Pre Amplifier</td>
<td>£494.95</td>
</tr>
<tr>
<td>Linn</td>
<td>LIK5 Power Amplifier</td>
<td>£494.95</td>
</tr>
<tr>
<td>Marantz</td>
<td>PM4200 Amplifier</td>
<td>£149.95</td>
</tr>
<tr>
<td>Musical Fidelity</td>
<td>A32 Pre Amplifier</td>
<td>£999.95</td>
</tr>
<tr>
<td>Musical Fidelity</td>
<td>A3 Power Amplifier</td>
<td>£999.95</td>
</tr>
<tr>
<td>Musical Fidelity</td>
<td>A308 Amplifier</td>
<td>£1999.95</td>
</tr>
<tr>
<td>Sony</td>
<td>TA-FE570 Amplifier</td>
<td>£149.95</td>
</tr>
</tbody>
</table>

ARCAM SOUN& VISION

DiVA CD82T CD Player
DiVA A85 Integrated Amplifier

DiVA CD82T Arcam’s latest sounds like a more mature version of its little brother. On an initial listen the increased solidity and refinement are obvious, but over time the subtler dynamic shading and more assured handling of transients come to the fore... The Arcam CD82T is one of the best CD players available at this price point. | September 2002 |

DiVA A85 “You’ll have realised by now that we rather like this amp. It took us completely by surprise, and further strengthens Arcam’s already impressive product range... The A85 is superb, and we can’t wait to put it up against its peer in a group test.” | March 2001 |

B&W Bowers & Wilkins
DM602S3 Speakers £299.95

But the B&W 602 S3 are our winners. They’re big and not particularly beautiful, yet if it were our money they’re what we would buy. No rival can match the wide ranging dynamics or low frequency performance of these not so compact standmounters. Add all-round sonic excellence and the choice is easy. Give them sufficient space to breathe, then sit back and enjoy the music." | August 2002 |

PURE DIGITAL

DRX-701ES Digital Tuner £249.95

This new tuner from the recently renamed Pure is based on the 2001 Award-winning Videologic DRX-601ES, but under the lid is an all-new third-generation digital radio engine, in the form of Frontier Silicon’s Chorus FS1010. Its biggest advantages are lower energy consumption and above all cost - it’s the main reason why the DRX-701ES is £100 less than last year's model.

The tuner uses 24-bit 192kHz conversion with 4x upsampling and data interpolation, and is powered by a linear variable transformer - such attention to sonic detail pays off. Digital outputs are provided on electrical and optical feed, but most people will use the analogue out. As usual the tuner is subject to the signal quality of air, but when it’s fed from a high-quality outdoor aerial and a good signal, it’s capable of a crisp, powerful and detailed presentation. Even more popular music stations like Radio 6 benefit from the mix of a neutral balance and fine weight, while speech is also neutral and easy to follow. If you want a quality home tuner for digital radio, you need look no further.” | October 2002 |
Cyrus 7 Amplifier: This is a fabulous amplifier. It is fast, punchy and has bags of power on tap but crucially delivers huge sacks full of subtlety when the music requires. Some of the other amplifiers in this group may be better with particular genres of music but as an all-rounder it takes some beating. ***** November 1999

ROKSAN Kandy KA1 MKIII Amplifier £549.95

When we last reviewed Roksan’s Kandy integrated amp in February it fought off serious competition to come top in a Supertest. This is its replacement. The MkIII version was impressive, but MkIII is a stunner. It betters all the amps here in the timing department, and has a wonderfully robust character that works well with all types of music. It manages to retain the good points of the MkII while adding extra resolution and subtlety. All the amps here have a place in the market. It’s just that at £550 the Kandy really does set the pace. ****** October 2002

11L Speakers £379.95

"Quad is best known for its superlative electrostatic designs which start at £3500. So any £379 pair of speakers that carries the company’s name has to be going some to avoid tarnishing the family reputation. The first surprise is that the 11Ls come in real-wood veneers covered with piano-gloss lacquer. This type of finish is almost unheard of at the £1000 mark let alone at this price. Has anything been sacrificed for such a luxury finish? Here’s the second surprise: apparently not.

The final surprise? Well, saving the best for the last, the sound quality of the 11Ls is phenomenally good. These are small speakers at just 33cm tall, but the scale and authority of their performance is terrific. The laws of physics dictate that extension limitations, but thanks to a clever dual rear firing port arrangement the 11Ls plum the depths with the determination of a multiwatt even when placed in free space.

If you’re in the market for a pair of top quality standmounters these Quads are a must listen. Quite simply, they’re good enough to startle the competition big time. ****** August 2002
FY A3.2 Series

A3.2 CD Player £999.95
A3.2 Amplifier £979.95

Replacing the WHAT HI-FI? SOUND AND VISION Award Winning A3 CD and Amplifier, the new A3.2 models have been further refined and re-styled. The A3.2 CD Player now incorporates the same DAC, filter assembly and control mechanism as the highly-acclaimed Nu-Vista CD Player. The A3.2 Amplifier draws on experience gained through the development of the Nu-Vista M3 amplifier and as such has inherited many of its qualities, producing a series of ease and flexibility that is normally only associated with far more expensive designs.

MONITOR AUDIO

Silver S6 Speakers £599.95

British loudspeaker manufacturer Monitor Audio has introduced a replacement series for its acclaimed and award winning Silver Series speakers. "The aim has been to offer real advances in performance and value," says technical director Dean Hartley. Every single aspect of the existing range was analysed, every user comment studied. We could have improved what we had, but instead we decided to design a whole new range of speakers from the ground up. New models include the S1 and S2 standmounters, the S6, S8 and S10 floorstanders.

With a close-miked track such as James Taylor's Line 'Em Up from SACD they really deliver the character of the singer's voice and they're just as expressive with the cultured rhythms of Groove Armada's latest outing. Having just the right mix of rhythmic control and fluidity. But amazingly the best is yet to come: these are simply beautiful speakers for classical music, once a few days' thrashing has tamed their initial rawness. With the latest release of Holst's The Planets on DVD-Audio they thunder out Mars with true conviction.

These are rather magical speakers, with a poise and grace that belies their ability to turn on the power when required. Pair them with a good CD player and suitably accomplished amp, and you won't go far wrong.

Pioneer PDR609 CD-RW Recorder £199.95

"While it looks simple, the Pioneer has an impressive array of features, including the handy double-speed disc finalization and CD-Text compatibility Internally, the PDR609 is a big step up from the Award-winning PDR-509 it replaced: the DAC is now a 24-bit/96kHz number, aided and abetted by Pioneer's Legato Link conversion technology, and it has 24-bit A-to-D conversion which is ideal for copying your vinyl onto CD. If this is your plan you'll appreciate that the Pioneer makes it easy to create first-rate copies from any source, helped by the manual recording-level controls. It was hard to tell our copy of Jim White's No Such Place from the original.

While the Pioneer's replay quality can't match the Marantz, it costs £120 less, which would buy you a lot of blank discs. If you've already got a dedicated CD player, we'd go with this recorder."

Recorder Selection

<table>
<thead>
<tr>
<th>Recorder</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marantz DR6000</td>
<td>£299.95</td>
</tr>
<tr>
<td>Sony MDS-JE770</td>
<td>£229.95</td>
</tr>
<tr>
<td>Yamaha KX393</td>
<td>£119.95</td>
</tr>
<tr>
<td>Yamaha KX860SE</td>
<td>£199.95</td>
</tr>
</tbody>
</table>

Gold Reference GR10 & GR20

Producer of the Year 2001

August 2001

October 2002
TAG McLaren, by the company’s nature, have always had it in their blood to produce a stylish product. After all, they are tightly linked to Formula 1 racing which very much has its own charisma. The alluring shape of the Aphrodite, reviewed here, is their attempt to bring some of that style into high-end audio.

Firstly, there’s the look and build of this beauty. The minute you lay your hands on the cold metal you know this is a very serious attempt to bring a one-box system up into the echelons of the real high-end. It weighs a fairly substantial 10 kilos and is housed in a classy, ergonomically rounded, brushed metallic chassis that’s available in a variety of carefully judged colours. The case houses a CD player, FM tuner and amplifier that delivers 50W per channel into 8ohms - enough muscle to run most modern speakers comfortably.

This system is a serious proposition for those in the market for a high-end sound from user friendly equipment. Few separates systems can deliver such quality and style for the same cost... Although expensive, the Aphrodite offers good value for those in the market for a sophisticated product - and it’s miles ahead of certain ‘lifestyle’ systems that offer poorer build quality and sound for little less cost.”

**J A Michell**

**Gyro SE Turntable** £1017.95

Founded in Borehamwood by mechanical engineer John Michell. For over thirty years, Michell Engineering have been at the forefront of quality audio with world-wide appreciated products like the GyroDec and Orbe Turntables. In the early eighties the revolutionary GyroDec Turntable with its elegant and effective suspension system was introduced.

The Gyro SE is a smaller and cheaper package that retains the classy sound of the GyroDec and can be upgraded to the full GyroDec specification by adding a plinth and dustcover.

“The beautifully engineered Gyro SE not only looks the part but has a wonderfully clean and fluid sound.”

**Linn Classik**

**Music System** £999.95

The Classik Music System is an alternative to the sound and looks of mass market compact systems. Designed to be useful throughout the home, the Classik is simple and stylish with all the advanced features needed to satisfy the most demanding hi-fi enthusiast or discriminating music lover.

“Since the Scottish company added a tuner to the amp/CD player, mouths have gaped even wider in appreciation. The addition of colour options panders to the public’s taste for kit to match their interior design, but it doesn’t just look lovely in the lounge: the Classik sounds simply marvellous. Boasting fine impact and drive it retains its grip even as it thumps out rock and dance tracks. Ask it to play quiet acoustic music and its smooth, loud presentation impresses still further. The Classik offers the performance you’d expect from high quality separates in one lovely package - this is a very superior product.”

Please Note: Some products may not be available at all outlets.

Advertisement valid until at least 13th November 2002.
scotland and north

Aberdeen 491 Union Street 01224 587070
Edinburgh 5 The Grassmarket 0131 229 7267
Glasgow 88 Great Western Road 0141 332 9555
Leeds 112 Vicar Lane 0113 245 2775 Open Sunday
Liverpool 16 Lord Street 0151 707 8417
Manchester 69 High Street, City Centre 0161 831 7969
Liverpool 19 Newgate Street 0191 221 2320
Manchester 40-41 Lune Street 01772 857777 Open Sunday
Sheffield 635 Queens Road, Heeley 0114 255 5661 Open Sunday

midlands and east

Bedford 29-31 St Peters Street 01234 272779
Cambridge 17 Burleigh Street 01223 304770
Ipswich 12-14 Dogs Head Street 01473 286977
Leicester 10 Loseby Lane 0116 253 6557
Lincoln 20-22 Corporation Street 01522 522397
Norwich 23/26 St Giles Street 01603 767605
Nottingham 597-599 Mansfield Road 0115 911 2121
Oxford 36-38 Park Road 01865 241773
Peterborough 36-38 Park Road 01733 897697 Open Sunday

midlands and west

Birmingham 12 Queensway Arcades, Livery Street 0121 233 2977
Bristol 92e White Ladies Road, Clifton 0117 974 3727
Cardiff 104-106 Albany Street 029 2047 3409
Chester 104-106 Albany Street 029 2047 3409
Cheltenham 15 Priory Street 01242 241171
Exeter 28 Cowick Street 01392 218895
Plymouth 107 Cornwall Street 01752 226011
Swindon 1729 S New Street 01793 495777 Open Sunday
Swindon 246 S New Street 01793 610992
Wolverhampton 109-113 London Road 01902 312225

London and south east

Brighton 57 Western Road, Hove 01273 733338
Bromley 39a East Street 020 82 920 1988
Chelsea 403 Kings Road 020 71 524 4656
Crawley 32 The Boulevard 01293 510777
Croydon 3-73 High Street 020 8265 1060 Open Sunday
Epsom 12 Upper High Street 01372 727 720 Open Sunday
Guildford 73 Broom Street 01483 536666
Holborn 144-148 Gray's Inn Road 020 7637 7540
Kingston 43 Fife Road 020 8547 0717 Open Sunday
Maidstone 96 Week Street 01622 686366 Open Sunday
Reading 3-4 Kings Walk Shopping Centre 0118 959 7768
Sevenoaks 109-113 London Road 01732 459555
Southampton 33 London Road 023 80 303 7770
Southgate 79-81 Chase Side 020 888 2777
Swiss Cottage 21 Northways Parade, Finchley Rd 020 7722 9777 Open Sunday
Tunbridge Wells 26-30 St Johns Road 01892 531543
Watford 476 High Street, Watford 01923 213553 Open Sunday
Wilham (Essex) 1 The Grove Centre 01570 501733

Please call to verify hours of business.
Contact our outlets via E-Mail outlet@sevenoaksoundandvision.co.uk

who are sevenoaks?

Founded in 1972, Sevenoaks Sound & Vision are one of the largest and most successful hi-fi and home cinema retailers in the country.

Each Sevenoaks Sound & Vision outlet stocks a wide range of quality products, covering all categories of specialist home entertainment, from DVD Players to WideScreen Plasma Televisions and Projection Systems, all at highly competitive prices.

Friendly staff are available in all stores to advise, demonstrate and guide you through the home entertainment jungle.

new outlets

Towards the end of October, our new store at Latimer House, 44-46 High Street, Poole should be opening - please call to verify before travelling. Other new outlets in Shirley (Solihull), Swindon and Wolverhampton will be opening over the next few months. Full details to follow soon.

staff wanted

We are currently recruiting staff at several locations. If you are enthusiastic, knowledgeable, have good customer service skills and would like a career within the audio/visual industry, call Jayne Ness on 01732 462214 for more information.

croydon store re-fit

We are pleased to announce that the Croydon store has now been completely refurbished and we would like to take this opportunity to invite customers new and old to come and see the new look shop.

sevenoaks online

The Sevenoaks Sound & Vision website has news and information on the Sevenoaks group and its outlets nationwide. The website is designed to provide you with answers to the questions you may have when buying new equipment.

The site has comprehensive guides to a range of products and technologies from vinyl and compact disc to all the latest formats, including DVD Audio, SACD and widescreen plasma monitors and front projection systems.

There are regularly updated stock clearance lists with hundreds of products on offer and detailed pages to help you locate your nearest outlet.

For impartial advice and information, just click on sevenoaks soundandvision.co.uk

stock clearance

With over forty outlets nationwide, the Sevenoaks Sound & Vision group stock and display a wide range of products. As technology delivers improvements in performance, so individual models and product ranges are changed or superseded. The prevailing models are made available at a reduced price, for clearance. Visit our Website for an up-to-date list of the clearance stock, listed by outlet, within the Sevenoaks Sound and Vision group.

0% finance option

Spread the cost of buying. 0% finance option is available on the vast majority of products we stock. *Waran drops on securit, licensed credit brokers. Minimum balance £400. Subject to status.

pricing policy

Whilst we do not claim always to be the cheapest, we try to ensure our prices are highly competitive. Take into account the expert advice, unrivalled product selection, demonstration facilities and excellent pre, during and after sales service and the lower price might not look such good value.

In the event you can find the same products and excellent service at a lower price, please bring it to our store managers' attention. We will always endeavour to offer you the best deal.

www.sevenoaks soundandvision.co.uk
Arcam have traditionally had the mid-price CD market wrapped up. Dominic Todd listens to the latest contender in this sector from the Cambridge company, the CD82T.

In terms of mid-range CD players, Arcam have been caught on the hop of late. The previous Alpha 7, 8 and SE versions of both, proved immensely popular and were always near the top of their respective classes. When the DiVA range was launched a couple of years ago, the £400 CD72 carried on this tradition and received rave reviews. Yet seven or eight months ago the competition began to hot up and, in my opinion, both the Rotel RCD-1070 and Exposure 2010 have eclipsed the CD72. To be fair to Arcam, though, the Rotel and Exposure cost £525 and £600 respectively, and therefore Arcam weren’t really competing on a level playing field. Well now, with the introduction of the CD82T, they most certainly are.

In true Arcam tradition the CD82T looks just like the other models in the DiVA range, it even shares the same Sony based transport featuring CD Text. What it boasts over it’s little brother though is a significantly upgraded DAC. Out goes the single Delta-Sigma unit, to be replaced by two 24/192 Wolfson components in a dual mono configuration. Furthermore, it features a high stability Class 1 crystal oscillator and, finally, they’ve also made use of some decent quality Burr Brown op-amps in the output stage.

Featurewise, Arcam have added an extra set of outputs for connection to multi-room systems but otherwise the unit is pure DiVA, which equates to excellent build quality and all the features you could realistically ask for.

The CD82T was hooked up to my usual system with a Rotel RCD-1070 and my notes on the Exposure 2010 alongside for comparison’s sake. The first disc to hit the tray was Jools Holland’s ‘I’m in a dancing mood’. I chose this bouncy track to see whether Arcam have managed to produce a little more dynamic vigour than the extremely refined yet somewhat over polite sounding CD72.

In part Arcam have succeeded. Compared to its baby brother, the CD82 appeared to have a greater scope for dynamic contrast, and a slightly deeper, marginally firmer bass response. However, the Rotel still proved to have the broader sound stage and “bigger boned” presentation. The Arcam did sound a little pinched by comparison. Of the two it was the Rotel that was more likely to get my foot tapping. Yet it didn’t all go the 1070’s way. The CD82 manages to eke out subtleties in the music that were once the preserve of far more expensive machines, and beyond the Rotel here. Holland’s vocals were beautifully articulated, and each instrument had fine separation from each other, despite the slightly narrower staging.

Eva Cassidy’s ‘The Letter’ was better suited to the Arcam. Such was the detail retrieval that the listener was given insight in to the manner in which the bass guitar string was plucked and just how the room’s acoustics played its part in shaping the reverberation. Likewise, the old reviewer cliché of cymbal decay, was there to behold. Probably because of the slightly slower pace, the timing appeared to improve here although, from memory, the Exposure still has the upper hand.

There were times when I just wanted the Arcam to let its hair
down and boogie, instead of cruising through the piece with immaculate refinement and none of the rough edges that can mar the 2010's performance. It was certainly impressive, but a little frustrating too.

This frustration really came to light with something like Eminem's 'Drug Ballard'. Here the CD82 was simply too smooth. The introduction should have the speakers' woofers moving with pistonic precision and alacrity. Instead the dynamic contrast had been traded for smoothed out peaks and troughs - pleasant enough to listen to, but not really appropriate here. On the plus side the female backing vocalists were imbued with a wonderful breathy nature that had eluded the 1070.

Whilst it may not have been the most dynamic, it would also be wrong to think of the CD82 as in any way anaemic. There was still a decently powerful bass response and fat soundstage, just not quite as bold as the best in the class.

Finzi's Music for Love's Labour Lost was, unsurprisingly, more the Arcam's bag. The sweet, fluid string tone had a beguiling manner that would make for pleasant lengthy listening sessions. The brass perhaps lacked a little rasp yet, as with the other instruments, the timbral balance was excellent. As with Eva Cassidy, one also got a real insight into the recording room's acoustics from simply hearing the decay and reverb from the surrounding surfaces. In this instance the CD82 turned the tables and proved a more involving listen than the 1070.

Cutting straight to the chase, as good as the CD82T is, I would say that the class best is still the identically priced Exposure 2010. It has an ebullient rhythm that the Arcam simply can't match. Neither can it beat the fulsome presentation of the Rotel RCD-1070. However, it does have its redeeming features. For subtlety and insight I would say that the Arcam is the new class favourite. It's also the most refined CD player I've ever heard at this price point. If you favour light classical and acoustic music over symphonic or high-energy dance themes then the Arcam could well be your machine. Likewise, if your amp and speakers are already on the boisterous side, the CD82T could be perfect. All other things being equal, though, for me the Arcam just fails to beat the best, but is a mighty fine effort none the less.

**Arcam CD82T CD player £699**

**Arcam Ltd.**
Tel: 01223 203200
www.arcam.co.uk

---

**MEASURED PERFORMANCE**

Arcam usually engineer a broad, flat frequency response with slow top-end roll off, to add some characteristic warmth and smooth out the sound a little. The CD82 follows this pattern, our response analysis shows, treble falling away slowly above 10kHz. The player just made it up to 21kHz within 1dB limits.

Linearity was excellent. The distortion trace clearly shows little in the way of quantisation noise or harmonic distortion, the residual at -30dB reading just 0.006%. This performance was maintained at -60dB, good linearity contributing to a 110dB dynamic range figure. A -90dB dithered signal produced just 2.4% distortion. The CD82 measures very well in all respects.

<table>
<thead>
<tr>
<th>Frequency response</th>
<th>4Hz - 21kHz</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distortion</td>
<td>left</td>
</tr>
<tr>
<td></td>
<td>right</td>
</tr>
<tr>
<td>-6dB</td>
<td>0.005</td>
</tr>
<tr>
<td>-30dB</td>
<td>0.005</td>
</tr>
<tr>
<td>-60dB</td>
<td>0.346</td>
</tr>
<tr>
<td>-90</td>
<td>2.4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Separation</th>
<th>1kHz</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>124</td>
</tr>
<tr>
<td></td>
<td>126</td>
</tr>
</tbody>
</table>

| Noise              | 0.105dB     |
| Dynamic range      | 110dB       |
| Output             | 2.2V        |

**World Verdict**

Extremely refined and subtle for the price but if you want ultimate excitement look to the plentiful competition.
The Affordable Phono Amplifier
from Trichord Research
only £299.00 inc VAT (complete with toroidal PSU)

Dino

Moving Coil
Moving Magnet
Switchable Gain
Switchable Loading
Super Regulators
Discrete Output Stage
Add a 'Dino+' PSU for true high end performance

World Verdict
A real 'hi-fi' sound and all that many will need.
Highly recommended.

October 2001

www.trichordresearch.com

tel: +44(0)1684 573524
fax: +44(0)1684 577380
Just a couple of years after the first SACD players arrived, the latest machines cost a mere fraction of their predecessors. David Price reviews Philips' latest budget blockbuster, the DVD763SA.

It only seems yesterday when I was testing Marantz's seminal SA-1, a £5,000 behemoth that made one of the sweetest sounds from silver disc I've ever heard. Although the research I'd done into the respective merits of DVD-Audio and SACD had lead me to plump for the former, when I slid a Super Audio CD into the Marantz, I was forced to rethink. Smooth and seductive, it made 24/192 PCM from DVD-A sound hard and showy. I was hooked.

Since then, the bulk of SACD players have come from Sony, which - to its credit - has had a jolly good go at making the format affordable. I still remember, some eighteen months back, people gasping in amazement as the SCD-940QS was launched. It offered SACD and CD playback (although not CD-R, famously) for a trifling £600! Now though, the company does far cheaper designs (Richer Sounds is currently selling the SCD-XE670 for £130), meaning the fight for the low budget, high volume end of the market is on in earnest.

It is into this context that this Philips fits. For £249 (again, less if you shop around), you get not only SACD playback (in stereo or multichannel), but DVD video, Compact Disc (CD-R and CD-RW), MP3-CD (at 96, 112, 128, 256kbps and VBR) and VCD. In short, it spins practically anything small and shiny, except DVD-A. In addition, it comes with onboard Dolby Digital/AC3, DTS, MPFG and 24/96 PCM decoding. CD Text is also included, along with an audio and video bitrate indicator and - notably - full SACD Bass Management.

Frankly, the DVD763SA isn't the most drop-dead-gorgeous looking thing you'll see in the showrooms this year. It's small (at 435 x 7.5 x 303.5mm), light (3.3kg) and plasticky. In fact, the exquisitely made Supra FS SCART lead that I plugged into it rather put it to shame! Still, the fascia is cleanly designed, with the usual transport controls plus a 'Sound' button which selects the required mode - CD, SACD stereo or SACD multichannel (the Philips will downmix multichannel discs to stereo if you wish - handy feature for us stereophiles).

At the back there are six phono sockets which together provide multichannel audio output, a pair of phons for the stereo audio out, one optical and one coaxial digital output, plus the video outputs (CBVS, component, S-Video and two...
SCARTs). A captive power lead completes the picture. A passable illuminated remote is included, complete with three different switchable brightnesses. The package itself includes the player, remote, batteries, user manual, SCART cable, video cable and a pair of very cheap and nasty phono audio leads.

**SOUND QUALITY**

The Philips DVD763SA has a quoted frequency response of DC to 100kHz (in SACD mode, of course). This promises a beautifully open treble performance, with none of the distortion problems (that manifests as upper midband hardness) of 16/44 PCM. Cue up an SACD like Marvin Gaye’s ‘Midnight Love’ in this player and you can hear the format doing its thing. There’s little of the clangy, fizzy, muzzy sound that Red Book CD invariably serves up. Instead, the midband and treble is smooth, smooth, smooth. But before you go thinking this is an SA-1 in a cheap box, remember that it has cheap digital converters and all the noise that a budget digital video section can muster.

The upshot is that the tonal colouring that SACD can produce (as evinced by the aforementioned SA-1) is nowhere to be seen. The Human League’s ‘Dare’ is a brilliantly warm disc - packed, as it is, with all those classic analogue synthesisers - but you wouldn’t know it from listening to this. The Philips is actually rather cold and steely, albeit not harsh. Essentially then, it sounds like a budget machine with a difference. You don’t get the aggro of 16/44’s nasties, but you do suffer from the fact that the DVD763SA is a dual purpose audio-video machine, built down to a price.

In other respects, it’s not bad. Staying with SACD, bass is a little soft but still quite fluid. Midband is open and there’s a surprising amount of depth. Imaging lacks the holographic quality of more expensive machines like Pioneer’s DV-747A, but does the job. Treble isn’t sweet, but it’s commendably free from harshness - doubtless thanks to that 2.822MHz sampling frequency! Overall, it’s a decently tuneful and involving performer, but still very much of the budget ‘oeuvre’ even when spinning SACDs.

Critically, put it against a top budget CD player, such as NAD’s C521 (£200) and it’s a very close fight - with the NAD’s 16/44 sound coming very close and in some respects bettering the Philips SACD. Certainly the NAD has a fuller, fatter sound with nicer tonal detailing - it’s only the upper midband or treble that’s inferior to the Philips playing SACDs. Feed the Philips with a standard CD and it falls miles behind.
It's vague, woolly, lightweight and really struggles to be called hi-fi at all. The Teardrop Explodes' 'Passionate Friend' (CD remaster) showed the DVD763SA to be out of its depth with fast, punchy, power pop. Its timing was well off the pace compared to the NAD, and it wasn't altogether successful at communicating dynamic crescendos or phrasing. Bass was loose, midband thin and one dimensional and the treble sounded quite curtailed. All in all, you shouldn't buy this unless you intend to use it for mainly SACD or DVD video use - as an aside, its video performance isn't half bad. All in all, it's hard to recommend Philips DVD763SA to serious audiophiles, unless you intend to use it almost exclusively with SACDs (when it performs decently). Its mediocre CD performance is such that it isn’t a great dual-format machine. Still, factor in its video capability and you can’t dispute it offers great value for money - it's just that hi-fi buyers may find it a false economy.

Philips DVD763SA £249.95 www.philips.co.uk

MEASURED PERFORMANCE

This player's performance with both SACD and 48kHz or 96kHz digital audio on DVD-V discs is very good indeed. For example, jitter was exceptionally low with 44.1kHz CD and 48kHz DVD audio, amounting to just 155ps of primarily data-induced peaks. These are highlighted in the jitter graph by red coloured markers, expressed as pairs either side of the main signal.

Distortion was also impressively low at less than 0.0009% at the player's full output of 1.9V, falling to a stupendous 0.00035% at -6dB (950mV), then rising to just 0.0045% at -30dB, where much of the musical action takes place.

Distortion increases to 0.02% at 20kHz with CD, but holds to 0.015% right up to 40kHz with both SACD and 96kHz DVD signals. However, as the graph demonstrates, there's significantly more ultrasonic noise associated with SACD source material (bright blue trace) than the 'equivalent' 96kHz DVD (dark blue trace). This noise will cause some unpredictability in the sound of the DVD763SA with different amplifiers.

Naturally, the responses differ, with CD possessing a gentle HF roll-off that amounts to -0.4dB/20kHz while 96kHz DVD continues to -1.2dB at 40kHz just before the 45kHz cut-off. Incidentally, the digital filter provides 44.1kHz CD and 48kHz DVD a good 90dB suppression of digital images, while 96kHz DVD has just 30dB.

SACD does not require digital filtering and its response extends to 100kHz (albeit at -14.8dB). Otherwise, the S/N ratio is fixed at 106-7dB, but resolution does improve with this format. So, low level errors amount to +0.5/-0.0dB at -90dB with CD but improve with SACD to +/-0.0dB at -90dB, +0.3/-0.1dB at -100dB and +0.9/-0.5dB down to -110dB. This is a fine result for a budget machine, showing Philips are on top form these days with their products. PM

Frequency Response
<5Hz - 20.1kHz (CD)
Distortion Left Right
-6dBFS 0.00035% 0.00035%
-30dBFS 0.0045% 0.0045%
-60dBFS 0.15% 0.16%
-90dBFS 2.7% 2.9%

Separation
1kHz 106dB 105dB
20kHz 101dB 102dB

Noise (IEC A) -106.7dB -106.0dB

Output 1.91V 1.90V

World Verdict
Brilliant value if you want a do-it-all machine for next to nothing, but audiophiles will find its decent SACD performance offset by poor CD sound.
Hi-Fi World listens to the latest classic remastered high resolution discs to hit the shops.

FLEETWOOD MAC RUMOURS DVD-A

Reputedly the sixth best selling album of all time, it doesn’t come as a complete surprise that Rumours has got an early DVD-A release. This Grammy award winning slice of 1977 vintage Fleetwood Mac sees the band at its most commercial, although by all accounts the songs were recorded in some very acrimonious circumstances. Having held the US album chart number one slot for some thirty weeks, it’s likely that most people have heard something from this album before - it spawned ‘Dreams’, ‘Don't Stop’, ‘Go Your Own Way’ and ‘The Chain’ (famously used by the BBC for their Formula One motoring racing theme for many years).

Another good reason for this album’s DVD-A release is its famed sound quality. Back in the late seventies it was the staple dem disc of every self-respecting hi-fi store, thanks to its superb analogue recording quality and FM radio-friendly production values. This is here in 24/96 glory on the new release, along with a new MLP 24/96 multi-channel remix courtesy of a number of the original production team, including Ken Caillat, Rich Fowler, James Stone and the legendary Bob Ludwig. Even a 448kbps Dolby Digital mix is bundled for those running standard DVD players without DVD-A decoding. The running order has been changed slightly compared to the original LP release - ‘Silver Springs’ wasn’t featured on the original due to LP playback time constraints, but appears now after ‘Go Your Own Way’, with ‘Songbird’ at the end.

The stereo mix sounds disappointing. Make no mistake, it’s head and shoulders above the 16/44 CD version, but it lacks the fluidity and warmth of the original LP. On some tracks especially, vocals are steely, guitars sound brittle and the general impression is one of a forward, aggressive sound. True, there’s stacks of detail, tremendous speed and the trademark DVD-A dynamics, but it’s far less ‘organic’ sounding than, say, Human League’s ‘ Dare’ SACD. Doubtless it will be a great demo disc again, but I’d find it hard to live with.

At least the multi-channel mix is tastefully done - no silly surround sound placement here! A partial centre fill is all you get from the middle speaker, the surround speakers serving to widen out the soundstage of the ‘core’ two channel mix. Instruments are placed midway between the front and rear channels, with few specific uses of the rears other than this. Close, but no cigar.

AMERICA HOMECOMING DVD-A

‘Horse with no Name’ is the one everyone remembers from this early seventies soft-rock band, but that’s only the start of the story. Released in November 1972, ‘Homecoming’ was the band’s ‘difficult second album’, attempting to repeat the runaway success of that certain song. It sees the original band members down to Gerry Beckley, Dewey...
Rhino's DVD-Audio release is brilliantly presented - the artwork is magnificent, giving a taste of the gatefold spread of the original LP. The sound is superb too. Unlike 'Rumours', for example, it's dramatically better even than a first pressing on LP. Incredibly clean and open, yet beautifully smooth, it really hits the spot. It's all the more surprising because 'Homecoming' is not what you'd call a typical 'audiophile' album! Bass is incredibly full and deep, soundstaging impressive (although it was never recorded in the Albert Hall), and treble smooth and sweet. The vocal sound is quite stunning. This is a brilliant effort by Warners/Rhino.

The surround mix is good, albeit a touch unsubtle. With lots of rear channel content and a good deal of panning front to rear, it's not quite as polished as 'Rumours' in this respect. For those with only DVD video machines, there's a Dolby Digital 3/2.1 mix which isn't half bad. A gallery of archive photographs, song lyrics and an audio interview with Gerry Beckley and Dewey Bunnell completes the goodies.

Musical Express. 'Don't You Want Me?' reached the top spot both sides of the Atlantic the next month, and the band secured its place in pop history. It's hard to underestimate the importance of Dare at the time of its release. The first all-synthesiser album to venture out of the avant-garde and into ordinary teenage bedrooms, it virtually defined what came to be called the 'synth-pop' genre. The fashion-magazine inspired cover, along with photos of heavily made up band members, crystallised 'new romantic' style.

Recording quality is excellent - the original LP was a thunderously good listen, showcasing the big, fat, sumptuous sounds of those early Roland and Korg analogue synths brilliantly. With such deep, powerful, resonant basslines and great squelchy powerchords, it's easy to see why those original synths are so sought after now.

Oakey's voice was wobbly, and the girls didn't always hit the right notes, but the effect is sublime nevertheless. Just as its name suggests, Dare has attitude - a sense of its own importance and purpose - which shines out from the first bar to the last. The SACD is a brilliant transcription - there's little to say about it except that it faithfully recreates the warmth and power of the original LP brilliantly. The result is a very sweet, detailed and smooth sound that is a convincing argument for the relative sonic merits of this new format. That it also contains a superbly remastered 16/44 PCM CD layer is icing on the cake. Superb.

Thanks to: Vivante Music Ltd (website: www.vivante.co.uk, tel:01293 822186) for assistance in preparation of this review.

Philip Oakey once said that he couldn't have got through his teenage years without David Bowie and Roxy Music, but it was hearing Walter Carlos's soundtrack to 'A Clockwork Orange' that got him into making music with synthesisers. Thus began The Human League, a group which enjoyed considerable success in the late seventies with its experimental 'electronic rock'. By 1980 however, the strains were showing between Phil Oakey and Adrian Wright's pop sensibilities and the more austere electronics beloved of Ian Craig Marsh and Martyn Ware. The group duly split in half in October 1980, with the smart money going on the future success of Ware and Marsh's British Electric Foundation project, whose Heaven 17 spin-off achieved great critical success with 'We Don't Need This Fascist Groove Thang'.

Few people expected to hear from Oakey and Wright again, but while the latter was teaching himself to play synthesisers, the former was teaming up with producer Martin Rushent and bumping into two schoolgirls at Sheffield's Crazy Daisy disco. Susan Ann Sulley and Joanne Catherall subsequently joined as vocalists and thus was born The Human League (Mk II). In July 1981 the silence was broken with the release of 'Love Action (I Believe in Love)', which reached number five in the UK singles charts. Ian Burden duly became a permanent member and synthesiser player Jo Callis was recruited from The Rezillos. The rest was history.

In December of that year, Dare was released to ecstatic reviews from the likes of The Face and New Musical Express.
Cyrus's AV8 preamp is the company's second attempt at bringing together the hi-fi and multichannel markets. If this doesn't succeed, says David Price, then nothing will!

Cyrus's AV5 was one of those avant-garde hi-fi separates that singularly failed to capture the buying public's imagination. Sure, it sold steadily enough - especially to devotees of the brand - but considering what it did and what it meant - it was tragically overlooked. In the best tradition of innovative British designs, it was a 'crossover product' that brought together two different buying 'constituencies' - namely those of audiophile hi-fi and audiovisual.

These two groups have been living apart for many years now, AV growing up in the early nineties and establishing its own conventions, practices and outlook. To us dyed-in-the-grain audiophiles, these have been somewhat baffling - disconcerting even. Whereas two-channel has been a keen advocate of minimalism (short signal paths, no tone controls, filters or frills), multichannel has necessarily had to evolve differently. With six speakers in the listening room (making it an acoustic minefield), and the need to handle vastly differing programme material (from Hollywood action movies to BBC Radio 3), signal processing is essential. The result is that when hi-fi nuts start looking at AV products, they're reduced to paroxysms of anguish. Horrendously complex, with little conspicuous attention to audiophile detail, your average Japanese AV receiver is enough to send running out of the showroom at a not inconsiderably fast pace. Now though, this is all changing. Linn, Naim, Meridian, TAG, Arcam et al are doing multi-channel sound with audiophile values. My point is that Cyrus's AV5 preamp processor, launched a few years back, was one of the very first.

Suddenly you had something that was ostensibly a hi-fi preamp, but with a small amount of digital decoding and processing onboard (Dolby AC3, DTS, PCM), a slick user interface with a brilliant auto set-up facility and delicious 'audiophile' aesthetics. Most important was its sound. Pretty much akin to the old two channel Cyrus Pre (i.e. sweet, smooth and lucid), when paired up with Cyrus's XPA stereo or Cyrus Power monoblocks it was in another league to your average Jap AV receiver. Nice.

The AV8 is essentially the AV5 with the bugs ironed out. Visually almost identical, it's housed in the same inverted half-width (73x215x360mm) alloy case with large backlit green LC display. Inside, its predecessor's 40VA toroidal PSU is retained but the circuitry is tweaked for an improved signal to noise ratio, with better clocking for lower jitter. The former's Spartan feature set is bolstered by Dolby Pro Logic II (which brings separate full bandwidth surround channel decoding, configurable for either movies or music). This is worth having, but it's hardly earth-shattering stuff. Audiophiles know that DTS is where it's happening right now, the omission of DTS-ES Extended Surround is a shame. Still, better sub bass bandwidth, improved MC-BUS software, an enhanced bass management system and new DTS mixdown options are added. Best of all for us two-channel migrants is the new provision of a 'stereo and sub' mode, which lets you run multichannel sources into ye olde two-channel hi-fi speaker pairs.

Round the back, the AV8 is proof positive that it is possible to cover every last square centimetre with phono socketry. With its six digital inputs, three pairs of analogue stereo ins, Cyrus MC-BUS connectors and six pairs of analogue outputs (front, surround, centre and two subs) and single digital output connected, it looks busier than Trafalgar Square on...
R CROSSOVER

Millennium Eve. Just as well then that there’s no video switching. Audio and video circuitry are unhappy bedfellows, and don’t do great things for one another, so I’m not sad to see it omitted.

Rear panel cable connecting contortions excepted, this amp is extremely easy to set up. The AV 8 can automatically configure your speakers to any given room, using the supplied microphone. You simply tell it their sizes and whether or not a subwoofer is present, then press a couple of buttons on the remote. The system then plays a series of test tones, and computes the respective time delay settings automatically. A nice feature is the variable digital crossover, which lets you closely match your main speakers to your subs.

What then of the sound? Using the AV8 in stereo mode as a line level preamp is a great way to assess the product’s intrinsic quality. In this mode, you get a characteristically ‘Cyrus’ sound - which means smooth and detailed, with just a modicum of dynamic compression and softening of attack transients. Feed it with Simply Red’s ‘Holding Back the Years’ on CD and you’ll be impressed by the depth perspective, the relaxed but beguiling rhythms and the fine handling of micro-dynamics (making the phrasing on the keyboard playing particularly lucid). The result is a very satisfying performance.

It’s only when you give it some Nirvana that you realise it’s not the grippiest bit of kit on the block. Compared to a Naim NAC202 (which, admittedly, is a dedicated two-channel design), you notice a slight lack of bass grip and energy, and a subtle softening of the hi-hat sound. Dynamics become just a little less well articulated and there’s a gentle loss of midband detailing. This isn’t to say it’s a dull sounding product - because it’s generally very open and neutral - it’s just that if it errs either way, then it’s on the smooth side.

In 5.1 channel line-level mode, the extra resolution from a DVD-A pressing of America’s ‘Homecoming’ really got the Cyrus singing. Whereas your average £2,000 Japanese AV amp sounds edgy and forward with high resolution digital, the AV8 positively shone, giving a beautifully full and open performance. Treble was sweet and atmospheric, with plenty of air and space. Midband was vast, with a walkaround soundstage, and bass full and powerful. A great performance, and head and shoulders above its non-specialist competition.

The onboard digital conversion/processing was also first rate. Simple 16/44 PCM again had that characteristically smooth but subtle Cyrus sound - I’d say it would actually improve upon most sub £800 standalone CD players in this mode. Dolby Digital was - as always - a bit of a let down, but that’s the codec for you. All I can report is that Bobby Womack’s ‘Across 110th Street’ (the opening track to Jackie Brown) was carried better through the AV8 than almost any other AV preamp I’ve heard. DTS sound was great - rich and sweet and rhythmically very involving. I’d always recommend searching out movies encoded in DTS over Dolby.

This product is a great bridge for two-channel users wishing to go multi-channel. Unless you’re running a high-end specialist preamp (of Michell Orca quality, or thereabouts), you’ll lose little if any quality by switching to the AV8, and it will improve on the preamp stages of most integrateds. The bonus is, of course, that you’ll also have full 5.1 channel capability (for movies or music) and DTS decoding (which is a boon for music-only multichannel devotees) which betters practically any foreign competition in sonic, ergonomic and aesthetic terms. Short of spending £2,500 on Naim’s superb AV2 (which is £1,400 more than the Cyrus), I can think of few multichannel preamps than even come close. A true audiophile bargain.

Cyrus AV8 £1,100

Tel: +44 (0) 1480 43 55 77

www.cyrus.co.uk
Unfortunately I recently picked up a copy of Hi-Fi World, as Trout & Salmon wasn’t in yet! I had no idea that so much yet so little has changed since I last dabbled back in the early eighties. I was up to my neck in twin amps, quad decoders, massive boom boxes and 'Dark Side of the Moon' in SQ. Come to think of it - that was rather like the current saga with SACD and DVD-A! After reading and re-reading the mag from cover to cover I have decided on a winter project to upgrade my ailing low-fi.

I have in the loft a Garrard 401/ SME3012 in perfect condition but it needs a new cartridge and a new plinth. I have a Marantz CD4000 which will do for the moment until the SACD/DVD-A thing sorts itself out. I’m not interested in the surround-sound TV bit at all - it just compromises the music. I also have a Tresham DR11/DRI102/ PS102 in excellent condition. Is it worth making them the nerve centre of my project? I also have a very sweet Marantz 2225 receiver which I like very much when teamed with the 401 and my old Heathkit three-way speakers with 12” Goodmans drivers. At the time I remember it all sounded sublime, but time moves on and upgrade we must! Your advice please on amplification, speakers and cartridges? I’m really looking forward to buying my first new LP for more than twenty years!

JR Saunders, Llandysul

You face the classic dilemma - do you stay with your ‘retro’ system or start performing some wholesale modernisation? Okay, let’s start with the turntable. Obviously the Garrard 401 is one of the best turntables ever made (in some respects, at least) and so it would be perfectly fine to keep it with just a little tweaking. The first question is, how much do you love your SME twelve inch? To be brutally frank, it’s miles off the pace these days and even the updated 312 isn’t the match of the giant killing Origin Live modded Rega RB250. To wit, if you’re going to get your deck replinthed, I’d get a Loricraft plinth predrilled for the Rega arm. If you must keep your SME you could always get a second cut-out drilled for it and use it as an ancillary arm, but frankly I’d sell it to the vintage brigade who’d give you a fine price for it. You could then spend the money on the likes of Dynavector DX10X4 to go with the OL RB250. This done, you’ll have a front-end right up in the Linn LP12/Michell GyroDec class (if not right at the front of it), which will give you a great start along the way to a seriously good sound.

Next the amplification. The Marantz 2225 is a lovely old lump, with a big, strong and sweet sound, but whether it’s up to today’s best is another question altogether. I’d say it isn’t - so the Tresham would be the one to use. Clean all its contacts, mains plugs etc. with Kontak (this stuff works wonders!) and use good interconnects and speakers cables - the old ones will be well past it by now. You might also give the volume pot a squirt of switch cleaner too, as it could well have got noisy after such a long slumber.

Your Heathkit three-way speakers are likely to be the least serviceable of all your components, but ironically the hardest to replace. It will be practically impossible to find a set of modern speakers that have such as big, fat, warm sound with the physicality afforded by those twelve inch drivers. Rather, modern speakers will give you a far tighter and more detailed performance, with better dynamics but an altogether less euphonic tonality. As a result, you’ll find it harder to find something you like without a seriously big financial outlay. By all means go around the dealers and look for a sound you like, but I’m tempted to suggest you seek out some classic loudspeakers on the second-hand market offering more of your Heathkit speakers’ character - well preserved/re-coned examples of KEF’s 104AB, IMF’s TLS80 or even Spendor’s BCI would be worth investigating. DP

[Image of a turntable]
DIGI FIX

Should I upgrade, buffer, interpolate or upsample? I want to improve the detail and realism in my system. My Eikos CD player is an original model which can be upgraded through to the reference version. I could attach a Chord DAC64 with its buffering technology, or even Perpetual Technologies PA3-PA1/Monolith power supply with its interpolating and upsampling. My system comprises a Gamma Space Reference Power amp and Era Reference pre-amp, with Border Patrol MB power supply with Gamma Reference speakers, Russ Andrews mains, Townshend supports and cables.

Simply sending my Eikos back to Tom Evans for upgrading would give me the added improvements that I want and would keep the same overall sound that I enjoy at the moment. But I am intrigued by the newer technologies being offered by other companies and could do with a little advice, as I am unable to audition all the possible variables. Would these other approaches work in my system (300B single-ended negative feedback)? Does my Eikos have the right connections and can it do the job as a transport, does the Chord upsamplre or just have a memory buffer? What would give me the best improvements? My system has a realistic, natural ‘being there’ feel to it and I would like to improve upon this if possible.

Kevin H
Eastbourne

Firstly, the Chord DAC64 is essentially a DAC with some clever digital signal processing build in. It uses a 64bit digital reconstruction filter, with a Pulse Array DAC chip using seventh-order noise-shaping realised with 64bit precision. The idea is that any mathematical errors due to the filtering and noise-shaping calculations will be way below the analogue noise floor, and thus inaudible. In addition to this, there’s a special “Watts Transient Aligned” digital filter said to minimise timing errors and an interesting RAM buffer system using a much larger memory stack. It’s an interesting and possibly worthwhile upgrade - giving a fuller, deeper, smoother 16bit sound - with only the lack of HDCD compatibility as a de-merit.

I haven’t heard the Eikos Reference, but have it on good authority that the upgrade is well worthwhile. Indeed, this would be the path I’d take if I were you - for this reason. I believe that the forthcoming generation of DVD-A and SACD players are going to make CD less and less appealing as a commercial proposition and I can’t see the logic in making substantial financial outlays on additional ‘bolt on’ boxes designed to upgrade 16/44 digital systems. Why try and squeeze a quart from a pint pot, when you can now buy the real thing anyway? You could use your upgraded Eikos to get the best from your existing software and slowly move to high resolution digital, or go the whole hog now and get a Marantz DV-12 (for DVD-Audio playback) or an SA-12 (for SACD playback) - both of which also play 16/44 very well. Worthy as some may be, I believe that interest in ‘CD wonder cures’ will soon be waning.

DP

DEAR ME!

I have recently purchased a system costing £187,000 and would be interested in your recommendations of insurance companies who deal specifically with high-end hi-fi. Do you know music? Do you FEEL music? Are you MOVED by music? Is it possible to pay more than this for a system? I must be insane.

Thank you
Dr. R. Meah Boitr

Er... not a psychiatrist by any chance are you Dr. Biotr? Yes, it is possible to pay more for a system but at the end of the day, why bother? If you know, feel and are moved by music that much, did you know you could sponsor a fair chunk of the London Symphony Orchestra for the price of your hi-fi?

Jibes apart, it’s a good point about specialist insurance and one that we’ve touched on before. Basically there aren’t any that we know of that deal specifically with high-end hi-fi. The ‘big’ insurers include consumer electronics as a part of your household contents and any further extension to the total value of contents demands a premium based on how much extra you wish to insure for. Insurers basically don’t imagine people to spend the kind of money you’re talking about on hi-fi (or anything in the home) and often sit in stunned silence when you mention such figures. Believe it or not, it’s hard to come up with a special cover for hi-fi. A search on website such as www.sisa.co.uk will reveal as much - exotic birds and fish, multiple birth insurance, even Masonic Lodge insurance (whatever that involves) are all there - but no separate hi-fi insurance.

However, there are a few specialist insurers that deal with policies for musical instruments and (usually professional) audio equipment that may be worth contacting. These items are usually insured because they are transported around and don’t stay in the home and this is the crucial point that makes them separate from household insurance. A few enquiries to such insurers revealed that they would try to help with any enquiries with their underwriters and come up with a policy. Two of the companies we tried who were helpful in this matter were Victor Knight in London (www.victorknight.co.uk) and Lombard in Slough (www.lombardinsurance.co.uk). Otherwise contact your current house insurer - presuming you’ve still got a house after shelling out that amount!

SP

SUPPLY AND DEMAND

My front-end system consists of an LP12, Rega tonearm and a Dyna vecto r DV20X cartridge. The Linn was bought in the very early 80s and has the Cirkus mod, but does not have either a Valhalla or Lingo power supply. I’m wondering whether it would be best to buy, as far as sound quality is concerned, the new Lingo, or get the Origin Live motor replacement. The second option appeals due to cost, plus it replaces a twenty year old motor, but the former is easier to connect, a boon when you have three small children who always want to “help”.

Yours
David Morse

As a recent convert from the Valhalla to the new Lingo I have no reservations whatsoever in recommending this simple but stunningly effective bit of kit. If you’ve not been used to an upgraded power supply for your LP12 the results should astound, even when compared to the old Lingo. The Origin Live is a good buy and would be an effective upgrade for you and your ageing motor but the latest Lingo should knock spots off it. You’d get a bigger and more open soundstage and increased detail, along with more muscular grip on the music as a whole. And as you rightly state it’s a doddle to add and a trained chimp could set it up. So my advice is to save up the pennies and plug and play. You won’t regret it, even in years to come! SP
90% of our customers prefer our "warm and old-valve" sound to their expensive transistor preamplifiers & power amplifiers. We have a signed testimonial to prove that one customer prefers £900 "EL34 Lim Signature" to £2,600 preamp / power amp / power supply made by a famous name.

Do you need further proof that price is not a substitute for the "valve sound"? Money refunded to 10% of customers who prefer transistor amplifiers.

Money back guarantee (less £30 return carriage, within 1 month) that our valve amplifiers deliver clear sweet treble, without harshness, from CD players + 100% fatigue free + Sibilance on female voices is well controlled and greatly reduced.

'His' sound like 'His' and not 'Hisssssssss'

+ Singers accentuation and accents become blatantly obvious + Random background noise/crossover distortion disappears, creating an inky black silence, so you can hear quiet notes, breathing noise, artificial reverberation, etc + more powerful bass slam than most transistor amplifiers and most Single Ended amplifiers + 40 watts (EL34)

Money back guarantee (less £30) that you prefer our £900 or £1,350 "KT88 Triode Connection" valve amplifiers to most transistor amplifiers, most transistor / valve hybrid amplifiers, most Single Ended valve amplifiers, most Ultra Linear valve amplifiers selling for £2,000 to £20,000.

"Proper" Triode Push Pull valve amplifiers should sound better, so they are excluded from our Money Back Guarantee. However, they cost £6,000 and upward.

Price is not a guarantee for sound quality. Some products are overpriced and pretentious.

Telephone 01634 268662 anytime or 01634 373410 for Mr Andrew Everard’s review in Gramophone Magazine and Summary of 18 testimonials from satisfied customers + www.affordablevalvecompany.com + Amplifier shown without CE safety cage, to prove that this is a genuine valve amplifier. Customers must not remove the CE safety cage.

Free delivery to U.K. Subsidised £50 UPS delivery to other countries. Return carriage for Money Back Guarantee is £30 for U.K. £100 for other countries. Proven reliability. 2 years guarantee.

RESERVE YOUR COPY TODAY!

Complete this form and hand to your local newsagent

Please reserve/deliver* (delete as appropriate) Hi-Fi & Computer Audio World on a regular basis, commencing with the next issue, until further notice.

Name ____________________________
Address ____________________________

Signed __________ Date __________

Distributed to the newstrade by

COMAG
MAGAZINE MARKETING
The latest version of the Lingo will breathe new life into your old LP12

COST NO OBJECT

I intend to spend $35,000 Australian Dollars on my ultimate system. I deeply respect your opinions, listen to all types of music, and want to experience the reality of such for the amount of money that I am intending to spend. I currently have a shortlist of hi-fi gear that I am attempting to purchase and would appreciate any comments on the quality and sound that the following system may generate. Any recommendation would be greatly appreciated - it comprises the power amp, Classe Audio CP47.5 preamp, Arcam FMJ CD23T CD player, Wilson Benesch Discovery speakers, plus Nordost Blue Heaven interconnects and speaker cables.

I was also considering using the new Chord DAC 64 to improve the sound quality of the Arcam FMJ CD player. I've heard that it would, but others have advised that the FMJ's own internal DAC is quite good. I want 'exceptional' however, so do I purchase a higher-end CD player? I was also considering Musical Fidelity's new 3.2 Series amp combos and Meridian's S02/557 combo. Also, on my shortlist of speakers are the Quad ESL 988/989, B&W Nautilus 804/803s, and Living Voice Avatar/Avatar OBX-Rs and Spendor S9s. As for speaker cables and interconnects, I was also considering Nordost SPM or Red Dawn, but have been told that the Blue Heaven would be sufficient and that the sound difference of these two would be little?

Dave Meyer

Dave this is a tricky one. It's one of those 'how long is a piece of string'-type questions that are really hard to answer in a couple of paragraphs in a magazine. The problem is that there's a lot of money at stake, and that you're going into territory where respective bits of kit aren't 'better' so much as 'different'. Not even hi-fi reviewers have heard all the permutations of CD players, amps and speakers that you mention - all we can do is offer our two cents on the merits of various products in splendid isolation (i.e., in our own reference systems)! My point is that at this price more than at any other, you need to find yourself a couple of really good dealers, audition a wide range of kit, and find those that cohere (i.e., work synergistically) best of all. I can do is offer very general pointers, based on my own subjective findings.

The system you outline would undoubtedly produce a good sound - Arcam's FMJ CD23 is a fine mid-price player, and the Classe gear is quality stuff (albeit slightly too 'North American sounding' for my ears). Likewise the WB speakers are very good, as is Nordost cabling.

Is it the best sound A$35,000 will get you? No, absolutely not. I feel that you should be refocusing towards the front end, going for something like Marantz's SA-1 SACD player (now discontinued but I'm sure there are some still around elsewhere). Alternatively, Meridian's 598 DVD-Audio player practically recommends itself - a brand new design that (like the SA-1) sounds great with CD but brilliant with DVD-Audio. My point is that if you're sailing into superfi waters, you need the best source - and anything that spins ye oldie 16/44 CDs exclusively won't be it.

Having found a digital disc player you like, my next move would be to audition some speakers. The problem is that while Quad ESL 989s and B&W Nautilus 803s are both superb designs, they sound radically different thanks to their transducer technology and cabinet design. Which do you prefer? You can only decide with a serious, day-long dem!

Having arrived at your speakers and source, it's then a case of picking amplification. Again, you have a mouth-watering range of options at your disposal. If it were me, I'd go for either a Naim NAC282/ NAP300/ SUPERCAP or a Michell Orca/Alecto monoblock combo, depending on whether you chose the B&W or Quad speakers respectively. Cables should be used for fine tuning - rather like matching tyres to motorbikes, there's no best buy - it's a case of finding the solution that gives you the balance you want.

Sorry if you haven't got the shopping list you'd hoped for. The message is: find a good dealer and use your ears, not mine! It's your money and you're going to have to live with your decision, not me! Invest a few days travelling around the right dealers and you'll save thousands of bucks, not to mention future heartache. Good luck. DP

Just to really confuse things, let me chuck in a few suggestions! The system you've penciled in is good, and the Discoveries are a very fine purchase if you can spare the cash. The Blue Heaven will give a clean and fast sound (don't consider the exorbitantly expensive SPM at this stage!) but maybe you could grab a listen to the likes of the Audionet ART V2 CD player which retails in the UK for £2,300 in place of the Arcam. The Arcam is an accomplished allrounder but the V2 offers more detail and smoothness as well as a whole lot more high-end appeal, with its granite base and top loading mech, for relatively not that much more money.

As for the Classe amplification, this too is good, but models from the likes of Sugden, Bryston and the Lavardin integrations (not to mention the Michell amps that David mentions) are also available at this price and have a tad more sonic appeal in my view, offering greater openness and insight.

Finally, the Living Voice Avatars are very well balanced and easy going but the WB Discoveries and the Quads, for me at least, offer that little bit of something different, which gives them the edge. If you audition the Quads, try them with a decent sub to get nearer the bandwidth of your other choices. SP
SERIOUS WELLY
WANTED
Please help! My wife and I are trying to work out how to put our system 'right'. We currently use a Linn Mimik, NAD C370 integrated amplifier, C270 power amp and Linn Kober speakers bi-amped with Linn K20 cables. This sounds great at low to moderate volumes but turn up the wick and it goes seriously wrong! High frequencies get very edgy, the bass lets go of any control it has and the whole sound starts to break up and distort. We suspect that, as we have to drive the NADs with the volume knob at around the 2 o’clock position to get some real loudness coming through, it’s the NADs running out of puff rather than the speakers distorting.

We have spent the last couple of months at dealers hearing many different opinions and options. We tried changing the Kabers for JM Labs Cobalt 826, which are really easy to drive and very detailed but far too bright, and the PMC FB! which are okay but nowhere near as musical as the Kabers.

We also got the opportunity to use a Kaim pre-amp and three LK 100s hooked up to the Kabers but it still couldn’t drive the Kabers to very high levels. We are now thinking that some serious amps could be the answer instead of changing speakers, so what do you advise? We have a budget of around £2,000 and are happy to search the classifieds if that could open up more options for us.

D & J Mayer

I’m in no doubt that what you describe is the sound of your NAD combo running out of steam, Linn Kabers aren’t the most efficient loudspeakers around, and frankly your NAD amplification is more at home driving speakers of lower ability at lower levels. It’s budget kit, and unfair to ask more of it. I’m surprised however that a brace of Linn LK 100s still couldn’t do the job. Although not ‘muscle amps’ in the traditional sense, they’ve a lot more grunt than your NADs! Still, I’m happy that you’ve kind-of admitted that you want to stick with your speakers, which makes recommending stuff far easier: In truth, like all Linn speakers the Kabers aren’t the very best all rounders at the price, but what they do, they do passionately. And as you’ve identified, they do ‘music’.

At £2,000 you have plenty of choices. If you want to buy new, then the obvious candidate is Musical Fidelity’s A308. This has a clean, open and neutral nature, which will give loads more detail and grip than your NADs. You may also find it a little brighter - not because the MF is hard but the NADs that you’re used to are a touch smooth. You’ll find its 150W (plus) per channel is more than enough to stir the Kabers from their sleep - power isn’t an issue with this integrated. If you don’t mind buying used, then a pair of XA-200 power amplifiers (temporarily using your NAD as a preamp) would be just the job. These have even more muscle than the MF integrated, and can be had for under £900 second-hand. They’re faster and cleaner, too.

The other alternative - one of interest to all power hungry folk out there - is to invest in Naim amplification. While not as ‘well endowed’ as either of the aforementioned MFs, Naim’s new NAP250 actually sounds just as - if not more - punchy thanks to its massive 400VA power supply and superb stability into any load. I’ve never heard another power amp rated at just 80W RMS per channel (into 8 ohm loads) sound so strong and unfappable. I also believe it to be an excellent sonic match to your Linn Kabers. At £1,914 it fits into your budget, although you’ll soon be wanting to use something better than your NAD preamp section - suitably connected to Naim’s new entry level NAC202 (£1,170) it will sing. You can then upgrade to Naim’s top preamp/power supply combo at a later date. All three options will give you a vastly more powerful and confident sound - the one you choose depends on which subsequent upgrade path you want to embark upon.

Mike Dolan

Hi Mike, Although components do gradually burn out it’s very rare for a system to generally degrade, sound-wise (unless you have a bunch of valves that are on their last legs). It’s more likely that it merely sounds different (i.e. dated) to the equivalent of what’s around at the moment, or other stuff you’ve heard.

There are a variety of ways in which your system can be morphed into something sonically viable and it doesn’t necessarily have to be done all at once, meaning that saving a bit...
more money over a period of time means you can go that one notch extra, which would be worth it here.

For the front-end you can muster up a very good sounding package based around your Planar 3. With the risk of sounding like a stuck record (pun intended!) giving your RB300 the Origin Live modification will reap instantaneous sonic rewards. Bass will be tighter, instruments more focussed and everything much more detailed. Add to this a Goldring ID42 and for a little under £300 you’ll have yourself a totally revitalised vinyl replay system that will bring new life to your records. To really make it sing, £350 spent on an Ortofon Kontrapunkt A will bring refinement, plus speed and detail, taking the sound onto another level altogether.

Next, amplification. If you don’t mind trawling through the second-hand adverts a good bet would be something from Musical Fidelity for clarity and power. A used XA-1/XA-2 or A3 integrated can be picked up for a sensible £400 or so and will last a good few years and the A3 has a fine internal MM/MC phono input. The same also goes for a second-hand Puccini or Puccini SE. The older (pre 'Remote') versions will be around £250-£300 at most and have smooth and musical cohesion with, again, a very good MM/MC input for the money. They don’t have the clout or depth of a Musical Fidelity but are more organic and fluid. It may be worth holding on to find one of these, as there should be examples on the market and either are miles better than anything equivalently priced new, save a NAD C350/C370, which is your best bet for anything new.

Speakers: Monitor Audio are traditionally good if you like punch and attack, but aren’t the last word in refinement or low level detail, yet I gather from your question that you’re after a big sound. For a mixture of both you could try the Mission m53, which has detail and good imaging, plus good, deep bass and commendable speed for such a price point. Otherwise, from the Mission camp in the secondhand stakes, older examples such as the 773e have plenty of welly and loudness, due to good basic engineering coupled with very high sensitivity. Or a used pair of 782s will bring clout, depth and amazing detail for around £300 or less.

Moving away from both Mission and floorstanders, a pair of the new Epos M12s will bring weight and authority to your system in the shape of a largish standmount model. Otherwise, there’s always the classic tried and tested formula of B&W’s 602, which is a big and lively sound with relatively low coloration.

Finally, changing your cables for a package from the Chord Company will benefit the sound. The overall ‘house sound’ of the company is well balanced and uncoloured but smooth and lyrical. Prices are also very sensible, with the superb Cobra 2 interconnect at £50 (and the equally impressive Calypso at £30) and the Rumour 2 ‘speaker cable at £10 per metre.

The toughest part of the question lies with the CD player. You can now consider something that plays more than just Compact Discs to an acceptable standard. The world of optical disc players is changing rapidly and you can pick up a player from Pioneer that reads literally everything (DVD-A/DVD-V/SACD/CDI) bar the kitchen sink for £400. Philips and Sony also have some good DVD-Video and SACD combination players for a sensible price. Otherwise, for impressive CD quality at rock bottom prices look to NAD’s C521 (£200) and the more sophisticated C541 (£330), both of which offer great value for money. SP

At least vinyl to CD transcription is one kind of music copying we can still do on computers without interference - providing it’s for our own use, of course! The latest incarnation of Steinberg Clean is called Clean 3, and is an excellent (and much improved) version of the original version I tested back in 1999. It costs around £30 and comes with Steinberg’s latest WaveLab Lite for recording purposes. If you want a simple, get-you-going package, then I can’t think of anything better.

However, I’d recommend you splashed out on Syntrillium’s Cool Edit 2000 v1.1, which costs $69 to download from www.syntrillium.com. This is the consumer version of the software that is used at Abbey Road Studios (and David Price Studios, for that matter) and is blindingly good.

What you can’t do with CE2000 isn’t worth doing. It’s far smoother, more seamless and more intuitive than the Steinberg package, which is already no slouch in these respects. You can record, edit, process and even burn CDs (on the latest version) with ease. And if you don’t believe me then you can always download the cut-down 30 day demo version for free!

As for soundcards, there’s a wealth of good designs around. Turtle Beach’s Montego II Plus (£129.95) is a fine entry level product, complete with high quality digital in and outputs. Its onboard converters are good, although you might like to spend a little more on a card with a better analogue-to-digital section, which is all-important for vinyl archiving. To wit, TerraTec’s AudioSystem EWX 24/96 is worth the extra outlay. At £149 it’s still reasonably priced, but boasts the latest 24bit, 96kHz oversampling chipes for which a signal-to-noise ratio of over 100dB (A-D) and 110dB (D-A) is quoted. Importantly, it doesn’t use any unnecessary sample rate conversion, unlike Creative Labs Audigy. which you’ll probably have already considered. At under £100 now, this is a great starter soundcard but not quite up to the job if sound is all-important. DP

The NAD CS21i is a good and affordable replacement as a digital source.

CLEAN COPIES?
Do you have any recommendations for computer software to allow me to copy my precious vinyl to CD? I have an old copy of Computer Audio World from 1999 which I seem to remember came with your mag. They used Steinberg Clean! Would this still be available or is there new software out there somewhere? Do you also have anything to do with sound cards for the same purpose? Alternatively could you put me in touch with someone? Paul
Old fashioned technology inside a 21st Century shell. That'll be the striking B2 horn loudspeaker from Beauhorn. Simon Pope listens.

Despite being the holy grail for many, horns are an acquired taste. There's a list of audiophiles as long as your arm who have been bitterly disappointed when they've actually got round to hearing a full range horn for the first time. This is partly due to the fact that very few horns indeed deliver a true full range sound that a top spec two or three-way floorstander can deliver. The few that can are impressive but cost a packet and take over your house in a somewhat obtrusive manner.

What horns lack in true bandwidth, though, they make up for in speed and immediacy. Here they present lifelike transients and accuracy that few other designs can match. So what choice is there for those who want all the strengths of a full range horn but don't want to remortgage and build a separate room to get the damn things in? This is where the new Beauhorn B2 comes in.

If your idea of the traditional single drive unit horn is an expensive, wardrobe-proportioned monstrosity with the pipe smoking customer in mind, then think again. Although Beauhorn do, indeed, produce horns of near-wardrobe sized dimensions in the form of the Virtuoso with a choice of one of three Lowther drive units, they happen to have this exceptionally different looking beauty in the wings. And what's more, it's some £4,000 cheaper than any of their Virtuoso options.

One of the reasons for this is that it uses a more affordable Fostex full-range drive unit, as opposed to the more expensive Lowthers. The downside of this is that the Fostex drive unit is less sensitive than the Lowthers, but still at an approximate 96dB you won't be needing a Krell power amp! The company realised that to save money by making the B2 much smaller than the Virtuoso simply wouldn't work; the B2 therefore stands 47" tall.

The design is very much simpler than that of its bigger brother and it uncannily resembles the figure 2 as used in the corresponding BBC television station! What we have then, is a horn 'speaker that bizarrely doubles as a bit of a style product. The Fostex unit is of Bohms nominal impedance and is used at an axial height of 37" (940mm). The unit is wired with solid core annealed silver cable and has a quoted frequency response of 50Hz-20kHz.

I have to admit that my previous experience of all but the largest horns is that they're superb for well recorded string quartets and badly recorded, distorted dub, but if your tastes venture any further than this you'll be left wanting a bit more from your hi-fi! I let the B2s settle in for a good few days before giving them the full onslaught of an eclectic music collection. One important thing must be pointed out: like all horns, the Beauhorn is best suited to low wattage single-ended valve amplifiers. Put anything of the transistor type through these and the sound is decidedly dodgy, even unpleasant at times. However, use the transparent and lucid nature of a Unison Research single-ended 52K KT88 integrated using KT88 valves, or our own 7.5W 2A3 single ended design and you'll find the B2 far more at home.

First I put my mind at rest by treating them to some string chamber music in the form of Bach's sublime Cello Suites played by Yo-Yo Ma, and a couple of Shostakovich's string quartets courtesy of the Emerson Quartet. True to form the sound was immediate and impressively quick. Rhythms were exact and realistic and string tone was generally good with very little of that sucked-out 'cuppiness' that horn designs bring to the sound. Also impressive was jazz
in the form of 'Miles Davis's Kind Of Blue' on CD and John Coltrane's 'A Love Supreme' on vinyl (which helped the smoothness immensely!).

Quite impressive - and somewhat surprising - was the sweetness of cymbals that the Fostex unit delivered which was somewhat smoother than I had expected. Imaging also impressed, delivering a near-pinpoint accurate performance of the mix.

Where the B2 was less impressive was in its sense of scale and bandwidth. Large orchestral works such as Mahler's Sixth symphony lacked space and breadth and also were slightly dynamically compressed. Another type of music that suffered in this respect was unaccompanied choral music, which sounded a tad sucked out and without sufficient acoustic ambience.

At the end of the day the B2 is a serious yet fun bit of kit. It looks mightily different from anything else on the market but sonically it's quirky. Quirky in the respect that you must be acquainted with the particular traits of a horn design to appreciate what's going on and quirky in the respect that it will only play certain sections of your music collection well. If you're into large dynamic orchestral showpieces, choral music or balls-out rock, look elsewhere. If however, your taste is for simplicity such as classical chamber music and solo instruments (and hardcore dub!) then definitely give them a listen.

The Beauhorn B2 is a serious yet fun bit of kit. It looks mightily different from anything else on the market but sonically it's quirky. Quirky in the respect that you must be acquainted with the particular traits of a horn design to appreciate what's going on and quirky in the respect that it will only play certain sections of your music collection well. If you're into large dynamic orchestral showpieces, choral music or balls-out rock, look elsewhere. If however, your taste is for simplicity such as classical chamber music and solo instruments (and hardcore dub!) then definitely give them a listen.

The Beauhorn B2 is a serious yet fun bit of kit. It looks mightily different from anything else on the market but sonically it's quirky. Quirky in the respect that you must be acquainted with the particular traits of a horn design to appreciate what's going on and quirky in the respect that it will only play certain sections of your music collection well. If you're into large dynamic orchestral showpieces, choral music or balls-out rock, look elsewhere. If however, your taste is for simplicity such as classical chamber music and solo instruments (and hardcore dub!) then definitely give them a listen.

Wilson Benesch.

Whilst the Beauhorn B2 may not be the ultimate sonic experience that could convert the uninitiated to the horn sound it nevertheless gives a taste of the esoteric at a relatively affordable price point. What let's them down - something that horns in general suffer - is their fussiness. They can't play a wide variety of musical genres and recording styles with equal ability, which is OK if you buy your collection in order to suit the sound of your hi-fi - but that sort of defeats the whole object of high-fidelity! One thing that the B2 proves, though, is that 'true' horns needn't be big, expensive and ugly - merely fairly big, fairly expensive and well, quite stylish actually!

Beauhorn B2 £2445

Beauhorn
Tel: +44 (0)1424 813888
www.beauhorn.com

MEASURED PERFORMANCE

The Beauhorn uses a short horn behind a single, full range drive unit. Truncated horns, as they are known, don't measure too well unfortunately, in spite of their size. To deliver bass a horn must be massive, bigger than the Beauhorn, which reached down to 80Hz at best. Even at this frequency it was a good -6dB down and the horn exit provided little extra low frequency energy. The drive unit in untreated form reaches up to 20kHz but its output is ragged by today's standards. With high frequencies above 5kHz shelved down by -4dB or so and a prominent midrange the Beauhorn will sound light and bright, probably detailed, but not spisy. Comparison with the smaller Loth-X shows the huge cabinet offers little advantage in terms of frequency response and it does little to damp the cone at bass resonance, our impedance analysis shows.

The Beauhorn was massively sensitive (and efficient). It produces a deafening 96dB from just one nominal watt of input and, with an overall impedance of 12ohms, draws little current of power from any amplifier. Possessing little reactance it will be very easy on feedback loops too.

The Beauhorn might be best close to room corners where it will take up less space and drive room modes well, to augment its bass. It will likely provide a pretty detailed and coherent sound from low power valve amps in particular, with which it should be partnered. Even a 3watter will give plenty of volume. NK

www.hi-fiworld.co.uk DECEMBER 2002 HI-FI WORLD & COMPUTER AUDIO
Amazing, but true. All acoustic recordings – voices, strings and, yes, even triangles – sound better if the system can produce really deep bass. Why does it matter?

Deep bass

- for triangles??

You will take a major step towards greater REALISM if your system can produce really deep, clean bass – for all types of music. Even madrigals. Many people shy away from this aim a) because capable speakers and amplifiers cost a fortune and b) because bass done badly booms, slows rhythm and colours everything. So why spoil everything for bass you don’t need – because a lot of the HALL AMBIENCE resides in the lowest frequencies. Reproduce them well and music comes to life. Mid-range fills out, underpinned by the SUB-HARMONICS, as colours brighten when the sun shines.

Another problem is that all rooms amplify deep bass, called ROOM GAIN. The deeper your speakers go the more likely you will suffer BOOM. The deeper your speakers go the more likely you will suffer BOOM.

We find 70% of customers’ systems are spoiled by weak or boated bass. THE ANSWER is a “smart” subwoofer which can be controlled at both ends of its range: especially at the bottom to DRIVE THE ROOM cleanly.

The Audio Physic Luna does this, and its servo control means it never booms. Reviewing the bigger AP sub, US magazine Stereophile said, “In my small room the Rhea made the illusion of a large venue believable…”

Customers say we make some of the BEST SOUNDS they have ever heard, so you know we can do the same in your home. Our advice will take account of your best components and guide you where change is needed, in stages you can afford.

You AVOID EXPENSIVE MISTAKES, enjoy music along the way and save money in the long run. You will take a major step towards greater REALISM if your system can produce really deep, clean bass – for all types of music. Even madrigals.

We find 70% of customers’ systems are spoiled by weak or boated bass. THE ANSWER is a “smart” subwoofer which can be controlled at both ends of its range: especially at the bottom to DRIVE THE ROOM cleanly.

The Audio Physic Luna does this, and its servo control means it never booms. Reviewing the bigger AP sub, US magazine Stereophile said, “In my small room the Rhea made the illusion of a large venue believable…”

Customers say we make some of the BEST SOUNDS they have ever heard, so you know we can do the same in your home. Our advice will take account of your best components and guide you where change is needed, in stages you can afford.

You AVOID EXPENSIVE MISTAKES, enjoy music along the way and save money in the long run.
Forget format wars - Marantz now offers the choice of high end SACD, DVD-Audio players. David Price examines the glorious DV-12S1 DVD player.

Marantz is now offering its high-end customers the choice of two DVD players, one of which also plays SACDs (the SA-12), and the other DVD-Audio discs (the DV-12S1, you see before you). There's also the cheaper DV8300 which plays both!

The DV-12 is one of the new breed of high-end hi-fi machines - ones that come complete with video decoding and modulation and plug into your telly too. It is designed to be used as part of a 5.1 channel system (or more, if you like). It does, however, obligingly sport two-channel (i.e. stereo) RCA phono outputs and the facility, via its on-screen menu (ironically) to output stereo (downmixed, if need be) through them.

Aside from the on-off, open/close and play buttons, the most vital control on the DV-12 is the 'video off' switch. Used in conjunction with the 'display off', it turns an 'impressive' sounding DVD-A player into something altogether more serious. But more of that later.

Outside, the DV-12 is a classy looking item. It's solid (as its 13.2kg kerbweight attests), and beautifully suited and booted with tactile metal buttons, a nice clear blue display and a simply delicious remote control - no tripping the 'plastic fantastic' here!

Inside, two professional grade 24/192 resolution digital converters take care of the front channels, whereas 24/96 DACs are used for centre, surround and sub channels. Marantz's Super-Ring toroidal transformer supplies the juice, while selected passive componentry, high grade internal wiring, copper HDAM op amps, copper grounded circuit boards and an ultra low jitter master clock complete the picture.

This new Marantz is a little slow to access discs admittedly, but feed the DV-12 a standard 16/44 Compact Disc and you may be surprised how good it sounds - providing you hit the Video Off and (less importantly) the Display Off buttons. Inside, the player is divided tidily up into various areas (audio, video, power supply, etc), all religiously separated by copper divides.

As soon as the video circuitry is 'rested', this player gains a vastly more commanding manner. Suddenly it's rather vague and pleasant CD manner becomes tight, punchy and powerful. Its bottom-end is full and weighty, and tuneful too, if not the tightest around. Naim CDX users need not worry! Midband is also commendably smooth and detailed, while its treble performance is the epitome of good breeding - cymbals and female vocals have none of CD's customary fizz or brittleness. This is in marked contrast to the vague, rolled off, sat-upon sound of Denon's DVD-A1 spinning CDs.

The real test comes with DVD-Audio, of course. Here, the Marantz was initially a disappointment. Running through a Musical Fidelity A308 into my reference Yamaha
YES! I want to subscribe to Hi-Fi World for:-

☐ £27.00 for 12 months

Your Details

Title     Initial     Surname

Address

Post Code

Daytime Tel:

Start Issue

Delivery Address (if different)

I would like to pay by cheque made payable to Audio Publishing Ltd.

Please debit my VISA ☐  MASTER ☐  SWITCH ☐  AMEX ☐

Switch card issue No ☐  Expiry Date: ______/_______

Cardholder Signature:

Please choose service:-

Airmail
Middle East & South-East Asia

£60

Airmail
Europe

£50

Airmail
USA, Canada, Australia, Japan, Korea & China

£70

Surface Mail

£40

Send this form to:
Hi-Fi World, Freepost LON3478, London, NW6 6YR

Get your issue of hi-fi world straight to your door!

Get to our amazing classified ads first and grab a bargain!!

› Run by dedicated hi-fi engineers and enthusiasts.

› Hi-Fi World has become famous for its informative reviews and radical kit designs.

Credit Card Hotline
+44 01923 270 833

Monday - Friday 9.30am - 12.00 noon: Fax +44 01923 260 588

MISSED AN ISSUE?

Back issues also available at a cost of £3.50 only (includes P&P), payment by cheque only - overseas please contact subscriptions department for details.

Send cheque to: Hi-Fi World, Freepost LON3478, London, NW6 6YR.
NS 1000M loudspeakers, it turned in a rather plodding performance. The Eagles' 'New Kid in Town' was less impressive than via Denon's DVD-A1 - don't get me wrong, it didn't sound bad, it's just the Marantz failed to really get into its rhythmic stride.

Switching to Fleetwood Mac's 'The Chain', and it sounded a touch bright, although to be fair this whole disc has quite a hard midband (as a DVD-A pressing, at least). It was only when I cued up America's 'Ventura Highway' that it really sang.

The point is of course that it's a very neutral performer. The Fleetwood Mac disc is fierce through the Denon, less so through the Marantz. Only America's 'Homecoming' - a sublime remaster than trounces even the original US vinyl pressing - can really flourish with the neutral, matter of fact Marantz.

With a top notch disc, you can expect an extremely powerful bass (albeit just a tad on the warm side, as is Marantz tradition), a warm, clean and smooth and even midband with strong imaging and depth perspective (although not as tight as the likes of a Naim CDX), and sweet vinyl-like treble. It's got a nicely varied tonal palette too, with real subtlety in its dealings with the texture and grain of voices and instruments. True, the DV-12 does still sound digital, but less so than rival DVD-A spinners.

Marantz's DV-12SI is an impressive performer, even for £2.5k. It even spins CDs with a fidelity not that far behind, say, an Arcam FMJ CD23T, so it's a versatile machine to say the least. However, DVD-A still isn't quite there in my mind. It's a very nice upgrade on CD for sure, but there are more enchanting ways of extracting music from discs (of the black or silver variety) - such as SACD!

FORMATS

Audible CD, stereo CD, CD-R/RW, DVD-Audio, DVD-Video, CD-R/W-RW, VCD 2.0 playback, Dolby Digital 5.1, Dolby ProLogic, MP3, DTS and 3D True Surround decoding; THX Ultra certification

Marantz's very own SA-12. Heavens above - I do believe I prefer SACD!

Marantz DV-12 £2,500
Tel: +44 (0) 1753 680868
www.marantz.com

Although Marantz's DV-12SI looks very similar to its companion SA-12SI DVD/SACD player, the internal technology, including choice of DACs, is very different. Distortion is very low, amounting to 0.0008% at its 2.0V peak output, falling to 0.0005% at -10dB before increasing to a mere 0.004% at -30dB. This holds true from 20Hz to ~3kHz, beyond which the distortion increases, as is typical, before topping out at 0.008% re. 20kHz/0dB.

However, while the DV-12SI puts in an exemplary performance through the audioband, it's progressively less impressive at higher frequencies with 96kHz and 192kHz DVD-A material. Jitter increases from an already disappointing 1230psec (see Fig 1) while, at 40kHz, jitter, stopband intermodulation and other spurious distortions dominate the spectrum (see Fig 2). The contrast with its 'cleanliness' at lower frequencies and its sister product, the SA-12SI, could not be more marked.

With CD, the DV-12SI's response shows a mild -0.2dB treble roll-off (exaggerated with pre-emphasised material) but with 192kHz DVD-A extends to 80kHz (-3dB).

Channel separation is quite superb at >110dB across the audioband.

Good crystal selection yields a mere -55pm clock error while the DAC's integral digital filter helps suppress digital images by >104dB.

Overall, CD performance is very good, albeit compromised by power supply-related jitter, while

96kHz/192kHz DVD-A material is arguably less well served, suffering a little from jitter, noise and intermodulation products - a pity. PM

Frequency Response 10Hz - 20.1kHz (CD)

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Left</th>
<th>Right</th>
</tr>
</thead>
<tbody>
<tr>
<td>1kHz</td>
<td>115dB</td>
<td>116dB</td>
</tr>
<tr>
<td>20kHz</td>
<td>110dB</td>
<td>111dB</td>
</tr>
<tr>
<td>Noise (IEC)</td>
<td>-105.2dB</td>
<td>-104.7dB</td>
</tr>
<tr>
<td>Output</td>
<td>1.95V</td>
<td>2.01V</td>
</tr>
</tbody>
</table>

World Verdict

This does so much so well - probably the best DVD-A player at the price right now.
Aberdeen

- Acoustic Energy AE9100 (floor speaker) - £799
- Acoustic Energy AE9100 (center speaker) - £799
- Acoustic Energy AE9100 (surround speaker) - £799
- Acoustic Energy AE9100 (subwoofer) - £799
- Acoustic Energy AE9100 (amplifier) - £799

Bedford

- Acoustic Energy AE9100 (floor speaker) - £799
- Acoustic Energy AE9100 (center speaker) - £799
- Acoustic Energy AE9100 (surround speaker) - £799
- Acoustic Energy AE9100 (subwoofer) - £799
- Acoustic Energy AE9100 (amplifier) - £799

Birmingham

- Acoustic Energy AE9100 (floor speaker) - £799
- Acoustic Energy AE9100 (center speaker) - £799
- Acoustic Energy AE9100 (surround speaker) - £799
- Acoustic Energy AE9100 (subwoofer) - £799
- Acoustic Energy AE9100 (amplifier) - £799

Ipswich

- Acoustic Energy AE9100 (floor speaker) - £799
- Acoustic Energy AE9100 (center speaker) - £799
- Acoustic Energy AE9100 (surround speaker) - £799
- Acoustic Energy AE9100 (subwoofer) - £799
- Acoustic Energy AE9100 (amplifier) - £799

Kingston

- Acoustic Energy AE9100 (floor speaker) - £799
- Acoustic Energy AE9100 (center speaker) - £799
- Acoustic Energy AE9100 (surround speaker) - £799
- Acoustic Energy AE9100 (subwoofer) - £799
- Acoustic Energy AE9100 (amplifier) - £799

Leeds

- Acoustic Energy AE9100 (floor speaker) - £799
- Acoustic Energy AE9100 (center speaker) - £799
- Acoustic Energy AE9100 (surround speaker) - £799
- Acoustic Energy AE9100 (subwoofer) - £799
- Acoustic Energy AE9100 (amplifier) - £799

Please Note: Please consult the availability before traveling. Advertised stock until at least 13th November 2002.
Sorne people class high-end audio simply by price, others by brand-names. A few smart ones judge by performance - and performance alone. The Red Rose Spirit system is for those who judge on performance.

Red Rose is the brain-child of Mark Levinson, the man formerly behind ultra-high end brands like Mark Levinson and Cello. Realising that paying £100,000 for an interconnect cable disenfranchises more people than it enthuses, Levinson recently turned his back on the lunatic fringe of high-end and developed the Red Rose brand. Based initially in a chic store on New York’s Madison Avenue, Red Rose has produced a range of solid-state and valve amplifiers and ribbon-based speakers. While it’s possible to buy a select range of Red Rose separates components, Red Rose has also developed a systemic approach, starting with the Spirit system, which includes integrated amplifier, speakers and speaker cables, all for £2,000.

Although it has no source of interconnect cable supplied, this Spirit could be considered the high-end midi system (in the States, the Spirit kit is even sold on-line at Amazon.com). It comes supplied in a big white box that weighs close to 75lbs, so when it gets delivered, have some friends nearby! First out of the box is the Spirit amplifier and the 336J speaker cables. Then, deeper and hidden behind layer upon layer of cardboard are the small ribbon bookshelf Spirit speakers. Sold separately at £1,250, the...
there is no source or interconnect cable. Red Rose makes its own Silver One interconnects (not supplied with the system). This costs around £300/lm and is a silver Litz design. It’s extremely free and open sounding, but is probably too expensive in the context of a £2,000 amp and speaker. Still, it’s a worthwhile present to your system at a later date.

The choice of source is a bit tougher. Red Rose Stateside recommends SACD extremely vociferously and the Spirit amp has an SACD label instead of CD on one of the sources. Unless you have a heavily-tweaked Sony SCD-1 or similar sitting round, however, forget that and go for a good CD player instead. Get a good CD player of £1,000 or more at the front of the system and you can really get to hear what the Red Rose kit is doing. Our CD recommendations for the Spirit system? Try an Audio Analogue Maestro for warmth, an AVI S2IMC 4 for precision or a Rega Jupiter for musicality.

Whatever you choose, the Red Rose Spirit system has practically all the sonic benefits of more exotic kit at the sort of price tag normally populated by me-too humble stuff. In fact, it gets to within a hair’s whisker of The Rosette/Rosebud kit reviewed in these pages at the start of the year, but shaving almost four grand off the asking price! Oh, the joys of making some gong noise on what colour socks the conductor likes to wear that real high-end detail freaks crave. This is where it ultimately differs from the far more expensive Rosette/Rosebud pairing.

Nor is this the system for those looking to tap their foot to a dial tone. And, as you move higher up the Red Rose price list, so you get more of what proves so attractive in the Spirit system in the first place; warmth, beauty and holographic imaging.

For £2,000, the Spirit system is a steal. Put simply, you need to spend double to get a similar level of high-end, at least in purely sonic virtues.
“Probably the best tonearm in the world”
Hi-Fi World 2002

Origin Live Tonearms

“The Silver 250 is the very best tonearm I’ve ever heard.....the £599 price tag is laughably low.....could probably charge five times this amount.....words can’t express how good this is - one of the designs of the decade”
Hi-Fi World 2002

“There may be better value propositions around to upgrade your system but if there is I haven’t heard them....A fantastic product then from Origin Live and this particular audiophiles dream review tool.”
TNT Audio 2002

Very occasionally new products appear that are so advanced as to render all previous benchmarks obsolete. People believe our new range of tonearms are just such products and we invite you to experience an unprecedented leap in your system performance - regardless of your current tonearm. Arrange for an audition now.

Silver - £ 599
Encounter - £ 970
Illustrious - £1570

All products carry a full no risk money back guarantee and are available via your nearest Origin Live dealer or by direct mail order.

For more information visit our website or contact us at:
Origin Live, Unit 5, 362b Spring Road, Sholing, Southampton, S019 2PB, UK
Tel/Fax: 02380 578877 e-mail: originlive@originlive.com
www.originlive.com

Walrus Systems

11 New Quebec St, London W1

amazon
amphion
apollo furniture
argent
audio illusions
audio note
audio physic
avangarde
breuer dynamic
brinkmann
carfrae
cartridge man
cawsey
chord electronics
clearaudio
croft
decca london
dnm
duevel
dynavector
ear yoshino
es lab
final lab
gamut
graham slee
hadcock
incognito
klimo
taverdin

tel: 020 7724 7224
fax: 020 7724 4347
email: mail@walrus.co.uk
web: www.walrus.co.uk

* interest free credit available on most items, subject to status *
Simon Pope discovers a different way to make your cable sing, and encounters an entertaining new budget interconnect.

It's an acknowledged fact among the audiophile contingent that, like the majority of hi-fi componentry, a cable sounds better the longer it's run in for. Now there's a way for the impatient to experience the full capability of their cabling straight from the box. A service has been set up that utilises Nordost's CBID-I cable burn-in device to run in, or 'toast', speaker and interconnect cable for twenty quid per 48 hours. If the whole thing sounds like a load of cobblers to you, worry not, it did to me, which is why I had to swallow my pride when I tried out the service and compared one toasted and one un-toasted pair of the same interconnects.

The CBID-I, nicknamed the "toaster" uses two dedicated circuits, one for interconnects, the other for 'speaker cables. Each of these circuits creates a series of oscillating signals that operate throughout a wide bandwidth. When connected, this feeds the cables a fast and intense amount of data that covers both extremes of frequency and harmonic configurations.

The process apparently releases the gasses trapped in dielectric materials during the manufacturing process. The unit works in 24 hour cycles, after which it shuts down automatically.

For our test we used two pairs of John Dory's Analogue Spiral interconnect, an update of a cable that impressed us earlier in the year with excellent detail and good instrumental separation. The difference between the two cables was subtle but definite. With the toasted cable the sound was overall warmer and fuller, with increased imaging properties. Female vocals had a tad more body and there was good separation between instruments, which resulted in good detail. The un-toasted cable was still well detailed but sounded somewhat colder and a bit more sterile in comparison. The sound staging of the toasted cable was also slightly deeper than that of its non-treated counterpart. In comparison the bass of the toasted cable was more solid.

There's no doubt that it most definitely works and adds more depth and warmth to the cable, with a subtle difference to the original. And for the price of a curry and a pint you get an effective 'upgrade'.

ACOUSTIC RESEARCH MS230 MASTER SERIES

Once a name to be conjured with in the loudspeaker and electronics market, Acoustic Research now concentrate their efforts on affordable accessories for the Audio/Visual market. This interconnect is part of the company's top-end Master Series, yet still demands a reasonable price tag of £50 for a 0.9m pair. This cable looks like it should cost a lot more and actually does. It's packaged in a futuristic, pod-like case which is opened by unscrewing either end with the aid of a crosshead screwdriver.

Then there's the cable itself. It has unique, robust 24k gold-plated locking connectors and at the non-source end of the cable there is a plastic clamp that is AR's exclusive FNT (Ferrite Noise Technology). It is based on a standard recognised by the computer industry and aims to deliver a "comprehensive and advanced protection" against noise and interference from electronic and wireless equipment.

Construction-wise, it's a twisted pair, balanced and directional configuration. The cable uses frequency-corrected, silver-coated and multi-stranded 99.99% pure Oxygen Free Copper. There are two layers of shielding, one being 100% overlapped Mylar foil for RFI isolation and one 95% copper braid for EMI protection (Electro Magnetic Interference - not the record company!).

Sound wise the Master Series interconnect is very well balanced and musical. It gives an overall fluid and detailed response that doesn't concentrate too much on any particular aspect of reproduction but copes with any equipment and music with equal effort, which is a good trait to have. The top-end is fast and immediate without being grating, and the midrange is very open with vocals, a good thing at this price point.

Acoustic Research MS230 Master Series interconnect (£50)

Acoustic Research Accessories
Tel: 0161 702 5010
www.araccessories.com

www.cabletoasting.com
www.jdhi.co.uk (John Dory Hi-Fi)
Quad's latest floorstander in the successful 'L' Series hits the stores. Noel Keywood admires their attempt to appeal to all in the sophisticated form of the 22L.

Even coats of piano lacquer over a richly patterned Birds Eye Maple veneer is enough to make Quad's 22L floorstanders an attractive feature in the room. This light hued and richly patterned wood catches the eye and looks superb in a modern setting. There's little you can get from Ikea to Habitat (and John Lewis) with a finish like this that is so distinctive, which is why the Quads stand out. But, of course, appearance, although important, is only half the battle to win the approval of a potential buyer. After the eye has seen the ear will listen and anyone who knows a little about Quad will wonder whether the 22Ls are likely to follow tradition, which means - or meant - catering to conservative tastes and delivering supreme refinement.

As much as anybody, I am a Quad man, you could say, having used ESL63 electrostats for many years. I am well aware that Quad's famous electrostats possess a level of subtle ability far beyond conventional loudspeakers. They are one of the world's greats. Do the 22Ls carry forward this tradition? Are they better off with Mozart than Motorhead?

The short answer is "no!" Quad are now out to compete in a wide market and are trying to appeal to broader tastes. The 22Ls tackle rock music with gusto and, in that they have an extra bass driver for added oomph, could be seen to be the company's premiere rock proponent. At the same time though, Quad are a company who have always valued accuracy and the 22L is, under measurement, very accurate too. In other words, these speakers should reproduce violin as well vocal.

The 22Ls are not idiosyncratic; they follow normal design principles in an attempt to fit in with modern tastes and expectations. A woven Kevlar bass/mid unit (170mm/6.5in) works in conjunction with a textile tweeter to cover most of the audio band. An additional Kevlar unit of the same dimensions works below 150Hz to supplement bass output and increase power handling. This is an important feature for listeners who will be turning volume up to get real bass power, because if you want to go loud there's no substitute for multiple drivers. Quad claim to use top quality drive units, designed and built in-house. The crossover uses quality components and allows bi-wiring. A rear port provides reflex loading and the plinth carries threaded holes for floor spikes for stability.

In their handbook Quad rate the 22L as being able to handle 300W, considerably more than the other speakers in their range. This is largely because of the twin drivers. The 22Ls are really aimed at use with powerful amplifiers of 60W or more in order to be able to get high volume, so sensitivity isn't much of an issue.

I drove the Quads with a Mission Cyrus 7 amplifier bi-wired with Van den Hul cables and fed by a Denon DVD-3800. In basic character the 22Ls struck me from the first CD onward as a fairly brightly lit but concise loudspeaker, with plentiful bass. Having measured them I guessed they would have a sheen, since there's no absence of upper treble and this was a feature that occasionally made itself known with poorer recordings. Spinning a DVD-A track like Toy Matinee's 'Last Plane Out' showed the sort of dramatic dynamics the 22Ls are able to convey. A cohesive production like this showed the Quads to be full bodied and powerful, able to keep a tight control on rhythm and viscerally fast but muscular too. Their hard edged embodiment of vocalists almost took my breath away.

Staying on solid rock from DVD-A, Foreigner's 'Juke Box Hero' again showed just how clean and powerful things can get from the Quads; they've got the sort of bottom-end grunt needed to underpin a track like this. Vocal harmonies came over as a little strained and short of real depth at times though.

The Corrs DVD-A album, In Blue, had the hit single Breathless sounding a little jangly and incohesive, but I suspect this is partly down to the recording. However,
moving back to Cro-Magnon digital (you know, where the digits bonk you on the head) showed the 22Ls revealing surprising amounts of bass detail within the ample bass lines of Angelique Kidjo’s Tatchedogbe. There was real power and good control too. For gut wrenching bass lines, the 22Ls acquit themselves well. They are ahead of the opposition here.

It was with older material that the Quads sometimes proved a little too revealing, to the point of being a little ruthless. Disgusted that a modern survey of one hundred most popular female vocalists failed to even mention Janis Joplin, I put on ‘Cry Baby’ from Pearl, to expunge the very thought of Emma Bunton. The Quads were a tad hard here, and a bit short on depth resolution too. Some of those old recordings could be a little suspect in the fidelity department but they invariably have atmosphere and Pearl is no exception. However, as loudspeakers become progressively flatter in their response and tweeters match up better, without the once-common crossover dip, they have also become brighter and this sort of presentation isn’t uncommon nowadays.

But of course Quad have always been known for their highbrow approach so, putting on my carpet slippers, I popped in a reasonably modern (1999) digital recording of Wagner’s Rienzi Overture. The Quads were nice and clean, but certainly forward. They pushed orchestral sections into a plane in front of the ‘speakers, bringing a vividness and sense of detail to some sections unlike anything I’ve heard before. This effect was accompanied by a flattening of perspectives, giving drama precedence over naturalness. There’s no problem with orchestral scale. With ample, well controlled bass Orff’s Carmina Burana kicked off with suitably powerful timpani thraciks, choir well to the fore with each section again vividly lit.

As long as the recording is a good one, the 22Ls come across as clean and highly detailed; a DVD-

Audio disc of Beethoven’s Eroica passing muster in this respect. With classical vocal music, Renee Fleming’s voice was a little too light and edgy for my belief system to fully engage. As recordings got older and dodgier then the Quads became more critical. In a nutshell then, the 22Ls handled classical well, but they favour good, modern recordings and I did find, by the way, that the DVD3800 was not good enough with CD to be used with them; even an NAD521i sounded a lot better!

Quad’s 22Ls are good, modern floorstanders. By this I mean they are ruthlessly revealing, which rather favours good recordings over historical ones, shall I say? Their accuracy cannot be denied, nor can their ability. The way they project is dramatic and as a result partnering equipment needs to be chosen with care. In particular they need a very smooth sounding CD/DVD player as a source, plus a matching amplifier from Quad, Mission or Creek, I’d suggest. So equipped, the 22Ls are a superb package that provides the elegance Quad products are known for, together with a super-modern, high tech presentation of what lies on your discs.

**Quad 22L £699**

Quad Electroacoustics
Tel: + 44 (0) 1480 447700

www.quad-hifi.co.uk

---

**MEASURED PERFORMANCE**

Output from the 22L reaches down to 40Hz and there’s plenty of it. I would expect this floorstander to produce good amounts of deep bass. More unusual is the speaker’s impedance curve which suggests more damping than usual to cove movement, meaning the 22L is likely to give a tighter sound at low frequencies.

The 22L’s frequency response extends smoothly right up to 16kHz and in this respect it performs well against the best modern designs. I would expect good levels of detail and quite well defined treble, but an up-front sound that will tip very obviously into brightness with bright CDs.

Sensitivity was normal at 86dB for one nominal watt of input (2.84V). Amplifiers of 40W or more should be adequate. With a measured impedance of 6ohms the speaker measures much the same as rivals here. Reactance stays low; there are no sudden changes of impedance, so on balance measurement shows the 22L is a fairly reasonable load.

The Quad 22L measures very well in all areas. It should sound smooth, detailed and concise, and is likely to have plenty of solid, well controlled bass. It will be on the bright side though. **NK**
NEW DEMONSTRATION ROOM NOW OPEN AT 12A SPRING GARDENS, NEWPORT PAGNELL, MILTON KEYNES, BUCKS MK16 0EE - CALL FOR DETAILS ON 01908 218836

KECL82 VALVE AMPLIFIER KIT

The Kecl82 is our latest introduction for the true beginner and designed by Andy Grove. A simple and elegant design based on the classic ECL82 valve, a triode and power pentode sharing the same glass envelope. The amplifier consists of two ECL82s per channel, the triode sections work as the input/phase splitter and the pentode sections work in push-pull for the output stage. The amplifier offers 8 watts into an 8 ohm load, the hum level is extremely low, comparison to solid state standards. The chassis is constructed of 1.6mm mild steel with a black powder coat finish, there is only one signal input pair controlled at the front by a volume control for that simple touch. The speaker connects are the standard 4mm banana type, positioned at the rear, as are the mains input which is received through an IEC lead, mains switch and earth post. We have made the construction as simple as is humanly possible with comprehensive instructions. The circuitry is based on a single printed circuit board. Ultimately this kit is for the guy who has always fancied a go at building a kit, but never dared. Simon Pope says, "It's a great introduction to the valve sound. For it's humble price it delivers a full and rich sound with great detail and good depth." Kecl82 weighs 9kg. External dimensions are 30cm(w)x23.5cm(d)x11cm(h)

KIT6550 VALVE INTEGRATED AMPLIFIER KIT & KAT6550 VALVE POWER AMPLIFIER KIT

These are our new 6550 series amplifiers. A pure class A design providing 40 watts into a 8 ohm load. A truly high end design by Andy Grove, using Svetlana 6550Cs in push-pull (any 6550 or KT88 tube can be used with this amp). It features valve rectification (5U4) a choke pi filter power supply and is hard wired. Weights 16kg with dimensions 390mm(w)x235mm(d)x330mm(h). KAT6550 upgrade kit now available £120

Ke184 VALVE INTEGRATED AMPLIFIER KIT

The Ke184 features a pair of EL84 valves per channel in push-pull configuration. They give 15 watts into an 8 ohm load. The output transformers are Ultra Linear. Up front the ECF80 input/phase splitter valve has an extremely smooth sound. The Ke184 has very low hum, for simplicity the kit is built on a printed circuit board. A strong steel chassis is fronted by a 3mm anodised front panel and attractive chromed custom made knobs. There are five line level inputs, plus one monitor input, with a tape output included, all controlled from the front panel. At the rear is a mains switch/IEC power input, earth post, phono, and 4mm banana sockets. Simon Pope says, "The quality that can be gleaned from this amp is a fine introduction to the joys of the valve sound. The Ke184 will highlight all the intricacies and depth of detail in your favourite recordings whilst retaining a warmth and fullness that is almost exclusive to pure valve amps and is rare at this price point." Ke184 weighs 10kg. External dimensions with valves are 300mm(w)x270mm(d)x150mm(h). External dimensions without valves are 220mm(h) with cage. Simon Pope says - "If you favour attack and rhythmic grip, together with a smoothness of sound that is incredibly easy to live with, the KIT6550 could well be the kit amp for you. The 6550 is one for those who like a valve sound married to the attack and clout of a good quality solid state design".

2A3 PSE INTEGRATED AMPLIFIER KIT

The 2A3 PSE integrated amplifier offers a seriously hi-end sound, but without the cost usually associated with single-ended amplifiers. The stereo chassis houses, on the output, 2 x 2A3 in parallel single ended configuration and a single 6SN7 as the driver tube per channel. The valve rectified power supply consists of a 5U4 and a 10h choke. This feedbackless design provides 8.5 watts into an 8 ohm load, so a good sensitivity speaker is required above 90dB. It can accept 6 line-level inputs fully controllable from the front panel. We provide the excellent Alps Blue potentiometer as standard. The amplifier is hard wired so plenty of scope for tweaking in the future. Simon Pope says, "The 2A3 PSE is an extremely impressive piece of kit, good imaging, wide sound stage, nicely extended on the high frequency and tremendous bass thump. Weight - 20kg, external dimensions with valves fitted - 390mm(w)x360mm(d)x220mm(h)."
DIY KITS IN THE WORLD

ALL NEW SERIES II MODULAR PRE-AMP KIT

The PRE-II is a valve pre-amplifier with six inputs, tape monitor and two sets of output sockets. It utilises a high quality line driver transformer and x5 gain. The PHONO-II is a dedicated valve phono stage that incorporates a step-up transformer for MC users. Finally, PSU-II is a power supply unit that feeds both the PRE-II and PHONO-II.

- Power Supply Unit (PSU-II) £195.00
- Pre-amplifier (PRE-II) £195.00
- Phono Stage (PHONO-II) £110.00
- Moving coil step-up transformer £77.00
- Passive pre-amplifier (PAS-II) £135.00

NEW!

KAT34 VALVE POWER AMPLIFIER KIT & KIT34 VALVE INTEGRATED AMPLIFIER KIT

KAT34 is a 32 watt stereo valve integrated amplifier, featuring a pair of EL34s, in push-pull mode, per channel, plus an ECF80 pentode/triode as input/phase splitter. The power supply is valve rectified (2 x 5U4), using a heavy duty choke to achieve exceptional smoothing. The output transformers are 14% Ultra Linear tapped to keep distortion down to its lowest level and the kit is totally hard wired utilising three tag boards. It has five line level inputs, plus a tape-in and tape out, all controllable from the front.

Simon Pope says. This integrated bring together the best sonic virtues of our KIT88, KAT34 and top of the range 300B PSE in an affordable package. The highlights of the sound are a deep and taut bass response, together with an open and highly detailed mid and high frequency response that only the best valve designs can achieve...a true valve classic. “Weight 22kg, External dimensions with valves fitted - 390mm(w) x 360mm(d) x 210mm(h)."

300B PSU MONOBLOC KIT

Our Parallel Single Ended amplifiers offer ultimate sound quality. Each monobloc has two of the beautifully linear 300B directly heated triode in its output stage, producing 20 watts into an 8 ohm load. At the front we have a 6AU6 pentode and an ECC82 as the driver valve. This design utilises a 5U4 rectifier valve in the power supply, in combination with a 10H choke, giving an extremely quiet supply. Both mains and output transformers will E/I pattern.

For purists, feedback is switchable and the kit is totally hard-wired. For those that require valves we provide the superb Tesla 300Bs, Russian 5U4s and European 6AU6s & ECC82. Simon Pope says. "Not to put too fine a point on it, the sound these monoblocs create is among the finest that can be encountered in hi-fi."

Our 300B PSE kit bears an affordable price of £875.00 (UK price) excluding valves. Each monobloc weighs 23kgs., external dimensions with valves: 25cm(w) x 38cm(h) x 22cm(d) per monobloc.

KEL80 MONOBLOC AMPLIFIER KIT

Following the success of our budget KEL34 40watt kit amplifier, we have come up with a ‘big brother’ design. The output stage uses two pairs of TESLA EL34 pentodes in parallel-push-pull mode, allowing KEL80 to turn out 80 watts into an 8ohm load. Heading up the input stage we have the wonderfully linear Russian 6AU6 working into an American 5687 phase-splitter. KEL80’s output transformers are 4ohm and 8ohm tapped. With an input sensitivity at around 380mV for full output, it will happily partner both passive and active pre-amplifiers.

It is easy to assemble. Simon Pope says, “The proof of the pudding is in the eating and the KEL80 is a feast for the ears, with solid bass attack, lightning fast reactions, that emphasises musicality as well as power. As £649.00 a pair, a definite valve winner. Each monobloc weighs 12kgs., external dimensions with valves: 14cm(w) x 8cm(h) x 43.5cm(d).

KELSO VALVE INTEGRATED AMPLIFIER KIT

The KEL80 headphones amplifier is a beautifully simple design using Mullard ECL83 valves, a triode and power pentode housed in the same envelope. It works directly from any source, be it CD, tape, tuner etc. or from an amplifier’s tape out or pre-amp out sockets. The circuit uses high specification EI output transformers that will drive any headphone load from 16 ohms to over 300 ohms depending on how the secondaries are wired up. The HD83 is a single-ended design with the power pentode wired up in triode configuration for added sonic purity, and it is as quiet as a mouse. For sound quality Jon Marks says, "The bass is punchy and controlled without becoming artificial, while treble has the crispness of the best solid-state, with the tonal purity, delicacy and speed associated with valves." External dimensions 18cm(w) x 30cm(h) x 8cm (h) weight 4kg.

HD83 VALVE HEADPHONE AMPLIFIER KIT

£195

www.hi-fiworld.co.uk  DECEMBER 2002  HI-FI WORLD & COMPUTER AUDIO
**Mains transformers & Chokes**

<table>
<thead>
<tr>
<th>Transformer/Choke</th>
<th>Description</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>KIT6550/KAT6550 mains transformers</strong></td>
<td>4 x 0.22μF, 630V Jensen paper in oil</td>
<td>£100</td>
</tr>
<tr>
<td></td>
<td>4 x 100μF, 50V Black Gate</td>
<td>£130</td>
</tr>
<tr>
<td></td>
<td>2 inches stack</td>
<td>£120</td>
</tr>
<tr>
<td></td>
<td>80mm (w) x 60mm (d) x 70mm (h) clamp fitting. 18H. 20mA.</td>
<td>£150</td>
</tr>
</tbody>
</table>

**Output transformers**

<table>
<thead>
<tr>
<th>Transformer</th>
<th>Description</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>KIT4/KAT4 mains output transformer</strong></td>
<td>4 x UX4s, hardwired. Price - £50.00</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4 x UX4s, hardwired</td>
<td>£40.00</td>
</tr>
</tbody>
</table>

**Printed circuit boards**

<table>
<thead>
<tr>
<th>Board</th>
<th>Description</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>KAT34</strong></td>
<td>140mm (w) x 135mm (l) x 1.6mm (d).</td>
<td>£130.00</td>
</tr>
<tr>
<td><strong>KEL34</strong></td>
<td>280mm (w) x 135mm (l) x 1.6mm (d).</td>
<td>£150.00</td>
</tr>
<tr>
<td><strong>PHONO-11</strong></td>
<td>105mm (w) x 130mm (l) x 16mm (d).</td>
<td>£145.00</td>
</tr>
<tr>
<td><strong>PHONO-8</strong></td>
<td>105mm (w) x 60mm (l) x 16mm (d).</td>
<td>£42.00</td>
</tr>
</tbody>
</table>

**Hi-Fi World in Malaysia at Millennium Hi-Fi & Av. Kuala Lumpur, Malaysia**

Hi-Fi World is now distributed through good bookshops and newstands in Malaysia. For back issues, general enquiries and advertising, contact Simon Chang at Millennium Hi-Fi & Av.

**Millennium Hi-Fi & Av.**

Jalan Tun Razak 50400 K.L.

tel: 603 9283 8171 fax: 603 9281 3762

137 Jalan Pendekar 2, Taman Skudai Baru, 81300 Skudai, Johor DT

tel: 607 554 5171 fax: 607 554 7645

e-mail: info@millennium-audio.com
amplifier kits description

<table>
<thead>
<tr>
<th>Title</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kec82</td>
<td>valve amplifier kit (with valves) available 01/12/02</td>
</tr>
<tr>
<td>2A3 PSE valve integrator kit (with valves)</td>
<td></td>
</tr>
<tr>
<td>2A3 PSE valve power amplifier kit (without valves)</td>
<td></td>
</tr>
<tr>
<td>JEN 0.22uF 630Vdc paper in oil capacitor</td>
<td></td>
</tr>
<tr>
<td>Tag board 2 x 16 connections (hard wiring)</td>
<td></td>
</tr>
<tr>
<td>2A3 PSE/34/6550 cage</td>
<td></td>
</tr>
</tbody>
</table>

parts description

<table>
<thead>
<tr>
<th>Title</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>2A3 PSE mains transformer</td>
<td></td>
</tr>
<tr>
<td>KIT/Kat/5550 mains transformer</td>
<td></td>
</tr>
<tr>
<td>KIT34 valve integrator kit (with valves)</td>
<td></td>
</tr>
<tr>
<td>HD83 mains toroidal transformer</td>
<td></td>
</tr>
<tr>
<td>Ke180 mains toroidal transformer</td>
<td></td>
</tr>
<tr>
<td>300B PSE E/I mains transformer</td>
<td></td>
</tr>
<tr>
<td>KiT34 E/I choke/Kit5550 E/I UL</td>
<td></td>
</tr>
<tr>
<td>Ke184 E/I choke</td>
<td></td>
</tr>
<tr>
<td>KiT5550 choke</td>
<td></td>
</tr>
<tr>
<td>300B PSE choke</td>
<td></td>
</tr>
<tr>
<td>2A3 PSE choke</td>
<td></td>
</tr>
<tr>
<td>PSU-II E/I choke</td>
<td></td>
</tr>
<tr>
<td>2A3 PSE E/I UL push pull output transformer (4 ohm? or 8ohm?)</td>
<td></td>
</tr>
<tr>
<td>KiT34 E/I UL push pull output transformer (4ohm? or 8ohm?)</td>
<td></td>
</tr>
<tr>
<td>KiT34 E/I push pull output transformer (4 ohm? or 8ohm?)</td>
<td></td>
</tr>
<tr>
<td>HD83 E/I single ended output transformer</td>
<td></td>
</tr>
<tr>
<td>Pre-II E/I driver transformer</td>
<td></td>
</tr>
<tr>
<td>300B PSE E/I output transformer (4 ohms? or 8ohms?)</td>
<td></td>
</tr>
<tr>
<td>Ke184 Printed Circuit board</td>
<td></td>
</tr>
<tr>
<td>Ke184 Printed Circuit Board</td>
<td></td>
</tr>
<tr>
<td>HD83 Printed Circuit Board</td>
<td></td>
</tr>
<tr>
<td>Pre-II Printed Circuit board</td>
<td></td>
</tr>
<tr>
<td>2A3 PSE/34/6550 cage</td>
<td></td>
</tr>
</tbody>
</table>

Order information

<table>
<thead>
<tr>
<th>Name</th>
<th>Address</th>
<th>Post code</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Phone/Fax: 01908 218 836

I enclose cheque/pay order for £ and made payable to World Audio Publishing Ltd. I wish to pay by Mastercard / Visa / Switch / Solo. Please debit my account no.

Please enter your completed order form to:

World Audio Design Amplifiers fully built from Malaysia

Jalan Jalan Pendekor, 2, Daman Skudai Baru, 81100 Skudai, Johor. Tel: 07 554 5171 - Fax: 07 554 7065 - Email: sales@worldaudiodesign.co.uk

DB 54/06 2002 HIFI WORLD & COMPUTER AUDIO
World Audio

WE HAVE OVER 30 TITLES ON OFFER!!!

AUDIO ELECTRONIC THEORY BOOKS

Electronics Made Simple by Ian Sinclair
This book covers the basic theory and principles of electronics. A good read for the beginner.
Code No. 1430
£11.95 + £2.50 P&P (UK)

Radio-Valve Equipment by Elector
Build your own High-End Audio Equipment
by Elector
Build your own High-End Audio equipment contains construction projects for solid-state preamplifiers and power amplifiers, active cross-over filters, an active subwoofer, a microcomputer and a headphone amplifier.
Code No. 1390
£14.95 + £2.50 P&P (UK)

Build your own Electronic Test Instruments by Elector
This book contains designs for 15 main vacuum tube testers and analyzers, ten miscellaneous instruments and a number of test accessories and switches. The designs range from a simple multimeter cable designs to a special printed circuit, drawing of which are given in an appendix.
Code No. 1400
£15.95 + £3.25 P&P (UK)

VACUUM TUBE BOOKS

GEC Audio Tube Data
Full of data and circuits concerning the three most well known MO Vacuum valve types, the KT66, KT88 and KT106 (the E377 was GEC's answer to Mullard's EL34 and some are on the PX4 and PX33 triodes. The first section concerns preamplifiers of various types, with information regarding equalisation, tone controls, filters and switch. An excellent book for all valve heads.
Paperback Code No. 1780
£14.95 + £3.00 (UK)

Audio Reality by Bruce Rosenblat
Investigates conductors, skin effect, impedance, interconnects, speaker cables, balance lines, transmission lines, isolation transformers, tubes, acoustics and much more. Also, includes excellent detailed valve design projects. (Some on the PX4 and PX33.) The book is well illustrated and readable
Paperback 128pp, Code No. 1460 Price £11.50 + £2.50 P&P (UK)

Audio/Video Handbook by National Semiconductor
National Semiconductor's manual is essential to all engineers and experienced hobbyists in the application of national line of vacuum and solid-state ICs. It not only has a complete reference list of their ICs, but also gives plenty of projects and practical data.
Paperback 208pp, Code No. 1810 Price £11.95 + £2.00 P&P (UK)

Fundamentals of Radio-Valve Technique by J. Deakin
This is part of the philips technical series written in 1947. It is the most authoritative and comprehensive treatise of the nature and function of the vacuum valve.
34pp, Paper back Code No. 1630 £21.50 + £2.50 P&P (UK)

The Williamson Amplifier by D.Y.N. Williamson
Offers practical advice on how to build and set up the amplifier for best results
40pp, Paper back Code No. 1750 £19.50 + £5.00 P&P (UK)

The Best of Audiotechnical projects by Lucian Mancini
This book contains six excellent audio projects - a high sensitivity speaker, a tube preamp, a 3A2 amplifier and a project using the Russian 6CH3C and two projects using 6SC6 in output stages - there's something in the book for everyone. Read the paperback.
154pp Paperback , Code No.1620 £8.00 + £2.00 P&P (UK)

An Approach to Audio Electronic Valves in Audio Frequency Amplifiers by E. Brown
Discussing the use of valve data, the function of different amplifier stages and includes detailed descriptions of eight designs. A wealth of practical data, measurements and interesting features will be found. A very good read
Paperback 147pp, Code No. 1520 Price £11.95 + £3.00 P&P (UK)

The Cunningham Radiotron Manual Technical Series: RC-12
This book presents RCA's commercial valve-line-up as it was in 1934. The manual covers valve terminology, technology, application, and valve testing and then a large section giving some circuit ideas and plenty of data on numerous valves, e.g. 2A3, 6N7, 6L6 to have a few.
Paperback 159pp, Code No. 1660 £13.55 + £2.00 P&P (UK)

Glass Audio Projects - 17 Vacuum Tube Designs
This book features 17 valve projects, designed and tested by some of the best authors in the field. The designs range from solid-state designs such as a 500w output valve, to a 100w valve regulator, to a 35w valve, plus many others.
Paperback 77pp Code No. 1790 £20.00 + £3.05 P&P (UK)

Valve & Transistor Audio Amplifiers by J.L. Hood
Describes the basic valve amplifiers to the latest solid state design. It is the complete world guide to audio design. Other contents are preamplifiers, power supplies, etc.
250pp, Paperback, Code No. 1550 £16.99 + £2.00 P&P (UK)

Practical Electronic Fault-Finding and Troubleshooting by Robin Pain
This is a must have for the beginner who wishes to build more advanced electronic projects in the future.
132pp Paperback, Code No.1650 £11.50 + £2.50 P&P (UK)

Valve Tube Amplifiers by Vally & Waldman
This book is a well known reference valve tube book and is assembled from press by ten knowledgeable authors starting when it comes to valve electronics.
74pp, Paperback, Code No. 1770 £13.95 + £3.00 P&P (UK)

Vacuum Tube Accessories by Elecktor
This book takes a comprehensive look at audio tube design. It explains how vacuum tubes work and how to design them. Rosendahl covers the basic electronic circuits, covering the design of 13 famous audio circuits and preamps and how they work effectively as a designer. A hard case book for the professional electronic engineer, building and choosing components and tubes is a problem, 1997.
132pp Paper back Code No. 134 £15.50 + £2.50 P&P (UK)

The Beginners Guide to Tube Amp Design by Bruce Rosenblat
This book takes a comprehensive look at audio tube design. It explains how vacuum tubes work and how to design them. Rosendahl covers the basic electronic circuits, covering the design of 13 famous audio circuits and preamps and how they work effectively as a designer. A hard case book for the professional electronic engineer, building and choosing components and tubes is a problem, 1997.
132pp Paper back Code No. 134 £15.50 + £2.50 P&P (UK)

Mullard Tube Circuits for Audio Amplifiers
Includes full details for eleven power and control amplifiers, including 5-30 string valves. This four chapter tutorial on getting the best sound from valve amplifiers.
142pp 8" x 10" Paperback Code No. 1230 £13.95 + £3.00 P&P (UK)

Glass Audio Projects - 17 Vacuum Tube Designs
Glass Audio Projects - 17 Vacuum Tube Designs

SEE OUR NEW TITLES

Glass Audio Projects - 17 Vacuum Tube Designs

GEC Audio Tube Data
First in High Fidelity
The Products and History of M. J. Leek & Co. Ltd.
by Steven Spicer

Testing Loudspeakers
by Joe D'Apolito

Bullock On Boxes
by P. Bullock III

Audio Amateur Loudspeaker Projects

Please send (Code No.)

ORDER FORM
Pay: World Audio Publishing Ltd. £ or debit my Mastercard/Visa/Switch/Solo (Card No)

Expiry date: (Switch/Solo only) Valid Date: Issue No. Name: Signed:

Delivery Address:
Tel: (Day) Please return to: W.A. Ltd. 12A Spring Gardens, Newport Pagnell, Milton Keynes, MK16
Andy Giles recommends a captivating musical anthology from England's least English composer, Frederick Delius; conducted by England's most English conductor, Sir Thomas Beecham.

This is a tale of two Englishmen whose incongruity is hard to imagine. Frederick Delius - one of the most disregarded of English composers - was born in England 1862, lived and worked in Florida, Germany, Norway and France, where he died in 1934, and was buried in an English country churchyard in 1935. The fact that his countrymen disregard Delius is understandable, as it seems he never actually wanted to be English. He generally spoke in German, composed operas and songs in German, Danish and Norwegian and lived mainly abroad throughout his life. His music does not fall into the English tradition of Elgar and it is also gratifyingly distant from the more bucolic style of English music as pursued by the 'cow-pat' school, unintentionally championed by Vaughan Williams. It is more impressionistic, certainly at one with nature and even more certainly - immediately recognisable. It rustles with the sighing of autumn trees and the winnowing of light summer grass. Choral works are interspersed with travails. You know Delius's music when you hear it. It can be nobody else. And, without question, under the baton of Sir Thomas Beecham, it is peerless.

Beecham (1879 - 1961) - arguably England's finest conductor - was born in St Helen's, Lancashire, into great affluence; his father, Sir Joseph Beecham, was the producer of "Beecham's Pills". He made his professional debut as a conductor with the Queen's Hall Orchestra in London in 1905 and continued to rise to both prominence and eminence until his death, by which time he was known as much for his unashamed arrogance, eloquence and, some would say, bloody rudeness than for his prowess as a conductor! Despite his impeccable Englishness he cared little for English music. After conducting a concert in a festival of English music Sir Thomas remarked 'Well, I think we have successfully paved the way this afternoon for another quarter of a century of German music!' The most important aspect of his career as far as this piece is concerned is his discovery of the music of Delius. Beecham's understanding and mastery of Delius showed an incandescent creativity rarely caught in the recording studio. This highly satisfying EMI classic cut contains the complete stereo collection of Beecham's remarkable readings of the Delius canon. Beecham conducts his own Royal Philharmonic Orchestra with the Beecham Choral Society.

It has been said that perhaps it was a pity that EMI chose not to open this compilation with Brigg Fair, Delius's magnum opus among his shorter orchestral works, which is so matchlessly played here. There is a feeling of complete rapture at the opening, the plaintive call of the oboe solo contrasting with the soft pliability of the flute. Everything is so perfectly balanced and when, later, the long-breathed string melody arrives, it is given a sensuous lazy sleepwalking effect that perfectly encapsulates a warm English summer afternoon. The actual string sound here (as in the gentle syncopated dance of the third movement of the Florida Suite) has a misty, almost unfocused sparkle that is unique to Beecham and is delightfully wedged by the recording engineers. The glowing implied strings and radiant woodwind at the opening of On Hearing the First Cuckoo in Spring, the textural grace of Summer Night on the River, glowing like a French painting, or the free flexibility of tempo in Summer Evening are breathtaking moments on this recording. Beecham said, with characteristic nonchalance, that he found Delius's music as alluring as a wayward woman, and determined to tame it. The results are so sensuously and radiantly delectable to justify the sexual metaphor - there is a communion of musical ecstasy here which shows how close Delius's pantheistic response to nature was to the human sexual experience, yet there is an innocence too and a refinement that transcend physical associations.

The tracks vary in appeal and Delius isn't to everyone's taste. His music is neither anthemic nor nationalistic. It eschews the sacred and steers clear of the sweet. Delius was a wanderer in sequestered byways, one who had all the time to 'stand and stare'.

This truly ecstatic set of Delius compositions is the only Delius recording you need own. Beecham's excellence is never more manifest and it's a must-have album.
I'm slowly warming to DVD-Audio and, in particular, the idea of surround-sound. It's turning out to be a hi-fi enthusiasts dream, but what the average man in the street will ever make of it I don't know - and I shudder to think. You see, I had a conversation with another very technical reviewer recently where we both admitted we did not understand DVD! It's not the technology, nor the broad and confusing multiple standards, so much as the uniquely different way each manufacturer chooses to build their machine. It affects reviewers more than buyers, because they have to struggle to understand each machine from its handbook - and from what I've read incomprehension extends into the handbooks too. Will the sheer complexity of DVD-Audio prevent it ever becoming a mass market medium? I suspect it will, which will be a pity, because it is sheer complexity of DVD-Audio which will be a pity, because it is the music above 20kHz. And for those of you who believe there is no music above 20kHz - it's not the case. I use a Hewlett Packard spectrum analyzer that works up to 100kHz and believe me, there's plenty of harmonic info above 20kHz in modern recordings. DVD-Audio can be offer even better than 24/96 - it will give 24/192 - or mega fidelity! So if you just want better sound quality DVD can provide it. But what about surround-sound? The issue of surround-sound is an interesting one. Being an old cynic - and having suffered surround-sound hasn't much appealed to me. However, as we step into the next century, perhaps things will be different and better this time around. Surround-sound is meant to add real depth perspective and, after all, this is exactly what we are trying to achieve, to a limited extent, with valve amps and high-end hi-fi in general.

What's interesting now is that as we start to get decent modern surround-sound recordings coming through, sound quality - at least with decent equipment - is stunning. The spatial delineation of artists and instruments that's possible with surround-sound is way beyond the best stereo, as Simon Pope, our Editor, found out listening to Meridian's top-end system. So modern surround-sound does genuinely add to the overall drama of good hi-fi. But of course there's a little more to all this than just sound quality.

In the real world most people don't view their lounge as a hi-fi storage centre. Whilst the world's consumer electronics industry has gone into a possibly-premature feeding frenzy over DVD, believing sales of loudspeakers and surround-sound amps will shortly take off on the back of spiralling DVD player sales, somehow I doubt it. At least, I cannot imagine a majority of Britons heaving yet more full size boxes into their lounge.

Recently I even admit to critically eyeing up my large floorboards! OK for an audio enthusiast perhaps, but will others do likewise? I'm not convinced.

Then there's the expense. DVD music discs cost £16 or so and are hardly commonplace yet. Their sleeve notes are illegible and often indeliberable when it comes to the audio format used, as if it didn't matter. But with a DVD disc it does matter, because of the variety of different formats available.

Technically, DVD is great. As an easy to understand and use consumer product I think it is a confusing shambles. If I were Philips or Sony I would start considering whether a better worked out system could be devised, based on the Blue-ray disc.

Even though I'm a dyed-in-the-wool audio enthusiast I admit I have no love of the physical intrusion of cables.
specialist hi-fi dealers

LONDON

ORANGES & LEMONS
Friendly and efficient service
0% finance
JUICY FRUIT FROM LONDON'S FRESHEST RETAILER
ARCAM B&W CABLE TALK CASTLE CHORD CREEK DEVOX EPS LINDY LARANTZ NAJD NEAT PMC QED REGA ROKSAN ROTEL SHANDBAND YAMAHA YANTECH and many others.
020-7924 2040
61/63 WEBBS ROAD, SW11
website: oandhifi.co.uk

We aim to provide a well chosen selection of quality hi-fi and accessories including
FMJ, ARCAM, B&W, NAUTILUS, DYNAVECTOR, LIND, LOEWE, MERIDIAN, MIK, NAH, PIONEER, PROCEED, NEAT, REGA, ROTEL, SHAHINIAN, TATABIS + more.
www.infidelity.co.uk

Infidelity
INCREDIBLY GOOD HI-FI
9 High Street, Ripon, Wark, Kingsway upon Thames, Surrey KT1 4DA
Tel: 020 8943 3330

WORTHING AUDIO
50 Truville Gate, W. Sussex BN11 1JU
(01903) 212133
Mail: Audio shop with the best sound system in the South. Tel: Electronics - Friendly Advice - 3 Year Guarantee. Easy Parking - Open Mon-Sat, 10am-6pm. Late Night Thurs 7.30pm.
Amenities include: Dynaudio, Ruark, Gradiente, Roksan, Remote, Onoto, Sonorius, Kora, Cymbal, Talk Electronics, and many more.

SOUTH WEST

SOUTH WEST ANALOGUE
SME - MICHELL - NOTTINGHAM ANALOGUE - LORCRAFT GARRARD - PROJECT - ORTOFON - TUBE TECHNOLOGY 64bit Valve CD Player, Remote Control Hybrid Integrated Valve Amplifier CROFT VOODOO Isolation platforms/Loudspeakers, Equipment Stands and T/T Traffic lift off Penees Covers. Record cleaning service - Secondhand equipment. 01643 851 351
graham@southwestanalogue.fsnet.co.uk

Infidelity
INDRENENTLY GOOD HI-FI
9 High Street, Ripon, Wark, Kingsway upon Thames, Surrey KT1 4DA
Tel: 020 8943 3330

STOWESOUND
Basically Sound NORWICH NORFOLK Audio Analogue, Bryston, Linn, Linn, Chord Co. Denon, Epic, Tidal, Yamaha, Nam Audio MHC, Pro, Tekno, ELAC, Sonus Faber, Audio Note and more.
The Old School, School Road, Braxton School Road, Braxton, Norwich, Norfolk NR1 4BG
Tel: (01508) 30819

SOUTH EAST

THE DIRECT DISC
VINYL VINYL VINYL
Thousands of records always in stock.
+ a full range of sought after compact discs.
Extensive search service for wanted albums.
A comprehensive 96 page full catalogue available at £1.50
Telephone: 020 8688 6565
Website: www.thedirectdisc.com

Free catalogue!
Don't buy new equipment?
What you have is much better than you think!
Our NEW catalogue will show you how to release the full potential of your system.

MAIL ORDER

Free catalogue!

For your free copy just call UK FREEPHONE
0800 373467
and quote AM122

Information and products that really work
Mail Order Cables & Accessories

atv

ATV SERVICES
LEATHERHEAD
01372 456921

Front End Problem?
contact
The Cartridge Man
It doesn't have to cost an arm and a leg to get the best - listen to my

ease and experience.

Also agents for Croft, Hadcock, E.A.R, Michell & Morth

plus cartridge re-tipping service

020 8688 6565

Website: www.thecartridgeman.com

THE DIRECT DISC
VINYL VINYL VINYL
Thousands of records always in stock.
+ a full range of sought after compact discs.
Extensive search service for wanted albums.
A comprehensive 96 page full catalogue available at £1.50
Telephone: 020 8688 6565
Or visit our web site on
www.directdisc.denon.co.uk

Free catalogue!

Don't buy new equipment?
What you have is much better than you think!
Our NEW catalogue will show you how to release the full potential of your system.

MAIL ORDER

Free catalogue!

For your free copy just call UK FREEPHONE
0800 373467
and quote AM122

Information and products that really work
Mail Order Cables & Accessories

atv

ATV SERVICES
LEATHERHEAD
01372 456921

Front End Problem?
contact
The Cartridge Man
It doesn't have to cost an arm and a leg to get the best - listen to my

eo and experience.

Also agents for Croft, Hadcock, E.A.R, Michell & Morth

plus cartridge re-tipping service

020 8688 6565

Website: www.thecartridgeman.com

THE DIRECT DISC
VINYL VINYL VINYL
Thousands of records always in stock.
+ a full range of sought after compact discs.
Extensive search service for wanted albums.
A comprehensive 96 page full catalogue available at £1.50
Telephone: 020 8688 6565
Or visit our web site on
www.directdisc.denon.co.uk

Free catalogue!

Don't buy new equipment?
What you have is much better than you think!
Our NEW catalogue will show you how to release the full potential of your system.

MAIL ORDER

Free catalogue!

For your free copy just call UK FREEPHONE
0800 373467
and quote AM122

Information and products that really work
Mail Order Cables & Accessories

atv

ATV SERVICES
LEATHERHEAD
01372 456921

Front End Problem?
contact
The Cartridge Man
It doesn't have to cost an arm and a leg to get the best - listen to my

eo and experience.

Also agents for Croft, Hadcock, E.A.R, Michell & Morth

plus cartridge re-tipping service

020 8688 6565

Website: www.thecartridgeman.com

THE DIRECT DISC
VINYL VINYL VINYL
Thousands of records always in stock.
+ a full range of sought after compact discs.
Extensive search service for wanted albums.
A comprehensive 96 page full catalogue available at £1.50
Telephone: 020 8688 6565
Or visit our web site on
www.directdisc.denon.co.uk
DVD is the fastest growing new technology format ever. This much we know as those clever chaps at the Guinness Book of Records have told us. All the indications are that this Christmas will be yet another bumper year for the format, but a saturated market (as happened with mobile phones last Christmas) is still some time off. With the price for many machines now well below £100, I would have thought that Compact Disc was in grave danger from the conquering new format.

When DVD launched just five years ago, many predicted the total demise of CD within a decade. Yet this is far from being the case. As a whole, the CD hardware market continues to thrive. More in-car units than ever now use a Compact Disc player. Whilst DVD systems incorporating navigational aids are available, the standard fitment is still a small fraction of that of CD. As cassette continues to decline and the price of DVD based car systems remains high, CD's in-car dominance should be set to remain for some time to come, at least the next five years at any rate.

DVD has made a greater impact on 'lifestyle' hi-fi, those shiny, all in one hi-fis seen filling department stores across the country. The 1980's gave us the midi system and the 90's the mini. Lifestyle systems are the mass-market hi-fi choice for the turn of the century. More of these are now incorporating DVD, perhaps best typified by Sony's DAVS systems and Linn's Classik at the other end of the scale. All the same, CD is still the source of choice for most listeners; higher resolution discs are hardly available in record stores. Let us also not forget the seemingly endless array of personal, and portable CD players that can be swept through a Tesco counter for less than the cost of a roast dinner for four (especially if you like lamb!).

Yet it's the sales performance of separate CD players I'm more concerned with here. Although some retailers have noticed a decline in player sales, many have noted that the fall hasn't been as great as expected. Typically, retailers report static sales or falls, typically, of between 6-8%. Certainly, the falls haven't been as great as those of separate cassette decks over the past few years, and those manufacturers who are predicting the demise of two-channel audio are perhaps being somewhat premature.

A recent demonstration showed me why DVD isn't obliterating the CD market. The machine in question was a Toshiba SD220 DVD player. Those in the know would rate it as one of the best budget designs around. Yet, despite what was undeniably impressive picture quality, CD replay quality was most unimpressive. This is meant to be one of the more competent DVDs in terms of sound quality, yet it was easily seen off by a humble £100 Cambridge CDS. Sadly, the Toshiba's sound quality was no better than a portable player of around £60.

The potential buyer was not impressed, since he wanted the SD220 to replace both his video and CD player. In the end, he paid more than half as much again for the NAD T535 at £350. The NAD is a fine machine for CD play back, just like their dedicated players, yet had he spent the same amount on a CD player the poor old T535 wouldn't have stood a chance. You probably get the gist of it by now. It doesn't seem to matter how much or how little one spends on a DVD player, the performance with stereo CD is never as good as that of a separate player.

It shouldn't really come as a surprise I suppose, as you're paying for far more versatility in a DVD player, so something's got to give in terms of quality. Of course, for those who want the ultimate audio performance, there's always DVD-A. It is an impressive format and one that has the potential to oust CD. There are also a good deal more machines offering this format available now than a year or so ago. Yet there are plenty of people still sceptical at having to position five or more 'speakers around the room. No doubt the same could have been said about the switch from mono to stereo; why have two 'speakers when a single one does a perfectly good job? The deciding factor however, will be if the public are willing to switch from CD surround-sound and DVD-A. Even allowing for the fact that CDs are far cheaper at the moment, the sheer back catalogue available would take DVD-A years to replicate.

Then there's the further thorn in DVD-A's side in the form of SACD. Yet despite the marketing power of its backers, Sony and Philips, in the longer term I'd be surprised to see SACD win out over DVD-A.

Nevertheless, despite DVD's current success, total domination by DVD is some time off. I believe the demise of the Compact Disc will be far slower than many have predicted. The point where I would unreservedly recommend a DVD player over and above a CD in terms of sound quality is still some way off. Be assured, though, that when I do you'll be the first to know!
Turntables are a particularly hotly contested area of hi-fi. Few would dispute, however, that the mantle of the world's 'most impressive' vinyl spinner is the Goldmund Reference. Absurdly expensive, lavishly finished and ridiculously over-engineered, back in the 1980s this was the kind of hi-fi product you'd buy just because you could.

The Reference was not Goldmund's first product, but the one that put the young company on the map. Back in 1978, a group of physics students designed the tonearm that was to become the Goldmund T3. By the end of the following year, it was garnering rave reviews in the US and a matching turntable was being planned. By 1981 the company had the original Goldmund Studio turntable on the market. At 1983's Chicago CES however, Goldmund surpassed itself and everyone else - with the launch of the Reference.

Claimed to offer a unique blend of "very advanced design, traditional Swiss craftsmanship and beautiful finish", the new Georges Bernard design was like nothing the world had ever seen before. It incorporated a variety of interesting - if not innovative - solutions to the problems of vinyl disc replay. First was its massive 600x540x750mm plinth, which together with its integral 'support table' was finished in gold plated brass, black anodised aluminium, steel and black methacrylate. Massively heavy, its shape and surfaces were optimised to give optimum "mechanical grounding" (i.e. vibration transfer) in the top-to-bottom direction. At the time, turntable isolation was still a very inexact science, and this was radical thinking indeed. In conjunction with the very strong damped spring suspension, it made a sterling job of keeping bad vibes at bay.

Next was its speed control system. Belt drive was - of course - de rigueur for any self respecting European superdeck by the early eighties, so the Reference featured a very high quality AC synchronous motor mounted in a suspended heavy base to reduce vibration, powered by a computer controlled speed regulator giving a claimed accuracy of 0.01%. Speed adjustment of +/- 4% was provided, along with a Technics-style four digit tachymeter speed display. The '14 function' computer even featured a resettable time counter that could keep track of your stylus's total playing life. All this was accessed by an illuminated gold-plated touch control panel - nice!

The 30kg aluminium subchassis (complete with lead inserts for damping) supported a massive 15kg platter made from a methacrylate and brass sandwich, claimed to have just 0.005cm of eccentricity. This rested on a bearing shaft machined from hardened, non-magnetic stainless steel, sitting on a micron-toleranced hard bronze receptacle. The stunning servo-controlled, fully automatic parallel tracking Goldmund T3F tonearm was mounted on a 40mm methacrylate support to minimise resonances, its seven programmed movements controlled via the turntable's control panel.

Sound was superb - if not to the taste of your average British audiophile. Very transparent, the Goldmund neither added nor subtracted anything from the original recording. Rather, you got an accurate and even summation of the recording and all its flaws. Tonally and texturally superb, it was a revelation by the standards of the day.

Considering that total production of the Goldmund Reference ran to just 300 (whereas some 1,000 T3F tonearms exist), and its original mid-eighties retail price approached £10,000 - it's unlikely that you'll pick up a bargain in the classifieds. Nowadays these decks are highly sought after for their sound, 'period' eighties styling and general rarity value, so price will be a matter of negotiation between you and the seller. A beguiling and emotive reminder of another age - sadly, Goldmund's website (www.goldmund.com) bears no mention of it now.
our through the classifieds in this magazine from ten years ago, and you get a fascinating snapshot of the then contemporary hi-fi scene. The prices of various bits of kit, from newish CD players to vintage turntables, says much about the fashions of the day. Furthermore, if you compare the amounts being asked for gear then with now, you get a great insight into what's hot and what's not right now.

Interestingly, CD players from a decade ago have all but been forgotten. The budget designs of the day are all practically worthless in 2002, while no one's really paying through the nose for rubbish anymore. The budget player manufacturers at least, if not with the disc buying public. For example, the humble Thorens TD160S. This was a perfectly good late seventies suspended subchassis design, but in truth a properly set up Rega Planar 3 would have had the legs on it. A decade ago there were still Thorens decks turning up in the classifieds for £30-£50. Now though, they're closer to £150.

If you think this is a healthy gain, then look at CD players, whose second-hand values have gone stratospheric. In 1992, I picked up a dusty Hydraulic Reference from a hi-fi shop for £40, and I recently saw an identical one sell on eBay for over £600. Even the price of a humble Focus - with none of the traditional suspended weights and gold-plated ephemera so beloved by fans of the marque - has gone through the roof.

Right now is plainly not a good time to pick up a classic turntable then, but audiophile bargain hunters can be comforted by the risible residuals of classic digital. Sooner or later, people will realise that there's no better way to play plain old 16/44 Compact Discs (of which there are still a lot around, obviously!) than a purpose-built, top quality CD player. With DVD Musselberg's way into people's hi-fi systems in the guise of a modern, multi-function CD player expect to see a flood of abandoned CD players soon. But as people realise that current DVD players do a bad job with CD they may well regret such a hasty move into tomorrow's technology, as so many have in the past regretted junking their LP collections. With DVD and SACD being the new kids on the block, CD has gone rapidly out of fashion - with player manufacturers at least, if not with the disc buying public. For the moment, this means there's a fine selection of classic CD players around at sensible prices.
David Price suggests three ways of making your vinyl sing even more sweetly.

**AVONDALE TAPS**

Suitable for all turntables with the Philips MB10/MB12 synchronous motor, this external power supply unit works with a large number of specialist belt drive decks, from Linn's to Regas to Aristons to Thorens. It's an austere looking product - very 'eighties black box' - but then again it should be heard and not seen. Essentially, it's very similar in design to Michell Engineering's original 'GyroPower' (the transparent one that looked like Orac from Blakes' Seven!), and works by generating a pure 50Hz feed, free from the vagaries of the mains. It's easily connected (no surgery required) and comes with a connecting lead and simple installation instructions.

Interestingly, Avondale supply it on a 'sale or return' basis - if you don't like it then you can get your money back. This is a bold and novel concept in hi-fi retailing to be sure, but as soon as I connected it up to my Rega Planar 3 I can see why it is commercially viable. The TAPS sieves out a substantial layer of mains mush, making things sound so much cleaner, tighter and rhythmically coherent. It's amazing how good a humble Rega can sound given a clean feed of power such as this - it's punchier and more dynamic, yet less ragged in the treble and a good deal more sprightly in the bass. After you've made the mod, you really won't want to go back - hence the money back guarantee I guess! The only downside is that it works at 33 RPM only - so there's no electronic speed switching. Still, you can't have everything for £242 (including delivery). A bargain!

Avondale Audio
Tel: 01246 200096

**DONNER CLAMP**

This record clamp is manufactured in Germany by Dr Andreas Donner, an avowed Revox turntable fanatic (remember the B790 parallel tracker of the late 1970s?). As well as bespoke Revox clamps, he makes this 'universal' model too. It's weighty at 365g, but should be just about light enough not to upset suspended subchassis decks. It's beautifully hewn...
from a single piece of stainless steel (and looks a million dollars), but it does ring a little when you tap it, so I'd suggest adding a ring of suede or felt underneath to damp it.

Placed on my Technics SL 1500, it worked a treat. Despite what the likes of Linn say, I reckon gently clamping the disc to the platter can only be a good thing. You get a tighter, punchier and more detailed sound with obviously firmer bass and smoother treble. Of course, I can't predict the results on every deck, but I'd say it should benefit most. The Michell Clump is better finished, lighter and works equally well (if not better), but there's something really cool about just placing this over the spindle without having to twist any-thing! Highly recommended at around £35 plus carriage.

Andreas Donner, Ennepstr. 21, 44807 Bochum, Germany
email: DRA.DONNER@t-online.de

MICHELL UNICOVER

Another bright idea from the great mind of John Michell, this product is ideal for the new generation of plinthless, dustcoverless turntables (which he himself inspired!). It's also great for those, like me, who've removed their dustcovers because they wreck the sound quality (try it, LPI2 owners!). The Unicover is a beautifully finished but oddly shaped bit of clear Perspex (i.e. Acrylic) which simply sits on your deck when it's not in use.

It's designed to keep dust off your platter and the tonearm, without you having to go to the trouble of putting your original dustcover back on. It works! It's designed for Michell Orbe SE and GyroDec SE users, but - due to the universal relationship between the tonearm and platter centre (unless a 12 inch arm is used) - actually fits most decks. Everything from big SMEs to my old Pioneer fully automatic turntable, complete with S-shaped tonearm, took it happily, so I'd say it's near-universal. Top value at £44, then.

J.A.Michell Engineering Ltd.
Tel: +44 (0) 20 8953 0771
Suppliers of Electro-Acoustic measuring equipment. The OBH range of small products: OBH-8, OBH-8SE, MM and SE. These include: P53 Pre-Amps, featuring passive and active operation with amp output transformers and high value inductors. Our standard size products come in two award-winning ranges. The entry level P53 Pre-Amps offer passive and easy crossover design. Also available: Boxcrafter and Boxdramer bass optimisation packaged and Outline speaker. We will send full information and prices. Also, visit Audiomedia's new website: www.audiomedia.com.

EMINENT AUDIO Distributor of Croft Amplification. Tel: 01902 525657. Fax: 01727 857957. In addition we have an award-winning series and higher-priced 53 series. These include: PASSION 8, a fully remote-controlled uniquely transistor design. To advertise in Meet Your Maker please call Amanda Sweeney on Tel: 020-8255-8686. E-mail: talkelectronics@compuserve.com. We specialise only in mass testing material. After hours exhaustively testing SOUND BYTES with various types of speakers, we know it works and so do you - we have never had a single complaint. Call us for free advice to add to your equipment for the best performance and the location of your nearest dealer.

REL ACOUSTICS North road, Bridgend Ind Est, Bridgend, CF31 2PD Tel: 01656 766 777, international: +44 636 766 093. Email: sales@promonitorco.uk. Manufacturers of the patented INTEGRITY series andfind out what the fuss is all about.
CREATIVE THINKING

Creative Labs is one of the most prolific purveyors of computer audio products, as the latest market research from Chart Track in July 2002 bears out. The company is said to be number one in the soundcard market with an 83.4% share, and also dominates the speaker market with a 35.7% share. The latter figure puts it at the top of the table, commanding over a third of the PC/console speaker market, as measured by Chart Track.

INSTANT-ANEOUS

Steinberg's latest disc authoring package is claimed to be ideal for the professional burning of movies, music or other data to DVD and CD. INSTANT CD/DVD 6.5 can reliably burn standard audio and data CDs, as well as DVD-R, DVD-RW and DVD-RAM, supporting DAO, TAO, SAO and RAW, as well as CD formats such as ISO 9660, Joliet and HFS. It also produces boot, hybrid, photo and video CDs. It also includes Clean 2.0 SE, WaveLab Lite 2.0 and MovieXone 4.0 for comprehensive audio and video editing. Cost is £49.99 from Koch Media (tel: 0800 169 1341). More information is on the Steinberg website at www.steinberg.net/creative-tools.

VERBATIM TRUTH

Erstwhile software media specialist Verbatim is the latest company to launch a computer DVD burner. The new Omnia DVD+ ReWritable drive is a second generation rewriter with the ability to record vast amounts of music, data, video and music files to DVD+R, DVD+RW, CD-R, CD-RW and high speed CD-RW. The new machine allows users to store up to 4.7GB per recordable DVD, making it ideal for serious music or video applications, although it will also write to cheap, universally compatible recordable CDs. Both DVD+RW and DVD+R disks recorded in this drive can be played back on almost all DVD players and DVD-ROM drives, while it can also read DVD Video, DVD-ROM, CD Audio and CD-ROM discs.

Omnia comes complete with Ahead's Nero Burning ROM (for CD authoring), InCD (for simple drag 'n' drop copying of DVD+RW and CD-RW media), Medistream's neoDVD (for digital video capture and recording) and WinDVD (for watching DVDs on PCs). The drive is also supplied with DVD+R, DVD+RW, CD-R and Hi-speed CD-RW media. JustLink technology prevents buffer under runs for reliable burning. For more information, point your browser at www.verbatim-europe.com.

NEW SUPERSTORES!

LaCie has introduced its new D2 range of portable hard drives for storing music, photography, video and other computer data. They range from 60GB to record-breaking 250GB capacities, and use a 400Mbps FireWire interface. The 250GB drive can store the equivalent of 385 CDs or 50,000 MP3 songs, or over 20 hours of uncompressed digital video. They're interestingly styled and built, too. Designed by creator Neil Poulton in aluminium and ZAMAC, they're claimed to be elegant and sturdy. The metal alloy dissipates heat from the drive and prolongs drive performance, while an external AC adapter is used to keep the power supply away from the drive to obviate the need for a noisy cooling fan. The result is a drive that's claimed to give up to 50 percent less noise pollution than traditional external drives. Expect to pay from around £139+VAT for the 60GB version to £299+VAT for the 250GB drive. All LaCie drives are Mac and PC compatible. For more information, see www.lacie.co.uk.
**DVD-AUDIO REACHES THE PC**

Creative Labs' new SoundBlaster Audigy 2 soundcard not only offers THX Certification but full 24-bit/192kHz DVD-Audio too! Claimed to be the only stand-alone soundcard with THX certification (for 6.1 channel surround sound from Dolby Digital EX movies), DVD-Audio playback and 24bit, 96kHz recording, it packs an impressive punch for its £99 retail price. The company's next generation Creative MediaSource software offers a variety of digital music enhancements, including up-mix of stereo MP3 music into full 6.1 surround sound. Right now, the Sound Blaster Audigy 2 is the only PC audio solution to offer DVD-Audio with 24bit/192kHz resolution in stereo or 24bit/96kHz in 5.1 surround. The result is a claimed 106dB signal-to-noise ratio.

The card even supports Microsoft's brand new Windows Media Audio 9 Professional format, the web's first digital 5.1 surround-sound audio codec from the new Windows Media 9 Series. As per the original Audigy, the card is offered in a Platinum version for an additional £30 which includes a front drive bay for extra connection to external devices and an infra-red remote control, including full optical and coaxial inputs and outputs, plus a FireWire link. Check out [www.creative.com](http://www.creative.com) for more details.

**COPY PROTECTION WOBBLES**

Several major record labels in the US have put their rolling programmes of copy protecting CDs on hold, due to adverse consumer reaction. Christa Haussler, vice president of new technology at BMG Entertainment is reported to have said, "from our perspective, CD copy protection is unfortunately not as good as we'd all like it to be." This is in the context of the Recording Industry Association of America (RIAA) reporting that CD shipments dropped seven percent during the first half of 2002, compared with the previous year - largely blamed on music downloading and CD copying.

The US market seems to be having trouble with copycoding, unlike Japan where some ten million discs have been released with Midbar Technology's Cactus Data Shield. In America, Universal Music has not gone ahead with it, despite its executives leading the industry last year by saying they would copy-protect a significant proportion of their discs by this summer. It is reported as saying, "The integration of copy-protection technology into some of our CDs is a first step in measuring its effectiveness in a quickly evolving marketplace. We have not finalised our plans for 2002, nor have we made a commitment to put copy protection on all of our CD releases."

Two lawsuits have been filed over protected CDs, the first being country singer Charley Pride's most recent album, which alleged that customers were being misled about the contents of their purchases. There has also been a class-action suit against all five major labels, charging that the big music companies were selling defective CDs without notifying consumers. This has yet to make significant progress. For more information, check out [www.riaa.com](http://www.riaa.com).
Interesting, isn't it? Eighteen months ago, the third generation of MP3 portables was becoming ever more 'hi-fi like'. Models from TEAC, Aiwa and Samsung were styled like 'wannabe' MD players of the day - small, svelte, shiny, hewn from silver metallised plastic or even brushed aluminium alloy. Their status as a computer peripheral was downplayed - it was as if they were trying to outgrow their origins and move into the grown up world of the serious audio accessory.

Now though, the latest thinking is to celebrate their connectedness to the world of PCs. They've got so small that it would be silly to design them like conventional audio portables, and as they're all now USB (which registers as a removable disk in Windows Explorer), they've been given removable disk functionality. The £99 MuVo personifies this new approach.

At 73x35x16mm, it is tiny enough to fit on a keyring. It makes a Vivanco Vmax - once something of a statement about what was possible in the design of digital audio players - look pretty run of the mill. Small size brings commensurate weight savings too - the MuVo weighs just 28g without batteries. However, its diminutive dimensions don't limit its functionality - it packs a decent 64MB of memory (enough for one hour of good quality MP3 music), and is also able to act as a USB storage device.

The player slides apart, and you can then plug its 'MuVo Memory Module' directly into a PC's USB, where it is immediately recognised by Windows as removable storage. You can then easily drag and drop your music, photographs or data files using Windows' Explorer or your mouse pointer. It's an extremely elegant idea, obviating the need even for a cable because it plugs directly in. To turn the MuVo back into an MP3 player, you just slide it back together, plug in your earbuds and go.

Continuing the move away from hi-fi styling, you won't even find an LC display - quite a contrast from the paperback-sized first generation Thomson Lyra with its 6 line alphanumeric extravaganza! In fact, it's an almost Mac-like model of easy ergonomics. There are only six buttons, controlling playback and volume. A single LED glows green when the device is playing, and red when it's stopped or connected to a PC via USB. No 'equaliser' presets are offered - the MuVo is supplied with the company's 'Rock' EQ profile (which delivers a gentle bass boost) on all the time.

The box contains the MuVo itself, a pair of poor quality earbuds (replace them with a pair of Sennheiser's superb MX500s at your earliest convenience!), a neck cord, a single AAA battery (giving around twelve hours of continuous play), an installation CD, Quickstart guide and -err - that's it. No carrying cases, USB cables, flash memory cards or docking stations here - which is a testament to this player's supreme inherent simplicity. All post- Win 98 SE Microsoft operating systems work automatically - as do Mac OS9 or OS
Elegant simplicity and brilliant portability makes this one of the best designed digital audio portables around right now.

X - although Win 98 users will need to install a driver. Should you require an MP3 or WMA jukebox, Creative Labs' Creative PlayCenter software is included for good measure - although is not necessary to get the MuVo working.

Once you've got this up and running - which involves taking it out of its packaging, putting the battery in, slotting the memory module into your computer, dragging and dropping your music, snapped the two bits together and plugging your headphones in - it's brilliant to use. No fiddling, no faffing around - you simply take your music out and about, listen to it, and then swap it in a matter of seconds when you want to hear something else. It's so simple and so elegant it makes even an iPod seem a bit clumsy - which is really saying something! The ability to move bits of data around using a universal connector (i.e. USB) makes it great for taking work into the office, too.

An ergonomic triumph, it's a shame that the side is let down a little by the general air of 'plasticity'. The MuVo doesn't feel like a million dollars, or ninety nine quid for that matter. In one sense it's so small and light that it's hard to break - 28g hitting the deck is hardly a jolt of seismic proportions after all - but it still doesn't inspire confidence. How long will it stand the rigours of everyday use, I wonder? Either bring back alloy or use Perspex is what I say. Another downside is the sound quality. It isn't bad, but neither is it particularly involving. The headphone amplifier has a hard time driving a half decent pair of in-ear phones, and the permanent bass boost isn't a welcome feature either. The result is decently full and warm sounding, but a tad imprecise and rhythmically vague. It also lacks dynamics too. Compared to a Rio 600 - admittedly far more bulbous - it's rather anaemic sounding, and lacking in true grit.

Still, in fairness, Creative Labs would doubtless argue it was designed with size and ergonomics as first priorities. I liked the MuVo - it's a wholesale advance on rival 'tiddlers' - but I couldn't help wanting to pay just a little more for an altogether better built product. If you do buy one, you'll adore its practicality and ease of use, just make sure you don't sit on it - or lose it, for that matter!

Creative Labs MuVo £99.95
http://uk.europe.creative.com/

SPECIFICATIONS
Memory: 64MB
Power: 1 AAA Alkaline Battery
Music Formats: MP3, WMA
Signal-to-Noise Ratio: >90dB
Frequency Response: 20Hz-20kHz
Harmonic Distortion Output: <0.05%
Headphone output: 5-7mW
Remember Hoontech? This is the distant relation of a soundcard Computer Audio World reviewed back in 1999. David Price listens to ST Audio’s Media 7.1, and wonders how times have changed.

Hoontech is a South Korean company that made something of a name for itself amongst tweaky computer music types, thanks to its products’ impressive feature sets and low, low prices. The Soundtrack Digital card I reviewed some four years ago cost a princely £29, making it the cheapest digital output-equipped audiocard of its day. Now though, as ST Audio, the company is making bigger and better things, but still at silly prices.

The new DSP24 Media 7.1 card - to give it its full name - has come a long way since the ST Digital. Packing true 24bit/96kHz full-duplex multi-channel audio capability, plus a high quality breakout box complete with microphone and phone (RIAA) preamplification, plus an assortment of powerful software, it’s a lot of hardware for £150 retail price. There’s more too. As its name suggests, this card will output 7.1 channel surround sound when playing DVDs via from the supplied WinDVD software.

The card itself is based on ST Audio’s professional range of DSP24 recording interfaces. It offers two simultaneous analogue input channels (i.e. stereo) running at a maximum of 24bit/96kHz resolution, and eight simultaneous analogue output channels also capable of 24/96, thanks to its AKM4529 combined analogue-to-digital and digital-to-analogue converter (claimed to have an A-weighted signal-to-noise ratio of better than 100dB). It is the standard PCI size, and comes with a mic input (for a PC microphone), a 3.5mm line input to connect up the onboard soundcard or TV card, and two internal analogue inputs (i.e. CD and aux).

The breakout box hooks up to the main card by a 25pin D-SUB connector. It’s one of the most evolved I’ve seen at or anywhere near the price. It offers the choice of optical or coaxial digital inputs and outputs, full 16 channel MIDI (in and out), and an onboard hardware synthesiser using the DREAM/Roland GS soundset. There’s a microphone pre-amp with balanced phantom powered 6.3mm input socket and gain control knob, plus a phono pre-amp (with RIAA EQ) which is switchable with the stereo RCA phono line level analogue inputs, plus a headphone amplifier, volume control and 6.3mm jack socket. Round the back, eight gold plated phono’s give the 7.1 channel analogue audio output. Made from thick alloy, it’s extremely robust considering that it’s only slightly more expensive than Creative Labs’ highly plasticiised Audigy 2!

The package contains the aforementioned DSP24 Media 7.1 PCI card and breakout box, plus a welter of high quality software. This includes Emagic Logic SoundTrack24 (a 24bit/96kHz audio/MIDI-sequencer), Intervideo WinDVD v3.0.
(multichannel DVD playback software), Diamond Cut 32 Art v4.0 (audio restoration software), DART Karaoke Studio, DART CD Recorder 4 Basic, Sonic Foundry ACID XPress 3.0 and Sonic Foundry Siren XPress 2.0.

Installation went smoothly enough. The standard PCI card goes in a slot in the back of your PC and connects up to the breakout box via the supplied connector. The set-up CD got things going without any fuss, and it was then simply a case of installing your required applications.

The bundled software includes a little control panel that offers a choice between the multichannel audio mixer (essentially an elaborate version of Windows’ Volume Control), the settings menu (offering the choice of clock and sample rates at up to 96kHz) and the interesting ‘Patch-bay’. This offers a graphical representation of the way the breakout box is connected up, and after you’ve re-educated yourself to work in a graphical environment it’s very easy to use. I used Cool Edit Pro for most of my testing, which had absolutely no problems working with this card, its drivers all appearing in CEP’s SETTINGS/DEVICES menu.

Suitably installed and configured, it proved consummately easy to use. Because all the most used controls and socketry is on the breakout box’s front panel, there’s no need to fiddle around the back with cables, and the Patchbay and Mixer apps are a cinch. You soon feel that you can play, record or switch digital audio as easily as you would with a hi-fi recorder - despite its power, it’s not intimidating or overtly ‘techie’ to use.

Sound quality is another big plus. The digital ins and outs work superbly, giving virtually nothing away against my reference Zefiro ZA2 digital interface card. Feeding my Cambridge Audio DACMagic 3, it made a big, clean and confident sound. Comparing its own converters against the Cambridge (at 16/44 resolution) also proved encouraging. You get a very clean and refined sound, with a fast, tidy, rhythmic bass, and open and smooth midband (if a tad analytical) and very cough treble with lots of detail and atmosphere.

Compared to TerraTec’s AudioSystem EWX24, there’s a touch less bass weight and dynamic articulation. Rather than really grooving down to the music, the ST Audio takes a more considered, dispassionate angle. Although just a touch less involving, it’s probably more detailed - surprisingly so for something of this price.

Things get better still when you crank up the sample rate. It’s a whole heap better than 16/44. There is great subtlety, air and space. Instruments can breathe more naturally, and there’s a fuller, better articulated bass.

The built-in phono stage proved very quiet. You’ll find it better a QED Discaver - which is saying something, although if you’re doing serious audio transcription/restore, you’ll do better to use the likes of a Creek OBH-8SE.

Still, it proved big and bouncy, with plenty of life - and it’s really cool being able to plug your deck straight into your PC! The only obvious oversight is the lack of an earth terminal on the breakout box - if your arm has a separate earth lead then you’ll have to make your own arrangements!

All in all, this is one of the most impressive, best built, well implemented and thought out soundcards I’ve tried at or anywhere near the price. TerraTec’s aforementioned EWX24 is its only obvious price rival, but it’s swings and roundabouts. While it may have a marginally more musical sound (and there’s really nothing in it), its user interface isn’t as good and its lacks a phono stage and surround-sound output.

Ultimately, ST Audio’s Media 7.1 is an extremely user friendly product, but still aimed at the serious hobbyist/home musician. It’s less gimmicky and better built than Creative Labs Audigy 2, too. Highly recommended.

ST Audio DSP24 Media 7.1 £199
Et Cetera Distribution
Tel: +44 (0) 870 873 8731
http://www.etcetera.co.uk

DRIVER SUPPORT
Windows 9x/ME/2000/XP is supported, with ASIO 2.0 and G3IF. The included ASIO 2.0 drivers of ST Audio’s DSP24 series support 2ms latency at 96kHz and 5ms at 44.1/48kHz (even lower values are supported under Windows 2000/XP on faster systems). This means that users of modern software synthesisers like GigaStudio or VST-/DXi-plugin instruments can now play their sounds in real time and even using real-time effects (like DirectX- or VST-plugins). It is fully compatible with Logic Audio, Cubase VST, Cakewalk, Samplitude, Cool Edit, Acid, Vegas, etc.
Here’s a list of products that are a good buy. We’ve tried to cater for a range of tastes, identifying strong products in every area. We’re agnostic so you’ll find a wide range of products, from valve pre-amps through to MiniDisc players. Products marked * are recently out of production but make a good second-hand buy.

**COMPACT DISC**

**ARCAM FMJ CD23** £1100
This British-built player is extremely versatile. Controlled and detailed with a musical insight that few match. (Jul 2000)

**CAMBRIDGE CD4SE** £200
A touch soft in the treble but outstanding in every other respect. (Feb 98)

**KENWOOD DP-3080II** £180
Has great clarity and presence for the price. Not as naturally expressive as the CD4SE though. (Feb 98)

**LINN KARIK III** £1775
Under rated and overlooked, the final Karik was a gem. Superb transport gives a brilliantly tight, grippy dynamic sound, albeit tonally rather dry. (Feb 98)

**MARANTZ CD-17 KI-S** £1100
The Marantz excels in all areas. Without doubt this is one of the most involving CD players on the planet. Build quality is also exemplary. (Sep 97)

**MARANTZ CD-63** £400
Similar to the CD-63SE but more powerful bass and an all-round smoother sound. The famous KI tweaks pay off again. Whether or not it is still pre-eminent against the vastly improved competition is a matter of opinion.

**MIDIMAN FLYING COW** £299
A fine all-rounder and easy to upgrade too. More depth and breadth than Rega Planar 3. (Sep 94)

**MUSICAL FIDELITY X-RAY** £800
Commonsense sturdy CD player of exceptional ability. Clear and detailed with high quality internal processing system. The X-Ray is inclined to show up poor recordings, but it's only doing its job. (Feb 99)

**NAD 5500** £1200
This dynamic top of the range Silverline spinner delights with any type of music. Exciting, sophisticated sounding and highly recommended. (Jun 2000)

**Prices shown are those at the time of the review**

**SONIC FRONTIERS TRANSPORTS**

**SONIC FRONTIERS TRANSPORT** £6999
Cutting-edge design and technology combine to make this one very desirable product. The only problem is the fantasy hi-fi price. (Sep 98)

**TEAC VRDS-TI** £600
Excellent mid-price silver disc spinner with a powerful, expansive and warm sound. Easily beats most sub-£1000 designs. A good choice for the budget conscious who want the best. (Feb 95)

**DACs**

**CAMBRIDGE AUDIO DACMAGIC 3** £99
Superb value for money with extensive facilities and solid, detailed sonics. Upgrade any sub-£300 player.

**DCS ELGAR** £8500
Future-proof convertor which will handle HDCDs. (Nov 97)

**DPA LITTLE BIT 3** £299
A taste of the high end on a budget. Rich, clean, punchy sound transforms budget CD players.

**MIDIMAN FLYING COW** £299
Excellent as a DAC and doubles as an ADC for archiving to CDR. (Jun 98) Great value, as is junior version Flying Calf at £109. (Feb 99)

**MUSICAL FIDELITY X-DAC** £300
A bargain for normal CDs and even better with HDCDs. (Nov 97)

**SONIC FRONTIERS PROCESSOR 3** £6999
Quality never comes cheap! This DAC oozes authority. (Jun 2000)

**TONEARMS**

**LINN SONDEK LP12 BASIK** £1100
Of the pace these days in many respects but still an extremely sweet and engaging listen with a quintessentially analogue sound.

**Prices shown are those at the time of the review**
## PRODUCT OF THE MONTH

<table>
<thead>
<tr>
<th>Product</th>
<th>New Price</th>
<th>Equivalent Sale Price</th>
<th>Old Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sony CDP-552 ES (No Remote)</td>
<td>£495.00</td>
<td>£399.95</td>
<td>£550.00</td>
</tr>
<tr>
<td>Denon 350 (Remote)</td>
<td>£350.00</td>
<td>£319.95</td>
<td>£400.00</td>
</tr>
<tr>
<td>Cambridge CD-1. etc. (No Remote)</td>
<td>£245.00</td>
<td>£219.95</td>
<td>£269.00</td>
</tr>
<tr>
<td>Cambridge CD-6.</td>
<td>£295.00</td>
<td>£259.95</td>
<td>£329.00</td>
</tr>
<tr>
<td>Renwood Q De Reference (MINT)</td>
<td>£495.00</td>
<td>£459.95</td>
<td>£550.00</td>
</tr>
<tr>
<td>Old A-230 etc. (In Boxed)</td>
<td>£495.00</td>
<td>£459.95</td>
<td>£550.00</td>
</tr>
<tr>
<td>Motel RD-861 (2-Motor)</td>
<td>£350.00</td>
<td>£319.95</td>
<td>£400.00</td>
</tr>
<tr>
<td>Telefunken (DIN)</td>
<td>£299.95</td>
<td>£279.95</td>
<td>£349.00</td>
</tr>
<tr>
<td>Parlen 1100 Weer (MINT)</td>
<td>£495.00</td>
<td>£459.95</td>
<td>£550.00</td>
</tr>
</tbody>
</table>

## AMPLIFIERS

<table>
<thead>
<tr>
<th>Model</th>
<th>New Price</th>
<th>Equivalent Sale Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Musical Fidelity 3190</td>
<td>£395.00</td>
<td>£349.95</td>
</tr>
<tr>
<td>Musical Fidelity 3190</td>
<td>£395.00</td>
<td>£349.95</td>
</tr>
<tr>
<td>Musical Fidelity 3190</td>
<td>£395.00</td>
<td>£349.95</td>
</tr>
<tr>
<td>Musical Fidelity 3190</td>
<td>£395.00</td>
<td>£349.95</td>
</tr>
<tr>
<td>Musical Fidelity 3190</td>
<td>£395.00</td>
<td>£349.95</td>
</tr>
</tbody>
</table>

## TUNERS

<table>
<thead>
<tr>
<th>Model</th>
<th>New Price</th>
<th>Equivalent Sale Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>£495.00</td>
<td>£399.95</td>
<td>£495.00</td>
</tr>
</tbody>
</table>

## RECORDING EQUIPMENT

<table>
<thead>
<tr>
<th>Model</th>
<th>New Price</th>
<th>Equivalent Sale Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sony D-1055 / Dual/ 2 x 1055</td>
<td>£495.00</td>
<td>£495.00</td>
</tr>
<tr>
<td>Sony D-1055 / Dual/ 2 x 1055</td>
<td>£495.00</td>
<td>£495.00</td>
</tr>
</tbody>
</table>

## DIGITAL

<table>
<thead>
<tr>
<th>Model</th>
<th>New Price</th>
<th>Equivalent Sale Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sony D-1055 / Dual/ 2 x 1055</td>
<td>£495.00</td>
<td>£495.00</td>
</tr>
<tr>
<td>Sony D-1055 / Dual/ 2 x 1055</td>
<td>£495.00</td>
<td>£495.00</td>
</tr>
</tbody>
</table>

## SPEAKERS

<table>
<thead>
<tr>
<th>Model</th>
<th>New Price</th>
<th>Equivalent Sale Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sony D-1055 / Dual/ 2 x 1055</td>
<td>£495.00</td>
<td>£495.00</td>
</tr>
<tr>
<td>Sony D-1055 / Dual/ 2 x 1055</td>
<td>£495.00</td>
<td>£495.00</td>
</tr>
</tbody>
</table>

## MISC-LAMEOUS

<table>
<thead>
<tr>
<th>Model</th>
<th>New Price</th>
<th>Equivalent Sale Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sony D-1055 / Dual/ 2 x 1055</td>
<td>£495.00</td>
<td>£495.00</td>
</tr>
<tr>
<td>Sony D-1055 / Dual/ 2 x 1055</td>
<td>£495.00</td>
<td>£495.00</td>
</tr>
</tbody>
</table>

## TURN TABLES

<table>
<thead>
<tr>
<th>Model</th>
<th>New Price</th>
<th>Equivalent Sale Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sony D-1055 / Dual/ 2 x 1055</td>
<td>£495.00</td>
<td>£495.00</td>
</tr>
<tr>
<td>Sony D-1055 / Dual/ 2 x 1055</td>
<td>£495.00</td>
<td>£495.00</td>
</tr>
</tbody>
</table>

**Affordable Audio** - (Northampton) Pre-Owned Hi-Fi Specialists
168 Wellingborough Road Northampton NN1 4DU
Tel: 01604 231261 or 01933 273281 Evening (07770) 877893

**A selection of our ever changing offers for sale**
(all fully guaranteed)

<table>
<thead>
<tr>
<th>Model</th>
<th>New Price</th>
<th>Equivalent Sale Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sony D-1055 / Dual/ 2 x 1055</td>
<td>£495.00</td>
<td>£495.00</td>
</tr>
<tr>
<td>Sony D-1055 / Dual/ 2 x 1055</td>
<td>£495.00</td>
<td>£495.00</td>
</tr>
<tr>
<td>Sony D-1055 / Dual/ 2 x 1055</td>
<td>£495.00</td>
<td>£495.00</td>
</tr>
</tbody>
</table>

**A selection of our ever changing offers for sale**
(all fully guaranteed)

<table>
<thead>
<tr>
<th>Model</th>
<th>New Price</th>
<th>Equivalent Sale Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sony D-1055 / Dual/ 2 x 1055</td>
<td>£495.00</td>
<td>£495.00</td>
</tr>
<tr>
<td>Sony D-1055 / Dual/ 2 x 1055</td>
<td>£495.00</td>
<td>£495.00</td>
</tr>
<tr>
<td>Sony D-1055 / Dual/ 2 x 1055</td>
<td>£495.00</td>
<td>£495.00</td>
</tr>
</tbody>
</table>

**Affordable Audio - (Northampton) Pre-Owned Hi-Fi Specialists**
168 Wellingborough Road Northampton NN1 4DU
Tel: 01604 231261 or 01933 273281 Evening (07770) 877893

just compare our prices for the BEST deals.
Prices shown are those at the time of the review

Pro-ject Phono Box. Provides an inexpensive introduction to all that vinyl has to offer.

SME 3009SI £309

Once state of the art, but no longer. Weak at frequency extremes and detail but its legendary serviceability makes it a cult in Japan. Can be picked up for peanuts second-hand. (Jan 93)

SME 309 £689

A down-market version of the IV and V with frequency extremes and detail, but its valve phono and-go. High output version works a treat. (Feb 98)

SME 3009511 £140

Not quite as good as the dearer Supremes but the Super II is a splendid introduction to the joys of moving-coil cartridges.

Goldring 1042 £130

One of the best Moving Magnet cartridges going, with beautiful treble and muscular bass. New low price makes it a bargain.

Goldring ROHMANN £1000

In a way it's MC 2000 meets MC 7500 with great tonal strengths and a dynamo sound. (Apr 96)

INTEGRATED AMPLIFIERS

Audio Analogue

PUCCINI SE £595

This superbly-built Italian integrated has a lucidity and control which leaves others nowhere. Sound stage a wow. (Dec 97)

AUDIOLAB 8000AA £495

Well rounded integrated with smooth and detailed sound plus a huge feature count.

DENON PMA-250SE £160

It might not have bags of grunt but the Denon can sound exceedingly natural and open. (Feb 97)

McINTOSH MA8000 £3735

The MA8000 not so much plays music as takes control of it, with effortless bass drive. (Sep 95)

MISSION CYRUS 2 £299

Classic eighties minimalism combines arresting styling with clean, open, lively sound. Further upgradeable with PSX power supply.

MUSICAL FIDELITY

X-CAN52 £160

Warm, sumptuous, sweet sound hophone amp gives startling results with a decent set of headphones.

NAIM NAIT 3 £575

Superb rhythms and dynamics make for great music making, but tonally monochromatic. Super optional phono stage makes it ideal for vinyl junkies.

ROKSAN CASPIAN £695

Smooth, warm integrated with remote control that works happily into most speakers. (Dec 97)

SONNETEER ALABASTER £995

Builds on the strengths of the Campion with ample control, colour and drive. (Oct 97)

PHONO STAGES

CREEK OBM-8 SE £180

Punchy, rhythmic character with oodles of detail makes this a great budget audiophile product.

LFD MISTRAL PHONO STAGE £300

The Mistral has a warmth and involvement that make many pricier stages sound overpriced.

MICHIEL DELPHINI MONOBLOCKS £1995

Analogues tour-de-force gives supremely clean, detailed and finely resolved sound with breathtaking dynamics. Great value, even at this price.

MUSICAL FIDELITY X-LP £125

One of the famous MF X series. Full marks throughout for clarity and detail. Switchable between MM and MC. Indestructible build! (May 99)

PROJECT PHONO BOX £39

Not the last word in many respects but a thoroughly honest piece of work. Inexpensive introduction to all that vinyl has to offer. MM and MC provision plus choice of two impedances.

ROKSAN ARTAXERXES X £950

With the Attessa PSU the Artaxerxes X MM/MC stage still shines. Great stage depth, neutrality and tonal colour. (Oct 97)

AMPLIFIER and DV88 DVD player are available in black or silver in very limited quantities, so don't delay - call now!

Arcam A85 Amplifier normal Price £799.00
Arcam DV88 DVD Player normal price £999.00

Arcam A85 Amplifier £625
Arcam DV88 DVD player £745
<table>
<thead>
<tr>
<th><strong>SONNETEER SEDLEY</strong></th>
<th>£399</th>
</tr>
</thead>
<tbody>
<tr>
<td>Combined transparency and fine dynamics with excellent rhythmic ability. (May 98)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>PRE-AMPLIFIERS</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>AMC 1100</strong></td>
<td>£150</td>
</tr>
<tr>
<td>Suffers from un-defeatable tone controls but an extremely good value piece of kit. Partners the similarly budget level AMC 2200 power amplifier, also at £150. Comfortable beginners’ choice. (Mar 99)</td>
<td></td>
</tr>
<tr>
<td><strong>AUDIO ANALOGUE BELLINI</strong></td>
<td>£475</td>
</tr>
<tr>
<td>Showcases AA’s characteristic mix of clarity and musicality and blasts the competition. (Apr 98)</td>
<td></td>
</tr>
<tr>
<td><strong>CHORD CPA1800</strong></td>
<td>£1800</td>
</tr>
<tr>
<td>Clarity, insight and control are second to none - an addictive mixture. (Mar 98)</td>
<td></td>
</tr>
<tr>
<td><strong>CROFT VITALE</strong></td>
<td>£350</td>
</tr>
<tr>
<td>A modestly priced valve pre-amp with exceptionally transparent performance. MM phono stage plus three line stages are standard. Volume controls are separate for each channel, thus giving balance adjustment. A remarkable item in all respects. (Feb 2000)</td>
<td></td>
</tr>
<tr>
<td><strong>XT/1 PRE-1</strong></td>
<td>£1000</td>
</tr>
<tr>
<td>Almost valve-like in its smoothness, the line-level Pre-1 is warm and seductively clear. (Nov 96)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>POWER AMPLIFIERS</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ARCAM 9</strong></td>
<td>£400</td>
</tr>
<tr>
<td>With 75W on tap, 9P will drive most loudspeakers with a spacious and detailed sound. Good bass welly too. (Dec 96)</td>
<td></td>
</tr>
<tr>
<td><strong>CHORD SPM400</strong></td>
<td>£400</td>
</tr>
<tr>
<td>There’s a sense of effortless power to the Chord that gives music real scale and presence. (Mar 98)</td>
<td></td>
</tr>
<tr>
<td><strong>MARANTZ MODEL 9</strong></td>
<td>£800</td>
</tr>
<tr>
<td>Authentic reproduction monoblocs still more than cut the sonic mustard. Highly expensive and highly sought after. (Mar 97)</td>
<td></td>
</tr>
<tr>
<td><strong>MICHELL ALECTO</strong></td>
<td>£1989</td>
</tr>
<tr>
<td>Crisp, clean and beautifully controlled with gorgeous styling. Partnered with the £1650 Orca this is a superb winning combo. (Oct 98)</td>
<td></td>
</tr>
</tbody>
</table>

| **MUSICAL FIDELITY X-A200** | £1000 |
| 200W of high-end monobloc power in a grooved tube. (Aug 98) |
| **NAIM NAP180** | £1060 |
| Partnered with a NAC82, this has classic Naim control, and a superbly rhythmic presentation. |

<table>
<thead>
<tr>
<th><strong>TUNERS</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CAMBRIDGE T500</strong></td>
<td>£180</td>
</tr>
<tr>
<td>An extremely engaging tuner with a performance at odds with its low price. Not exactly a Troughline, but you may not notice... (Feb 99)</td>
<td></td>
</tr>
<tr>
<td><strong>CREEK T43</strong></td>
<td>£199</td>
</tr>
<tr>
<td>Excellent detail, separation and dynamics. A great little tuner and unbeatable at this price. (May 98)</td>
<td></td>
</tr>
<tr>
<td><strong>MARANTZ ST17</strong></td>
<td>£600</td>
</tr>
<tr>
<td>A positive dreamsworth of a tuner. Sweet and refined but with a heavy punch when needed. A tuner of this quality demands a decent aerial. (Jul 99)</td>
<td></td>
</tr>
<tr>
<td><strong>MISSION CYRUS FM7</strong></td>
<td>£300</td>
</tr>
<tr>
<td>Clear and lucid sound puts it up with the best. Superb build too. (Apr 94)</td>
<td></td>
</tr>
<tr>
<td><strong>NAIM NAT03</strong></td>
<td>£595</td>
</tr>
<tr>
<td>The NAT03’s warm, atmospheric sound is further proof of Naim’s proficiency with tuners. (Sep 93)</td>
<td></td>
</tr>
<tr>
<td><strong>SONY ST-SA1ES</strong></td>
<td>£250</td>
</tr>
<tr>
<td>Beguiling RDS tuner for the sonically discerning. Good ergonomics and sensitive too. (Apr 97)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>CASSETTE DECKS</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>AIWA AD-5750</strong></td>
<td>£200</td>
</tr>
<tr>
<td>Sonically a very decent machine at the price. Comes fitted with Dolby B, C and the dead handy Dolby S. (Apr 96)</td>
<td></td>
</tr>
<tr>
<td><strong>AIWA AD-5950</strong></td>
<td>£300</td>
</tr>
<tr>
<td>A stable transport, superb head and Dolby S make the AD-5950 an excellent all-rounder. (Feb 95)</td>
<td></td>
</tr>
<tr>
<td><strong>KENWOOD KX-3080</strong></td>
<td>£140</td>
</tr>
<tr>
<td>A simple deck, but excellent-quality head and transport give top quality sound. (Oct 96)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>LOUDSPEAKERS</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CASTLE EDEN</strong></td>
<td>£469</td>
</tr>
<tr>
<td>Impressive valve-free speakers that offer great transparency and involvement. One of a select band that simply makes music regardless. (Mar 97)</td>
<td></td>
</tr>
<tr>
<td><strong>EPOS ES12</strong></td>
<td>£495</td>
</tr>
<tr>
<td>Strong, punchy bass is allied to finely detailed, articulate midrange and sparkling treble. (Oct 96)</td>
<td></td>
</tr>
<tr>
<td><strong>KEF CRESTA I</strong></td>
<td>£100</td>
</tr>
<tr>
<td>Delightfully sophisticated presentation for the price. Won’t blow the roof off, but will deliver a very musical sound. (April 2000)</td>
<td></td>
</tr>
<tr>
<td><strong>KLIPSCH HERESY II</strong></td>
<td>£1100</td>
</tr>
<tr>
<td>An outstanding high sensitivity loudspeaker with midrange and treble horns coupled with infinite baffle 12” bass driver. Effortless, fast and accurate. (May 99)</td>
<td></td>
</tr>
<tr>
<td><strong>MISSION 752</strong></td>
<td>£495</td>
</tr>
<tr>
<td>Cracking mid-price mini towers combined with midrange and treble horns coupled with surprisingly warm results. Benign load characteristics makes them great for valves. (Oct 96)</td>
<td></td>
</tr>
<tr>
<td><strong>MISSION 771</strong></td>
<td>£170</td>
</tr>
<tr>
<td>Characteristically fast, punchy Mission sound from the Aerogel midbass and silk-dome tweeter. (Jul 98)</td>
<td></td>
</tr>
</tbody>
</table>

---

**Billy Vee**

Would you like to upgrade your Naim?

Call 020 8318 5755 or 8852 1321 now!

---

**Job Opportunity**

We have a vacancy for a young enthusiastic 18 - 20 year old sales and customer service person. Experience not necessary but must have good communication skills. Good income potential. Please write to Ian Anderson sending your C.V to the address above.

---

Each year we replace our Naim demonstration stock giving you an opportunity to make a substantial saving on our normal price! All products are boxed with full two year warranty. Only one of each available.

- NAC 52 Preamp (£3850) £2690
- SuperCap Power Supply (£2450) £1795
- NAC 102 Preamp (£1210) £859
- NAP 180 Power Amplifier (£1220) £859
- NA CDX Player (£2470) £1729
- NAP 250 Power Amplifier (£1910) £1339
- NA CDX/2 Player (£4165) £3099
- NAP 500 Power Amplifier (£10995) £6995

Interest Free period of nine months available - please call for details.

---

**PIONEER CT-57405**

A great piece of engineering from Pioneer, with first-rate sound. (Jun 96)

**YAMAHA KS-580SE**

The ‘SE’ tag is more than a marketing gimmick. Sound is solid and clear with Dolby S. (Sep 97)

---

**SONY**

Produces some of the best-looking and best-sounding equipment on the market today. (May 98)
QUAD ESL 63 ** £3450
A reference against which all other loudspeakers are judged, the 63s have superb imaging and genuine transparency.

TANNOY AMS8 ** £2700
Bold sounding pro active monitor with solid bass, clear midrange and delicious treble. (Aug '96)

TANNOY MERCURY M2 ** £140
A true audiophile bargain which embarrasses many more expensive boxes. Never mind the price, let your ears decide. (May '97)

MINIDISC PLAYERS

KENWOOD DM-9090 £500
One of the best MD players yet, AT-RAC 4.5 gives clean and very musical recordings from this Kenwood. (Jan '99)

SONY MDS-JB930Q £250
Great mid-price machine that adds better build and facilities to the 530's already excellent sonics.

SONY MDS-JA50ES ** £1300
This Sony can put the wind up Nakamichi cassette decks when used with better blank MDs. (Apr '98)

SONY MDS-JS55ES £520
The best sounding MD deck made so far, thanks to awesome build and heroic AT-RAC-DSP Type R coding.

SONY MDS-JS510 £300
An impressive sound and unmatched convenience make this MiniDisc player an excellent buy.

DENON DVD-5000 £1600
Monster build, as you'd expect at this price. Facilities and gadgets galore and drop-dead high end looks. A very smooth and sophisticated sound, although not as good as similarly-priced CD players. (Mar '99)

PIONEER DV-717 £700
Well built and a solid performer, with a "true" 24/96 digital output. Facilities in abundance and a controlled, exciting way with CD replay. Shame it lacks a Dolby Digital decoder! (Sep '99)

PIONEER DVD-717 £490
One of the best buys in the DVD market. Available in a dodge white case, but the facilities and performance more than make up for this. Excellent with both music and visuals, and a whole host of up to the minute facilities to keep you occupied. (Mar '00)

HEADPHONES

JECKLIN FLOAT MODEL TWO £99
Wonderful panel-like and open sound from these esoteric-looking headclamps. Do not wear in public unless you like being made a fool of.

JECKLIN MODEL TWO £99

SAVE UP TO 50% ON EX-DISPLAY BARGAINS

Some as new with 1yr warranty. 24hr del only £5. Check availability before ordering.

Call Sales: (020) 8318 5755 or 8852 1321 - 248 Lee High Road, London, SE13 4PL

Billy Vee Sound Systems

Arcam DV88 DVD Player (1yr G/tee) . . . . (999.00) £699.00
Blueroom Minipod Speakers Var colours . . (289.00) £199.00
Linn Kark/2 CD Player/S/H (1yr G/tee) (new) (1850.00) £895.00
Linn 5105 Power Amps (2 yr G/tee) 50% . . (1200.00) £549.00
Linn Kann Speakers (2yr G/tee) . . . . (325.00) £229.00
Linn Keooss Speakers (2yr G/tee) . . . (495.00) £299.00
Linn KL140 Power Amp (2yr G/tee) . . . (750.00) £549.00
Linn Klout Power Amp S/H (1yr G/tee) (1600.00) £999.00
Linn Kairn Line Preamp (2yr G/tee) 50% . (1400.00) £799.00
Linn LP12/Lingo/Akito S/H (1yr G/tee) (2250.00) £1250.00
Linn Keilidh Blk S/H (1yr G/tee) 50% . . . (775.00) £387.00
Linn Keikth Speakers Wal (2yr G/tee) . . . (6000.00) £3950.00
Lexicon MC1 Processor (2yr G/tee) . . . (5500.00) £3995.00

Marantz DV7000 DVD Player (1yr G/tee) 50% (599.00) £266.00
Naim CDX CD Player (2yr G/tee) . . . . . (2470.00) £1279.00
Naim 102 Preamplifier (2yr G/tee) . . . . (1210.00) £859.00
Naim Hi-Cap Power Supply (2yr G/tee) . (1100.00) £659.00
Naim NAP 180 Power Amp (2yr G/tee) . (1700.00) £979.00
Naim NAP 250 Power Amp S/H (1yr G/tee) (1805.00) £1339.00
Naim NAP 500 Power Amp (2yr G/tee) . . (1905.00) £1759.00
Naim NAP500 Power Amp (2yr G/tee) (1095.00) £799.00
ProAc Tablette 2000 Spks (2yr G/tee) . . (649.00) £456.00
Rotel RV 985 DVD Player (2yr G/tee) 50% . (625.00) £299.00
TAG DV32R DVD Player (2yr G/tee) . . . (3995.00) £2995.00
Yamaha AX620 AV Amplifier (2yr G/tee) . (399.00) £289.00
## CASSETTE

**NAKAMICHI DR-2**
A great machine with Nakamichi's legendary heads. Lowest cost 'true' Nakamichi at the time, retailing for £600.

**NAKAMICHI CR-7**
The last of the great ones, and definitely the best Nakamichi ever (yes, better than a Dragon)

**YAMAHA TC-800G**
Early classic in serious cassette. Its skislope looks got it a cult following once it had ceased to be simply ugly.

## CD PLAYERS

**MERIDIAN 207**
Beautifully-built two-box with pre-amp stage. Very musical although not as refined as modern Biostream gear. No digital output.

**PIONEER PD-91**
Built-to-last player with easy upgrade routes for modifiers. Not knockout as it stands but get one cheap and have a go!

**CAMBRIDGE CD1**
The first two box player with weighted mechanics and even an optional Dropout/error counter. Radical and effective at the time - a classic.

## AMPLIFIERS

**LEAK POINT ONE, TL12 & TL10**
Ancesters of hi-fi, consequently expensive nowadays. As with all vintage valve stuff, overhauling is de rigueur before use, using original parts if possible.

**LEAK PRE-AMPS**
Line of 'good for their time' pre-amps. Use of EF86 pentode valve for high gain rules out ultra performance. Not the highest-fi.

**LEAK STEREO 20**
Excellent workaday classic valve amp. In good order the 20 will not disgrace itself. Various upgrades are available from specialist repairers.

**LEAK TL12**

**NAD 3020**
You can't argue with success! NAD's budget dream. Genuine valve hi-fi on a budget.

**QUAD 33/103 PRE/POWER**
Great style and construction, also bullet proof. Warm and wooly sound, but easy going. A good introduction to early transistor audio classics.

**Garrard 401**
A legendary turntable.

**QUAD 22/11 PRE/POWER**
One of the all-time classic valve amplifiers. Unusual circuit but it works beautifully. 22 pre-amp not up to today's standards.

**SUGDEN A21**
Seventies transistor integrated has an eminently likeable smoothness and musicality. Limited inputs via DIN sockets.

**TECHNICS SE-AS Mk2**
Nice transistor and electronics, shame about the casework. With tweaking, this 150watt can sound sweet.

## LOUDSPEAKERS

**PIEGA (I Series - see picture above)**

<table>
<thead>
<tr>
<th>LOUDSPEAKERS</th>
<th>RETAIL</th>
<th>SALE</th>
</tr>
</thead>
<tbody>
<tr>
<td>S3: Satellites with Wall Brackets (Aluminium)</td>
<td>£2400</td>
<td>£1200</td>
</tr>
<tr>
<td>S4: Floorstanding Speakers (Pair) (Aluminium)</td>
<td>£1995</td>
<td>£997.50</td>
</tr>
<tr>
<td>S4C: Centre Speaker (Aluminium)</td>
<td>£1175</td>
<td>£585.75</td>
</tr>
<tr>
<td>P2L: Floorstanding Speakers (Pair) (Aluminium)</td>
<td>£1695</td>
<td>£847.50</td>
</tr>
<tr>
<td>P4XL: Floorstanding Speakers (Pair) (Aluminium)</td>
<td>£2210</td>
<td>£1105.50</td>
</tr>
</tbody>
</table>

## ACCESSORIES, ETC

**EUPHONIA ISOLATION CONES:**

<table>
<thead>
<tr>
<th>ACCESSORIES, ETC</th>
<th>RETAIL</th>
<th>SALE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Petite 30: Box of 6. Use 3 Under Amps, etc.</td>
<td>£60</td>
<td>£30</td>
</tr>
<tr>
<td>Grande 46: Box of 3. For Large Power Amps, etc</td>
<td>£90</td>
<td>£45</td>
</tr>
<tr>
<td>FI-RAX/TARGET STANDS: Many give us a call</td>
<td>£160</td>
<td>£90</td>
</tr>
</tbody>
</table>

## AUDIO ILLUSION

23 Langley Broom
Langley, Berkshire SL3 8NB
(01753) 542761 FAX: (01753) 772532
Open 10am-8pm (Mon-Sat) By appointment only
www.audiollusion.co.uk
mail@audiollusion@btinternet.com

**EVERYTHING MUST GO**
**MASSIVE CLEARANCE SALE**
**AT PRICES NEVER TO BE REPEATED**
**ALL ITEMS SOLD WITH A WARRANTY**
**ALL MAJOR CREDIT CARDS ACCEPTED**
**MANY HALF PRICE OR LESS!!!!!!**

**STRAIGHT AUDIO/HOME THEATRE!!!**

**EVERYTHING MUST GO**
**MASSIVE CLEARANCE SALE**
**AT PRICES NEVER TO BE REPEATED**
**ALL ITEMS SOLD WITH A WARRANTY**
**ALL MAJOR CREDIT CARDS ACCEPTED**
**MANY HALF PRICE OR LESS!!!!!!**

**STRAIGHT AUDIO/HOME THEATRE!!!**
LEAK SANDWICH
Rather warm sounding big infinite baffle but cheap with it. With a reasonably powerful amp can sound quite satisfying.

LOWTHER PM6A
High quality full-range driver, still manufactured. High sensitivity, as fitted to many classic horn designs.

MAGNEPLANAR SMG4
Touch dry in the bass but a technological marvel. Very expensive with it. With a reasonably powerful amplifier can make them caviar to the general.

LEAK SANDWICH
And a kind load to amplifiers. For Tannoy a one-time king of turntables very similar to the Linn LP12. Now no longer available but very much worth finding in Hong Kong or the Far East..Unmarshal the Linn LP12. Now no longer available but very much worth finding in Hong Kong or the Far East.

TANNOY YORK, LANCASTER
Mid-price deck with a keen following. No longer the last word but peanuts second-hand.

TANNOY GRF & AUTOGRAPH
Arguably the best sounding tuners ever. Adaptation for stereo easy via Phono multiplex socket.

LEAK TROUGHLINE III STEREO
Excellent tuner with indifferent stereo decoding circuit. Best when adapted to use modern outboard decoder.

MARAMTZ STB
Possibly the ultimate Tards deck, including an oscilloscope for checking the strength of signal. Expensive even now.

VINYL

ACOS LUSTRE
Very honest price of kit, well made and easily adjusted. Would most definitely do very much worse.

THORENS TD124
Best classic deck ever! Judging by the prices they fetch its possible - 78rpm too!

THORENS TD150
Mid-price deck with a keen following. No real difficulty with servicing. - novices may find the suspension system unnerving.

TRIO L-0TD
Knockout heavyweight from 1980 with stainless steel 16mm platter! Not a give-away and,beware - spares scarce.

TUNERS

LEAK TROUGHLINE (ORIGINAL)
Interesting ornament but no longer hi-fi. Limited coverage of 88 MHz to 100 MHz only.

LEAK TROUGHLINE II & III MONO
Arguably the best-sounding tuners ever. Viewed more warily in the UK and a kind load to amplifiers. For Tannoy and a kind load to amplifiers.

LEAK TROUGHLINE II & III STEREO
Excellent tuner with indifferent stereo decoding circuit. Best when adapted to use modern outboard decoder.

MANTRA AUDIO

AURAL STIMULATION
Distributed by: Henley Designs
U1235 5111166 www.henleydesigns.co.uk
e-mail: info@henleydesigns.co.uk

ALPHASON NR100S
First class arm, up to present-day standards. Buy carefully though, as there's no service available now.

ARISTON RD11
A one-time king of turntables very similar to the Linn LP12. Now replaced but worth a look at the right price.

LINN AXIS
Uncomplicated, lower-price version of the famous Sondek. Less expensive than some of its stablemates.

GARRARD 301 & 401
Legendary turntables, once fairly plentiful. Great deck for the kitchen table enthusiast. Garrard fans won't look at 'em but cheap and capable. Servicing available.

HADDOCK 228
Recently out-classed by Haddock's updated 228 Special Edition but a proper hi-fi arm for all that. Makers still service.

MICHEL FOCUS ONE
20 years and still going strong. Early runner in the 'modern' turntable cycle with a first class arm. Factory servicing available.

SHURE M75
Recent line-contact improvements have left the M75 behind but the wide range of needles make it a handy tool.

SME 3009 IIS
Evetlasting classic tone-arm. Spares permanently available from SME. No longer the last word but peanuts second-hand.

THORENS TD124
Best classic deck ever! Judging by the prices they fetch it's possible - 78rpm too!

THORENS TD150
Mid-price deck with a keen following. No real difficulty with servicing - novices may find the suspension system unnerving.

TRIO L-0TD
Knockout heavyweight from 1980 with stainless steel 16mm platter! Not a give-away and, beware - spares scarce.

TUNERS

LEAK TROUGHLINE (ORIGINAL)
Interesting ornament but no longer hi-fi. Limited coverage of 88 MHz to 100 MHz only.

LEAK TROUGHLINE II & III MONO
Arguably the best-sounding tuners ever. Adaptation for stereo easy via photo multiplex socket.

LEAK TROUGHLINE III STEREO
Excellent tuner with indifferent stereo decoding circuit. Best when adapted to use modern outboard decoder.

MARAMTZ STB
Possibly the ultimate Tards deck, including an oscilloscope for checking the strength of signal. Expensive even now.
**Choice hi-fi**

Choice hi-fi makes it easy for you to fulfil your sonic dreams. Quality hi-fi is not just about expensive brandnames. It’s about aspiring to the very best sound, about choosing your ideal system from the widest selection in the country, in a unique no-pressure environment.

**Your choice**
- Acoustic Energy
- Advantage
- ATC
- Audible Illusions
- Audio Physic
- B.A.T.
- Boulder
- Bryston
- Cary
- Clear Audio
- Denon
- DNM
- EgglestonWorks
- Electrograph Delphi
- Genelec
- Gryphon
- Graem
- Inver
- J M Lab
- Krell
- Lexicon
- Linx
- Loewe
- Lutron
- Lyra
- Mark Levinson
- Michell Eng.
- Musical Fidelity
- Naim
- NCF
- Nordost
- Oracle
- Ortofon
- Plinius
- P.M.C.
- Primare
- Project
- Quadraspire
- REL
- Rockport
- Roksan
- Rosel
- Sharq
- Siltech
- SME
- Straight Wire
- Sugden
- Tara Labs
- Teac
- Totem
- Transfiguration
- Trichord
- Trilogy
- Van den Hul
- VPI
- Wilson Audio
- Wilson Research
- YBA

---

**Quarterly Sale**

**HI-FI HOME CINEMA MUTIROOM INSTALL BUY / SELL**

<table>
<thead>
<tr>
<th>Components</th>
<th>Our Price</th>
<th>Original Price</th>
<th>New Price</th>
<th>Retail Price</th>
</tr>
</thead>
</table>

---

**Audio Physic**
- Luna Sub (wood)
- Avanti II
- Tempo II

**Audio Research**
- LS50

**CD PLAYERS & DACS**
- CD3 Delta
- CD2

**DACS**
- Mark Levinson No 39
- Meridian 508

**MAGNUM Dynalab P 200 Pre**
- Cary 572SE Monoblocks

**PICTURED**
- Audio Physic Avanti II
- Audio Physic Luna Sub (wood)

---

**Power Amplifiers**

---

**Turntables & analogue**
- Nordost Quatrofil Tonearm Cable
- SME 3022A

---

**Speakers**
- Wilson Audio

---

**Quality**

---

**Pre-Ampers**
- Krell
- Musical Fidelity

---

**Turntables & analogue**
- SME 3022A
- Wilson Audio

---

**Pre-Amplifiers**
- Musical Fidelity
- Audio Research

---

**Power Amplifiers**
- Audio Physic
- Audible Illusions

---

**CD Players & DACs**
- Audio Research
- Cary

---

**HI-FI HOME CINEMA MUTIROOM INSTALL BUY / SELL**

---

**Speakers**
- Wilson Audio

---

**Pre-Ampers**
- Krell
- Musical Fidelity

---

**Power Amplifiers**
- Audio Physic
- Audible Illusions

---

**CD Players & DACs**
- Audio Research
- Cary

---

**HI-FI HOME CINEMA MUTIROOM INSTALL BUY / SELL**

---

**Speakers**
- Wilson Audio

---

**Pre-Ampers**
- Krell
- Musical Fidelity

---

**Power Amplifiers**
- Audio Physic
- Audible Illusions

---

**CD Players & DACs**
- Audio Research
- Cary

---

**HI-FI HOME CINEMA MUTIROOM INSTALL BUY / SELL**

---

**Speakers**
- Wilson Audio

---

**Pre-Ampers**
- Krell
- Musical Fidelity

---

**Power Amplifiers**
- Audio Physic
- Audible Illusions

---

**CD Players & DACs**
- Audio Research
- Cary
No. 70
December 2002

News 97

All the latest from the weird and wonderful world of DIY Hi-Fi.

Bargain Bulbs 98

Nick Lucas describes our new KLC bargain priced valve amp kit.

Book Review 103

Understanding Hi-Fi Circuits by Norman Crowhurst - Reviewed by Andy Grove.

Letters 105

Correspondence from our DIY readers.
PRODUCTS INCLUDE:- Power Amplifiers 30-250W, Preamplifiers, Phono stages, Active Crossovers, Power Supplies, Buffer Amplifiers, Balanced line drivers / receivers, Stepped attenuators, Gold plated connectors, Cables, Capacitors, Resistors, Semiconductors, Transformers, Subwoofers, Loudspeaker drive units

WHITE NOISE
II STATION ROAD
BEARSDEN
GLASGOW
G61-4AW

Web: http://www.wnaudio.com
Email: david.white38@ntlworld.com
Tel: 0141-942-2460 (until 9pm)
Fax: 0141-587-7377

WEBSITE - http://www.wnaudio.com

“Rediscover the beauty of pure sound…”

We have been supplying tubes to the audio market for over 40 years. Only valves that pass our stringent in house QC tests are used for the CVC Premium brand, and our no fuss guarantee ensures your complete peace of mind. When available, we also stock the justifiably famous brands such as Brimar, GEC, Mullard, RCA Telefunken etc. So why compromise? Our sales and technical staff are just a telephone call away. To put it simply……

YOUR NEEDS…OUR BUSINESS.

NEW! Visit our web site at www.chelmervalve.com to view our entire valve “catalogue and buy on line”.

CVC Chelmer Valve Co Ltd
The Stables, Baddow Park, Great Baddow, Chelmsford, Essex CM2 7SY
Tel: +44 1245 241300 Email:sales@chelmervalve.com
Fax: +44 1245 241309 www.chelmervalve.com

Only $59.95 us for 12 Issues!

audioXpress • PO Box 876 • Peterborough, NH 03458-0876 USA • Phone: 603-924-9464
Fax: 603-924-9467 • E-mail: custserv@audioXpress.com

audioXpress • PO Box 53, CROWBOROUGH, EAST SUSSEX, TN6 2BY
TELEPHONE: 01892 654 534

TECHNICAL & GENERAL

SOME NECESSITIES - FROM THE ORIGINAL CLASSIC TURNTABLE SPECIALISTS

CONNOISSEUR

PAP
BD1/2 Drive Belt £12.60 £1.90
BD1/2 Motor Suspension Kit £16.50 £2.50
SAU.2 Headshell £18.50 £2.90
SAU.2 Connecting Lead £16.50 £2.90

GARRARD STANDARD MODELS

301/401 Transcription models
Original Throat pad assembly from £14.50 £2.90
Original Idler lashin spring £3.65 £1.90
Original Brake pad £3.40 £1.90

Options

401 Owners Manual incl. full size mounting template £1.20 £1.90
Replacement 301 control knobs On-Off/Speed select pair £2.50 £2.90
Replacement 301 suppressor unit £7.20 £2.90
Replacement 301 motor pulley (+2%), (-1%), (Std), (+1%) each from £15.60 £2.90
Replacement 301 Chrome mounting bolts nuts, washers, set £7.85 £2.90
Recommended Lubrication (specify) set £7.25 £2.90

GOLDRING/LENCO

Idler wheel (lock-nut or clip fixing) £2.85 £2.90
Idler wheel original £24.65 £2.90
Tension spring £3.85 £2.90
Arm pivot bearings - with fitting instructions £9.85 £1.90
Spindle/Main bearing assembly GL 6970 £21.00 £1.90
GL 7578 £26.00 £3.90
Chassis suspension springs (set of 4) £21.25 £3.90
Headshells £23.25 £2.90
Instruction books £3.25 £1.90

THORENS

T124 series
Idler wheel £29.95 £2.90
Idler wheel our redesigned replacement £14.50 £1.90
Drive belt £24.65 £1.90
Suspension rubbers (‘mushrooms’ ) £17.50 £2.90

T150/156
Drive Belt £19.25 £1.90
Suspension springs (1%), (5ft), (+1%) (set of 3) £14.50 £2.90
Suspension - main bushes (set of 3) £14.50 £2.90
Armboards T150 blank £14.50 £2.90
TD 160 £12.50 £2.90

CECIL WATTS

Dustbugs & spares - incl. Preener wicks £21.50 £2.90
Cartridges and styli for 78s and Mono LPs in addition to current Stereo LPs £22.00 £2.90

Cartridges and styli for 78s and Mono LPs in addition to current Stereo LPs £22.00 £2.90

TECHNICAL & GENERAL

PO BOX 53, CROWNBOURGH, EAST SUSSEX, TN6 2BY
TELEPHONE: 01892 654 534
VISATON'S NEW RELEASE

Visaton Loudspeakers from Germany have released a high-end series of shelf-mounted loudspeaker kits. The ARIA 1 is a two-way system using their G20SC tweeter and the titanium coned Ti-100, both units are magnetically sealed. The ARIA 2 uses one G20SC tweeter and 2 Ti-100s per 'speaker. The ARIA DIPOL 1 is equipped with three G20SCs and one Ti-100. This one is switchable, to use in a dipole or in a direct radiating set-up. These speakers are ideal for surround-sound systems and in home cinema. The kits are available from:-

Wilmslow Audio Ltd on 01455 286603.
Visatons site is www.visaton.com

FRANCOPHILE AUDIOPHILE

This site has to be seen to be believed. It's not the best site layout, but the picture content is the selling point. It will take a little while to download the homepage as all the pics are provided in 60kB jpegs and there are about 20 of them. The site details the visit of a man to the hi-fi room of Gilles Molinier. As the supplied picture suggests he is into his hi-fi. All the amplifiers and speakers shown are home made.

website - http://www3.sympatico.ca/rsfr/France.htm

"A" IS FOR AUDIO-GRAGE

New from "A" Audiosolutions is Lundahl transformers. Their range includes matching, input, interstage, mains and output C-core transformers manufactured in Sweden. Their output transformers are manufactured to suit most valve types in push-pull and single-ended applications and are air gapped to suit individual applications. The primaries are multi-section and can be configured to give different impedances. Lundahl have a world wide following in studio and professional fields. Typical price for 300b or 2A3 single-ended output would be £100 plus carriage.

Also available is Dynamicap. Manufactured in the USA, this premium range of polypropylene signal and crossover capacitors are available with a plastic wrap finish and also a coated finish, each giving slightly different results - one is much sweeter, the other more dynamic. They are wound to give minimal 'time smearing' using a very special technique. Typical price for 0.1 uf £10 each.

"A" Audiosolutions
01977 798844

WHO IS TONY WELSH?

A wonderful home-made site that sells unusual audio grade bits and bobs, obviously a passion for Tony Welsh the owner. He sells power tubes and hi-end audio tubes. For example a 6C33C-B sells for £13.95. There are valve sockets, Russian ceramic and military capacitors and Russian paper-in-oil capacitors for high voltage power supplies. Also sold are CT hand keys (telegraphy equipment) and vintage computers.

website - http://www.tonywelsh.com

OUTBACK KITS

Based in Victoria, Australia, Aksa are makers and suppliers of audio grade kit sets. As the site explains, "The Aksa family of amplifiers use solid-state sophistication and efficiency to produce a valve sound." Their range consists of the Aksa 55, a 55Watt amplifier module, the Aksa 100, a 100Watter, a TLP, a unity gain, valve pre-amplifier module and the Alcsonics, a two-way bass reflex speaker. Please note the modules do not come with power supply modules, which are left to you. This is a well though out site and you can buy online.

www.aksaonline.com
If you've always thought of valve amps as temperamental and expensive beasts, think again. World Audio Design’s latest kit is designed with the budget conscious beginner in mind, explains Nick Lucas.

The Kec182 was created from a brief that demanded simplicity, ease of build and a super low cost. In order to achieve a reasonable power output we went for a push-pull amplifier.

To satisfy the simplicity aspect we went the four-valve route, with two tubes per channel. The valve would have to be a triode/output pentode type, rather like the one we use in our classic HD83, the ECL86, but due to the higher cost of this particular valve, it was not to be. Consequently, we chose the ECL82, used heavily in the valve’s heyday in radios, record players and TVs. This tube is readily available and has a good sound, together with a good price. In push-pull mode it delivers about 9Watts. Remember this is a budget amplifier and has been devised to give the true beginner the opportunity to build a valve amplifier without breaking the bank, or his back for that matter - valve amps are renowned for their heavy weight.

The Kec182 has a voltage supply of 235Vdc, half that of our 6550 kits, and each tube consumes around 30mA, not as scary as your everyday valve amplifier kit that may provide, say, 30Watts. You would in fact be surprised as to how loud the amp goes, all the same. In an early test of the prototype I used Quad ESL988s, which have low sensitivity. I still achieved a good listening level without any break-up. But realistically you need a speaker of around 89dB or above. This is possible at a budget price - try the smaller Triangle models, or a Tannoy mX3 or even one of the older Missions like the 773e.

Alternatively, if you want to try a kit loudspeaker check out the Adire Audio HE10.1, as reviewed in our October 2002 issue.

Experience has shown me it is unwise to shortcut on output transformer quality. It is a high cost item that needs to be kept that way to preserve tonal purity. We maintained full quality here; the output transformers are multi-layer, segmented types with plenty of metal in the core.

Savings made were in the chassis. There's no anodised front plate, chromed knobs or transformer caps, just a simple but elegant black box. You will see that the front has only a volume control, and it is fed by one pair of phono sockets. A selector and tape/source switch were not used in this amplifier as they are tricky to wire up, and the aim was to make it easy to build. In fact, in many ways the Kec182 would be great powering
Kec182 Valve Amplifier

Signal circuit (one channel)

V1N2(triode)- ECL82
V3N4(triode)- ECL82
V3N4(pentode)- ECL82

Power supply unit
(both channels)

CAMER PIN LAYOUT

CIRCUIT DESCRIPTION
BY ANDY GROVE

The Kec182 kit amplifier follows conventional practice, using the Russian version of the trusty ECL82 triode-output pentode valve. This is a sweet little valve which has made an appearance in vast numbers of TVs, record players and radios over the years. The pentode section was used as a scan valve in small black and white TV sets, as well as an audio output valve. There is a slightly more powerful version, the ECL86, but these aren't so easily available, and I think that the only ones around are either N.O.S. (New Old Stock) or from obscure and possibly suspect sources.

The two triode sections are set up as a Floating Paraphase phase splitter, with an unbalanced bridge instead of the usual T network of resistors. The imbalance of resistor values between R16/R17 and R18/R19 makes up for the finite gain.
of the actual inverter valve, thereby giving a balanced push-pull voltage to the output valves. Incidentally, there isn’t enough HT (due to maximums imposed by the output valves) or gain available from the triode sections to use much else but the floating paraphase arrangement. The output valves are set up with a bit of Ultra Linear to the screen grids. This linearises the valves and reduces screen dissipation at high output levels. Feedback is taken from the output transformer secondary in the usual way and fed to the cathode of the input valve.

The power supply is again conventional, with a solid-state bridge and CLC filter for the main HT voltage and a bit extra for the input stage to keep hum down.

THE KIT

The Kec182 is extremely compact measuring 30cm wide, 23.5cm deep and 11cm height with feet and is entirely self enclosed. Do not fear, the valves are visible through the four upper circular vent holes (one directly above each valve) and two on both sides, so you don’t have to take the lid off to impress your friends with the valve glow.

Designed with budget in mind we have kept the look simple with the minimalist front panel holding the volume potentiometer, crowned with a good looking plastic knob from Cliff. The two-part chassis is constructed from 1.6mm mild steel with a durable black powder coat finish. The whole unit is very sturdy but manageable, weighing in at 9kgs.

The signal input is in the form of a pair of gold plated RCA phono sockets that sit at the rear of the chassis. The speaker sockets accept 4mm banana plugs as well as bare wire. The mains switch is positioned at the rear of the amplifier, on the right hand corner for easy access. This avoids problems with hum pick-up from the mains wiring close to the input valve, a potential problem when the mains switch is situated on the front panel. Mains power is received via an IEC lead. The rear panel also sports an earth post.

THE BUILD

The design and the assembly of the Kec182 is based on a printed circuit (PCB) board, a method that favours easy build as component-to-component connections are done for you in the form of PCB tracks. There is a school of thought that says valves and PCBs do not mix well which is true to a certain degree. Valve amplifiers that use the larger octal base valves (KT88, EL34) and UX4 base valves (300B, 2A3) tend to generate a lot of heat and have quite a high current passing through the tracks. The heat generated in the thin copper tracks can physically distress some boards. However, small amplifiers such as our Kec182 and our Ke184 and pre-amplifiers like our PRE II and PHONO II use 9BA (9 pin) valves. These tend to operate at much lower currents and emit a fraction of the heat.

The PCB is easy to follow with all component names, locations and orientations shown clearly. “Orientation” I hear you say! Fear
without any need for adjustment.

The kit will come with comprehensive instructions taking you through the build step by step. Numerous diagrams and pictures are provided to help you along the way. We have a help-line manned 9.00am - 5.30pm Mon-Fri, e-mail assistance and a back-to-base repair facility that won't cost the earth.

**SOUND QUALITY BY SIMON POPE**

The Kec182 is a bit of a steal at the price. Its sound quality at least equals any £600 amplifier you can name on the market, plus it has all the sonic virtues that come with a pure valve amp design.

Indeed, purity is the key to this amplifier's design and sound. Because there's very little to get in the way of the signal what you get is an exceptionally sweet and simple sound that also has a superbly wholesome roundness to it. A high quality recording of Mahler's Das Lied Von Der Erde on Reference Recordings showed that the Kec182 faithfully reproduced all the depth and space of a full symphonic orchestra without any problems. Violins were smooth and sweet, as was percussion (which virtually sparkled) and the woodwind section was especially impressive, with a spacious and airy sound.

A run through Miles Davis's Kind Of Blue saw the little integrated delivering a detailed and precise sound that highlighted the warmth of Coltrane's tenor sax and the rich, deep sound of the upright bass. Rock and Pop records such as Radiohead's 'Lucky' demonstrated that the valves inside the amp, whilst small, are quite robust sounding, with commendable clout and bass depth for a humble budget 9W valve amp. This is a great introduction to the sonic art of the valve amp and a big upgrade for anybody with a mid-price solid-state amp that wishes to swap over to something more musically engaging, for a price that's virtually as cheap as chips!

**MEASURED PERFORMANCE**

- Frequency response +/-3dB 15Hz - 75kHz
- Power output 8 watts into an 8 ohm load
- Sensitivity 850mV (suitable for CD)
- Noise 0.5mV

**Kec182 valve amplifier parts list:**

**RESISTORS:**

<table>
<thead>
<tr>
<th>part No.</th>
<th>Description</th>
<th>quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>R1</td>
<td>10K, 1W</td>
<td>1</td>
</tr>
<tr>
<td>R2</td>
<td>100K, 2W</td>
<td>1</td>
</tr>
<tr>
<td>R3</td>
<td>10K, 2W</td>
<td>1</td>
</tr>
<tr>
<td>R4</td>
<td>1M, 0.5W</td>
<td>1</td>
</tr>
<tr>
<td>R5</td>
<td>1M, 0.5W</td>
<td>1</td>
</tr>
<tr>
<td>R6</td>
<td>1K, 0.5W</td>
<td>1</td>
</tr>
<tr>
<td>R7</td>
<td>1K, 0.5W</td>
<td>1</td>
</tr>
<tr>
<td>R8</td>
<td>220K, 2W</td>
<td>1</td>
</tr>
<tr>
<td>R9</td>
<td>220K, 2W</td>
<td>1</td>
</tr>
<tr>
<td>R10</td>
<td>220R, 0.5W</td>
<td>1</td>
</tr>
<tr>
<td>R11</td>
<td>220R, 0.5W</td>
<td>1</td>
</tr>
<tr>
<td>R12</td>
<td>3.3K, 0.5W</td>
<td>1</td>
</tr>
<tr>
<td>R13</td>
<td>3.3K, 0.5W</td>
<td>1</td>
</tr>
<tr>
<td>R14</td>
<td>220K, 2W</td>
<td>1</td>
</tr>
<tr>
<td>R15</td>
<td>220K, 2W</td>
<td>1</td>
</tr>
<tr>
<td>R16</td>
<td>1M, 0.5W</td>
<td>1</td>
</tr>
<tr>
<td>R17</td>
<td>1M, 0.5W</td>
<td>1</td>
</tr>
<tr>
<td>R18</td>
<td>1M, 0.5W</td>
<td>1</td>
</tr>
<tr>
<td>R19</td>
<td>1.1M, 0.5W</td>
<td>1</td>
</tr>
<tr>
<td>R20</td>
<td>1M, 0.5W</td>
<td>1</td>
</tr>
<tr>
<td>R21</td>
<td>1M, 0.5W</td>
<td>1</td>
</tr>
<tr>
<td>R22</td>
<td>1M, 0.5W</td>
<td>1</td>
</tr>
<tr>
<td>R23</td>
<td>1M, 0.5W</td>
<td>1</td>
</tr>
<tr>
<td>R24</td>
<td>10K, 0.5W</td>
<td>1</td>
</tr>
<tr>
<td>R25</td>
<td>10K, 0.5W</td>
<td>1</td>
</tr>
<tr>
<td>R26</td>
<td>10K, 0.5W</td>
<td>1</td>
</tr>
<tr>
<td>R27</td>
<td>10K, 0.5W</td>
<td>1</td>
</tr>
<tr>
<td>R28</td>
<td>680R, 3W</td>
<td>1</td>
</tr>
<tr>
<td>R29</td>
<td>680R, 3W</td>
<td>1</td>
</tr>
<tr>
<td>R30</td>
<td>680R, 3W</td>
<td>1</td>
</tr>
<tr>
<td>R31</td>
<td>680R, 3W</td>
<td>1</td>
</tr>
<tr>
<td>R32</td>
<td>100R, 0.5W</td>
<td>1</td>
</tr>
<tr>
<td>R33</td>
<td>100R, 0.5W</td>
<td>1</td>
</tr>
<tr>
<td>R34</td>
<td>100R, 0.5W</td>
<td>1</td>
</tr>
<tr>
<td>R35</td>
<td>100R, 0.5W</td>
<td>1</td>
</tr>
<tr>
<td>R36</td>
<td>3.3K, 0.5W</td>
<td>1</td>
</tr>
<tr>
<td>R37</td>
<td>3.3K, 0.5W</td>
<td>1</td>
</tr>
</tbody>
</table>

**CAPACITORS:**

<table>
<thead>
<tr>
<th>part No.</th>
<th>Description</th>
<th>quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>C1</td>
<td>100uf 400V</td>
<td>1</td>
</tr>
<tr>
<td>C2</td>
<td>100uf 400V</td>
<td>1</td>
</tr>
<tr>
<td>C3</td>
<td>100uf 400V</td>
<td>1</td>
</tr>
<tr>
<td>C4</td>
<td>1uf 400V</td>
<td>1</td>
</tr>
<tr>
<td>C5</td>
<td>not used</td>
<td>1</td>
</tr>
<tr>
<td>C6</td>
<td>47uf, 10V</td>
<td>1</td>
</tr>
<tr>
<td>C7</td>
<td>47uf, 10V</td>
<td>1</td>
</tr>
<tr>
<td>C8</td>
<td>0.22uf, 400V</td>
<td>1</td>
</tr>
<tr>
<td>C9</td>
<td>0.22uf, 400V</td>
<td>1</td>
</tr>
<tr>
<td>C10</td>
<td>0.22uf, 400V</td>
<td>1</td>
</tr>
<tr>
<td>C11</td>
<td>0.22uf, 400V</td>
<td>1</td>
</tr>
<tr>
<td>C12</td>
<td>100uf, 63V</td>
<td>1</td>
</tr>
<tr>
<td>C13</td>
<td>100uf, 63V</td>
<td>1</td>
</tr>
<tr>
<td>C14</td>
<td>100uf, 63V</td>
<td>1</td>
</tr>
<tr>
<td>C15</td>
<td>100uf, 63V</td>
<td>1</td>
</tr>
</tbody>
</table>
| BRIDGE RECTIFIER
| BR1      | KBU4J       | 1        |

**TRANSFORMERS**

<table>
<thead>
<tr>
<th>part No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Choke, L1</td>
<td>250mA, 1H</td>
</tr>
<tr>
<td>Output transformer</td>
<td>2</td>
</tr>
<tr>
<td>Mains transformer</td>
<td>1</td>
</tr>
</tbody>
</table>

**VALVES**

<table>
<thead>
<tr>
<th>part No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECL82</td>
<td>4</td>
</tr>
</tbody>
</table>

**HARDWARE**

<table>
<thead>
<tr>
<th>part No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>IEC mains &amp; switch</td>
<td>1</td>
</tr>
<tr>
<td>500mA fuse, slow blow</td>
<td>1</td>
</tr>
<tr>
<td>Black phono sockets</td>
<td>1</td>
</tr>
<tr>
<td>Red phono sockets</td>
<td>1</td>
</tr>
<tr>
<td>Speaker terminals</td>
<td>2 pairs</td>
</tr>
<tr>
<td>Self adhesive feet</td>
<td>4</td>
</tr>
<tr>
<td>B9A valve base</td>
<td>4</td>
</tr>
<tr>
<td>M6 fibre washers</td>
<td>4</td>
</tr>
<tr>
<td>M3 x 6mm screw</td>
<td>8</td>
</tr>
</tbody>
</table>

The Kec182 amplifier kit is available from World Audio Design as from 1st December 2002. Tel/fax: 00 44 (0) 1908 218836 or order on-line at www.worldaudiodesign.co.uk

Kec183 amplifier kit (UK price) £195.00 (inc. vat & carriage)

Kec183 amplifier kit (EU price) £195.00 (inc. vat, exc. carriage)

Kec183 amplifier kit (Overseas price) £170.00 (exc. carriage)

Safety gloves (UK price) £14.00 (inc. vat & carriage)

Safety gloves (EU price) £14.00 (inc. vat, exc. carriage)

Safety gloves (Overseas price) £12.00 (exc. carriage)
COMPONENT SUPPLIERS

"A" Audiosolutions
36 Love Lane
Pontrilas
West Yorkshire
WF8 4EG
Tel: 01977 988 844
Email: audiosolutions@ao.com

KIMREX - resistors - 2w £1.10ea.
5w £2.20ea.
GOLDPOINT stepped attenuators - true ladder type stereo/mono
J - electrolytic capacitors 100uf + 100uf /suppliers of the largest range of components for the Audiofile Kit builder. Valve amplification data and vintage circuits also available. See the double page spread in the back ben of the main section for extra & more detailed information.

Audiofile Kit Suppliers
Audio Note (UK Ltd)
Unit C, Peacock Ind. Est.
125-127 Davidge Road
Hove, East Sussex BN3 1SG
Tel: 01273 220 511
Fax: 01273 731 291
Suppliers of a large amount of components for the Audiofile Kit builder. Valve amplification data and vintage circuits also available. See the double page spread in the back ben of the main section for extra & more detailed information.

Falcom DIY Speakers
Falcom Acoustics Ltd.,
Tabor House,
Norwich Road, Mulbarton,
Norfolk
NR11 8JF
Tel: 01508 578 727
UK distributors of FOCAL drive units & kits, and ETION loudspeakers, plus SOLEN (SCR-Chateauroux) polypropylene capacitors. We are the largest specialist Audio-inductor manufacturer in the UK. We also stock Audio Amateur Publications and Audio Computer Software and a comprehensive range of DIY speaker kits, parts, accessories and books. Please send large SAE (£4p) for free price list. "Everything but the wood".

IPL Acoustics, Chelsea Villa, Torrs Park, Ilfracombe, North Devon, EX34 8AY
Tel/Fax: 01271 867 439
Website: www.iplacoustics.co.uk
IPL Acoustics supply a range of 7 transmission line, 3 conversional, speaker kits, and kits for centre speakers and active subwoofers. We also supply a full range of drive units from Audax, SEAS, Morel and Legend Acoustics (Ribbon Tweeters) as well as custom built metal cone drivers. Also included is a range of capacitors, inductors and quality cabinet accessories as well as Silver Plated PTFE insulated cables.

Specialist Upgrade Services
AudioCom (UK), Unit 14 Pier Road,
Pembroke Dock,
Pembroke, SA72 6TR
Tel: 01646 685 601
Fax: 01646 685 602
Website: www.audiocom-uk.com
E-Mail: enquiries@audiocom-uk.com
Receive the full potential of your digital source with CD/DVD upgrades from audiocom Available is the highly acclaimed SUPERLOCK master clock oscillator. (Dave Bensman fits the S- Clock to the YAESU V-10SE word clock and comments, "there was no one area of music reproduction which didn't improve") SUPERLOCK super low noise power supply, & Q-power ultra-low noise discrete regulators. Why not contact us to see how this service can be adapted to suit your requirements?

Valve and Output Transformer Suppliers
Wilson Valves, 2 Bars Avenue,
Golcar, Huddersfield,
West Yorkshire HD7 4LZ.
Tel: 01484 654 650/844554
Fax: 01484 655 699
Email: wilsonv@zoo.co.uk
We stock over 500 different types of valves, NOS and New. Please send a SAE for full list. No charge for matching. Most major credit cards accepted.

Warfords Valves
3 Ryall Close, Bricket Wood,
St. Albans, Herts AL2 3TS
Tel: 01923 893 270
Specialist in new stock and current production valves. Sole UK distributor of the Harma Diamond range selected for their superior performance. Huge range held, stockists of Mullard, GE, Philips, National, Brimar, Sylvia, Telefunken, RCA, MOV and many more. All valves are new boxed and guaranteed. For free price list and specialists advice call or fax Derek Rocco, Warfords Valves.

Chelmer Valve Company Ltd
The Stables, Baddow Park
Great Baddow, Chelmsford, Essex CM2 7SY
Tel: 01245 243 100
Fax: 01245 243 109.
Email: sales@chelmervalve.com
Website: www.chelmervalve.com
Supplier of premium range of audio valves, other valves and components also available. (Please see our main advertisement in this supplement).

Langreux Supplies Ltd
1 Mayo Road, Croydon,
Surrey, CRO 2QP
Tel: 020 8884 1166
Fax: 020 888 43056
One of the largest distributors of electronic valves, tubes and semi-conductors in the UK by original UK and USA manufacturers. Obsolete types are a specialty. We also supply a full range of valve equipment ( Made to order) plus RF, amplifiers and valve equipment. (Made to order) Supplier of premium range of vintage valves, other valves and components also available. (Please see our main advertisement in this supplement).

Billington Export Ltd.
102, The Mall, Billingham, Cleveland.
Tel: 01642 783 222
Fax: 01642 783 223
Email: sales@billingtonexport.co.uk
We are the largest suppliers of high grade, valve and solid state equipment Classic and vintage equipment always sought, working or not. Catalogue £3.50 redeemable on first order over £30.00
Understanding Hi-Fi Circuits by Norman Crowhurst.
Reviewed by Andy Grove

This book was originally published in 1957, during the 'Golden Age of Audio', a time before the evil silver discs invaded our homes. Norman Crowhurst was a well respected technical author of the period who trusted his ears as much as his oscilloscope.

The first chapter, 'The Approach to Hi-Fi' starts the reader off at the dawn of audio. Here Crowhurst tries to get the message through that there is no panacea for all of audio's ills; good sound comes from good engineering practice. My favourite part is the picture of "Triode Man" and "Pentode Man". That alone is worth buying the book for! "Triode Man" is a refined sort of chap with top hat and tails while "Pentode Man" looks like one of Al Capone's henchmen!

In Chapter Two Crowhurst covers most of the output stage types in use at the time, using the 5881 valve connected in various ways to illustrate the relevant points. The efficiencies, distortions and intrinsic damping factors of the different types are discussed. Various types of operation are covered including straight triode and pentode operation, Ultra Linear and Unity Coupling. Crowhurst shows that some of these configurations, although seeming to offer great benefits at first glance, fall apart when given a more stringent analysis.

The following chapter, 'Feedback and Damping', follows the theme of the preceding chapter, by further developing the theory of the output stage/speaker interface and the influence feedback has upon it. Some useful data charts are given which show the maximum feedback ratios versus maximally flat response for a given set of time constants. Crowhurst uses these two chapters to illustrate that even though an amplifier may give an impeccable measured performance into a resistive load gremlins may and usually do, rear their heads under real world conditions.

Chapter Three - 'Inverter and Driver stages' - covers just that. Most of the common phase-splitters are covered, although some gained more popularity or were invented after this book was published so are either absent or not so well covered. However the more commonly used ones, like the paraphase and concertina, are analysed with some simple, intuitive mathematics and the use of charts. There is an interesting table which compares the common phase splitters on a one-to-one basis. Once again Crowhurst exposes some hidden problems which probably result in a less than perfect sound from many amplifiers.

Chapter Four - 'Input Stages' takes a look at the amplifier's input stage, at both the preamp and power amp. Here, of course, noise and hum are important. Crowhurst gives useful information on how to manage these by sensible design and selection of the right valve.

'Matching' is a very brief chapter which covers some of the theory involved in impedance matching and load matching of the output stage.

'Equalisation' is a bit more of a meaty chapter and discusses the requirements of cutter head, RIAA and microphone matching, there are no complex mathematical formulae so the coverage is limited. However the reader can gain some knowledge as to why equalization is necessary and why sometimes it can cause more problems than it is intended to solve. Crowhurst cites an example of a microphone which was electronically equalized to give the flattest response attained up to that date. However there was a severe time domain problem inherent in the mic which made the thing unusable.

'Speaker Distribution and Crossovers' is a brief chapter, as Crowhurst was concentrating on the amplifier side of the hi-fi system. He gives some information on the different types of crossovers in their basic forms and even goes into active crossovers some way. He does an interesting analysis of a multi-amplifier active system and comes up with some interesting results. The penultimate chapters 'Loudness and Volume Controls' and 'Tone Controls' go into some detail on their subjects. Crowhurst reveals some very ingenious and flexible control circuits, including regular bass-treble controls as well as sophisticated variable slope controls and filters similar to those found on vintage preamps from manufacturers such as Leak and QUAD.

The final chapter 'Overall View of Hi-Fi' is a short conclusion where Crowhurst gives a little thought to a complete hi-fi system.

This book is excellent in every way. It was written by one of the leading lights of hi-fi. In it you will find clear, concise information upon a variety of subjects.

This book is available from World Library p68-P69 also through our website

www.worldaudiodesign.co.uk

Code 1820
paperback, 224pp, 140mm x 220mm
Price £13.95 + £2.00 UK P&P
# Langrex Supplies Ltd

DISTRIBUTORS OF ELECTRONIC VALVES, TUBES AND SEMICONDUCTORS AND I.C.S.

1 MAYO ROAD • CROYDON • SURREY CRO 2QP

E-MAIL LANGREX@AOL.COM

24 HOURS EXPRESS MAIL ORDER SERVICE ON STOCK ITEMS

A selection of our stocks of **New Original Valves/Tubes.** Many other brands available.

## Standard Types

<table>
<thead>
<tr>
<th>Type</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECC83</td>
<td>4.00</td>
</tr>
<tr>
<td>ECC85</td>
<td>5.00</td>
</tr>
<tr>
<td>ECC88</td>
<td>6.00</td>
</tr>
<tr>
<td>ECC88</td>
<td>10.00</td>
</tr>
<tr>
<td>ECH81</td>
<td>3.00</td>
</tr>
<tr>
<td>ECH82</td>
<td>5.00</td>
</tr>
<tr>
<td>ECL36</td>
<td>10.00</td>
</tr>
<tr>
<td>EL36</td>
<td>5.00</td>
</tr>
<tr>
<td>EL37</td>
<td>10.00</td>
</tr>
<tr>
<td>EZ81</td>
<td>5.00</td>
</tr>
<tr>
<td>EZ82</td>
<td>5.00</td>
</tr>
<tr>
<td>GZ33/37</td>
<td>20.00</td>
</tr>
<tr>
<td>GZ32</td>
<td>25.00</td>
</tr>
<tr>
<td>5Z4G</td>
<td>6.00</td>
</tr>
<tr>
<td>6V6GT</td>
<td>7.50</td>
</tr>
<tr>
<td>12BH7</td>
<td>12.00</td>
</tr>
<tr>
<td>12E1</td>
<td>10.00</td>
</tr>
<tr>
<td>13E1</td>
<td>85.00</td>
</tr>
<tr>
<td>807</td>
<td>7.50</td>
</tr>
<tr>
<td>811A</td>
<td>25.00</td>
</tr>
<tr>
<td>6080</td>
<td>10.00</td>
</tr>
</tbody>
</table>

## Special Quality Types

<table>
<thead>
<tr>
<th>Type</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>A290/CV4090</td>
<td>12.50</td>
</tr>
<tr>
<td>E282</td>
<td>7.50</td>
</tr>
<tr>
<td>E283</td>
<td>7.50</td>
</tr>
<tr>
<td>E286/CV2492</td>
<td>15.00</td>
</tr>
<tr>
<td>E288/CV4024</td>
<td>6.00</td>
</tr>
<tr>
<td>E288/CV4024</td>
<td>7.50</td>
</tr>
<tr>
<td>E289/CV4030</td>
<td>15.00</td>
</tr>
<tr>
<td>E289/CV4040</td>
<td>17.50</td>
</tr>
<tr>
<td>E289/M8136</td>
<td>15.00</td>
</tr>
<tr>
<td>E289/4240</td>
<td>40.00</td>
</tr>
<tr>
<td>5B4GY</td>
<td>7.50</td>
</tr>
<tr>
<td>5U4GB</td>
<td>15.00</td>
</tr>
<tr>
<td>5Y3WGT</td>
<td>5.00</td>
</tr>
<tr>
<td>6B8XGT</td>
<td>7.50</td>
</tr>
<tr>
<td>6B84</td>
<td>22.00</td>
</tr>
<tr>
<td>6FQ7</td>
<td>7.50</td>
</tr>
<tr>
<td>6LG6C</td>
<td>20.00</td>
</tr>
<tr>
<td>6LG6G</td>
<td>15.00</td>
</tr>
<tr>
<td>12AX7WA</td>
<td>6.00</td>
</tr>
</tbody>
</table>

## American Types

<table>
<thead>
<tr>
<th>Type</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>5840</td>
<td>7.50</td>
</tr>
<tr>
<td>5U40</td>
<td>15.00</td>
</tr>
<tr>
<td>5Y3WGT</td>
<td>5.00</td>
</tr>
<tr>
<td>6B8XGT</td>
<td>7.50</td>
</tr>
<tr>
<td>6B84</td>
<td>22.00</td>
</tr>
<tr>
<td>6FQ7</td>
<td>7.50</td>
</tr>
<tr>
<td>6LG6C</td>
<td>20.00</td>
</tr>
<tr>
<td>6LG6G</td>
<td>15.00</td>
</tr>
</tbody>
</table>

## Other Types

<table>
<thead>
<tr>
<th>Type</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>E88CC</td>
<td>4.00</td>
</tr>
<tr>
<td>ECC81</td>
<td>3.00</td>
</tr>
<tr>
<td>ECC82</td>
<td>6.00</td>
</tr>
<tr>
<td>ECC83</td>
<td>8.00</td>
</tr>
<tr>
<td>EF86</td>
<td>5.00</td>
</tr>
<tr>
<td>EL34</td>
<td>6.00</td>
</tr>
<tr>
<td>EL37</td>
<td>7.50</td>
</tr>
<tr>
<td>EL84</td>
<td>8.00</td>
</tr>
<tr>
<td>EL34</td>
<td>12.00</td>
</tr>
<tr>
<td>E82CC</td>
<td>3.00</td>
</tr>
<tr>
<td>ECC83</td>
<td>8.00</td>
</tr>
<tr>
<td>ECC82</td>
<td>10.00</td>
</tr>
<tr>
<td>ECC81</td>
<td>10.00</td>
</tr>
<tr>
<td>EL34</td>
<td>15.00</td>
</tr>
<tr>
<td>EL37</td>
<td>20.00</td>
</tr>
<tr>
<td>EL84</td>
<td>25.00</td>
</tr>
<tr>
<td>ECC83</td>
<td>5.00</td>
</tr>
<tr>
<td>ECC82</td>
<td>7.50</td>
</tr>
<tr>
<td>ECC81</td>
<td>7.50</td>
</tr>
<tr>
<td>EL34</td>
<td>17.50</td>
</tr>
<tr>
<td>ECC83</td>
<td>20.00</td>
</tr>
<tr>
<td>ECC82</td>
<td>25.00</td>
</tr>
<tr>
<td>ECC81</td>
<td>25.00</td>
</tr>
<tr>
<td>EL34</td>
<td>30.00</td>
</tr>
<tr>
<td>EL84</td>
<td>35.00</td>
</tr>
</tbody>
</table>

## Watford Valves

7 DAYS A WEEK 9AM - 9PM The Audiophiles Choice
All output valves multi-tested and digitally matched
Full no quibble guarantee. Expert advice on all valve amps

---

**QUAD II REVALVE SPECIAL OFFER**

The Harma KT66 has become the industry choice as the closest in performance to the G.E.C. KT66 in these classic amps. This month you can revalue and revitalise your quad at a fraction of the normal cost.

- **KT66** Harma only £130 The set plus carriage and VAT.
- **6C33C** Philco PC900 at £8.50 each.

**ATTENTION ALL 6C33 USERS & GRAAF OWNERS**

We are renowned for supplying the high grade military version of the 6C33C. We have selected items which have been matched on plate current & transconductance at the special offer price of £23 each.

Also PC900 Philips on special at £9.50 each.

---

**WATFORD VALVES 3 Ryall Close,**
Bricket Wood, St Albans, Herts AL2 3TS

Fast mail order/next day delivery/World Wide shipping

1000's more valves stocked. Prices exclude VAT and carriage.

**Fax:** 01923 679297

www.watfordvalves.com
SILVER DREAM AMPS

Dear HFVV supplement,

As a long term music lover I have always been interested in getting around the hype surrounding hi-fi components. Several years ago when my interest was at its peak I experimented with various speaker designs and eventually built my own from the panels culled from 4 quad ESL57s running off a pair of vintage BTH valve amps, which came from Mike Pointer of Station Sounds. When one eventually gave up the ghost with a burnt out 40 year old mains transformer after being left on all night (wires please note!) I sold them and bought a pair of Magnaplanar MG3 American high-end panel speakers. I still use them, having been unable to find better; they are like electrostats, but with more low-end punch and I would recommend anybody to try them. Even the smallest SMGa (s/h roughly £350) knocked a box into a cocked hat for clarity.

I built a transistor amplifier from Wireless World which was highly regarded by all, until that died after being wrongly wired to the mains during its service by yours truly at 3 o’clock in the morning. It literally blew up in my face, which was peering into circuits at the time, despite having checked and double checked five times. This prompted me to go against my grain and buy something ready made. After trying various designs I decided I wanted a pair of Audion Silver Knights but couldn’t get any for the right price so I bought a Krell as a stopgap while I checked out other designs I decided I wanted a pair of the rest. I then re-designed the internal layout on the tagboards to accommodate the volume control - a Danish Audio Connect Stepped Attenuator run between the signal input and first stage to allow finite control of the input signal for each amp independently. This was to ensure no HF signal losses caused by cable capacitance if they were mounted externally in a separate box like, for example, Ben Duncan’s Passion. The DACTS were held in place with home-made brackets and all the internal signal wire was the thinnest PTFE covered wire I could find (PTFE has the next lowest insulator capacitance to air, so it’s the first choice).

All the screws were changed for stainless steel from a local industrial fastener shop and a remote control shaft was run between the DACT attenuators and the knob on the front. All the metalwork was done in-house with readily available tools. The cutters came from local engineering tools suppliers.

The Yin / Yang symbols were from a New Age suppliers, and the blue LEDs from Farnell - as was electronics, the wire and the elegant on/off toggle switch. The original black sprayed chassis did nothing for me so I had it chromed by a specialist car chromers for the best job. Then it was all put together on my front room floor over a couple of weeks.

I wanted a unique piece of art that nobody else had in the world, that had a practical use. I think I got it.

The sound was exactly what I was looking for, full, rich, punchy with plenty of detail and no nasses. It’s a very fatigue free listen when played back on my masterlink 24-bit studio CD copier via my own design of speaker cables, which has impedance equalisers called Le Scarbe in-line just before the crossovers, and a Francenstein Actif on the CD output. Both are available from one-time HFVV scribe Richard Price of Perfect Pitch products. They are very affordable and highly recommended.

Robert Hardcastle

Yorks

We try and make the amps as pleasing to the eye as to the ear, Robert, but to keep costs low we concentrate primarily on the sound as I’m sure you understand. However, as you’ve discovered, a little creativity coupled with some searching can reap rewards and transform your kit amp into something that almost doubles as an ornament. Also it’s good that you note the amps will run a pair of power hungry ‘Maggies’ - they have a beautifully transparent and airy sound which suits the sound of this type of single-ended amp. Providing you don’t want to scare the horses or drive out your neighbours, then a 20W valve amp such as ours, with its hefty output transformers, will drive virtually anything. After all, they’re a great match for Quad electrostats, which aren’t exactly sensitive!

Nick Lucas

Dear HFVV supplement,

As a long term music lover I have always been interested in getting around the hype surrounding hi-fi components. Several years ago when my interest was at its peak I experimented with various speaker designs and eventually built my own from the panels culled from 4 quad ESL57s running off a pair of vintage BTH valve amps, which came from Mike Pointer of Station Sounds. When one eventually gave up the ghost with a burnt out 40 year old mains transformer after being left on all night (wires please note!) I sold them and bought a pair of Magnaplanar MG3 American high-end panel speakers. I still use them, having been unable to find better; they are like electrostats, but with more low-end punch and I would recommend anybody to try them. Even the smallest SMGa (s/h roughly £350) knocked a box into a cocked hat for clarity.

I built a transistor amplifier from Wireless World which was highly regarded by all, until that died after being wrongly wired to the mains during its service by yours truly at 3 o’clock in the morning. It literally blew up in my face, which was peering into circuits at the time, despite having checked and double checked five times. This prompted me to go against my grain and buy something ready made. After trying various designs I decided I wanted a pair of Audion Silver Knights but couldn’t get any for the right price so I bought a Krell as a stopgap while I checked out other designs I decided I wanted a pair of the rest. I then re-designed the internal layout on the tagboards to accommodate the volume control - a Danish Audio Connect Stepped Attenuator run between the signal input and first stage to allow finite control of the input signal for each amp independently. This was to ensure no HF signal losses caused by cable capacitance if they were mounted externally in a separate box like, for example, Ben Duncan’s Passion. The DACTS were held in place with home-made brackets and all the internal signal wire was the thinnest PTFE covered wire I could find (PTFE has the next lowest insulator capacitance to air, so it’s the first choice).

All the screws were changed for stainless steel from a local industrial fastener shop and a remote control shaft was run between the DACT attenuators and the knob on the front. All the metalwork was done in-house with readily available tools. The cutters came from local engineering tools suppliers.

The Yin / Yang symbols were from a New Age suppliers, and the blue LEDs from Farnell - as was electronics, the wire and the elegant on/off toggle switch. The original black sprayed chassis did nothing for me so I had it chromed by a specialist car chromers for the best job. Then it was all put together on my front room floor over a couple of weeks.

I wanted a unique piece of art that nobody else had in the world, that had a practical use. I think I got it.

The sound was exactly what I was looking for, full, rich, punchy with plenty of detail and no nasses. It’s a very fatigue free listen when played back on my masterlink 24-bit studio CD copier via my own design of speaker cables, which has impedance equalisers called Le Scarbe in-line just before the crossovers, and a Francenstein Actif on the CD output. Both are available from one-time HFVV scribe Richard Price of Perfect Pitch products. They are very affordable and highly recommended.

Robert Hardcastle

Yorks

We try and make the amps as pleasing to the eye as to the ear, Robert, but to keep costs low we concentrate primarily on the sound as I’m sure you understand. However, as you’ve discovered, a little creativity coupled with some searching can reap rewards and transform your kit amp into something that almost doubles as an ornament. Also it’s good that you note the amps will run a pair of power hungry ‘Maggies’ - they have a beautifully transparent and airy sound which suits the sound of this type of single-ended amp. Providing you don’t want to scare the horses or drive out your neighbours, then a 20W valve amp such as ours, with its hefty output transformers, will drive virtually anything. After all, they’re a great match for Quad electrostats, which aren’t exactly sensitive!

Nick Lucas
Falcon Acoustics Ltd
Falcon Electronics, Basically Sound
http://www.falcon-acoustics.co.uk

Full Price List and Focal details on Web Site

DRIVE UNITS: by FOCAL & SEAS, and a pick of the best from other manufacturers.
100+ CROSSOVER NETWORKS: - Active & Passive, Components, Accessories.

COMPONENTS
SOLN Polypropylene capacitors, 0.1mFd to 10mFd. Polyethylene and Polycarbonate Film Capacitors, 0.1mFd to 10mFd. ALCAP Reversible Electrolytic Capacitors (Non-Polar): 50v. 100v & Low Loss. 2mfd to 600mFd.

51+ rare books and 51+ Audio Amateur's magazine year sets. 2001 year sets on CD-R only ensures your complete peace of mind. When available, we also
years. Only valves that pass our stringent in house QC tests are

We have been supplying tubes to the audio market for over 40 years. Only valves that pass our stringent QC tests are used for the CVM Premium brand, and our no fuss guarantee ensures your complete peace of mind. When available, we also stock the justifiably famous brands such as Brimar, GEC, Mullard, RCA Telefunken etc. So why compromise? Our sales and technical staff are just a telephone call away. To put it simply. ........

YOUR NEEDS...OUR BUSINESS.

Chelmer Valve Co Ltd
The Stables, Baddow Park, Great Baddow, Chelmsford, Essex CM2 7SY
Tel: +44 1245 241300 Email:sales@chelmervalve.com
Fax: +44 1245 241309 www.chelmervalve.com

Hello, we are here to help. Call us at 0141-942-2460 and ask for David.

Falcon Electronics, Basically Sound
http://www.falcon-acoustics.co.uk

Send our FREE price list 44p stamp or US$2 bill overseas. To:-( Dept HEW)  Tabor House. Norwich Road. MULBARTON, Norwich. Norfolk. NR 14 8.IT Tel  (0)1508 578272

Rediscover the beauty of pure sound....

NEW! Visit our web site at www.chelmervalve.com to view our entire catalogue and buy on line!

We have been supplying tubes to the audio market for over 40 years. Only valves that pass our stringent QC tests are used for the CVM Premium brand, and our no fuss guarantee ensures your complete peace of mind. When available, we also stock the justifiably famous brands such as Brimar, GEC, Mullard, RCA Telefunken etc. So why compromise? Our sales and technical staff are just a telephone call away. To put it simply. ........

YOUR NEEDS...OUR BUSINESS.

Chelmer Valve Co Ltd
The Stables, Baddow Park, Great Baddow, Chelmsford, Essex CM2 7SY
Tel: +44 1245 241300 Email:sales@chelmervalve.com
Fax: +44 1245 241309 www.chelmervalve.com

Hello, we are here to help. Call us at 0141-942-2460 and ask for David.

Falcon Electronics, Basically Sound
http://www.falcon-acoustics.co.uk

Send our FREE price list 44p stamp or US$2 bill overseas. To:-( Dept HEW)  Tabor House. Norwich Road. MULBARTON, Norwich. Norfolk. NR 14 8.IT Tel  (0)1508 578272

Rediscover the beauty of pure sound....

NEW! Visit our web site at www.chelmervalve.com to view our entire catalogue and buy on line!

We have been supplying tubes to the audio market for over 40 years. Only valves that pass our stringent QC tests are used for the CVM Premium brand, and our no fuss guarantee ensures your complete peace of mind. When available, we also stock the justifiably famous brands such as Brimar, GEC, Mullard, RCA Telefunken etc. So why compromise? Our sales and technical staff are just a telephone call away. To put it simply. ........

YOUR NEEDS...OUR BUSINESS.

Chelmer Valve Co Ltd
The Stables, Baddow Park, Great Baddow, Chelmsford, Essex CM2 7SY
Tel: +44 1245 241300 Email:sales@chelmervalve.com
Fax: +44 1245 241309 www.chelmervalve.com

Hello, we are here to help. Call us at 0141-942-2460 and ask for David.

Falcon Electronics, Basically Sound
http://www.falcon-acoustics.co.uk

Send our FREE price list 44p stamp or US$2 bill overseas. To:-( Dept HEW)  Tabor House. Norwich Road. MULBARTON, Norwich. Norfolk. NR 14 8.IT Tel  (0)1508 578272

Rediscover the beauty of pure sound....

NEW! Visit our web site at www.chelmervalve.com to view our entire catalogue and buy on line!

We have been supplying tubes to the audio market for over 40 years. Only valves that pass our stringent QC tests are used for the CVM Premium brand, and our no fuss guarantee ensures your complete peace of mind. When available, we also stock the justifiably famous brands such as Brimar, GEC, Mullard, RCA Telefunken etc. So why compromise? Our sales and technical staff are just a telephone call away. To put it simply. ........

YOUR NEEDS...OUR BUSINESS.

Chelmer Valve Co Ltd
The Stables, Baddow Park, Great Baddow, Chelmsford, Essex CM2 7SY
Tel: +44 1245 241300 Email:sales@chelmervalve.com
Fax: +44 1245 241309 www.chelmervalve.com

Hello, we are here to help. Call us at 0141-942-2460 and ask for David.
WELCOME TO OUR
MARKET PLACE

Here are a wide variety of specialist hi-fi products and services. Keep an eye open for regular advertisers, who know the market and serve their customers in a friendly and reliable manner.

CableToasting.com

‘Release the potential’

Why wait 100’s of hours before your cables begin to perform as they should! Get them ‘toasted’ by one of our Nordost cable toasters to avoid missing what you’re waiting for

Contact

www.cabletoasting.com  mobile: 07904 015789

GRAND
M25
AUDIOJUMBLE

SUNDAY 10TH NOVEMBER 2002
10.30AM - 2.30PM

ALL VINTAGE & MODERN HI-FI
PARAPHERNALIA
INCLUDING: VINYL, DISC ETC

FOR STALL BOOKINGS/DATAILS
CALL
07730 134973

MUSONIC
STYLI

SPECIALIST MANUFACTURER & SUPPLIER FOR MORE THAN 40 YEARS

REPLACEMENTS & ORIGINALS
MANY OBSOLETE/78 VERSIONS
PICK-UP CARTRIDGES
RECORD/TAPE/CD ACCESSORIES

WHY NOT TRY US AND HEAR THE DIFFERENCE ?!

NAGAOKA CARTRIDGES NOW IN STOCK

For further information tel/fax/e-mail to:-

MUSONIC (UK) LIMITED
Unit 13 Wenta Business Centre Colne Way
Watford Hertfordshire WD24 7ND

Tel: 01923 213344  Fax: 01923 213355
E-mail:sales@musonic.co.uk

VISIT OUR UPDATED WEBSITE
www.musonic.co.uk

Trade and Export enquiries welcome
<table>
<thead>
<tr>
<th>Product</th>
<th>Condition</th>
<th>Price 1</th>
<th>Price 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>DUNLOP Systemdek 3 / Beolit UX / KS</td>
<td>Ex-dem</td>
<td>£750</td>
<td>£379</td>
</tr>
<tr>
<td>MIChell ISD HR Phone Stage Ex-dem</td>
<td></td>
<td>£895</td>
<td>£696</td>
</tr>
<tr>
<td>MIChell Gyro (like new)</td>
<td></td>
<td>£897</td>
<td>£699</td>
</tr>
<tr>
<td>MIChell ISD/HERA Phone Stage Ex-dem</td>
<td></td>
<td>£895</td>
<td>£480</td>
</tr>
<tr>
<td>REVIVER Tunable + Linear DX (arm)</td>
<td></td>
<td>£830</td>
<td>£484</td>
</tr>
<tr>
<td>Roksan Xerxes + R3300 + PSU</td>
<td></td>
<td>£1500</td>
<td>£600</td>
</tr>
<tr>
<td>SME 104 with 309 Tone Arm Ex-dem</td>
<td></td>
<td>£3410</td>
<td>£2866</td>
</tr>
<tr>
<td>STAX System SRX/505/SRX335 (W)</td>
<td></td>
<td>£180</td>
<td>£648</td>
</tr>
<tr>
<td>VPI Reference Direct Drive arm</td>
<td></td>
<td>£1145</td>
<td>£600</td>
</tr>
<tr>
<td>WILLIAM BENSECH Full Circle (arm)</td>
<td></td>
<td>£1995</td>
<td>£1495</td>
</tr>
<tr>
<td>WILLIAM BENSECH ACT 1 Tanniem</td>
<td></td>
<td>£1200</td>
<td>£594</td>
</tr>
<tr>
<td>ARCAM Alpha 6 (CD)</td>
<td></td>
<td>£750</td>
<td>£458</td>
</tr>
<tr>
<td>ARCAM Alpha 6 (CD + Clock 3)</td>
<td></td>
<td>£850</td>
<td>£458</td>
</tr>
<tr>
<td>ARCA Alpha B 8 CD</td>
<td></td>
<td>£450</td>
<td>£228</td>
</tr>
<tr>
<td>ARCA Alpha 9 (HDAC)</td>
<td></td>
<td>£820</td>
<td>£402</td>
</tr>
<tr>
<td>ASSEMBLAGE DAC 2</td>
<td></td>
<td>POA</td>
<td></td>
</tr>
<tr>
<td>AUDIO ALCHEMY V+ + PSU</td>
<td></td>
<td>£489</td>
<td>POA</td>
</tr>
<tr>
<td>AUDIO ALCHEMY V3 DAC + PSU</td>
<td></td>
<td>£950</td>
<td>£459</td>
</tr>
<tr>
<td>AUDIO MECHA Kreatura Trans</td>
<td></td>
<td>£1500</td>
<td>£648</td>
</tr>
<tr>
<td>AUDIO MECHA Evolution + Upgrade</td>
<td></td>
<td>£1750</td>
<td></td>
</tr>
<tr>
<td>CYRUS AD302</td>
<td></td>
<td>£498</td>
<td></td>
</tr>
<tr>
<td>DPA 10M 1 DAC</td>
<td></td>
<td>£1000</td>
<td>£383</td>
</tr>
<tr>
<td>Krell KPS 25 CD / Pre</td>
<td></td>
<td>£2499</td>
<td>£1069</td>
</tr>
<tr>
<td>LINN KAIR CD</td>
<td></td>
<td>£1850</td>
<td>£1098</td>
</tr>
<tr>
<td>LINN RIKI (Ex-dema)</td>
<td></td>
<td>£1500</td>
<td>£1694</td>
</tr>
<tr>
<td>MERIDIAN 203 DAC</td>
<td></td>
<td>£228</td>
<td></td>
</tr>
<tr>
<td>MERIDIAN 263 DAC</td>
<td></td>
<td>£398</td>
<td></td>
</tr>
<tr>
<td>MERIDIAN 500 Trans</td>
<td></td>
<td>£400</td>
<td>£798</td>
</tr>
<tr>
<td>MOKOMEGA DAC 1</td>
<td></td>
<td>POA</td>
<td></td>
</tr>
<tr>
<td>NAIM MAC OSD 5</td>
<td></td>
<td>£1300</td>
<td>£798</td>
</tr>
<tr>
<td>NAIM MAC OS2 Ex dem</td>
<td></td>
<td>£4615</td>
<td>£2924</td>
</tr>
<tr>
<td>NAIM MAC OS3 Ex dem</td>
<td></td>
<td>£600</td>
<td>£402</td>
</tr>
<tr>
<td>NVA Envious Statement (Must be seen!)</td>
<td></td>
<td>£2200</td>
<td>£998</td>
</tr>
<tr>
<td>OKEEL E1010 Transen</td>
<td></td>
<td>£900</td>
<td>£430</td>
</tr>
<tr>
<td>PONY TRIUMPH Cardinal (trans)</td>
<td></td>
<td>£599</td>
<td>£358</td>
</tr>
<tr>
<td>RADFORD WSI CD Player</td>
<td></td>
<td>£550</td>
<td>£350</td>
</tr>
<tr>
<td>REGA Planet</td>
<td></td>
<td>£1000</td>
<td>£658</td>
</tr>
<tr>
<td>REGA Jupiter Ex dem</td>
<td></td>
<td>£2200</td>
<td>£1000</td>
</tr>
<tr>
<td>REVOLX 825S</td>
<td></td>
<td>£348</td>
<td></td>
</tr>
<tr>
<td>TAG COTTON (trans)</td>
<td></td>
<td>£2700</td>
<td>£1100</td>
</tr>
<tr>
<td>TEAC VRDS 10 (CD Player)</td>
<td></td>
<td>£450</td>
<td></td>
</tr>
<tr>
<td>TEAC P500 (trans)</td>
<td></td>
<td>£850</td>
<td>£400</td>
</tr>
<tr>
<td>AUDIO ANALOGUE Purin SE</td>
<td></td>
<td>£700</td>
<td>£498</td>
</tr>
<tr>
<td>AUDIOLAB 8000 (Pre)</td>
<td></td>
<td>£680</td>
<td>£290</td>
</tr>
<tr>
<td>BAT VX/40</td>
<td></td>
<td>£4950</td>
<td>£2650</td>
</tr>
<tr>
<td>CYRUS PSX</td>
<td></td>
<td>£750</td>
<td>£358</td>
</tr>
<tr>
<td>CYRUS Power</td>
<td></td>
<td>£750</td>
<td>£358</td>
</tr>
<tr>
<td>CYRUS Power Mk III</td>
<td></td>
<td>£1990</td>
<td></td>
</tr>
<tr>
<td>CYRUS Time II</td>
<td></td>
<td>£2000</td>
<td>£1998</td>
</tr>
<tr>
<td>THORENS TD2000/200 (DAC)</td>
<td></td>
<td>£2000</td>
<td>£1998</td>
</tr>
<tr>
<td>FRED CHOP 1 DAC + PSU</td>
<td></td>
<td>£1800</td>
<td>£298</td>
</tr>
<tr>
<td>WADIA 8 front/OSR 122 DAC</td>
<td></td>
<td>£9500</td>
<td>£3600</td>
</tr>
</tbody>
</table>

**Selected Used & Ex-Demo Items**

**Hi-Fi Bought for Cash**

**Commission Sales**

**High End Repairs & Service**

---

**The Hi-Fi Company's Trading Station**

35 Cowgate
Peterborough PE1 1LZ

World Radio Radio

---

**Turntables & Arms Wanted**

---

**All Credit Cards Accepted for Next Day Delivery**

**Phone:** 0870 608 8211

**audiotrader@talk21.com**

**Open:** Tues - Sat, 10am - 5.30pm

---

**More Much Always Available**

Please Check Our Web Site

**nighthifiradio.com**

---

**6**-**11** fl.1.1

**188**

**228**

**247**

**213**

**247**

**254**

**267**

**288**

**320**

**344**

**368**

**398**

**422**

**446**

**470**

**494**

**518**

**542**

**566**

**590**

**614**

**638**

**662**

**686**

**710**

**734**

**758**

**782**

**806**

**830**

**854**

**878**

**902**

**926**

**950**

**974**

**998**

---

**NAGRA P4 (Line Level Pre) (Mim)** | £379 | £289 |

**PAPWORTH TH4** | £200 | £198 |

**PATHEMOS Twin Towers** | £225 | £268 |

**VALUE SYSTEMS 70i** | £380 | £350 |

**WEILBORN LAB Modules** | £150 | £98 |

**Audiolab 6000** | £750 | £400 |

**Linnd Neo Ex-dema** | £345 | £450 |

**LUXMAN 350 (Rare)** | £950 | £550 |

**Magico 7i** | £380 | £598 |

**Pioneer VSX9200** | £348 | £250 |

**SONY ST7775** | £440 | £270 |

**Nakamichi CR-72 Cassettes** | £800 | £300 |

**Nakamichi CR-10 Cassettes** | £400 | £270 |

**REVOLX 360 Axel to Axel** | £348 | £238 |

**REVOLX 363 Axel to Axel** | £494 | £348 |

**REVOLX B710 M2K** | £548 | |
V'AUDIO
Hi-Fi Consultants

Turntables

In the October issue I referred to eagerly awaited items such as the new AVI Integrated and Pro-Nine Plus speakers, but as happens with new products the amp is still not quite ready and I will probably wait evaluating the new AVI amp until I get the new amp. Having just acquired an SME 10A turntable, and having found that the new Infinity Prelude MTS speakers (see Oct) sound particularly good with vinyl, I have spent time playing this turntable, an old VPI TNT, an Audiomeca J1 with SL5 arm, an old Oracle, and plan to dig out one of the original Pink Triangle's. The trouble always with turntables, now we have become accustomed to CD etc. is the time it all takes, especially as the eyes and hands aren't as good as they were!. Invariably they have different arms and cartridges and comparisons are difficult. They all should sound good however. I am playing them through the Trichord Dino Phono Stage. AVI preamp & ESLAB Digital poweramp which suits the Preludes very well.

The Preludes are very open and detailed but never get hard when driven. Looking forward to the new 350 watt Eslab amp, which although more powerful than the Preludes need, being efficient, will no doubt change the balance. Will keep you up to date.

www.vaudio.co.uk

V'audio Hi-Fi Consultants
36 Druid Hill, Stoke Bishop, Bristol BS9 1EJ
Tel/Fax 0117 968 6005
**Midland Audio X-change**

**S/hand and ex-demo clearance items - DECEMBER 2002**

<table>
<thead>
<tr>
<th><strong>CD players DACs &amp; Transports</strong></th>
<th><strong>Was</strong></th>
<th><strong>Now</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Audio Analogue Pagani 24/96kHz CD Player x-demo</td>
<td>795</td>
<td>599</td>
</tr>
<tr>
<td>dCS Elgar DAC 24/192 S/H</td>
<td>850</td>
<td>599</td>
</tr>
<tr>
<td>Electrocompaniet EMC1 24/192kHz x-demo</td>
<td>2795</td>
<td>1995</td>
</tr>
<tr>
<td>Linn Genie CD Player Silver S/H</td>
<td>1030</td>
<td>749</td>
</tr>
<tr>
<td>Rega Planet 2000 CD Player</td>
<td>498</td>
<td>379</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Turntables Tonearms &amp; Cartridges</strong></th>
<th><strong>Was</strong></th>
<th><strong>Now</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Basis 1400/ RB300 Turntable x-Demo</td>
<td>1299</td>
<td>899</td>
</tr>
<tr>
<td>Basis 2000/RB300 Turntable x-Demo</td>
<td>1999</td>
<td>1299</td>
</tr>
<tr>
<td>Basis 2001 Turntable x-Demo</td>
<td>2999</td>
<td>2299</td>
</tr>
<tr>
<td>Basis 2004 Turntable x-Demo</td>
<td>4500</td>
<td>2799</td>
</tr>
<tr>
<td>Clearaudio Nature MC Cartridge (400 hours use)</td>
<td>1600</td>
<td>849</td>
</tr>
<tr>
<td>Electrocompaniet ECP1 MM/MC Phono stage x-Demo</td>
<td>599</td>
<td>399</td>
</tr>
<tr>
<td>Heed Audio Quazar 2 Box Phono Stage New and Boxed</td>
<td>599</td>
<td>399</td>
</tr>
<tr>
<td>Lehmann Audio Silver Cube S/H</td>
<td>1500</td>
<td>1249</td>
</tr>
<tr>
<td>Lyra Halikson MC Cartridge 200hrs S/H</td>
<td>1100</td>
<td>650</td>
</tr>
<tr>
<td>McCormack Phono Stage New and Boxed</td>
<td>650</td>
<td>499</td>
</tr>
<tr>
<td>Nottingham Analogue &quot;The Foot&quot; 12&quot;Carbon Tonearm S/H</td>
<td>1100</td>
<td>699</td>
</tr>
<tr>
<td>Nottingham Analogue Mentor S/H</td>
<td>2600</td>
<td>1799</td>
</tr>
<tr>
<td>Origin Live 250 Silver Tonearm S/H</td>
<td>600</td>
<td>499</td>
</tr>
<tr>
<td>Project Perspective 6.1/25S FL x-demo</td>
<td>950</td>
<td>589</td>
</tr>
<tr>
<td>Roksan Attemiz Tonearm S/H</td>
<td>895</td>
<td>399</td>
</tr>
<tr>
<td>Roksan Xenxes/GME Cyl N/O Arm Black S/H</td>
<td>N/A</td>
<td>250</td>
</tr>
<tr>
<td>Roksan Xenxes / Attemiz Corus Blk S/H</td>
<td>2200</td>
<td>749</td>
</tr>
<tr>
<td>Roksan Artexenex MC Head Amplifier S/H</td>
<td>549</td>
<td>199</td>
</tr>
<tr>
<td>Roksan Xenxes Blk/Tabrizi/Corus S/H</td>
<td>1599</td>
<td>999</td>
</tr>
<tr>
<td>Roksan Xenxes RW/Alphason HR/100Mcs</td>
<td>1799</td>
<td>599</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Preamplifiers</strong></th>
<th><strong>Was</strong></th>
<th><strong>Now</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Electrocompaniet EC4 T x-demo</td>
<td>1095</td>
<td>749</td>
</tr>
<tr>
<td>Audio Analogue Belini Remote Preamplifier x-demo</td>
<td>560</td>
<td>399</td>
</tr>
<tr>
<td>EAR 802 Valve Preamplifier S/H</td>
<td>1550</td>
<td>999</td>
</tr>
<tr>
<td>Einstein &quot;The Tube&quot; Preamplifier x-Demo</td>
<td>5000</td>
<td>3999</td>
</tr>
<tr>
<td>Linn Kolektor Silver 3mounts old</td>
<td>530</td>
<td>399</td>
</tr>
<tr>
<td>Krell KAV-S Processor/Preamplifier DAC/AC3/3/Digital Logic S/H</td>
<td>14989</td>
<td>4599</td>
</tr>
<tr>
<td>Paul Maynes Tube Phono Stage S/H</td>
<td>1600</td>
<td>749</td>
</tr>
<tr>
<td>Roksan L2 preamplifier S/H</td>
<td>1295</td>
<td>499</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Amplifiers</strong></th>
<th><strong>Was</strong></th>
<th><strong>Now</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>ATC SIA-2 150 Integrated S/H</td>
<td>2495</td>
<td>1799</td>
</tr>
<tr>
<td>Audio Research CASO Valve Integrated S/H</td>
<td>3495</td>
<td>1999</td>
</tr>
<tr>
<td>Bow Technologies Wazoo XL Amplifier (New&amp;Boxed)</td>
<td>2495</td>
<td>1950</td>
</tr>
<tr>
<td>Bryson B60R Amplifier S/H</td>
<td>1550</td>
<td>1099</td>
</tr>
<tr>
<td>Cyrus PSX Black S/H</td>
<td>299</td>
<td>175</td>
</tr>
<tr>
<td>Electrocompaniet ECI-1 S/H</td>
<td>3289</td>
<td>1399</td>
</tr>
<tr>
<td>Electrocompaniet AW180 Mono Amplifiers x-demo</td>
<td>4000</td>
<td>2999</td>
</tr>
<tr>
<td>Graaf GM100 DTL Stereo Valve Amplifier S/H</td>
<td>3295</td>
<td>1999</td>
</tr>
<tr>
<td>Lavadin IS</td>
<td>1600</td>
<td>1199</td>
</tr>
<tr>
<td>Lavadin IT x-demo</td>
<td>3200</td>
<td>2300</td>
</tr>
<tr>
<td>Linn LX140 Silver 3 months old</td>
<td>785</td>
<td>599</td>
</tr>
<tr>
<td>Mark Levinson No335 Power Amplifier S/H</td>
<td>8495</td>
<td>5999</td>
</tr>
<tr>
<td>Roksan Rok S/S Power Amplifier S/H</td>
<td>1499</td>
<td>949</td>
</tr>
<tr>
<td>Union Research S8 845 Triode Integrated x-demo</td>
<td>3995</td>
<td>2599</td>
</tr>
<tr>
<td>Union Research SR1 Hybrid Integrated x-demo</td>
<td>1295</td>
<td>799</td>
</tr>
<tr>
<td>Union Research S6 Valve Integrated S/H</td>
<td>1600</td>
<td>1199</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Loudspeakers</strong></th>
<th><strong>Was</strong></th>
<th><strong>Now</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>BKS 107 MKII Supreme Ribbon Hybrids x-demo</td>
<td>2199</td>
<td>1599</td>
</tr>
<tr>
<td>Dynaudio Audience 52 Speakers S/H</td>
<td>595</td>
<td>399</td>
</tr>
<tr>
<td>Indigo Model Two Centre Channel Cherry S/H</td>
<td>199</td>
<td>129</td>
</tr>
<tr>
<td>Jim Lab Micro Utopia Dark Cherry New and Boxed</td>
<td>4500</td>
<td>3799</td>
</tr>
<tr>
<td>Jim Lab Mezzo Utopia New and Boxed</td>
<td>7799</td>
<td>6500</td>
</tr>
<tr>
<td>Opera Super Pavarotti X-d emo</td>
<td>2595</td>
<td>699</td>
</tr>
<tr>
<td>Opera Operetta Mahogany x-demo</td>
<td>795</td>
<td>575</td>
</tr>
<tr>
<td>ProAc Response 1SC Mahogany S/H</td>
<td>1200</td>
<td>749</td>
</tr>
<tr>
<td>ProAC studio 100 Cherry x-demo</td>
<td>790</td>
<td>599</td>
</tr>
<tr>
<td>Revel Salon Black/Aluminium (6 months old) S/H</td>
<td>15000</td>
<td>11599</td>
</tr>
<tr>
<td>Robertson Audio DXT Cherry x-Demo</td>
<td>995</td>
<td>599</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Cables &amp; Accessories</strong></th>
<th><strong>Was</strong></th>
<th><strong>Now</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Air Pod size 1 x 3 S/H</td>
<td>210</td>
<td>120</td>
</tr>
<tr>
<td>Air Pod size 2 x 3 S/H</td>
<td>150</td>
<td>99</td>
</tr>
<tr>
<td>Audio Note AN-V 1m Silver Interconnect S/H</td>
<td>420</td>
<td>199</td>
</tr>
<tr>
<td>Cogan Hall EM-D 0.6m S/H</td>
<td>199</td>
<td>99</td>
</tr>
<tr>
<td>Finite Elemetne Pagode E55/14 A 1 Tier Maple Stand x-Demo</td>
<td>849</td>
<td>599</td>
</tr>
<tr>
<td>Finite Elemetne Pagode HD33 MR ex Martin Colloms</td>
<td>2499</td>
<td>1750</td>
</tr>
<tr>
<td>Goetz AG2 Silver 2x2.5m S/H</td>
<td>1900</td>
<td>955</td>
</tr>
<tr>
<td>Kimber DX-50 Illuminations AES/EBU 1.5m S/H</td>
<td>350</td>
<td>149</td>
</tr>
<tr>
<td>Opera Lux 3 Tier Table/Clean/Stainless x-Demo</td>
<td>950</td>
<td>499</td>
</tr>
<tr>
<td>QED Genesis Silver Spiral 2X 3 M S/H</td>
<td>395</td>
<td>199</td>
</tr>
<tr>
<td>Roksan HAF01 1M Interconnect S/H</td>
<td>99</td>
<td>49</td>
</tr>
<tr>
<td>Roksan HAF01 0.5m Digital Interconnect S/H</td>
<td>49</td>
<td>25</td>
</tr>
<tr>
<td>Siletch HF903 AES/EBU 1m Digital S/H</td>
<td>240</td>
<td>159</td>
</tr>
<tr>
<td>Tara Labs &quot;Floating GroundStation&quot; New</td>
<td>775</td>
<td>449</td>
</tr>
<tr>
<td>Tara Labs &quot;The One&quot; 1m Balanced New</td>
<td>2175</td>
<td>1299</td>
</tr>
<tr>
<td>Target R1 Stands S/H</td>
<td>329</td>
<td>199</td>
</tr>
<tr>
<td>Townsend Audio Seismic S/H</td>
<td>199</td>
<td>119</td>
</tr>
<tr>
<td>Transparent Music Wave Plus Bi-Wire 2.44m S/H</td>
<td>599</td>
<td>389</td>
</tr>
<tr>
<td>Transparent Music Link Ultra Balanced 7.26m S/H</td>
<td>2349</td>
<td>1499</td>
</tr>
<tr>
<td>Transparent The Wave 2XTM S/H</td>
<td>599</td>
<td>199</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Turners &amp; Tape Decks, Power Supplies</strong></th>
<th><strong>Was</strong></th>
<th><strong>Now</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>AKG C1000 Condenser Mic S/H</td>
<td>241</td>
<td>120</td>
</tr>
<tr>
<td>Magnum Dynatube FT-R Remote Switcher for FT101A/Ebute (New&amp;Boxed)450</td>
<td>299</td>
<td></td>
</tr>
<tr>
<td>Revox A77 MKIV Reel to Reel _ Track S/H</td>
<td>N/A</td>
<td>279</td>
</tr>
<tr>
<td>Revox B77 MKII Reel to Reel _ Track S/H</td>
<td>2800</td>
<td>699</td>
</tr>
<tr>
<td>Sony TCD-10Pro Portable DAT S/H</td>
<td>2500</td>
<td>999</td>
</tr>
<tr>
<td>Sony TXC-461S 2 head cassette decks new&amp;boxed</td>
<td>159</td>
<td>99</td>
</tr>
<tr>
<td>Teac T-8X10 Tuner S/H</td>
<td>399</td>
<td>149</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Bargains under a £100</strong></th>
<th><strong>Was</strong></th>
<th><strong>Now</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Denon DTS Processor S/H</td>
<td>299</td>
<td>79</td>
</tr>
<tr>
<td>Hendley Designs HMC50 Phonostage S/H</td>
<td>250</td>
<td>99</td>
</tr>
</tbody>
</table>

Midland Audio X-change are looking for Audio Research, Kreil, Mark Levinson, Naim Audio, Theta, Wadia, cash paid call John Roberts on 01562 822236 now!

---

**Suppliers and installers of High Quality Audio Systems**

- **47 Laboratory**
  - Graft
- **Accuphase**
  - Gryphon
- **Audio Note**
  - Lavardin
- **Audio Research**
  - Mark Levinson
- **Avid**
  - Martin Logan
- ** Basis**
  - Michell
- **Cabasse**
  - Nagra
- **Cardas**
  - Primare
- **Clearaudio**
  - ProAc
- **Conrad Johnston**
  - Rega
- **Copland**
  - Resolution Audio
- **Dacs**
  - Sun// Faber
- **DNA / Reson**
  - Spectral
- **Einstein**
  - Hitachi
- **Electrocompaniet**
  - Sugden
- **Final**
  - UKD
- **Finite Elements**

---

**www.midlandaudio-x-change.co.uk**

call John Roberts Tel: 01562 822236
or fax on: 01562 750246
181 Franche Rd • Kidderminster • Worcs • DY11 5AD
e-mail sales@midlandaudio-x-change.co.uk
Mobile 07721 605966
Musk, Monoblock Power Amp Knob, ONE OF THE BEST AMPLIFIERS YOU WILL HEAR? Run on demo at Bala, Southend, Peterborough and Burnley.

Single Ended Class A Valve Sound, 15 Watt Power Amp modules FOR THOSE WHO WANT THAT VALVE MIDBAND BUT BASS AND TREBLE TO MATCH.

ACTIVE B/Gemma SUBWOOFER MODULO £177.50

Speakers Designed & Built to Order

Advertise your Hi-Fi on my website (FREE)

WEB SITE www.williamshart.com e-mail: williamshart@classicfm.net

Tyn Y Coed, Llidiolau, Bala, Gwynedd, LL23 7SG

T: 01678 520707

PERSONAL VISITORS SHOULD PHONE FIRST TO AVOID DISAPPOINTMENT

Run by former Technical Director of Wilmslow Audio

NOW I can only say that until I had the Mana equipment table fitted, my hi-fi system was at best half Cocked.

Alan Sircom, Hi-Fi Choice March '95

Mana Tables are not cheap. But they are essential if you want to unlock your system's true potential. BEST BUY

Malcolm Steward, Hi-Fi Choice February '96

For information on Mana products please contact: Unit E, Amlwch Ind. Est., Amlwch, Anglesey. Wales. LL68 9BX. E-mail: post@mana.co.uk

Sales: 01248 751 043 Factory 01407 830 530

Fax 01407 830 535

PLEASE VISIT OUR SHOWROOMS OR CALL OUR HOTLINE NUMBER FOR DETAILS.

MANY ARE ONE-OFF ITEMS!!

HOTLINE 020 7497 1346

Convent Garden
18 Monmouth Street
Convent Garden
London WC2H 9JJ
Tel: 020 7497 1346

E-Mail: sales@musical-images.co.uk

NOT VALID WITH ANY OTHER OFFERS OR PROMOTIONS E&OE

www.musical-images.co.uk

DECEMBER 2002 HI-FI WORLD & COMPUTER AUDIO 111
HICAM

CHERISHED PRE-OWNED HI-FI EQUIPMENT SOLD, PURCHASED, PX/CASH WAITING FOR THE FOLLOWING BRANDS
NAIM, MERIDIAN, AUDIOLAB, KRELL, WADIA, SONUS FABER, MARTIN LOGAN MARK LEVINSON, COPLAND, QUAD

AGENTS FOR E.H. TRICHORD, AUDINOTE, MICHELL
MYRAD, AVL STAX, LAT, VHELAC, RUARK, SME
BLACK RHODIUM, LYRA, SUMIKO, QED

OPEN MON-SUN 10AM-6PM
FOR FURTHER DETAILS: TEL 01726 74474/0164 265517
FAX 01726 70857
MOBILE: 07973 253 380
E-MAIL: HICAM1@FREE.NETNAME.CO.UK
OR VISIT OUR WEBPAGE HICAM.CO.UK

USED AND EX DEM EQUIPMENT

Audio Analogue Bellini Pre Amp Silver £250.00
Alphason 7 Shelf Smoked Glass Rack £150.00
Base Isolation Platforms Silver £90.00
B&W Silver Signatures, Inc. HNE Granite Stands £279.00
B & W CB6 S'2 Centre Black £125.00
Bryton BP25 Pre. Remote, Silver £1250.00
Bryton 48 ST Power, Silver £1600.00
Chord Chameleon i江南Connects From £60.00
Chord Chorus i江南Connects From £125.00
Chord Chorus XLR (1 SET ONLY) £170.00
Chord Siren i江南Connects From £55.00
Chord Solid i江南Connect £105.00
Chord Pro Dac Digital From £35.00
Copland CDA 266 CD Mint £895.00
Cyrus Quattro & Cyrus Stereo Power Amp £695.00
Cyrus CSS 50's Cherry £300.00
Cyrus 2 int & PSX. Serviced. Inc QED Silver Spiral i江南Connect £300.00
Denon AVR 3802 Surround Receiver Amp. Black £45.00
Denon TU425RD Tuner £100.00
Ecosse Ref MS2 3 Scable Bi-Wire 3 pair £200.00
Ecosse Ref i江南Connects MS2 £135.00
Ecosse Ref i江南Connects The Legend £350.00
Electrocompaniet EC 4.6 Pre £875.00
Electrocompaniet AW25OR Power £2795.00
Buy Pre. & Power get Silver XLR Leads Inc.
Epos ES30's Rosewood, Inc. Exposure Tri-Wire S/Cable £1195.00
KEF Q5 Dark Apple £495.00
Kontak Link 502 i江南Connect 1ml R £40.00
LFD Zero Int. Amp £275.00
Manley Purist Pre. Valve £795.00
Marantz DR700 CD Recorder £150.00
Marantz SR5200 AV Surround Receiver Amp £325.00
Meridian 506 20 bit CD £645.00
Mission 752f Speakers. Rosewood £300.00
PMC F7 Floorstanders, Oak £1100.00
PMC DB1 Standmounts, Oak £475.00
PMC TB2 Centre, Oak £315.00
Pink Triangle Cardinal & DaCapo with 1307 & 24 Bit Filters. Serviced £1650.00
Rega Planet CD Black Inc. Remote £365.00
Sony MDS JB920 Mini Disc Remote £125.00
Sugden CD21 Latest Spec £670.00
Teac 6030S Cassette Deck £275.00
Teac VRS558CE CD Mint £350.00
Totem Model I's Cherry Inc. Dedicated Stands £1295.00
Townsend Isolda i江南Connects 75 meter £185.00
Veritas 7's Oak £500.00

ALL ITEMS PRICED TO CLEAR!

PHONE STEVE ON 01527 450500
MOBILE : 07773198336
F-MAIL: Apexxsm@aol.com www.apexacoustics.co.uk
We are best known for our single-ended 300B power amplifiers and power supply upgrades for valve amplifiers, but we also provide support and servicing for Audio Innovations valve products. For full information visit www.borderpatrol.net or ring 01273 276716

BorderPatrol Brighton UK
Tel/Fax +44 (0)1273 276716
e-mail: bp@borderpatrol.net www.borderpatrol.net

Selected products from:
BorderPatrol • Living Voice • SME • Audio Note • Cartridge Man • Goldring
Western Electric • Electrofluidics

passion, grace & fire
www.borderpatrol.net

New Showroom & Demo rooms now open
28a Haddington Place Edinburgh EH7 4AF Phone/Fax 0131 558 9998
Open 11.00am - 5.30pm - closed Monday & Sunday

WE ARE PROUD TO ANNOUNCE THE NEW BEAUMHORN B2 HORN LOUDSPEAKERS IDEAL FOR LOW POWERED SINGLE ENDED VALVE AMPS

Also demonstrating the new Graham Slee projects range of affordable Phonostats

Now stocking Sonnetteer's new Bronse product range including digital amp from £500 and matching CD player

Ear 169 single ended triode integrated amplifier (open box version) 10 watt valve amp. With high quality transformer modified input stage with the addition of a extra signal valve which has allowed an outcome of 100watts per channel. Also the 995 can be used as a power amp. Don't be fooled by its modest power output this amp drives real world speakers. Price £299.00

Ear &IK Integrating/pre-main amplifier
Using £450, 304 power valves to produce 150watts per channel in four main class A channels, with an in house designed output transformer. The RIA has been designed to meet a wide variety of needs from the most demanding of audio files to the non audiophile. Price £249.00

Ear CLASS A - MINIMIZED output stage.PCM/CD player - price £90.

消費者のための最新の sandalsスリッパコレクションを提供

New Showroom & Dem rooms now open
28a Haddington Place Edinburgh EH7 4AF Phone/Fax 0131 558 9998
Open 11.00am - 5.30pm - closed Monday & Sunday

WE ARE PROUD TO ANNOUNCE THE NEW BEAUMHORN B2 HORN LOUDSPEAKERS IDEAL FOR LOW POWERED SINGLE ENDED VALVE AMPS

Also demonstrating the new Graham Slee projects range of affordable Phonostats

Now stocking Sonnetteer's new Bronse product range including digital amp from £500 and matching CD player

Ear 169 single ended triode integrated amplifier (open box version) 10 watt valve amp. With high quality transformer modified input stage with the addition of a extra signal valve which has allowed an outcome of 100watts per channel. Also the 995 can be used as a power amp. Don't be fooled by its modest power output this amp drives real world speakers. Price £299.00

Ear &IK Integrating/pre-main amplifier
Using £450, 304 power valves to produce 150watts per channel in four main class A channels, with an in house designed output transformer. The RIA has been designed to meet a wide variety of needs from the most demanding of audio files to the non audiophile. Price £249.00

Ear CLASS A - MINIMIZED output stage.PCM/CD player - price £90.
Audio Analogue  Bellini  Preamp Silver REDUCED £ 250 SH
Theta Casanova fully loaded incl Circa Surround, Silver REDUCED £ 2995 XD
Tag  McLaren  AV32 A/V Processor ex dem £ 1750 XD
Transparent Cables — various P.O.A SH
S.eore, Sourelstyle Stands Unique. Sme Stewart Screens. Tag  McLaren  Tannoy Teac. Theta. Transparent Unison Research Van
Krell KPS25sc CD Player REDUCED ti13995 SH
Naim 102 £ 950 XD
Naim 180 Power Amp £ 95 XD
Naim 82 Preamp as new ex dem £ 1895 XD
Audio Research VT60 Power Amp £ 950 SH
Audio Research LS3 £ 650 SH
Unison Research Mystery One/Smart 845s £ 2695 SH
Marantz 753 speakers £ 295 SH
Martin Logan Prodigy ex dem £ 850 XD
Mission 753 speakers £ 295 SH
Musical Fidelity A1001 £ 1750 SH
Naim Na17.2 £ 350 XD
Musical Fidelity MVT preamp £ 350 SH
Unison Research Mystery One/Smart 845s £ 2695 SH
Marantz 1351 CD/CD TRAN & 24/96 KHZ DAC 7000
VIA 1.11 MAKING VIOLET HYBRID DISK TRANSPORT 1600
VIA 1.11 MAKING VIOLET HYBRID DISK TRANSPORT 1600
Omega Content 5/296 DVD/CD TRAN & 24/96 KHZ DAC 7000
Yamaha RZ3 INTEGRATED INTEGRATED 4000
Pink Triangle DA CAPO  1307 FILTER 1860
NVA THE INTEGRATED STATEMENT 1300
NHT 1.1 SPEAKERS PIANO BLACK EX DEM 400
NHT 1.3A SPEAKERS PIANO BLACK EX DEM 500
Naim CREDO CHERRY 1425
Naim PREFIX S 450
Naim SBL LATEST DRIVERS BLACK 2540
Naim 200 1910
Naim 72 800
Naim 180 1220
Naim SBL WALNUT 2450
Naim 180 POWER Amp £ 95 XD
Naim Supercap Ex Dom Min £ 1850 XD
Naim 102 £ 950 XD
Audio Analogue Bellini Preamp Silver £ 295 SH
Wilson System 5 £ 1295 SH
Wilson Systems 6.1 Ferrari Grey RED £ 1995 SH
Musical Fidelity A3 Preamp/power Amp £ 1295 XD
Krell KCD98CE £ 3495
Krell KF525sc CD Player REDUCED £ 1995 SH
SH - Second Hand XD - EX Demonstarting

REFER TO OUR WEBSITE FOR THE LATEST UPDATED SALE LIST. 

Sales list - October 2002

BADA: Bada, Oxford Audio Consultants Ltd.

Part Ex Change

0% interest free credit
Licensed Credit Broker

Refer to our website for the latest updated sale list.

TAX-FREE SERVICE
MAIL-ORDER AVAILABLE ON MOST ITEMS
CENTRE HOME E MANT ITEMS
Oxford OX1 1JD
Telephone: Oxford (01865) 790879
Facsimile: Oxford (01865) 791665
E-MAIL: oxford.audio@btinternet.com
WEBSITE: www.oxfordaudio.co.uk

QUALITY USED EQUIPMENT, BOUGHT, SOLD, PART EXCHANGE
URGENGTLY REQUIRED LINN, NAIM, MERIDIAN, QUAD, CASH WAITING

OPEN MON-SUN 10.00 TO 8.00
WEBSITE: www.centralaudio.co.uk
E-mail: tony@centralaudio.co.uk

Also Agents for

E-mail: tony@centralaudio.co.uk
SPECIAL CLEARANCE SALE October 2002

Hi-Fi Separates (! = Ex - demonstration)

Acam Xtra IIAmp £200.00 Musical Tech Harriers £499.00
Audiolab 8000 Pre/Pwr £600.00 M/F A3 Amplifier £565.00
B&W DM-603 S3 spaks £405.00 M/F HT-6005 Amp+HTP Pro £3000.00
B&W ASV500 SubW £299.00 Naim CDS II Ex dem £3665.00
Castle Richmond ant/oak £199.00 Naim XPS ex dem £1848.00
Castle Harlechi ant/oak £850.00 Naim NAC-62/ NAP 90/3 £499.00
H/K AVR-4000 AV/Rc £450.00 Naim NAC 72 pre amp £399.00
Linn Intek/Phono £250.00 Naim NAP 90/3 £899.00
Linn Isotank Spiks Teak Active crossovers £199.00 Pioneer PDS-707 CD Player £1999.00
3x LR 280 power amps £200.00 Rega Jura's (cherry) £399.00
Linn CD-12 I £799.00 Rega Radio £250.00
Linn Kain/Phono £799.00

AV Separates (! = demonstration)

Acam AVR 110 Receiver £449.00 Rotel DSP-966AX Processor £699.00
Naim AV-1 Processor £3650.00 Sony DVP-7700 DVD player £399.00
Nakamichi T-5 DVD player £2599.00 Yamaha RXV-420 DRS Amp £199.00
Phalma Hitachi 32" +stand £2999.00 Yamaha DSP-AX3000 120w X 6 £399.00
Phialma 50" Pioneer P06-503 £399.00 Yamaha DSP-E 8000 processor £2491.00
Phialma 50" Pioneer P0P-502 £2999.00 B&W 802's Red Cherry Ex dem £499.00
Pioneer DV-444 DVD player £949.00 B&W 802's Red Cherry Ex dem £7495.00
Pioneer NS-DV1 DVD System £699.00 B&W ASW-500 SubW £299.00
Pioneer XV-DV55 = 8-58 spaks £995.00 Sim 2 HT-200 Projector, ex dem £9895.00
Pioneer VSX-059 THX RC £399.00 Denon AV-F100s System +XT panels £9895.00

Check our web site: soundcrafthi-fi.com

Audio Visual Furniture
For further information or a free brochure contact: JEM Distribution, Springfield Mills, Spa Street, Ossett Wakefield WF5 0HW.
Tel: 01924 277626 Fax: 01924 270759
THE AUDIO ROOM
EX DEMONSTRATION AND USED SALE

<table>
<thead>
<tr>
<th>Product</th>
<th>Used</th>
<th>New</th>
</tr>
</thead>
<tbody>
<tr>
<td>Linn Kollector</td>
<td>£2400</td>
<td>£1000</td>
</tr>
<tr>
<td>Linn KARIC 3 CD Player</td>
<td>£1850</td>
<td>£850</td>
</tr>
<tr>
<td>Linn NUMERIK DAC</td>
<td>£1500</td>
<td>£750</td>
</tr>
<tr>
<td>Linn Ikemi</td>
<td>£1950</td>
<td>£1400</td>
</tr>
<tr>
<td>Linn Genki silver</td>
<td>£1030</td>
<td>£595</td>
</tr>
<tr>
<td>Linn Kolektor silver</td>
<td>£530</td>
<td>£350</td>
</tr>
<tr>
<td>Linn LK85 silver</td>
<td>£530</td>
<td>£395</td>
</tr>
<tr>
<td>Linn 5103 silver</td>
<td>£3285</td>
<td>£1995</td>
</tr>
<tr>
<td>Linn 5125 silver</td>
<td>£1785</td>
<td>£1195</td>
</tr>
<tr>
<td>Cyrus 7</td>
<td>700</td>
<td>500</td>
</tr>
<tr>
<td>NEW VERY LIMITED STOCK</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cyrus 5</td>
<td>500</td>
<td>350</td>
</tr>
<tr>
<td>Cyrus 7</td>
<td>700</td>
<td>400</td>
</tr>
<tr>
<td>Naim NAP180</td>
<td>1220</td>
<td>900</td>
</tr>
<tr>
<td>Naim Credo Maple</td>
<td>1425</td>
<td>995</td>
</tr>
<tr>
<td>Rega PLANET</td>
<td>498</td>
<td>300</td>
</tr>
<tr>
<td>Rega Elidit</td>
<td>748</td>
<td>450</td>
</tr>
<tr>
<td>Rega PLANET 2000</td>
<td>498</td>
<td>400</td>
</tr>
<tr>
<td>Rega Mira</td>
<td>498</td>
<td>400</td>
</tr>
<tr>
<td>Totem STitaf mahogany</td>
<td>1190</td>
<td>800</td>
</tr>
<tr>
<td>Totem ARO cherry</td>
<td>970</td>
<td>700</td>
</tr>
</tbody>
</table>

NEW PRODUCTS THIS MONTH.
LINN KLIMAX KONTROL PRE AMP , TRULY AWESOME !
SUGDEN MASTERCLASS INTEGRATED AMP (it's not new but
an amp of this quality deserves to be mentioned).
SPENDOR 56 LOUDSPEAKERS, revised from original
model, wow what a difference.

THE AUDIO ROOM
2 GEORGE STREET, HEDON, HULL, HU12 8JH
T. 01482 891375
E. hi@theaudioroom.co.uk
W. www.theaudioroom.co.uk

MIDLAND STUDIO HIFI
9 FINCHFIELD ROAD WEST, TUFFIELD, WOLVERHAMPTON, WEST MIDLANDS, WV3 3YB
HI-FI CONSULTANTS.
FAX/TEL: (01905) 380055
www.midlandhi-fi.co.uk

AMPLIFICATION
OCM 55 Preamp
Ex Dem £1700
Musical Fidelity Studio T Power
New £1800
Metaxas Marquis Preamp
New £750
Rogers Cadet III excellent condition
New £250

DIGITAL
Teac T1 Transport D1 DAC
£535
DPA T1 Transports
£595
Counterpoint DAII Transport (new laser fitted)
£1500
Theta Chroma HDGC
£650

* Why not buy a package of s/h Teac or DPA Transport with
Theta Chroma for £950!!! *

SPEAKERS
Spendor SP2

OTHERS
Pioneer F91 Reference Tuner
£195
Yamaha TC800 GL Designer Cassette
£100
Two yes 2 Sony WMD-64 Professional Portable Cassette
£225

COLLECTORS ITEMS
Ortofon ST1ST Cartridge
£150
ADC 25 + Alternate Styli
Offers
Wordccnt Articulated Arm
Offers
Ex-Demo Clearance
Sale Of Hi-End And Top Of The Line Components At Up To 50% Off

Red Rose & Wadia (Demonstration models, as new)
- M2/M3 'Silver Signature' tube pre-power £17,000 now £8,500
- Passion integrated solid state 100wpc £3,000 now £1,999
- Rosette 1 integrated solid state 50wpc £2,000 now £1,349
- Rosebud 1 speaker french sycamore £3,000 now from £1,499
- Rosebud 1 as above piano laquer black £3,300 now £1,699
- R3 original model with dipole ribbon tweeter £3,500 now £1,750
- Wadia 270/27ix top of the line transport and Dac latest model

Home cinema components (Demonstration models)
- Seleco VP310 CRT projector £4,000 now £1,999
- Faroudja DVD1000 hi-end region 1 player £4,500 now £1,499
- Proceed AMP 5 channel theatre amplifier £5,500 now £2,750
- Lexicon 700T programmable touch screen £1,500 now £995

Two channel components (Demonstration models)
- Revox Exception top loading cd player £2,500 now £1,250
- Revox Exception integrated amplifier £2,200 now £1,100
- Revox Exception FM RDS tuner/timer £1,800 now £900
- Revox Elegance Prestige floor standing speakers £1,500 now £750
- Revox Unisub passive subwoofer £300 now only £75

Sonic Design Damping Feet are available from all good specialist hi-fi & accessory retailers.
(Trade enquiries are welcome - email: tradesales@sonicdesign.co.uk
Or, in case of difficulty, via our web shop at: www.sonicdesign.co.uk
Distributed by: Wavelength Distribution
Tel: 01622 201983 Fax: 01622 201983

www.supradirect.co.uk
The ONE-STOP SECURE WEBSITE to buy SUPRA cables to improve your Hi-Fi and/or Home Cinema system. ** ONLINE CREDIT CARD PURCHASES via 128bit SSL **

Need a reason to buy Supra cables??
- Other good reviews include:
  - Hi-Fi Choice "Recommended"
  - Hi-Fi World "Highly recommended"
  - What Video "Best Buy" cable: Classic 4T
  - What Video "Best Choice" cable: P3 3.4 & P3 3.4/S shielded
  - Also available now EFF-ISL "25th Anniversary" the updated version of the Hi-Fi Choice "Best Buy" EFF-ISL cable

STOP PRESS:
Visit us in the Audio Atmosphere demo room at the forthcoming Manchester Hi-Fi & Home Cinema Show Hilton Hotel, Manchester Airport from 16th-17th November.
We'll have plenty of award winning Supra cables available at SPECIAL SHOW PRICES - so come along and see us!!

These are the 4 easy steps for improving your system
1 - VISIT: www.supradirect.co.uk
2 - VIEW the range on/offline (download the PDF catalogue)
3 - SELECT from the wide range, SAVING money when you buy
4 - ENJOY!!
<table>
<thead>
<tr>
<th><strong>EQUIPMENT</strong></th>
<th><strong>PRICE</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>AUDIO AMPLIFIERS &amp; CD PLAYERS</strong></td>
<td></td>
</tr>
<tr>
<td>NAKAMICHI LX1 CASSETTE DECK</td>
<td>£200.00</td>
</tr>
<tr>
<td>PHILIPS 430PL100 42&quot; PLASMA SCREEN</td>
<td>£4,299.00</td>
</tr>
<tr>
<td>PIONEER EX-400 VALVE RECEIVER</td>
<td>£155.00</td>
</tr>
<tr>
<td>PINK TRIANGLE DA-CAPO DAC</td>
<td>£699.00</td>
</tr>
<tr>
<td>PRECIOUS METALS COPPERTECH DELTA</td>
<td>£50.00</td>
</tr>
<tr>
<td>PRECIOUS METALS SILVER £350 SIGNAL</td>
<td>£187.00</td>
</tr>
<tr>
<td>PRECIOUS METALS SILVER COPPERTECH DELTA</td>
<td>£110.00</td>
</tr>
<tr>
<td>PRECIOUS METALS STEREO 53 SIGNAL</td>
<td>£81.00</td>
</tr>
<tr>
<td>PROJECT 2.9 RECORD DECK WITH ORTHOFLON CART. CHERRY</td>
<td>£399.00</td>
</tr>
<tr>
<td>USA PASSIVE CD PRE AMP ALPS POT.</td>
<td>£65.00</td>
</tr>
<tr>
<td>QUAD FM 1 TUNER</td>
<td>£50.00</td>
</tr>
<tr>
<td>QUAD FM 3 TUNER</td>
<td>£95.00</td>
</tr>
<tr>
<td>ROGERS MASTER POWER AMPLIFIER - RARE EXCELLENT</td>
<td>£650.00</td>
</tr>
<tr>
<td>ROGERS LS888 FLOOR STANDERS - EX DEM.</td>
<td>£159.00</td>
</tr>
<tr>
<td>ROGERS H888 MK2 CHASSIS - WORKS FINE</td>
<td>£150.00</td>
</tr>
<tr>
<td>ROGERS RAVENSBROOK</td>
<td>£75.00</td>
</tr>
<tr>
<td>ROGERS JUNIOR STEREO CHASSIS + PRE AMP - RARE</td>
<td>£150.00</td>
</tr>
<tr>
<td>ROGERS CADET CHASSIS WITH SEPARATE PRE-AMP</td>
<td>£250.00</td>
</tr>
<tr>
<td>SNELL ACoustics TYPE 30 SPEAKERS - OAK</td>
<td>£575.00</td>
</tr>
<tr>
<td>SOUND ORGANISATION RACK - SILVER 4 SHELVES 40% OFF</td>
<td>£120.00</td>
</tr>
<tr>
<td>SOUND STYLE XS RACK - ICE BLUE GLASS - 3 SHELVES</td>
<td>£299.00</td>
</tr>
<tr>
<td>TRIPLETOLE STEREO INTERGRATED</td>
<td>£195.00</td>
</tr>
<tr>
<td>WHARFEDALE RUBIANCE FLOOR STANDERS CHERRY/BLACK</td>
<td>£120.00</td>
</tr>
<tr>
<td>WORLD AUDIO 4 WATT SINGLE ENDED - INTEGRATED</td>
<td>£399.00</td>
</tr>
<tr>
<td>YAMAHA CT710 TUNER</td>
<td>£600.00</td>
</tr>
</tbody>
</table>

**PRE-OWNED EQUIPMENT**

<table>
<thead>
<tr>
<th><strong>EQUIPMENT</strong></th>
<th><strong>PRICE</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>AUDIO INNOVATIONS SERIES 1000 8 MK MONOS</strong></td>
<td>£350.00</td>
</tr>
<tr>
<td><strong>BLAIR 8000#-PHONES</strong></td>
<td>£450.00</td>
</tr>
<tr>
<td><strong>AUDIOLAB 8000C DAC</strong></td>
<td>£550.00</td>
</tr>
<tr>
<td><strong>DEFINITIVE TECHNOLOGY PRO TOWER IV (UCZ, TWIN ACTIVE SUBS-£250 NEW)</strong></td>
<td>£1,195.00</td>
</tr>
<tr>
<td><strong>DENON AX-41 GOLD BOXED AND IMMACULATE (£500 NEW)</strong></td>
<td>£995.00</td>
</tr>
<tr>
<td><strong>KEF 1000 CAR 1000 BOXED AND IMMACULATE (£750 AVERAGE)</strong></td>
<td>£995.00</td>
</tr>
<tr>
<td><strong>LINN SÜPER DAC 30 BIT NON SMPs VGC</strong></td>
<td>£350.00</td>
</tr>
<tr>
<td><strong>LINSOHN TAIWAN DMC190 LOVELY CONDITION BUYER COLLECTS</strong></td>
<td>£450.00</td>
</tr>
<tr>
<td><strong>MAHLEA MANNES S2 MINT</strong></td>
<td>£699.00</td>
</tr>
<tr>
<td><strong>SOUND STYLE XS RACK - ICE BLUE GLASS - 5 SHELVES</strong></td>
<td>£399.00</td>
</tr>
<tr>
<td><strong>PREMIUM METALS COPPERTECH 102 SIGNAL</strong></td>
<td>£110.00</td>
</tr>
<tr>
<td><strong>AUDIOLAB 8000DA - GREY - PHONO</strong></td>
<td>£199.00</td>
</tr>
<tr>
<td><strong>MIKRO 1000 TRANSPORTABLE BOXED AND IMMACULATE (£150 NEW)</strong></td>
<td>£995.00</td>
</tr>
<tr>
<td><strong>MUSICAL FIDELITY HIFISX 100 AV SILVER 5 MONTHS OLD AS NEW (£300 NEW)</strong></td>
<td>£240.00</td>
</tr>
<tr>
<td><strong>MUSICAL FIDELITY F9T MINI II 150 WATTS BOXED AND IMMACULATE (£200 NEW)</strong></td>
<td>£240.00</td>
</tr>
<tr>
<td><strong>ROGERS CHASSIS WITH SEPARATE PRE-AMP</strong></td>
<td>£250.00</td>
</tr>
<tr>
<td><strong>SEBELAS RAVENSBROOK</strong></td>
<td>£150.00</td>
</tr>
<tr>
<td><strong>SEBELAS HG88 MK2 CHASSIS - WORKS FINE</strong></td>
<td>£650.00</td>
</tr>
<tr>
<td><strong>SEBELAS MASTER POWER AMPLIFIER - RARE EXCELLENT</strong></td>
<td>£1,500.00</td>
</tr>
</tbody>
</table>

**SHOWROOM**

- 65 DARENTH ROAD
- DARTFORD
- KENT DA1 1LU

---

**MAIL ORDERS**

**PHONE:** 01376 521132 07802 483698

**FAX:** 01376 293291

**E-MAIL:** info@matrixhi-fi.co.uk

---

**STOWSOUNDS**

Special prices on the following new and used products:

- **Engine:**
  - Creek C253 £1,099
  - Exposure 2116 £1,400
  - Musical Fidelity X 1 £375

- **GEARBOX:**
  - Exposure 2116 £1,400
  - Musical Fidelity £375

- **PRE-OWNED EQUIPMENT:**
  - **AUDIO INNOVATIONS SERIES 1000 8 MK MONOS** £350.00
  - **BLAIR 8000#-PHONES** £450.00
  - **AUDIOLAB 8000C DAC** £550.00
  - **DEFINITIVE TECHNOLOGY PRO TOWER IV (UCZ, TWIN ACTIVE SUBS-£250 NEW)** £1,195.00
  - **DENON AX-41 GOLD BOXED AND IMMACULATE (£500 NEW)** £995.00
  - **KEF 1000 CAR 1000 BOXED AND IMMACULATE (£750 AVERAGE)** £995.00
  - **LINN SÜPER DAC 30 BIT NON SMPs VGC** £350.00
  - **LINSOHN TAIWAN DMC190 LOVELY CONDITION BUYER COLLECTS** £450.00
  - **MAHLEA MANNES S2 MINT** £699.00
  - **SOUND STYLE XS RACK - ICE BLUE GLASS - 5 SHELVES** £399.00
  - **PREMIUM METALS COPPERTECH 102 SIGNAL** £110.00
  - **AUDIOLAB 8000DA - GREY - PHONO** £199.00
  - **MIKRO 1000 TRANSPORTABLE BOXED AND IMMACULATE (£150 NEW)** £995.00
  - **MUSICAL FIDELITY HIFISX 100 AV SILVER 5 MONTHS OLD AS NEW (£300 NEW)** £240.00
  - **MUSICAL FIDELITY F9T MINI II 150 WATTS BOXED AND IMMACULATE (£200 NEW)** £240.00
  - **ROGERS CHASSIS WITH SEPARATE PRE-AMP** £250.00
  - **SEBELAS RAVENSBROOK** £150.00
  - **SEBELAS HG88 MK2 CHASSIS - WORKS FINE** £650.00
  - **SEBELAS MASTER POWER AMPLIFIER - RARE EXCELLENT** £1,500.00

**CUSTOMER INTERCONNECTS**

Saves customers, supports at reduced prices.

Phone for details.
Sound & Music
93-95 Nantwich Rd., Crewe, Cheshire.
Telephone: 01270 214143

Linn Sizik (Maple/XD) - £650
Creek CAS 3140 Tuner (XD) - £80
Sanyo PV30 Projector (XD) - £1400
Monitor Audio FB110 Sub-Woofer (XD) - £300
NAD 370 Integrated Amplifier (XD) - £350
Linn 5103 Surround Sound Controller (XD) - £2500
Technics SUYO £95

Raid Ildwnift, ! oaken Integrated £25

Alchemist Kraken APD8Amk2Power 1425
Audio Research D70 Valve Monster 0195

Tannoy Einys 3 Speakers (Sycamore/XD) - £800
Infinity Kappa 400 Speakers (XD) - £700

Castle Warwick (Cherry/XD) - £350
Arcam Delta 250 / B50 (SH) - £500

Meridian D33 Speakers (XD) - £1900
Meridian Digital Sub-Woofer 2500 (XD) - £1700
Castle Conveyor Speakers (Cherry/XD) - £750

Monitor Audio Silver 8 (Cherry/XD) - £500

All equipment is fully tested and guaranteed

We buy, sell & part exchange quality Hi-Fi

AMPLIFIERS / RECEIVERS

Triode 318 £1950

Late 1960s Power Amp... £295
Audio Research 370 Tone Matching £195
Audio Research 91 £900

Nakamichi RX-510 Power Amp £900

Kec Reference 104/2 Speakers (SH) - £500
Harman Kardon DVD 20 DVD Player (XD) - £200
Loewe System Tuner/Amplifier/CD (XD) - £800

Technics 3020 on wall £550

Roksan 4 Channel AV Power Amplifier (XD) - £350
Roksan Kandy Integrated Amplifier (XD) - £350
Castle Harlech Speakers (Cherry/XD) - £700

Tannoy Einys 3 Speakers (Sycamore/XD) - £800
Infinity Kappa 400 Speakers (XD) - £700

Castle Warwick (Cherry/XD) - £350
Arcam Delta 250 / B50 (SH) - £500

Meridian D33 Speakers (XD) - £1900
Meridian Digital Sub-Woofer 2500 (XD) - £1700
Castle Conveyor Speakers (Cherry/XD) - £750

Monitor Audio Silver 8 (Cherry/XD) - £500

All equipment is fully tested and guaranteed

We buy, sell & part exchange quality Hi-Fi

AMPLIFIERS / RECEIVERS

Triode 318 £1950

Late 1960s Power Amp... £295
Audio Research 370 Tone Matching £195
Audio Research 91 £900

Nakamichi RX-510 Power Amp £900

Kec Reference 104/2 Speakers (SH) - £500
Harman Kardon DVD 20 DVD Player (XD) - £200
Loewe System Tuner/Amplifier/CD (XD) - £800

Technics 3020 on wall £550

Roksan 4 Channel AV Power Amplifier (XD) - £350
Roksan Kandy Integrated Amplifier (XD) - £350
Castle Harlech Speakers (Cherry/XD) - £700

Tannoy Einys 3 Speakers (Sycamore/XD) - £800
Infinity Kappa 400 Speakers (XD) - £700

Castle Warwick (Cherry/XD) - £350
Arcam Delta 250 / B50 (SH) - £500

Meridian D33 Speakers (XD) - £1900
Meridian Digital Sub-Woofer 2500 (XD) - £1700
Castle Conveyor Speakers (Cherry/XD) - £750

Monitor Audio Silver 8 (Cherry/XD) - £500

All equipment is fully tested and guaranteed

We buy, sell & part exchange quality Hi-Fi

"Classique Sounds servicing restores the Quads to a position where they can hold their own..." J. Marks, HI-FI WORLD, April 1999. Full servicing facilities available.

Our full range of audio visual products is also available from our new Liverpool branch. Please ring for details.

Please call us if you have any equipment to sell or are looking for anything in particular. New stock daily.

All equipment is fully tested and guaranteed

Also: Music CDs, Games, Musical Equipment, Computers, TV, VCR & Photographic

Web page: www.xelectrical.com
125 King Street Hammersmith
020 - 8569 7383
A Station Bldgs Fife Road Kingston
Games & CDs upstairs at Kingston
43 Church Street Gorton
020 - 8564 4442
020 - 8560 0007

DECEMBER 2002 HI-FI WORLD & COMPUTER AUDIO 119
<table>
<thead>
<tr>
<th><strong>COST</strong></th>
<th><strong>PRICE</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CD &amp; DACS</strong></td>
<td><strong>new</strong></td>
</tr>
<tr>
<td>CD-PLAYER</td>
<td><strong>150</strong></td>
</tr>
<tr>
<td>CD-PLAYER</td>
<td><strong>150</strong></td>
</tr>
<tr>
<td>CD-PLAYER</td>
<td><strong>150</strong></td>
</tr>
<tr>
<td>CD-PLAYER</td>
<td><strong>150</strong></td>
</tr>
<tr>
<td>CD-PLAYER</td>
<td><strong>150</strong></td>
</tr>
<tr>
<td>CD-PLAYER</td>
<td><strong>150</strong></td>
</tr>
<tr>
<td>CD-PLAYER</td>
<td><strong>150</strong></td>
</tr>
<tr>
<td>CD-PLAYER</td>
<td><strong>150</strong></td>
</tr>
<tr>
<td>CD-PLAYER</td>
<td><strong>150</strong></td>
</tr>
<tr>
<td>CD-PLAYER</td>
<td><strong>150</strong></td>
</tr>
<tr>
<td>CD-PLAYER</td>
<td><strong>150</strong></td>
</tr>
<tr>
<td>CD-PLAYER</td>
<td><strong>150</strong></td>
</tr>
<tr>
<td>CD-PLAYER</td>
<td><strong>150</strong></td>
</tr>
<tr>
<td>CD-PLAYER</td>
<td><strong>150</strong></td>
</tr>
<tr>
<td>CD-PLAYER</td>
<td><strong>150</strong></td>
</tr>
<tr>
<td>CD-PLAYER</td>
<td><strong>150</strong></td>
</tr>
<tr>
<td>CD-PLAYER</td>
<td><strong>150</strong></td>
</tr>
<tr>
<td>CD-PLAYER</td>
<td><strong>150</strong></td>
</tr>
<tr>
<td>CD-PLAYER</td>
<td><strong>150</strong></td>
</tr>
<tr>
<td>CD-PLAYER</td>
<td><strong>150</strong></td>
</tr>
<tr>
<td>CD-PLAYER</td>
<td><strong>150</strong></td>
</tr>
<tr>
<td>CD-PLAYER</td>
<td><strong>150</strong></td>
</tr>
<tr>
<td>CD-PLAYER</td>
<td><strong>150</strong></td>
</tr>
<tr>
<td>CD-PLAYER</td>
<td><strong>150</strong></td>
</tr>
<tr>
<td>CD-PLAYER</td>
<td><strong>150</strong></td>
</tr>
<tr>
<td>CD-PLAYER</td>
<td><strong>150</strong></td>
</tr>
<tr>
<td>CD-PLAYER</td>
<td><strong>150</strong></td>
</tr>
<tr>
<td>CD-PLAYER</td>
<td><strong>150</strong></td>
</tr>
<tr>
<td>CD-PLAYER</td>
<td><strong>150</strong></td>
</tr>
<tr>
<td>CD-PLAYER</td>
<td><strong>150</strong></td>
</tr>
<tr>
<td>CD-PLAYER</td>
<td><strong>150</strong></td>
</tr>
<tr>
<td>CD-PLAYER</td>
<td><strong>150</strong></td>
</tr>
<tr>
<td>CD-PLAYER</td>
<td><strong>150</strong></td>
</tr>
<tr>
<td>CD-PLAYER</td>
<td><strong>150</strong></td>
</tr>
<tr>
<td>CD-PLAYER</td>
<td><strong>150</strong></td>
</tr>
<tr>
<td>CD-PLAYER</td>
<td><strong>150</strong></td>
</tr>
<tr>
<td>CD-PLAYER</td>
<td><strong>150</strong></td>
</tr>
<tr>
<td>CD-PLAYER</td>
<td><strong>150</strong></td>
</tr>
<tr>
<td>CD-PLAYER</td>
<td><strong>150</strong></td>
</tr>
<tr>
<td>CD-PLAYER</td>
<td><strong>150</strong></td>
</tr>
<tr>
<td>CD-PLAYER</td>
<td><strong>150</strong></td>
</tr>
<tr>
<td>CD-PLAYER</td>
<td><strong>150</strong></td>
</tr>
<tr>
<td>CD-PLAYER</td>
<td><strong>150</strong></td>
</tr>
<tr>
<td>CD-PLAYER</td>
<td><strong>150</strong></td>
</tr>
<tr>
<td>CD-PLAYER</td>
<td><strong>150</strong></td>
</tr>
<tr>
<td>CD-PLAYER</td>
<td><strong>150</strong></td>
</tr>
<tr>
<td>CD-PLAYER</td>
<td><strong>150</strong></td>
</tr>
<tr>
<td>CD-PLAYER</td>
<td><strong>150</strong></td>
</tr>
<tr>
<td>CD-PLAYER</td>
<td><strong>150</strong></td>
</tr>
<tr>
<td>CD-PLAYER</td>
<td><strong>150</strong></td>
</tr>
<tr>
<td>CD-PLAYER</td>
<td><strong>150</strong></td>
</tr>
<tr>
<td>CD-PLAYER</td>
<td><strong>150</strong></td>
</tr>
<tr>
<td>CD-PLAYER</td>
<td><strong>150</strong></td>
</tr>
<tr>
<td>CD-PLAYER</td>
<td><strong>150</strong></td>
</tr>
<tr>
<td>CD-PLAYER</td>
<td><strong>150</strong></td>
</tr>
<tr>
<td>CD-PLAYER</td>
<td><strong>150</strong></td>
</tr>
<tr>
<td>CD-PLAYER</td>
<td><strong>150</strong></td>
</tr>
<tr>
<td>CD-PLAYER</td>
<td><strong>150</strong></td>
</tr>
<tr>
<td>CD-PLAYER</td>
<td><strong>150</strong></td>
</tr>
<tr>
<td>CD-PLAYER</td>
<td><strong>150</strong></td>
</tr>
<tr>
<td>CD-PLAYER</td>
<td><strong>150</strong></td>
</tr>
<tr>
<td>CD-PLAYER</td>
<td><strong>150</strong></td>
</tr>
<tr>
<td>CD-PLAYER</td>
<td><strong>150</strong></td>
</tr>
<tr>
<td>CD-PLAYER</td>
<td><strong>150</strong></td>
</tr>
<tr>
<td>CD-PLAYER</td>
<td><strong>150</strong></td>
</tr>
<tr>
<td>CD-PLAYER</td>
<td><strong>150</strong></td>
</tr>
<tr>
<td>CD-PLAYER</td>
<td><strong>150</strong></td>
</tr>
<tr>
<td>CD-PLAYER</td>
<td><strong>150</strong></td>
</tr>
<tr>
<td>CD-PLAYER</td>
<td><strong>150</strong></td>
</tr>
<tr>
<td>CD-PLAYER</td>
<td><strong>150</strong></td>
</tr>
<tr>
<td>CD-PLAYER</td>
<td><strong>150</strong></td>
</tr>
<tr>
<td>CD-PLAYER</td>
<td><strong>150</strong></td>
</tr>
<tr>
<td>CD-PLAYER</td>
<td><strong>150</strong></td>
</tr>
<tr>
<td>CD-PLAYER</td>
<td><strong>150</strong></td>
</tr>
<tr>
<td>CD-PLAYER</td>
<td><strong>150</strong></td>
</tr>
<tr>
<td>CD-PLAYER</td>
<td><strong>150</strong></td>
</tr>
<tr>
<td>CD-PLAYER</td>
<td><strong>150</strong></td>
</tr>
<tr>
<td>CD-PLAYER</td>
<td><strong>150</strong></td>
</tr>
<tr>
<td>CD-PLAYER</td>
<td><strong>150</strong></td>
</tr>
<tr>
<td>CD-PLAYER</td>
<td><strong>150</strong></td>
</tr>
<tr>
<td>CD-PLAYER</td>
<td><strong>150</strong></td>
</tr>
<tr>
<td>CD-PLAYER</td>
<td><strong>150</strong></td>
</tr>
<tr>
<td>CD-PLAYER</td>
<td><strong>150</strong></td>
</tr>
<tr>
<td>CD-PLAYER</td>
<td><strong>150</strong></td>
</tr>
<tr>
<td>CD-PLAYER</td>
<td><strong>150</strong></td>
</tr>
<tr>
<td>CD-PLAYER</td>
<td><strong>150</strong></td>
</tr>
<tr>
<td>CD-PLAYER</td>
<td><strong>150</strong></td>
</tr>
<tr>
<td>CD-PLAYER</td>
<td><strong>150</strong></td>
</tr>
<tr>
<td>CD-PLAYER</td>
<td><strong>150</strong></td>
</tr>
<tr>
<td>CD-PLAYER</td>
<td><strong>150</strong></td>
</tr>
<tr>
<td>CD-PLAYER</td>
<td><strong>150</strong></td>
</tr>
<tr>
<td>CD-PLAYER</td>
<td><strong>150</strong></td>
</tr>
<tr>
<td>CD-PLAYER</td>
<td><strong>150</strong></td>
</tr>
<tr>
<td>CD-PLAYER</td>
<td><strong>150</strong></td>
</tr>
<tr>
<td>CD-PLAYER</td>
<td><strong>150</strong></td>
</tr>
<tr>
<td>CD-PLAYER</td>
<td><strong>150</strong></td>
</tr>
<tr>
<td>CD-PLAYER</td>
<td><strong>150</strong></td>
</tr>
<tr>
<td>CD-PLAYER</td>
<td><strong>150</strong></td>
</tr>
<tr>
<td>CD-PLAYER</td>
<td><strong>150</strong></td>
</tr>
<tr>
<td>CD-PLAYER</td>
<td><strong>150</strong></td>
</tr>
<tr>
<td>CD-PLAYER</td>
<td><strong>150</strong></td>
</tr>
<tr>
<td>CD-PLAYER</td>
<td><strong>150</strong></td>
</tr>
<tr>
<td>CD-PLAYER</td>
<td><strong>150</strong></td>
</tr>
<tr>
<td>CD-PLAYER</td>
<td><strong>150</strong></td>
</tr>
<tr>
<td>CD-PLAYER</td>
<td><strong>150</strong></td>
</tr>
<tr>
<td>CD-PLAYER</td>
<td><strong>150</strong></td>
</tr>
<tr>
<td>CD-PLAYER</td>
<td><strong>150</strong></td>
</tr>
<tr>
<td>CD-PLAYER</td>
<td><strong>150</strong></td>
</tr>
<tr>
<td>CD-PLAYER</td>
<td><strong>150</strong></td>
</tr>
<tr>
<td>CD-PLAYER</td>
<td><strong>150</strong></td>
</tr>
<tr>
<td>CD-PLAYER</td>
<td><strong>150</strong></td>
</tr>
<tr>
<td>CD-PLAYER</td>
<td><strong>150</strong></td>
</tr>
<tr>
<td>CD-PLAYER</td>
<td><strong>150</strong></td>
</tr>
<tr>
<td>CD-PLAYER</td>
<td><strong>150</strong></td>
</tr>
<tr>
<td>CD-PLAYER</td>
<td><strong>150</strong></td>
</tr>
<tr>
<td>CD-PLAYER</td>
<td><strong>150</strong></td>
</tr>
<tr>
<td>CD-PLAYER</td>
<td><strong>150</strong></td>
</tr>
<tr>
<td>CD-PLAYER</td>
<td><strong>150</strong></td>
</tr>
<tr>
<td>CD-PLAYER</td>
<td><strong>150</strong></td>
</tr>
<tr>
<td>CD-PLAYER</td>
<td><strong>150</strong></td>
</tr>
<tr>
<td>CD-PLAYER</td>
<td><strong>150</strong></td>
</tr>
<tr>
<td>CD-PLAYER</td>
<td><strong>150</strong></td>
</tr>
<tr>
<td>CD-PLAYER</td>
<td><strong>150</strong></td>
</tr>
<tr>
<td>CD-PLAYER</td>
<td><strong>150</strong></td>
</tr>
<tr>
<td>CD-PLAYER</td>
<td><strong>150</strong></td>
</tr>
<tr>
<td>CD-PLAYER</td>
<td><strong>150</strong></td>
</tr>
</tbody>
</table>
YES! I want to subscribe to Hi-Fi World for:

- £27.00 for 12 months

Your Details
Title            Initial  Surname
Address
Post Code
Daytime Tel:
Start Issue
Delivery Address (if different)

I would like to pay by cheque made payable to Audio Publishing Ltd.

Please debit my
- VISA
- MASTER
- SWITCH
- AMEX

Switch card issue No.  Expiry Date: /

Cardholder Signature:

Please choose service:

Airmail
- Middle East & South-East Asia £60
- Europe £50

Airmail
- USA, Canada, Australia, Japan, Korea & China £70

Surface Mail £40

Send this form to:
Hi-Fi World, Freepost LON3478,
London, NW6 6YR

Get your issue of hi-fi world straight to your door!

Get to our amazing classified ads first and grab a bargain!!

- Run by dedicated hi-fi engineers and enthusiasts.
- Hi-Fi World has become famous for its informative reviews and radical kit designs.

Credit Card Hotline
+44 01923 270 833
Monday - Friday 9.30am - 12.00 noon; Fax +44 01923 260 586

MISSED AN ISSUE?
Back issues also available at a cost of £3.50 only (includes P&P), payment by cheque only - overseas please contact subscriptions department for details.
Send cheque to: Hi-Fi World, Freepost LON3478, London, NW6 6YR.
IAN HARRISON HI-FI
TEL: 01283 702875

SALE NOW ON!

TRADE IN YOUR OLD MOVING COIL CARTRIDGE & SAVE UP TO 60% OFF THE RRP.

CARTRIDGES & STYLUS

SHURE
DENON
Optimum
SENNHEISER
SONY
DENON

GOLDING
APOLLO
SOUND STYLE
AKG
GRADO
AUDIOTECHNICA

SUMIKO
ORGANISATION
MICHEL
ALPHASON
CABE
DAC
TASCA
SONY
PANASONIC

TRANS
FIGURATION
D+N
TRICCHORD
MOTH
CREEK
NAD
EAL
ROKSAN
TOM EVANS

LONDON DECCA
GRADE
BLACK RHODIUM
TRANSPARENT
ORPHEON
QED
CABLE
D+N
PIONEER
TEAC
SONY
DENON

PAVANIC
CASABASS
SHUN MOKK
EPICS

ROKSAN
SPEAR ISOLATION
ARGENTO
AURAL 

GAMUT
MOTH
CAT

ROKSAN
ATLAS
HAPI

CABASSE

MUSICAL FIDELITY
XP100 BARGAIN

$799.00 $549.00 D

MUSICALITY
SL Amp

$400.00 $199.00 D

SOUNDSTAGE

ARCAM FMJ P35 £150.00 £489.00 N

Arcam FMI P25 £199.00 £489.00 N

Arcam Alpha 10 £199.00 £519.00 D

Mission 773 SE £239.00 N+D

Mission 781 £219.00 D

Mission 783 £295.00 £649.00 D

Hi-Fi Multiroom and home cinema

ACOUSTIC ENERGY AE1 MKII

$995.00 $599.00 D+N

Arcam Alpha 10

$799.00 $519.00 D

Arcam FMJ P25 power amp

$750.00 $489.00 N

Arcam FMJ CD23 Cd player

$1099.00 $719.00 N

Arcam FMJ A22/Dave AC3 - DTS amp

$1849.00 $1199.00 N

Arcam FMJ P35 power amp

$830.00 $539.00 N

Mission 783 £995.00 £649.00 D

Mission 773 SE £399.00 £239.00 N+D

Mission 781 £399.00 £239.00 N+D

Mission 783 £995.00 £649.00 D


MUSICALITY FIDELITY SPECIAL OFFERS

A3 CD

$999.00 $499.00 D+N

A3 power amp

$999.00 $559.00 D+N

A3 pre amp

$999.00 $559.00 D+N

MUSICALITY FIDELITY

XP100 BARGAIN

$799.00 $459.00 N

D = EX DEMONSTRATION, N = NEW, SH = SECOND HAND

Hi-Fi Multiroom and home cinema

ACOUSTIC ENERGY ARCAM ASH DESIGN AUDIO RESEARCH CELESTION COPELAND CYRUS DENON KEF KRELL LINN TAG MCLAREN MARTIN LOGAN MERIDIAN MICHELL MISSION MONITOR AUDIO MUSICAL FIDELITY NEAT ACOUSTICS PIONEER PROAC QED QUADRASPIRE REL SONUS FABER SME STANDS UNIQUE STAX THETA WILSON AUDIO ETC...

THE LISTENING ROOMS LTD

161 OLD BROMPTON ROAD LONDON SW5 0J

TEL: 020- 7244 7750/59 FAX: 020 - 7370 0192
www.listeningrooms.com
E-mail: trl@dial.pipex.com
Mon-Sat 10-6pm

WANTED:
Large collections of Classical LPs...

HI-FI WORLD & COMPUTER AUDIO DECEMBER 2002

122

www.hi-fiworl.com
UNISON RESEARCH Simply Four integrated valve amplifier, excellent condition, original packaging and manuals £650. Creek OBH-8SE MM phono pre-amp, mint condition £95. Tel: 020 7794 6676 (Dec)(I)

WILMSLOW VOGUE speaker Scanpeak D2905/9500 treble, bass 18W 8545, Holvud Musics £350. Meridian 508 20bit CD player £400, KEF PSW200/HITS 2001 sub/sat speakers, new £300. Tel: 020 8531 5979 (Dec)(I)

B&W NAUTILUS 801 Reference Monitors, red cherry finish, 16 months old, excellent condition. New RRP £8500, offered at £6250. Red cherry finish, 16 months old, mint, boxed £380 complete. Tel: (020) 7947 46974 or 07787 533170 (Dec)(I)

LEAK STEREO 20 profession-ally rebuilt including new valve bases. Point One pre amp perfect for CD tape etc. Trougline stereo tuner matching gold £380 complete. Tel: 020 8467 7759 (Dec)(I)

MONITOR AUDIO, PMC 703, floorstanding speakers, excellent condition, cost £800 new will accept £425 ono. Tel: 01525 854652 or 07787 533170 (Dec)(I)

B & W 801S Mkl, new tweet-ers fitted otherwise in original wood cases, £1150 the pair. Tel: 01202 765412 (Poole), (Dec)(I)

RUARK PROLOGUES Mark Two floor standing speakers very little use, two months old, dark cherry cabinets £450 ono. Tel: 01279 304671 (Essex) (Dec)(I)

FOR SALE. Clearaudio Basil MM/MMC phono amp see Hi-Fi Plus review, mint £175. Tel: 01903 247779 (Sussex) (Dec)(I)

JAMO CONCERT II, 12 months old, mint, boxed £1250 ono, American cherry. Jamo Concert centre £200 ono, vgc. boxed. Musical Fidelity FMT1 tuner £100 ono. Tel: (Mobile) 07833 161646. (Jan)(I)

DNM PA35 Power amp £2000 ono. Audio Synthesis Passion BM full size remote controlled passive pre £850. Proac Response One SC speakers with stands cherry £800. Tel: 01922 477682 (Dec)(I)

MUSICAL FIDELITY M3 Nu Vista integrated amplifier £2250 ono. Thiel CS2.6 loudspeakers, world class leading speakers (£5495) absolute bargain at £2495. Tel: 01508 499586 evenings or leave message by day (Feb)(I)

DENON DP 2000 with plinth and cover with Linn Itok LVII black with Audio Technica Art cartridge £495. Tel: Alan 01344 751446 (Dec)(I)

QUAD II monoblocks in chrome excellent condition £550 ono. Phase Technology Unis included phono stage £900 ono. Linn Axis mint boxed £185 ono. Tel: 01634 323683 Mobile: 07901 893982 (Dec)(I)

THORENS TD124 Mkll turntable in heavy oak plinth superb £300. Marantz Tjoeb 99 valve CD player £210. Leak ST20 £250. Alchemist Axiom integrated amp £130. Tel: 01827 261082 (Tamworth, Staffs) (Dec)(I)

B & W 801s Mkll, new tweeters fitted otherwise in original condition, literature, boxes can demonstrate £650. Denon CD DCD 890 ASLC 20 bit (£270) £80 remote boxed. Tel: 01453 546191 (Dec)(I)

QUAD 77 pre-amp. Quad 77 tuner. Quad 77 CD player: Quad 707 power amp. All boxed & instructions. B&W 7SE speakers £1200. Tel: Mobile: 07766 572060 (West Yorkshire) (Dec)(I)

WANTED: PAIR of LS3/5a loudspeakers in good condition. Rogers, Harbeth or similar. Tel: 01394 388399 (Jan)(I)

WANTED. A.D.C. Graphic Equaliser models. Soundshaper 2 IC hi-fi size or Soundshaper 3 19" rack mount. Any condition working or not working. Black or silver. Please contact Sat on 07974 467947, anytime or 020 8539 8513 after 7pm. (Dec)(I)

ACCUPHASE C2005 preamp £575, P3005 power amp 150 wpc, £685, both in matching wood cases, £1150 the pair. Tel: 01202 767873 (Poole). (Dec)(I)

AUDINO NOTE M1 phono preamplifier mint boxed £375, Castle Howard SII loudspeakers £550. Thiel TDI250 turntable SME 3012 12" arm in large SME plinth £250. Tel: 020 8965 1762 (Dec)(I)

MERIDIAN SYSTEM 602/606 transport DAC combination £950. 601 preamp £650. Pair 605 monoblocks £1050. ATC SCM20LS with ATC stands £900. Revox B260RS tuner £530. All excellent boxed. Tel: 01159 242075 or Email: hifi@theview.demon.co.uk (Nottingham) (Dec)(I)

MARANTZ CD94 extensive audiophile upgrade £450. Pioneer M-90 amplifier 250 wpc awesome and underrated in UK £450. RMS Revelation II speakers £350. (new £1800) Audio Technica ATH-70 Stereophones £65. Tel: 01159 242075 Email: hifi@theview.demon.co.uk (Nottingham) (Dec)(I)

IMPULSE H2 Horn loudspeakers, light ash in good condition £750. Ask for John, can deliver. Tel: 01484 308298 (Dec)(I)

CAMBRIDGE R50 Transmission Line Monitors. Classic design updated to modern standards with Scanpeak D2905 tweeters, New Coles Supertweeters, New crossover with high quality Poly prop capacitors and rewired throughout. Superb controlled base and wonderful clear sound. £325 ono. Tel: Peter 01344 751446 (Dec)(I)

Dawn balanced interconnects £150. Tel: Hong 01903 690 777 (Sussex) (Dec)(I)

CASTLE HOWARD SII loudspeakers black or silver £325. Linn LKII centre £650. Ono. Tel: 01254 711795 (Norfolk) (Dec)(I)

JAMO CONCERT II, 12 months old, mint, boxed £1250 ono, American cherry. Jamo Concert centre £200 ono, vgc. boxed. Musical Fidelity FMT1 tuner £100 ono. Tel: (Mobile) 07833 161646. (Jan)(I)

LUCCIA FIDELITY M3 Nu Vista integrated amplifier £2250 ono. Thiel CS2.6 loudspeakers, world class leading speakers (£5495) absolute bargain at £2495. Tel: 01508 499586 evenings or leave message by day (Feb)(I)

DENON DP 2000 with plinth and cover with Linn Itok LVII black with Audio Technica Art cartridge £495. Tel: Alan 01344 751446 (Dec)(I)

QUAD II monoblocks in chrome excellent condition £550 ono. Tube Technology Unis included phono stage £900 ono. Linn Axis mint boxed £185 ono. Tel: 01634 323683 Mobile: 07901 893982 (Dec)(I)

B & W 801s Mkll, new tweeters fitted otherwise in original condition, literature, boxes can demonstrate £650. Denon CD DCD 890 ASLC 20 bit ( £270) £80 remote boxed. Tel: 01453 546191 (Dec)(I)
VALVE AMPS

GIANT 500W LTD BOXED 290 WATT MONOBLOCS 8 500R PRE AMP
MINT/BOXED £2250

NESTORVICH LANS 100 WATT MONOBLOCS (VERY RARE/FANTASTIC)
MINT/BOXED £1250

LUKELY REFERENCE 120 MONOBLOCS (SOME SWITCHABLE) NEW VALUES 30 HOURS
MINT/BOXED £1200

CODA VISTA O/E MONOBLOCS IN GREAT/AS NEW/PRPR.
MINT £1200

AUDION GOLDEN KNIGHTS
MINT (EACH) £1750

AUDIOKITE ONE SIGNATURE (2006 PARTS BUILD FEW FEW HOURS USE FANTASTIC)
AS NEW/BOXED £2100

AUDIO RESEARCH DS-1 5000 POWER AMP
EXCLUSIVE £1700

AUDIO RESEARCH LS-2 PRE AMP
MINT/BOXED £1400

UNISON RESEARCH MUTE PRE AMP
MINT/BOXED £1000

UNISON RESEARCH PRIME PHONE
MINT/BOXED £1200

MONROE ASTY VALVE PRE ( pretty new)
MINT/BOXED £1250

MICHI RH-1 PASSIVE PRE AMP
MINT £275

SOLID STATE

PINK TRIANGLE INTEGRAL 12 MONTH OLD NEW PRICE £2995
MINT/BOXED £2495

ION TECHNIQ DOES WADLW 1800W 2100W £2995
MINT/BOXED £2750

GAIT VALVE AMP BALANCED-SINGLE ENDED (MATCHES D-290)
MINT £550

OHM 3 BOX PRE AMP
MINT £195

OHM 2 PASSIVE PRE AMP
MINT £225

MICHI RHA-10 REMOTE PRE AMP ( RARE)
MINT £650

MICHI RHC-10 PASSIVE PRE AMP (RARE/GOOD)
MINT £325

REGA CURSA REMOTE PRE AMP
MINT £225

MUSICAL FIDELITY MA-50 CLASS A MONOBLOCS
MINT £450

MUSICAL FIDELITY MA-20 CLAS...
NAIM NAIT 02 FM tuner (£1200 new) mint £500. Sony SACD DVD player black DVP NS 900 VQS 7 months old (£500 new) mint £325 Tel: 020 8643 4260 (Sutton) (Dec(I)

CHORD CPA3200 and matching SPM 1200b piano black pre and power amps equipped with Kimber Powerkords and Silver Streak XLR interconnects £2800. Tel: Andy 01606 75254 (Cheshire) (Dec)

LINDSLEY-HOOD HART 25cl pint £125. AR Legend Mission arm £175. Nakamichi 902 £800. Lenteq M/C £75. Thorens 318 £150. All excellent, other items. Tel: 01522 820179 (Lincs.) (Dec(I)

BASE AUDIOPHILE support system. 5 tiers with shelves. Excellent isolation. Great sound. Good condition. Was £1100, now £529. Extra shelves also available separately. Tel: 01256 819198 or 07768 998 948 (Jan(I)

PASS LABS X-350 amplifier for sale boxed as new condition £6000 (£10000). See www.passlabs.com. Tel: 07769 641748 or Email: cs411@pica.co.uk (Dec(I)

AUDIO NOTE M.Zero pre/monos £275. A/Note Zero pre £295. Arcam 70.2 £175, SL600 signatures stands £295. Aura VASO £175. DPA pre/pwr £695, Linx Stratos (wow!) pre/monos £695. Ruark Talismans II £345. Arcam A £275. Rega Jupiter 210 £695. KEF Q55 £225. Levinson No 27 £3995. Tel: 07966 267404 or Email: coom@biobun.com (Dec(I)

PINK TRIANGLE LTD Roksan Tabriz top end Pickering cartridge with free Nagaoka MPII Boron. All mint condition original packing. Pioneer F737 classic tuner £375 & £120. Tel: 01904 636174 (Dec(I)

KELLY RIBBONS with lenses. Pair of unused units with Decca Diffusion lenses, transformers and crossovers £300 pair. ATC 15" bass units Ref. PA100-375, unused about 6 years old, £190 pair. Tel: 01206 852209 (Colchester) (Dec(I)

MUSICAL FIDELITY A3CD £499 (£800). A3 amp £549 (£850). Acoustic Energy AE1 Mk2 £549 (£850). All six months old mint condition very reluctant sale. Tel: David 02390 315816. Mobile: 07747 603850 (Dec(I)

RUSS ANDREWS 8-way purifier block w/6ft mains £390 ono. 6ft mains hi-current w/vastgate 350 £190 ono. Transparent Musiclink super interconnect £280 ono. All boxed mint also VDH D102 III (2 pairs) £40 each Tel: Chris 020 8543 5311 evenings (Jan(I)

WILLIAMS HART Audiophile monoblock power amplifiers factory assembled. Boxed new £700 ono (pair). Roksan Ojan speakers rosewood finish as new superb build quality £300 ono. Tel: daytime 01268 887730, evening 01268 459442 or Email: steven_s156eb@hotmail.com (Dec(I)

MERIDIAN 500 CD player reclocked with Vimaic 1800 DAC cost £600 new £950 ono. Fantastic sound. Tel: 029 2035 5831 day, 029 2077 7156 evening (Jan(I)
Upgrade Your Turntable

"It's value is nothing short of tremendous"
Listener Magazine

"The single most important upgrade you can ever make to any record deck concerns the motor drive. Nothing can compare you for the shock of going DC, in a word, Gobsmacking"
Common Ground Magazine

...if you are thinking of upgrading your system...the Origin Live DC-motor kit should be high on your list for consideration" TNT Audio

Whatever your current turntable, the results in upgrading to the Origin Live DC motor and power supply are simply astounding. Designed as a drop in replacement for almost all turntables, the Origin Live upgrade kit offers vast improvements to all versions of Linn turntables, as well as Ariston, Rega, Systemdeck, Roksan, Rock, Oracle, Thorens, Well Tempered etc. With only a 12 Volt power supply and a full set of illustrated instructions our upgrade is both easy and safe to install. The upgrade is also offered with a full money back guarantee if you are not satisfied. The kit consisting of a high grade dc motor, soldered regulator board and power supply is only £262. This provides an extremely cost effective route to truly high end audio and is significantly superior in performance to other power supply upgrades costing 4 times the price. A larger purpose built transformer is also available as an optional extra at £175.

Turbocharging your Rega arm

"Nothing less than total dynamite" Hi-Fi World

If you are the proud owner of any rega toneram, you are now in the enviable position to transform it's performance into the league of super arms with modifications offered by Origin Live - the Origin live structural modification at £75 will enable your Rega to perform at a level exceeding that of arms costing over £1200. High performance rewiring with high grade litz cable is also offered at an additional £70 and external rewiring is £70 this further increases the performance.

"I have to say the Rega modifications turn this humble arm into a real Giant killer. Gone is the rather grey, sterile sound of the cooking Rega. Instead, tonal colour is fresh, dynamics have great speed and impact, and the sound stage is huge."
Hi-Fi World, Nov 97 (structural modification on RB250)

What Hi-Fi? gave this modification 5/5
Structural Modification - £75
Internal Rewiring - £70
External Rewiring - £70

For arm modifications we normally return your arm in 2 - 3 days.

Origin Live Ultra Turntables

Build & setup in an hour

"...this Vinyl front end had my jaw heading towards the floor with the solidity and transparency of the music it was making...with all these goodies in place the Standard would give turntables at the £1200 -1400 mark a hard time...

...Overall a deeply impressive deck...brilliant value for money...component quality is superb and the build process is a doddle."
Hi-Fi World

"the best sounding deck here (group comparison test of 8 leading turntables)...sounds fantastic."
What Hi-Fi?

"One of the most enjoyable and musically involving turntables I have ever heard ...Regardless of make or reputation"
Audiophile

Now you can own a professionally built, high performance turntable at a fraction of the normal cost. Origin Live turntable kits are supplied in 3 different specifications:

1. A standard kit of parts to enable you to build your own plinth at £282
2. The complete standard kit offered with a non-suspended pre-drilled & finished plinth at £349
3. The complete ultra kit comes in two options. The Ultra Kit Classic offering a truly high end suspended sub-chassis turntable with beautifully finished solid wood plinth. The Ultra Kit modern offers the performance of the Ultra Kit Classic combined with the modern day skeletal styling of our sensational resolution turntable. Both options available at £538.00

All kits are supplied with well illustrated instructions and are easier to assemble than many of today's pre-built turntables.

FOR MORE INFORMATION SEE WEBSITE OR CONTACT
Origin Live, Unit 5, 362b Spring Road, Sholing, Southampton, SO19 2PB, U.K.
Tel: 02380578877 / 80363249 Fax: 02380578877 e-mail: originlive@originlive.com
http://www.originlive.com
NAKAMICHI CR7E cassette unmarked as new mint condition boxed with remote and instructions plus Nakamichi head de-magnetizer also boxed sell together £1275.
Tel: 01275 835334 (Bristol) (Dec(I)

CONRAD-JONSEN PV10-SE pre and MV55 power amp combination, new Svetlana valves, mint, (£3500) £1500. Proac Studio 150 speakers in gorgeous yew, mint, (boxed), (£1500) £850. Musical Fidelity E600 CD, mint, (boxed), (£600) £200. M.I.T. speaker cables, 3 metre bi-wire pair (£500) £200. Tel: 07810 871731 or Email: peter.mccue@ntworld.com (Dec(I)

BBC LS3/J5 Goodmans 150hm. Boxed £300. Lowther mini Acoustas with blown PM6s. Garrard 301, original arm; Quad gear in sore need of restoration. Offers! Tel: 01249 815033 (Wivts) (Dec(I)

SILTECH LS-8RG3 1.5m WBT terminated speaker cable £270, Siltech LS-3BQG 1.5m unterminated speaker cable £130, Siltech ST-3BQG 0.6m interconnect £135. All very good condition, 1/2 price off list. E-mail: k_nikalakakis@hotmail.com (Dec(I)

NAIM NAC 112/NAP 150 pre/power amplifier, moving coil stage, speaker cable, guaranteed, £1400 "Hi-Fi Answers". Rogers transmissions line monitor speakers 150 watts, teak veneered PW10 £300. Tel: 02392 253900 (Portsmouth) (Dec(I)

VDH FIRST Ultimate 1m RCA. Brand new boxed. £145. Yamaha KXS8050SE award winning cassette deck (£250) £95. Violet Wire CCS/1 99.9997% continuous cast silver interconnects (£700) £150. Tel: 020 8566 5293 or 07946 602514 (Dec(I)

UNUSED - EXPORT Audio Innovations Series 300 with Border Patrol Supply, Living Voice Auditorium, not yet run in. Hitachi cable and XLO interconnect plus amp stand, £1500 ono. Tel: 07736 788 544 (West Sussex) (Dec(I)

TOCA-SECa power amp. Class A, dual mono, single-ended feat. 2008 WPC. Large heavy construction, marble fascia, sweet sounding, Colin Wonfor design, reviews available (Hi-Fi News/02/95) £995 (£2940) Tel: 01273 325 901 (Dec(I)

LYNNAUDIO 1.3 MkII black ash, mint condition £650.
Tel: 01253 692536 evenings (Dec(I)

REVOX A77 quarter inch tape recorder. Standard speed, suitcase model in excellent condition. Spare NAB adapter and loads of tape (some unused). £150. Tel: 01883 716 213 (Dec(I)

EXPOSURE SUPER 18 Stereo Power Amp £420 or plexi good subwoofer. Marantz CD17 MkII £420. Various interconnects, speaker cables around half price (QED, Sonic Link etc). Tel: 01934 863261 (Bristol area) or Email: cheri@offcampus.net (Dec(I)

NAIM SBL speakers, four years old, black ash, superb performance, perfect condition, boxed, £1100 ono. Tel: 01362 683 777 or Email: old@ash.t.fsworld.co.uk (Norfolk) (Dec(I)

ACOUSTIC ENERGY AE-3 with genuine twin pillar A.E. stands superb condition £750. Musical Fidelity P270.2 pre power amplifier boxed and immaculate £495. Tel: 01904 763157 or 07960 615375 (York) (Dec(I)

CROFT EPOCH pre amp, brand new with MC phono stage (£1500) £800. Croft v power amp (£800) £400. Copland CDA 288, with remote (£2000+) £1150. All items in mint condition. Tel: 020 8908 4633 (office), 01923 224 404 (home) (Dec(I)

ACOUSTIC ENERGY AE1 speakers (black) with matching AE stands, A1 condition, boxed, cost £1350, asking £1350. Denon DRM14HX cassette deck (remote control) as new, boxed, cost £250, accept £90. Tel: Steve 07951 746 928 or 020 8550 5192 (Dec(I)

PAIR QUAD II valve amps. Nos. 95/96 in original cabinet. £400 or best offer. Tel: 01865 779804 or 0879 415562 (mobile) (Dec(I)

ARCAM ALPHAPA 8 CD £125. Alpha 8 amplifier £100. Straightwire Chorus interconnect £15 or £225 all together. Mint, boxed, manuals. Tel: 01403 230070 (evenings) (Dec(I)

NOTICED: two 250s, CDS: SNAXO 2-4 Flatpack 2: 160 (updated: 32.5, updated). Most items less than three years old. Tel: 01508 470211 or Email: johnnobs@btinternet.com (Dec(I)

Tel: Bill 01993 851508 (Dec(I)

A.T.C. speakers SCM 7 brand new boxed £250. Buyer collects. Tel: 01744 736218 (Lancs) (Dec(I)

NAIM NAC 102 preamp incl NAPSC and MC c/boards £795. NAP 180 power amp £695. Both only 9 months old and balance of 3 year guarantee Tel: 02380 671366 (Southampton) (Dec(I)

LINF NK1/Lidrik £350. 280/Sparx £350. Linco £350. All together £950 including K600 loudspeaker cable. Great sound, excellent condition, boxes and manuals available. Tel: 01865 881 582 (Oxford) (Dec(I)

NAIM CDX CD player £1650 ono. Kef Reference One Point Two £800 ono. A.VI. S2000M monoblock amplifiers £650 ono. All in new condition and boxed. Tel: 01492 516875 after 5pm or Email: lenedwards@thalesgroup.com (Jan(I)

CYRUS III AMP plus Chord Solid Gold leads £200. Mission 752 floorstanding speakers (black) with QED Qudos cables £200. Tel: 07810 374202 or Email: andrew.trist@njw.co.uk (Dec(I)

AUDIOLAB 8000 CD player, mint £225 ono. Quad 44 pre amp £175 ono. Both mint condition, boxed with manuals. Mordaunt Short Signifier speakers, walnut, mint condition, boxed £250 ono. Tel: 01642 405634 (Dec(I)

NAIM 31 pre-amp: two Supercaps: two 250s, CDS: SNAXO 2-4 Flatpack 2: 160 (updated: 32.5, updated). Most items less than three years old. Tel: 01508 470211 or Email: johnnobs@btinternet.com (Dec(I)
AUDUSA-Eupen CSA 2.5 MAINS CABLE - HI FI CHOICE SEPT 2001 BEST BUY AWARD

CSA and GNLM Cable with FERRITE TECHNOLOGY - A polymer material mixed with a considerable quantity of homogeneously fine high quality ferrite powder. This compound is called EMC/COM and it can be extruded around copper conductors. The ferrite itself is a non-conducting material, but it has a very interesting magnetic behaviour. As a ferromagnetic material, it will go through hysteresis loops whenever it is under influence of an alternating magnetic field. Consecutively magnetizing and demagnetizing the material will cause considerable losses of high frequency energy. This energy is absorbed in the ferrite grains and converted into heat. This effect is more or less proportional to the field frequency. By coating conductors with a thin layer of ferrite compound, high frequencies will be strongly attenuated, because their energy will be absorbed by the ferrite powder. This applies to high frequency disturbances that are propagating on the conductor and which we don't want to disturb the environment, as well as to surrounding interferences, which we want to prevent from disturbing the signals on our cable. The CSA and GNLM cable which in addition to the above described ferrite technology are further protected with a foil shield and a drain wire and specifically manufactured for High End audio use. Ask for the silver plated contacts on IEC and MK Tough plug for an extra £6.

LAT AC-2 Power cable. We have developed a cabling (weaving) pattern along with an unusual shielding/filtering system that gets rid of the garbage that contaminates your components. The difference you hear with our cord is astounding. Our power cord takes advantage of silver in its design through use of our proprietary Silverfuse conductors. The conductors are 10 gauge and insulated with PTFE; the best insulation available. Fitted as standard with an IEC and MK Tough plug. 60cm £62, 90cm £75, 1.2m £88, 1.5m £101, 1.8m £112 etc. Other lengths available off the reel at £0.25 per m thereafter. Fitted with IEC (Martin Kayser) and MK Tough Plug available with Marinco 320 IEC, Figure of eight, 16 amp IEC, Bulgin etc also available as well as USA Hubble, European Schuko, Neutrik, Australian and other mains plugs. Cable can be supplied fitted to our all steel 4, 6 and 8 way distribution blocks. We can rewire the distribution blocks with Eupen cable as an extra cost option. Refer to our web site for details.

LAT INTERNATIONAL - Analogue, Digital and Video interconnects and Speaker cable

- better than most other at double the price Refer to www.audusa.com for further details or ask for reviews etc.

SUNFIRE CORPORATION - Snohomish USA

New for 2002 Sunfire True Sub Woofer MKIV - 11 inch cube. Signature True Sub Woofer 13 inch cube and Junior Sub Woofer 9 inch cube - all with two drivers, to as low as 16Hz, 116 SPL and 360 cu ins of air movement, 1200 or 2700 watt patented amp technology. Classic Tube Pre-amp, Solid state power amps 2 channel (300 x 2 or 600 x 2) and 5 channel (220 x 5 or 430 x 5 - yes total of 2150 watts into 8 ohms or 4300 watts into 4 ohms) patented amp technology (no heat sinks) and Theatre Grand II processor pre-amp.
VINTAGE WIRELESS COMPANY LONDON
Website: www.vintagewirelesslondon.co.uk
Buy-Sell-Exchange. Vintage wireless and classical audio. Repairs, spares, restoration, modification to all valve equipment. Quad II, Leaks etc, shipped worldwide, best prices, call us at 17 Bell Street, London, NW1 5BY. Tel: 020 7258 3448 Fax 020 7258 3449 Email: vwirelesslondon@aol.com (Oct 30)

WOODSIDE ELECTRONICS service and repair. Woodside, Radford and Quad valve products. Replacement transformers are available to original specifications (Quad transformers are approved by Quad). Tel: 01758 741026, Email: m.davis@virgin.net Website: http://freespace.virgin.net/m.davis (Dec 1)

HI-FI HUT in Harrogate offer: Bryston, Quad, Creek, Roksan, Harman Kardon, P.M.C., Wharfedale, Epos, J.B.L., Cable Talk, Chord Company, QED, Stands Unique, Soundstyle, Custom Design. Phone for details: 01423 810 990 (Dec 1)

AMAZING CABLES! Unlock your system's full potential. Handbuilt silver interconnects from £85, solid speaker cables from £220. £5 p & p. Fantastic performance, money back guarantee. Details: 0115 982 9772 after 7pm or Email: bob@skydivers.co.uk (Feb 1)

NAIM SPECIALIST Buys and sells top condition Naim products. Cash waiting for your Naim gear. Plus all products sold are tested with money back guarantee. Telephone. 07971 202742 with requirements. (Dec 1)

GRAND M25 Audiojumble at Leatherhead Leisure Centre, M25 Jct 9, Sunday 10th November 10.30am. Tel: 07730 134 973 for details (Dec 1)

DYNA RHYTHM Speaker kit, 96dB efficiency, 30Hz extension, drivers treated with Dieter Ennemosers C37 Lack, compact floorstander, real dynamics, real bass! Captures the excitement of the original performance, £595. Email: dyna-rhythm@abra-cadabra.co.uk or Tel: 01642 649702 (Jan 1)

AUDIO COMPUTER valve output or Midiman Audiophile soundcard, rack sized, black, silver, looks like Hi-Fi also PC. Replay/Record, CD, LP, MP3, Wav, Radio, P4, AMDxp from £999. Tel: 01460 659988 or Email: info@silentaudio.co.uk (Jan 1)

FARADAY CONCRETE Cabinet loudspeakers, 'a sonic revelation', What Hi-Fi! Our unique low density formulation and design really does produce the ultimate in audio transparency. DIY options available. Tel: 01603 762967 www.faradaysound.co.uk (Feb 1)

KOHA VALVE Amplifiers on permanent dem. Also 6N-Pure flat silver foil air interconnects with Bucchinco phono plugs. Also silver mains cables. Furutech 1EC's fitted. Tel: 01903 212333 Mobile: 07900 918882 (Dec 1)

USED & EX DEMONSTRATION Equipment for sale. Naim CD2 CD player £875. Naim NAC 102 pre-amp £825. Naim 100 power-amp £825. Naim SBL speakers, black (upgraded bass units) £60. PMC FB1 speakers, cherry £950. Arcam AVR 100 home cinema receiver £395. Linn Kairn Pro pre-amp SMPS £750. Base 10 shelf cabinet in oak £600 (new £1800). Call Griffin Audio 0121 622 2230 or Email: griffinaudio@fsbdial.co.uk (Dec 1)

TECHNICS SLP1200 CD £400, SP10 Mkii £280, Sony DCD 3000 £1200, Revox PR99 Mkii £1200, PR 99 £750, CIIL £400, C27B £1400, Studer A810L £550, A807L £950, A80 VU £1200, A62 £550, B62 £650, Tel: 01246 275479 or Email: j.i.tipping@amserv.net (Dec 1)

WORTHING AUDIO Summer Specials. Rogue Audio 88 power amp (Magnum) £1250. Audio Note Anvxs silver interconnect 1 mtr £550, 75mtr £500. ESLab DX4 200 watt digital power amp £1599. Amphion Argon loudspeakers £599. Silver Arrow mains cables various lengths 'excellent'. P.O.A. Kora products on permanent dem. Tel: 01903 212333 Mobile: 07900 918882 (Dec 1)

NAIM NAC 32.5 pre, with phono stage, mint condition £275. Mission 780's, 2 years old, black ash, boxed as new, inc stands, £200. Telephone Jules on 01792 280061, Email: info@sounddrjuleshifi.co.uk Web: www.sounddrjuleshifi.co.uk (Dec 1)

VAN DEN Hull the Second, 1.0 mtr RCA Phono, mint. (£200) £120. Van Den Hull the 2nd, 0.6 mtr RCA (Phonas) good condition, (£160) £95. Quad ESL 63's, Mint condition, black, one elderly owner, 7.5yrs old £1600 Telephone Jules on 01792 280061, Email: info@sounddrjuleshifi.co.uk Web: www.sounddrjuleshifi.co.uk (Dec 1)

KRELL KAV300i CD, 18 months old, immaculate, boxed as new, instructions, purchase doc's, £1850. Conrad Johnson PV10A Pre-Amp, Conrad Johnson MV55 Power Amp, 5 weeks old, as new, combo, £2600 (£3600). Telephone Jules on 01792 28006, Email: info@sounddrjuleshifi.co.uk Web: www.sounddrjuleshifi.co.uk (Dec 1)

KRELL KRC- 2 pre-amp, as new £1750. Michell Orbe SE, SME IV, immaculate, absolutely stunning. (£3250) £2400 ono. Infinity Renaissance 80 floorstander's, Oak, £550. Telephone Jules on 01792 28006, Email: sales@sounddrjuleshifi.co.uk Web: www.sounddrjuleshifi.co.uk (Dec 1)

KIMBER SELECT Digital KS 2020, 0.75 MTR Interconnect (£54.60) £400. Mancitore Tonnable, Mancitore Mantralse arm, mahogany plinth, Mancitore Magician arm, AT-OCS, Mana Reference table, PSU MB6i External upgraded P/S, etc, (£3.585) £1600. Audio Technica O9C carridge brand new £270. Telephone Jules on 01792 28006, Email: info@sounddrjuleshifi.co.uk Web: www.sounddrjuleshifi.co.uk (Dec 1)
RATES - ALL ADVERTS MUST BE PRE-PAID
Maximum length per advert is 30 words, each additional word is 50p extra. Telephone numbers and E-mail addresses are treated as one word. Model numbers are treated as one word i.e. Quad 303 = two words. Please tick the box for the advert required

Dealers must not advertise in the Private Classified section. Monthly consecutive insertions will be considered Trade advertising. The Publisher reserves the right to judge submissions

SPECIAL OFFER
Book a private or trade classified advert, and get one months *FREE internet advert

*FREE internet adverts are published three weeks AFTER the magazine has been published

Please write or type your advertisement copy in block capitals with one word per box. Please continue on a separate sheet if necessary.

NAME

ADDRESS

POST CODE

DAYTIME TEL:

Please tick here if you DO NOT WANT your FREE internet advert

I 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

Name

Address

Post Code

Daytime Tel:

Please write or type your advertisement copy in block capitals with one word per box. Please continue on a separate sheet if necessary.

WE WILL ACCEPT PHOTOCOPIES OF THIS FORM

Please debit my VISA/MASTER/SWITCH Card No.(Switch card issue No

Expiry Date: Cardholder Signature:

I enclose a cheque/postal order for £ Made payable to: Audio Publishing Ltd.

Send in your private classified ads with our NEW Freepost service. No need for a stamp!

Send this form together with your payment in an envelope marked:

Hi-Fi World, FREEPOST LON3478, LONDON NW6 6YR
UNISON RESEARCH
UNICO

The new Unico integrated amplifier from Unison Research has an impeccable pedigree. Triode valves give the purity of sound that makes listening a pleasure. With styling of understated elegance and 80 watts of power, Unico offers an unbeatable package. As top reviewer Ken Kessler put it (Hi Fi News, July 2002): "No integrated I’ve used in recent memory delivers so much at this price”. Unico is pure luxury – at a sensible price. Complete with radiowave remote control.

Unico Remote (line) £750. (line + phono) £800

OPERA
SP2

Beautiful to behold and a delight to listen to. Opera loudspeakers are the genuine article. The solid hardwood “boat-tailed” cabinet allows the SP2’s top quality drive units to produce a lovely, natural sound. Italian craftmanship, advanced acoustic technology and the very finest materials make SP2 the perfect choice for the discerning music lover.

*Opera SP2 (mahogany). £1350/pair. Other finishes available.

TRIANGLE
Loudspeakers that love music

Five stars for sound and five stars for value. Triangle are regular winners of top accolades from the world’s most prestigious reviewers. As What Hi Fi recently put it “Rarely have we come across loudspeakers that are so lively and communicative...they turn in a sparkling performance that makes others seem bland in comparison”. Listen for yourself. You’ll be amazed.

Zerius 202

*Zerius 202. £995/pair

PATHOS ACOUSTICS
The Unorthodox Approach

After almost two years of design, prototypes, testing and listening, the stunning new Logos integrated amplifier is finally here. For the lucky few who will own one, it has been worth the wait. Logos is an object of rare bellezza - a swan in a world of ugly ducklings. A future classic. And as a machine for playing your favourite music, Logos is simply delizioso. Look, listen, and you will know exactly what we mean.

*Pathos Acoustics Logos, 110 Watts/channel. £2495

Contact us for more information or visit our website

23 Richings Way, Iver, Bucks, SL0 9DA, England
Tel: 01753 652 669  Tel: 07000 853 443  Fax: 01753 654 531
www.ukd.co.uk