Quad's 11L loudspeaker tested

The new high-tech DVDS2FLD DVD player from TAG McLaren Audio

• Unison Research Unico amplifier
• KEF Q1 speakers
• Panasonic DVD-RA61 & Toshiba SD510E DVD players
• AudioValve Avalon monoblocs
• Vandersteen 2Ce Signature speakers
• Naim AV2/NAP 175 processor & power amp
• CD, MD and SD Card portables group test

• Elac's 301 Micro Monitor loudspeakers
• Creative Labs' Extigy USB soundcard
• Lacie Fusion CD writer

COMPETITION
This month we've four project turntables up for grabs!!

+ 100s of classified ads full of secondhand bargains!!
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 craftsmanship, 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, £695/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, £2,995
listen to a selection of Austro-Germanic orchestras and the one trait that will (or should) be uniform throughout them will be a warm and rich sound. Violins are invariably free from brightness or edge, woodwind has a natural and rich reedy and woody sound, brass will be well rounded and rarely raspy and even percussion sections have an organic sound that blends seamlessly with the rest of the orchestra as a whole. Composers such as Wagner and Bruckner sound marvellously homophonic and richly textured in the hands of a band of this type, with depth and cohesion beyond your wildest dreams.

Then do the same with a selection of American orchestras. Whilst many will to a certain extent have some string richness and warmth (especially those with a history of European musical directorship such as Cleveland or New York) the overwhelming impression you get from this type of orchestra is one of intricate detail and transparency, as well as rhythmic and dynamic precision. It's an entirely different ball game from their Teutonic colleagues.

Now do the same with a selection of these respective nations' hi-fi and you'll find that, weirdly, the opposite occurs. German hi-fi is generally transparent, bright and rhythmically accurate, whilst the typical American high-end sound is somewhat smooth, sweet and refined. It's a strange one, just as some of the world's most traditionally musical countries now have the worst pop music on the globe (David Hasslehof reaches No.1 Germany, Italy has its own advanced test listening room.

whilst fumbling with the radio controls recently I came across a fascinating discussion on Radio 3's excellent 'Music Masters' programme. An, alas, nameless contributor was decrying the way in which music has become "big" - not in the business sense but in the sonic sense. Claiming that because of record-decrying the way in which music has become enjoyment, that's the be all and end all of music. And the shocking truth is this: it doesn't have to sound like the real thing, as often this can be inferior when it comes to sound quality. In most cases I'd rather hear a full orchestral tutti of a Mahler symphony through my hi-fi than sitting in the back row of the stalls in the Festival Hall, where it sounds like a wet towel has been wrapped around your head! I'd opt for the choir seats any day, where the sound is completely unbalanced but at least you get to see the conductors face - something you can't do at home! Maybe it's about time that manufacturers stopped making specious claims that their equipment is just like the real thing and just accept the fact that the two are, praise be, just different.

These examples demonstrate that musical reproduction in the home often barely resembles that which we suppose is meant to emulate or recreate. The crux of the matter is this - hi-fi components are designed to make music enjoyable, that's the be all and end all of it. And the shocking truth is this: it doesn't have to sound like the real thing, as often this can be inferior when it comes to sound quality. In most cases I'd rather hear a full orchestral tutti of a Mahler symphony through my hi-fi than sitting in the back row of the stalls in the Festival Hall, where it sounds like a wet towel has been wrapped around your head! I'd opt for the choir seats any day, where the sound is completely unbalanced but at least you get to see the conductors face - something you can't do at home! Maybe it's about time that manufacturers stopped making specious claims that their equipment is just like the real thing and just accept the fact that the two are, praise be, just different.
reviews

digital source players

PANASONIC DVD-RA61 & TOSHIBA SD-510SE  8

These are two of the latest midprice DVD-A players to hit the shops. Alan Sircom airs his views in this head-to-head review.

TAG MACLAREN DVD32LR  18

David Price guides you through the latest hi-tech DVD player from the highly respected hi-end AV experts.

digital audio broadcast

VIDEOLOGIC DRX-601EX  16

This is the long-awaited portable stereo digital radio from DAB specialists VideoLogic. Is it worth the hefty price tag, asks Simon Pope?

amplifiers

NAIM AV2/175  34

The latest products from Naim Audio claim to bring true audiophile quality to multichannel technology. This new combination is the entry level S Series processor/preamp and three channel power amp. Find out what we make of them.

AUDIO ANALOGUE UNICO  42

The latest product from the Italian amplifiers specialist is a valve/solid state hybrid that promises to be a new challenger for the £700 integrated crown.

AUDIOVALVE AVALON  62

AudioValve from Germany specialise in beefy sounding valve amplifiers. Simon Pope grapples with the Avalon, their latest monobloc power house.

VANDERSTEEN 2CE SIGNATURE  24

Simon Pope encounters these slightly unusual floorstanders from the USA.

JAMO A400  38

Employing house friendly design ethics, these new satellite speakers with matching sub come under the scrutiny of Hi-Fi World.

KEF Q1  56

Featuring the latest generation Uni-Q drive unit, Dominic Todd listens to the entry level model in the new look Q Series from KEF.

vinyl

GRAAF GM 70 PHONO STAGE  54

HFW listens to the GM 70, the brand new all-valve phono stage from the Italian tubular Maestros.

accessories

POWERED UP  41

Need to tighten up the sound of your system? Three audiophile mains cables jostle for position in our monthly cable bash!

PORTABLE HI-FI  50

We listen to a selection of the latest CD, MD and SD card portables for music lovers on the move.
features  

ROCK OF AGES  20  
David Price highlights the influence that the classic Townshend Rock turntable had on the hi-fi market.

regulars  

WORLD NEWS  6  
Hot off the presses, the latest news from the hi-fi business.

NEXT ISSUE  7  
For a sneak preview of what's coming next month, look no further.

READERS LETTERS  44  
Got a burning issue that you would like to tell everyone about? Suffering from below-par performance in the stereo area? Fret not, Hi-Fi World's wise men will reply to your letters and e-mails and put you back on the right course. And don't forget, every letter or e-mail we print wins a superb prize.

SUBSCRIPTIONS  58  
Spare yourself the frenzied riot as you struggle with the hordes to claim the last copy of Hi-Fi World in the newsagent - Subscribe today!

OLDE WORLDE  59  
This month it's the turn of the Nakamichi 600 ski slope cassette deck.

HI-FI WORLD KITS  64  
Solder in one hand, glue in the other, satisfy your creative urges with a World kit.

HI-FI WORLD LIBRARY  68  
A comprehensive selection of titles covering audio, valve amplifiers, loudspeakers, solid state electronics and more.

COLUMNS  71,73,75  
The World team get to grips with issues facing both the industry and hi-fi alike.

DIAL-A-DEALER  76  
Look before you leap, or alternatively listen before you buy. These are the people to talk to.

MEET YOUR MAKER  78  
Not a call to the spiritual, but a list of manufacturers detailing who makes what, and how to get in touch.

SPECIALIST HI-FI DEALERS  79  
The perfect mix - excellent coffee, a comfortable sofa, and someone who really knows how to guide you through the world of hi-fi.

COMPETITION  80  
Win one of four Project turntables we have to give away.

WORLD CLASSICS  89  
Our list of products that have stood the test of time.

SUPPLEMENT NO.67  95  
DIY NEWS  97  
TJOEB UPGRADE  98  
Upgrading the Njoe Tjoe 4000 Valve CD Player - Are Upgrades Really Worth it? by Neville Roberts

BOOK REVIEW  102  
DIY LETTERS  103  
MARKETPLACE  107  
READERS CLASSIFIED 125  

This is the definitive place to find classic audio components.

ADVERTISERS INDEX  130  

computer audio world  

THE MAGIC NUMBER  81  
Will Elac's new 301 'micro monitor' loudspeaker be the classic that the Garrard of the same name became? David Price investigates.

ON THE ROAD  83  
David Price goes out and about with Creative Labs' brand new Extigy external portable USB soundcard.

TITLE RIGHT  85  
As any MiniDisc user knows, adding titles to discs can be a right pain. David Price looks at an interesting new gadget claimed to make life easier, the MD Titler.

FULL METAL JACKET  86  
LaCie has come up trumps with its new aluminium cased Fusion external CD writer, says David Price.
**ELAC IN MINIATURE**

German company Elac claim to have the world’s smallest high-end loudspeaker in the diminutive form of their new 301 “micro monitors”. Available as a separate pair, a pair with matching subwoofer or in any configuration up to a 7.1 system, the all-aluminium 301 has a 1.2kg extruded-alloy cabinet. The drive units comprise an 80mm alloy cone woofer and a wide dispersion dome tweeter. A built-in bass filter enables the satellite to be driven directly from the amplifier.

The front firing matching SUB 301 subwoofer can deliver 80W of power and uses a 18mm long throw, alloy sandwich woofer with a high efficiency port. Other features include a phase switch, multiple inputs, plus continuously adjustable crossover and level controls.

Known as the Cinema 3 Series, both the 301 monitor and subwoofer are available in either black or silver. The 301s are priced at £398 per pair and the sub at £399. Packages are £1299 for a 5.1 system and £1697 for a 7.1 system. See full review in Computer Audio World on page 81.

**HEAR ALL ABOUT IT!**

After a relatively quiet period in the UK, Californian speaker specialists NHT (Now Here This) announced the introduction of the entry level SB1 in the UK, through a new distributor. The SB1 is part of a new “Super Audio” series which promises to raise the standard on price/performance value with “enhanced driver response”. The SB1 is a bookshelf design with the classic NHT look of rounded edges and eight layers of piano black lacquer for a deep gloss finish. Designed as the progeny of the SuperZero, the minuscule SB1 (10.25in D x 6.25in W x 6.75in D) features a 5.25in polypropylene woofer and a 1in fluid cooled aluminium dome tweeter. The SB1 is available now priced at £299 per pair.

**KRELL’S NEW SHOWCASE**

At the recent Home Entertainment 2002 show in New York, Krell demonstrated their latest products to hit the market. The £5,000 Showcase preamp/processor is loaded with specifications and facilities. It features Krell’s Current Mode, discrete Class A direct-coupled circuitry with balanced outputs and user-configurable input assignment and system macros. It’s also THX Ultra certified and includes processing for THX Surround EX, DTS6.1, DTS NEO:6, Dolby Digital, Dolby Digital EX and Dolby ProLogic II. There are nine Krell Music Surround modes and Krell’s seven channel digital room equaliser. A multi-channel analogue input for SACD and DVD-A bypasses all the digital circuitry. As well as the preamp/processor, there is the Showcase amplifier which is available in three configurations: five channel (£5,000), six channel (£5,990) and seven channel (£6,755). It offers 125W per channel into 8ohms which is created by the help of a massive 1,400VA toroidal transformer with 10,000 microfarads of filter capacitance.
Two new cracking looking amps have been launched from the stylish high-end Italian manufacturer, Pathos. Both are valve/solid state hybrid designs. First up is the new version of the Classic One integrated, priced at £1,125. This revision of their 'budget' amplifier has paralleled the development of their other new product, the Logos. It features a new high quality electronic volume control that adds, they say, to an increased frequency response and in turn improved “reconstruction” of the sound stage. Power output is rated at 70W per channel.

The Classic One is accompanied by its striking bigger brother, the Logos. This 110W integrated design features an electronic network that’s been laid out in a “natural” feedback-free design. The preamp section is a pure valve based, balanced design and operates in pure Class A. There is a 100-step electronic volume control which is apparently 100% resistive and the input selector is operated through high-tech miniature relays developed for very high frequency telecommunication applications. There are five RCA and two balanced XLR inputs, a smart two digit numerical LCD display and full remote control. The Logos is price at £2,495.

The Latest NAD amplifier design from Bjorn Erik Edvardsen is the latest generation model derived from his classic 3020 design, first introduced way back in 1978. The new £220 C320BEE features a number of improvements on the current C320. Onboard, there is NAD’s exclusive PowerDrive Technology, a “more refined” version of the Power Envelope technology developed in the eighties by the company. The idea is basically to make a power supply of a given size act as though it’s actually more powerful in a working (i.e. loudspeaker driving) situation. A “smart” power supply creates a high dynamic power and low impedance drive capability. This optimises itself for high current or voltage, depending on the conditions of operation.

There’s also an upgraded toroidal transformer and better smoothing capacitors, which contribute to a higher power rating of 50W per channel, compared to the 40W of the existing C320. Tone controls have also been tweaked, increasing the boost/cut range by 1.5dB, and there’s a better quality volume control. The C320BEE comes with a new system remote handset, the SR-4.

Here’s a small selection of what we hope to bring you next month...

Here is the latest version of the stylish NXT panel ‘speaker from Cyrus electronics. How will the new improvements sound? We reveal all next month!

**PATHOS LEAST RESISTANCE**

**NAD’S BUSY BEE**
As the DVD market floods with new products, so prices start to plummet. Alan Sircom brings two DVD-A players priced at £400 together in a high resolution head-to-head.

Thanks to DVD’s unparalleled success, there are products available at virtually any price. And because sales have rocketed, companies are aggressively pricing feature-rich players. These DVD Audio/Video players from big name brands are a prime example: DVD-Audio is still a very new technology and in other circumstances might command a high price tag. But, because DVD Video is in such demand at the moment, competition is hot and DVD-Audio has to be included on mid-price players, like the Toshiba SD-510 and the Panasonic DVD-RA61.

Both models cost “around” £400 (although DVD players do not fall under the same legal ruling that prevents manufacturers from quoting a list price for TV sets and mini systems, many big Japanese manufacturers politely refuse to suggest a retail price) but judicious shopping around on-line can shave £50 or more from that figure. And both players have very similar specifications. Both play DVD-Audio, DVD-Video, DVD-R, CD-Audio, CD-Video (a precursor to DVD-Video that was very popular in Asia), CD-R/RW and Toshiba have an easy to control zoom function for video nutters. Similarities are stronger than differences, though. Both have 10bit, 54MHz video DACs, both play DVD-Audio in 192kHz, 24 bit resolution for both channels and 96kHz, 24bit resolution all round for six channel sound. There are operational differences but they are minimal.

IDENTICAL TWIN
Both are rather traditional looking players, eschewing the latest trend for extremely slim DVD players, promoted by the likes of Pioneer and Sony. Neither player is particularly heavy, however, and the Panasonic’s casework is insubstantial. Of the two, the Panasonic is the more button-intensive on the front panel, thanks to track handling controls on the left side of the fascia. This makes the Panasonic moderately more handy if the remote goes AWOL, but functionally the front panels are very similar otherwise.
The back panels show bigger differences between the players. Most of their layout and line-up is identical, but Panasonic has included a useful second Scart socket for videophiles who may want to pass AV signals from their DVD player to a TV. However, Toshiba includes a trio of component video connections which can also be used in Progressive Scan mode for NTSC projector systems. Bear in mind that most TV sets in the UK do not accept component video, more commonly coming with SCART, which offers high quality RGB. The Toshiba also has coaxial digital output as well as a Toslink (Panasonic has only one optical link).

A DVD player can often stand or fall by its remote control and its on-screen graphical user interface. The remotes are both pale grey, with very similar thumb-joysticks. Once again, there’s not a great deal between the two; the Toshiba remote has zoom functions to hand, but obscures lesser functions behind a flap. The Panasonic’s remote is more elegant, even if it is festooned with buttons in comparison.

Both set-up menus are simple to use. The Panasonic’s may lack the colourful 3D iconography of the Toshiba, but both will have you up and running in under half an hour. Both set loudspeaker delay times in microseconds instead of distance, but this is explained in both manuals with equal clarity.

A big difference between the two in day-to-day menu use is that the Panasonic relies on an information bar which can seem confusing, whereas the Toshiba has a graphical user interface that obscures the picture. For ease of understanding Toshiba wins, but the Panasonic comes close.

In an ideal world, testing a DVD Audio/Video player means using it in three distinct systems: a stereo hi-fi setting, a home cinema system and a multi-channel music set up. However, in practice this is almost impossible; instead, the players were tested as CD players in their own right through a Musical Fidelity A308CR prepower combination driving a pair of KEF Q7 floorstanding loudspeakers. This was then removed and the multi-channel side of its performance was investigated using an Arcam AVR200 integrated amp, a 5.1 channel Mission 7 Series speaker system and a REL Q150E subwoofer. Cables used were from Kimber and Cardas, although custom low impedance speaker cables (made by Musical Fidelity) were used to connect the A308CR power amplifier to the speakers. An old but functional Audio Alchemy digital-to-analogue converter was used to see how the players worked as CD transports.

Video was connected by a RGB-only QED SCART cable to a 32inch Toshiba widescreen TV set acting as monitor (this was wheeled out of the room for dedicated stereo listening). All the kit sat on the same deliberately wobbly Quadraspire Q4 Reference table.

DVD-Audio replay shows the biggest difference between the two players. The Panasonic player has a rich, fullness to its sound that is extremely attractive. This works well in home entertainment outside of a hi-fi context.
systems, as opposed to outright multi-channel hi-fi systems that demand pin-sharp precision. Its dynamic range was good too, in a very natural manner. The slightly brash sound of home cinema equipment will benefit from the Panasonic's smoother, richer presentation. Using DTS's distinctly audiophile-quality DVD-Audio discs, the sound of Larisa Stow's voice was smooth and full-bodied like a good claret, but with a fair amount of wispy seductiveness. It bordered on the syrupy, though. It was never going to offend anyone, but the Panasonic could be too polite for some users. If you have a good multi-channel set-up that is built with music in mind, the Panasonic's performance may be a bit too thick set.

**POSH TOSH**

In contrast to the Panasonic's richness, the Toshiba has a more detailed presentation. Music moves from channel to channel with a precision that is more like good CD replay. It is arguably the more transparent of the two players with very precise detail from bass to treble. It is not as immediately dynamic as the Panasonic, but the Toshiba's dynamic range is more subtle and just as sweeping. The Larisa Stow disc used above lost little of her seductive vocal charms but the sound was anything but full and rich. Instead, presentation of detail is both refined and perceptual. It is like the difference between a pair of Quad Electrostatics and a pair of Castle Howards. Both are extremely cerebral and the Panasonic is more luxuriant. It's a simple case of head vs. heart.

The difference between the two is like the difference between a pair of Quad Electrostatics and a pair of Castle Howards. Both are extremely refined and perceptual. The Toshiba's coaxial output is incoherent and ill-focused. The difference between the two players, even through DVD-Audio, is comparatively slight and certainly not as marked as the Quad vs Castle debate. In most respects, comparisons are closer to judging one pair of Quad Electrostatics and another pair of Quad Electrostatics – the two players are that close in performance terms.

The most important performance for hi-fi enthusiasts remains the CD replay of these two players. Unless you are a real DVD-Audio propeller head, more than 99% of your collection will remain CD-based for some time. And it is also with CD replay that the performance of DVD players often falters.

**FINAL ANALYSIS**

These are two competently-engineered players, and their CD replay is similarly competent. That's a polite way of saying, both players fall in the 'good but dull' CD playing category. The sound of both is pretty and polite and with a reasonably wide soundstage, but both lack drive, dynamics and image depth. Play something with a bit of oomph — Led Zeppelin's 'Stairway to Heaven' for example — and some of the energy just seems to have left the performance.

They are not identical, though. The Panasonic is the more refined of the two, with a pleasant but uninspiring balance that favours the genteel Mozart end of the spectrum. By contrast, the Toshiba has a bit more grunt and HDCD decoding means it sounds like the more extended of the two in the bass and treble. It raises the CD performance by a notch, to the level of a decent £200 CD player in a hi-fi system. This is one of the few DVD players under £1,000 that could be used as a CD player replacement, but in most cases those with a good CD player should stick with it.

Using either of these DVD players as a CD transport is an exercise in futility, though. Neither PCM output is much cop. Using both through their Toslink outputs was terrible, making the on-board digital decoder of the DVD sound a lot better. The Toshiba's coaxial connection fared slightly better, but it still sounds as if the PCM digital output is incoherent and ill-focused. Perhaps the demon jitter is at play.

Last comes the DVD-Video performance. The Panasonic has greater adjustment of the video settings to tweak the picture to suit your TV set, but the Toshiba has more preset video and noise reduction settings. Both are pretty vivid straight out of the box, however, with slight differences between the two. The Toshiba's picture is packed with
detail; the Panasonic is dripping with vivid colour. Careful tweaking of picture settings can make both near enough identical in performance. DVD-Video sound is also pretty much identical between the two, although the lack of DTS decoding in the Toshiba does give the Panasonic the upper hand, especially as DTS is beginning to take hold with the best reissues on UK DVD. Once again, the DVD-Video sound is richer on the Panasonic and more detailed on the Toshiba, but the differences are not as marked as on DVD-Audio. Moreover, played through Toslink the outputs are nigh on identical.

Ultimately, there is hardly anything between these two players; if you have to travel an extra 20 miles to buy one over the other, save your petrol and go for the nearest! Both do DVD Audio and Video extremely well, and cope with CD better than most DVD players could dream of. Of the two, the Toshiba scores a notch above the Panasonic in almost every category. It is a bit easier to operate, sounds ever so slightly better and is more geared for the audiophile thanks to that coaxial digital socket. The Panasonic does have a headphone socket, however.

**Panasonic DVD-RA61 £400**

**Toshiba SD-510 £400**

---

**MEASURED PERFORMANCE**

**Panasonic DVD RA61**

The Panasonic has a smooth, even frequency response that extends out to 20.9kHz with CD. Our analysis shows a gentle roll down at the top end. With 24/96 programme analogue bandwidth extends out to 48kHz, measurement showed, avoiding the truncation introduced by earlier chipsets. As a result 24/96 recordings will sound more open and dramatic, with greater contrast to CD.NK

**Frequency response** 4Hz-20.9kHz

**Distortion**

-6dB 0.004 0.004 20kHz -86 -85

-30dB 0.018 0.02 Noise -118

-60dB 0.62 0.66

-9027 27 Dynamic range -104

**Separation** left right

1kHz -99 -100

**Output**

2.25

---

**Toshiba SD-510**

A slowly falling high-end characterizes this player’s response, which in use will likely translate to subtle softened treble. The player will have a little less digital glare. With 24/96 programme frequency response reached 48kHz on the nail before cutting off. Output above 20kHz was smooth. With a 24-bit, -60dB test signal returning 0.1% distortion (mostly noise) I would expect high resolution recordings from this player to give clearly improved results over 16bit CD.

**Frequency response** 4Hz-21kHz

**Distortion**

-6dB 0.004 0.004 20kHz -86 -85

-30dB 0.015 0.018 Noise -110

-60dB 0.4 0.45 Dynamic range -110

-9027 27 Output 2.04

---

**World Verdict**

Panasonic DVD-RA61

Warm sounding DVD player that is good with DVD-Audio too but a mediocre CD performance.

Toshiba SD-510

Detailed DVD player which is one of the few that works well as a CD. Decent performance from all sources, but it’s still not time to ditch that CD player yet!
Quad has sprung a pleasant surprise on us all with their first, modern in-house designed moving coil loudspeaker, the Quad 11L. Simon Pope reveals all.

Here's a little word equation for you: Quad + loudspeaker = electrostatic. I don't think anyone well immersed in the art of audiophile discussion would argue much with this. It's due to Peter Walker's groundbreaking design that Quad made its name with electrostatics, a tradition it maintains with two latest generation models.

But a few diehards out there may well recall that not so long ago (1997 to be precise) there was a Quad 10L. Whilst bearing the name Quad, this moving coil 'square' cabinet speaker was made for the company by Spendor. It was in production for only two years. Although overshadowed by its bigger electrostatic brother, the 'speaker had a small cult following. Since then, the company, even under its new Chinese ownership has stuck resolutely to its roots with a small range of electrostatic 'speakers and a valve pre and power combination that could be transported back to the sixties where it would fit in just fine. Not that there's anything wrong with this - the industry needs a bit of retro appeal.

With the universal success of the new Diamond range from Quad's sister company, Wharfedale, it would seem a wasted opportunity not to carry some of the expertise at hand over into the more 'sophisticated' brand of Quad. After all, Wharfedale have perhaps done more than most to prove that something manufactured and developed in the People's Republic of China needn't be tosh. The engineers and R&D depts. are in place in their 700 employee factory in Shenzhen, as is the money, so it only seemed fair to let the Quad brand have a go.

**HOUSE STYLE**

Enter the brand new Quad 11L - the company's first in-house designed moving coil loudspeaker and a 'clean sheet' design. If looks are anything to go by it's a winner the moment you take it out of the box and slip off the classy little draw string bag. You're greeted with a superbly finished product that oozes class, confirmed by a gentle stroke of the silky smooth cabinet. It's a loudspeaker very much in the traditional mould: there's no sci-fi metal additions to the box or bizarre and funky colours, for example. However, a piano laquer finish like this doesn't usually come cheap. A retail price in the UK of a grand (if you pardon the pun), minimum would be typical. The 11Ls, however, are £380 a pair for all finishes. Options available are Piano Black, Piano Rosewood, Piano Maple and Piano Bird's Eye (nothing to do with fish fingers, incidentally). An expert in gloss finishes was hired from a piano manufacturing company to oversee this production stage - it's not just hi-fi companies that look to the East for production! The result is a finish that would do justice to a Bosendorfer - it's that good.

The cabinet appears to be a real labour of love for Quad, and remember labour is a lot cheaper in
China so 'labour intensive' work needn't result in a mortgage crippling product. It's constructed using 18mm veneered MDF sheets. When veneered, the 'speaker moves to the lacquering process for the piano finish. Once applied, it's left to dry before being polished. An impressive six coats are applied over a week long period for the desired luxurious look. The cabinet alone is worth the price, but as a bonus the company decided to put drive units in it!

**DRIVE TIME**

The drive units in the 11L are also designed and manufactured in-house. The 135mm long throw bass driver uses a resin impregnated Kevlar diaphragm. Resin is used for stiffening to create good pistonic motion. The intrinsic self-damping properties of the Kevlar unit helps keep resonance to a minimum. A phase plug sits in the centre of the unit. Whilst this bears more than a passing resemblance to the Kevlar unit used in Wharfedale's Diamond range, Quad emphasise that there are differences. Attention has been paid to the suspension system of the unit to allow for control under extremes of power and it sits in a special die-cast aluminium alloy chassis. It also features a dual wound voice coil, hand wound on an aluminium alloy former to remove heat from the coil area.

Last but not least, the bass driver incorporates a high-gauss magnet assembly. This is an expensive, very fine grain, powder magnet designed to provide a high density of magnetic field lines around the voice coil. The result apparently improves timing and rhythm due to better magnetic control over the coil and diaphragm.

A 25mm fabric dome treble unit uses a neodymium magnet with a ferrofluid cooled voice coil and claims to have the ability to produce information up to 37kHz, achieved by reducing weight in the diaphragm and coil assembly.

At the rear of the 'speaker are two narrow ports, used to reduce distortion in the upper bass region. Placement slightly away from a rear wall is recommended. Also on the rear are two pairs of decent quality binding posts for bi-wiring should you wish.

A personal favourite small bookshelf 'speaker of mine is the £600 Royal Menuet from Dali. This petite Danish beauty has much in common with the 11L in that it has a beautifully finished cabinet (although not up there with the 11L) and a sophisticated and sweet sound that's also neutral thanks to a thick, dead cabinet. The Quad easily matches the Menuet's impressive performance for just over half the price. Of course, a good recording helps but the 11Ls aren't as fussy as some other high quality 'speakers out there. A whole host of rock recordings were tried out, with only the overtly compressed ones bringing out a slightly edgy upper midrange response.

And one more thing: the Quads can be caned. A session of the Foo Fighters and the first, in yer face Oasis album 'Definitely Maybe' showed that the 11Ls can actually take some pounding - although brandishing the Quad label, they're
The full picture.....

Distributors: Henley Designs Ltd
Unit 11 Moorbrook, Southmead Industrial Park, Didcot, Oxon, OX11 7HP.
Tel: 01235 511166, E-mail: info@henleydesigns.co.uk, WWW.henleydesigns.co.uk
tough little things. A trawl through my jazz collection saw the Quad's comfortably at home with both Miles Davis and Chet Baker on vinyl. The sheer intimacy of small ensemble brings out a very musical and communicative sound in the Quads. 'Kind Of Blue' was a revelation when price is considered. Phrases were measured performance

Nice smooth, even reproduction of a pink noise test signal suggested the I1Ls would measure well - and they did. The Kevlar drive unit of this speaker has a controlled, resonance free output that makes for a smooth response, up to the point where it meets the tweeter. The two match up seamlessly, with no trace of a crossover dip to soften the sound or remove detail. The soft dome tweeter continues smoothly up to 20kHz.

With few peaks or dips and an almost ruler flat trace right across the audio band Quad's I1L is certainly an accurate loudspeaker. Subjectively it may sound a little light or bright in general balance, except in a well furnished room. It will also sound detailed and coloration free. As for downsides, it's difficult to find any. When fed with duff rock recordings, the midrange could become a tad shouty, especially when pushed, but this is about all. They are also fairly hungry when it comes to power, needing a good 60W per channel or thereabouts. Such comments are a bit churlish, though.

Put the I1Ls in front of any experienced listener, with a good recording (or a bad one for that matter), and ask them to put a price to both the sound and the finish and I would guarantee even the most parsimonious would guess at least £300 over top.

The I1Ls will be joined later in the year by a larger standmount, plus two floorstanders and a centre speaker, so all bodes well for a cracking range. That battalion of cabinet polishers in China will be busy for some time to come I suspect.

At low frequencies the I1L rolls down smoothly, suggesting it is best placed close to a rear wall. The two rear ports are tuned to 51Hz, which is quite high. Bass will likely sound firm and fast, rather than big or low.

As a load, the Quads measure out at 6ohms overall. With a four ohm bass driver and eight ohm tweeter this is expected and in line with current design convention. Sensitivity was good at 87dB SPL from a nominal watt of input (i.e. 2.8V) and there was little reactance in the load to upset amplifier feedback.

The Quads measured well in all areas. They are a very well executed piece of design work, but the balance will be on the light/fast side of things. NK

At low frequencies the I1L rolls down smoothly, suggesting it is best placed close to a rear wall. The two rear ports are tuned to 51Hz, which is quite high. Bass will likely sound firm and fast, rather than big or low.

As a load, the Quads measure out at 6ohms overall. With a four ohm bass driver and eight ohm tweeter this is expected and in line with current design convention. Sensitivity was good at 87dB SPL from a nominal watt of input (i.e. 2.8V) and there was little reactance in the load to upset amplifier feedback.

The Quads measured well in all areas. They are a very well executed piece of design work, but the balance will be on the light/fast side of things. NK

Quad I1L £380
Quad Electroacoustics Ltd.
Sovereign Court
Ermine Business Park
Huntingdon
Cambs
PE29 6XU
Tel: 0845 458 0011
www.quad-hifi.co.uk

Pretty much sets a new standard at the price. The gorgeous looking I1L is also a sophisticated and neutral sounding winner. A bit of a bargain.
With the growing emergence of digital radio it's all eyes on format leaders Videologic as they launch their long awaited portable model. Simon Pope listens with interest.

Many people think this will be the year that digital radio broadcasting finally goes mass market. We are promised £100 digital radio incorporated systems before the end of the year and more digital-only stations are sure to materialise. If this is a way of persuading the masses to move to digital radio, the industry needs something else. It isn't television and most listen in on the way to work in the car. Having said that, millions of digital television subscribers listen to digital radio broadcasts every day without realising it, since the technology is not revealed by the TV companies. Strange, eh?

There have been a few DAB (Digital Audio Broadcasting) hi-fi tuners from the likes of Arcam and Cymbol, right up to Sony, but it's the Videologic models that have so far had the lion's share of the admittedly small - market. The number of dedicated stereo tuner listeners is small compared to those using ordinary domestic radios. This sector lies between the hi-fi and in-car markets as far as number of listeners is concerned, so it seems sensible to come up with a portable, of good quality to reflect DAB's potential in this respect.

And they have - at a price. The new DRX-601EX costs - wait for it - a fairly whopping £495 which for a 'portable radio' isn't cheap. Now here's the good news. It's a pretty serious bit of kit - beautifully built and well finished. The style is clean, fresh and modern in contrast to other 'high-end' portable radios that favour the retro approach, such as those from Tivoli or Roberts. The use of a real wood veneer and inlaid aluminium adds to the striking understated look and the layout of the fascia is uncluttered and easy to navigate. The buttons on the front are accompanied by a fast-tune knob and an attractive blue LCD display.

This radio uses the same electronics as the DRX-601ES hi-fi tuner, including a 24bit/96kHz DAC (along with its psycho-acoustic compensation technology) but has two built-in bass/mid 'speakers with concentric tweeters. There's a host of connection options, including analogue audio output for connection to an external stereo amplifier, analogue inputs for portable players to utilise the in-built 'speakers, as well as coaxial and optical digital outputs. A simple but effective remote control completes the package.

After a quick read through the shortish manual I found the DRX-601EX pretty much a dodble to use: basically one knob does all the important tuning work. Indeed, a little 'trial and error' experimentation should have anyone being a dab (if you pardon the pun) hand within five minutes or so. There's very little to it, which is one of its big pluses. Those concerned with the aerial situation should be happy to know that the supplied screw-on telescopic DAB aerial (of the FM style) worked a treat in a fairly 'difficult' area of Buckinghamshire, with only a few cracks and gurgles upon moving the unit or aerial from one position to another. An external aerial can of course be used. In a further nod to hi-fidom the unit has stereo analogue outputs transferring it into a hi-fi separates tuner if you should so wish.

When it comes to sound quality the DRX-601EX was as impressive sonically as it is aesthetically. The overall sound was warm and rounded, and it projected well out from the confines of the compact casework. This created a nice spread of stereo sound that is very different from what you'd expect. Bass was full and tuneful (within the limits of the case, of...
course) and the top end nicely rolled off, bringing a certain sweetness to the sound. There's a good sense of balance throughout the frequency range.

Stations such as Radio 3 and Radio 4 had a nice 'dead' neutrality to them, with voices clean and realistic. In a live studio music broadcast, acoustic instruments on Radio 3 had a convincing sense of vibrancy and life to them. Other commercial stations didn't suffer from as much studio processing as found on FM.

The DRX-601EX is described as portable digital radio, but that's somewhat underselling it. Think of the unit as a dedicated stereo digital radio tuner with in-built stereo 'speakers and a metal handle! The sound justifies this description and it also psychologically softens the blow of shelling out £500 for a 'mere' portable radio.

Ultimately, it's the price that will limit sales of this radio; if it were £300 less it would be a bargain. As it is, it's a very useful bit of kit if you're an audiophile that's into radio and have a little wonga to throw at the latest gadget. Physically and sonically it's a winner. In terms of value it is not. Perhaps making it a 'hybrid' model including FM, like Sony's tuner, could help justify the price a tad more. The price issue, however, is invariably high with a 'first'. It is brave of Videologic to release such a ground breaking product. It's still early days for DAB and perhaps, somewhere in a zone with Harrods at its centre, there's an appropriate audience for such a radio.

Ultimately, it's the price that will limit sales of this radio; if it were £300 less it would be a bargain. As it is, it's a very useful bit of kit if you're an audiophile that's into radio and have a little wonga to throw at the latest gadget. Physically and sonically it's a winner. In terms of value it is not. Perhaps making it a 'hybrid' model including FM, like Sony's tuner, could help justify the price a tad more. The price issue, however, is invariably high with a 'first'. It is brave of Videologic to release such a ground breaking product. It's still early days for DAB and perhaps, somewhere in a zone with Harrods at its centre, there's an appropriate audience for such a radio.

Videologic DRX-601EX £499

Videologic Systems
Home Park Estate
Kings Langley
Herts WD4 8LZ
Tel: 01923 260511
www.videologic.com

**MEASURED PERFORMANCE**

This Videologic radio uses the DRX-601ES circuit, hooked up to a power output stage to drive the internal loudspeakers. The 601ES circuit is compensated to produce the frequency response shown here, a third-octave analysis made from off-air test transmissions. Videologic have boosted lows by around 1.5dB and cut highs by the same amount, to bring DAB more into tonal alignment with original source, and with parallel vhf/fm transmissions. My own comparative listening tests show that this degree of compensation, although quite strong, is what it takes to get DAB sounding right, meaning not thin and shrieky.

In this radio, the compensated signal then goes to the internal loudspeakers. Here Videologic again demonstrate their commitment to quality by fitting drive units that measure surprisingly flat from 160Hz right up to 20kHz, our third-octave analysis shows, with 'tone' (treble cut) at zero.

So in a nutshell, this is very accurate radio that does more than full justice to DAB; it actually improves it! Connected into a hi-fi system via its analogue outputs it is in effect a DRX-601ES, so you are getting two in one here – a portable radio and a hi-fi tuner. NK

- Frequency response (-dB) 160Hz – 20kHz (analogue out) 20Hz-20kHz
- Distortion 0.01%
- Separation 88dB
- Noise -82dB

**World Verdict**

A fine bit of kit with a genuine hi-fi appeal. The only thing against it is the heavy price tag.
Tag McLaren Audio is on the offensive with its new 'value for money' front loading digital transport, the DVD32FLD. David Price listens in.

Let us not forget the mighty TAGMcLaren DVD32R, a humungously impressive (and expensive) digital disc spinner which amazed and delighted us last year with its swanky top loading transport. The merest glance of that disc lid gliding across to reveal the laser was enough to break many folk into a sweat, such was its beautifully slick and smooth motion. Underneath it, of course, was a brace of DVD disc reading technology second to none. Nice one, guys.

Unfortunately, the fact that TAG wanted £4,000 of your hard earned cash for the privilege of owning one was sufficient to dissuade a substantial number of potential purchasers, who took one look at the price tag and ran screaming in the direction of their Denon dealer. Yes, it's rather a lot of money for something that doesn't even have digital converters built in, isn't it? Indeed, if you wanted anything from the TAG range that decoded its datastream, you'd be asked to splash out an additional £2,800 or so for the AV32R processor. Ouch!

It is for this reason that what you see before you has come to be. In a spare moment when they weren't begging Mika Hakkinen to come back to the track, the company took the view that - for some strange reason - people wanted an 'affordable' high end DVD spinner. If that isn't a contradiction in terms. The provision of the DVD32R minus its 'surprise and delight' factor (i.e. the top loading transport) let them shave crucial pennies from its purchase price, the result being the £3,000 DVD32FLD (as in FrontLoader).

While the DVD32FLD's more conventional disc loading arrangement should not drastically degrade the sound, there were valid reasons for the DVD32R's skywards orientation. Essentially it allowed the drive motor and servo electronics to be mounted onto the heavy, mass loaded sub-chassis. Personally I'm not a huge fan of tray-based transports, because the disc drawer arrangement adds complexity along with more bits and pieces to resonate inside. Still, the 'budget' version retains all the R's other features, including a mech. that plays DVD, CD, CD-R and CD-RW discs with NTSC and PAL video, PCM, Dolby Digital, MPEG and DTS digital encoding at 96, 48 and 44.1 kHz sampling rates with 16, 20 or 24 bit resolution.

The FLD also sports its big brother's TAGtronic Synchronisation Link clock sync facility (which ties it to the AV32R's internal ticker) for ultra low jitter, and there's the various composite, S-Video and component video connection outputs to go with its three digital audio outs (two coaxial, one optical).

Although there's no digital audio conversion, the 32-bit Mediaworks Pantera-DVDTT RISC processor has MPEG decoding, 10-bit video DACs and an NTSC/PAL encoder built in. SACD and DVD-Audio discs aren't yet catered for, but there'll doubtless soon be software and hardware upgrades. Indeed, the TAG uses re-programmable flash memory devices that can be upgraded to support new features and formats via a software download from the website (www.tagmclarenaudio.com).

Although the front loader lacks the 32R's sense of occasion, it's still an immaculately screwed together product in its own right. The fascia is beautifully hewn, and the 445x100x320mm casing extensively damped. Inside there's a neatly laid out multi-layer printed circuit board with selected audiophile components, twelve independent power supplies and a sizeable, high quality toroidal transformer. Sorbothane mounting feet complete the package underneath.

Driving Naim AV2/ NAP 150/ NAPV175 decoding/amplification and...
ASSAULT

M&K S85/SS150 speakers, the DVD32FLD put in a near faultless performance. My major gripe was the remote control, which although sporting all the latest programmable buttons and flashy backlighting, was a pig to use and about as responsive as a Minardi backmarker with a flat tyre. It made the process of track selection a pain, so much so that I ended up using the few fascia buttons to administer operations.

Happily, its sound elicited more favourable reactions. Starting with the 5.1 DVD video mix of The Eagles' 'Hotel California', the FLD showed itself to be a tight, upfront performer with oodles of detail. Essentially very neutral, it gave tremendous insight into this famous recording (and indeed its superb remastering). The midband is particularly impressive - glass clear with very strongly articulated imaging (in the title track it's mostly across the front three channels - the surrounds are cranked right down, giving just a touch of ambience).

Of course, treble quality is largely a function of the preamp/processor's digital converters, but it's still easy to tell that this transport isn't exactly over-endowed with jitter. Cymbals were extremely crisp, with more sheen that a certain household spray polish, while the leading edges of the guitars were sharp as a knife. The result was a very 'alive' and vivid sound that majors on the music's rhythms and dynamics. Factor in oodles of air and atmosphere and the result was an extremely engaging, yet sonically informative sound.

While the TAG's bass performance on DVD wasn't bad, neither was it as strong as a sledgehammer. Rather, it carried the same trait over to CD, when it again sounded firm, lithe and insistent, but never generous or overblown. Indeed the same tight, taut, clean, clear signature was again in evidence.

Overall of course - as you'd expect - CD sound was dramatically poorer, but the DVD32FLD still put in a trenchant performance with The Verve's 'Bittersweet Symphony'. Once again it cut to the quick, with a high contrast midband that revealed the medium's shortcomings a touch too much, methinks. Bright and bouncy, forward but never strident, the TAG again got into the music's groove without a moment's hesitation. It was impressive and engaging enough to conclude that those wanting a serious CD spinner that also plays DVDs should put this close to the top of their list.

This was confirmed by its brilliance with a DTS 5.1 recording of Eric Clapton's 'Let it Flow'. DTS 5.1 discs are, of course, essentially non-standard Compact Discs (playable through offboard DTS decoders, such as the one built into the Naim AV2), and are capable of superb sound The 32FLD positively sang - scything through the murky 'vintage' analogue recording to throw up stacks of detail and atmosphere. Again it majored on the music's accenting and phrasing, but this time serving up a fulsome, strongly articulated bass (seemingly always a characteristic of this codec) too.

It's an interesting product alright, the DVD32FLD, offering just that little bit extra (in terms of sound quality, if not features) over the likes of Pioneer's DV-747A. Whatever format you feed it, it comes up trumps with a characteristically clean and open performance. Still, it's a lot of money to pay for only marginally superior sound to a number of designs snapping at its heels at under half its price. Whether you'll buy it depends, I suspect, on whether you've already got a TAG system and want something to match it.

Tag McLaren DVD32FLD £2,999
Tag McLaren Audio
The Summit
11 Latham Road
Huntingdon
PE29 6ZU
Tel: 01480 415600
www.tagmclaren.com

World Verdict

An excellent digital transport without a doubt, but faces stiff competition at the price.
ROCK ON!

David Price tells the story of one of hi-fi's most fascinating turntables, the Townshend Rock.

The world of high-end turntables is a weird and wonderful one. In no other area - possibly with the exception of loudspeakers - do you find so many different ways of addressing a particular engineering problem. Townshend's Rock is one particularly charismatic design, single-mindedly focusing on an area of vinyl replay that most manufacturers simply overlook, or choose to ignore. It's gone through numerous evolutions over the years, but retains an incredibly faithful band of devotees who praise it with near religious zeal.

Over the past few years we've had copious correspondence from readers pledging their allegiance to the Rock. So to please those, and probably a lot more besides, here's a comprehensive guide to one of the most controversial designs in the hi-fi universe.

SYNCHRONICITY

If Professor Jack Dinsdale hadn't fainted at the Harrogate hi-fi show in August 1979, hi-fi history could have been very different. After an early start and a long train journey he made it to the show at 11.30am and began exploring it frenetically, forgetting to have anything to eat. Suddenly, he writes, "the hall began to rotate, my legs lost their feeling, and I realised that I was passing out in the crowd". His next memory was that of sitting in a chair and being invited to drink a cup of coffee with a generous nip of brandy inside, by a stranger with a strong Australian accent. Max Townshend (for it was he) duly asked him if he'd like to buy one of his pickups!

Dinsdale declined, but a few weeks later invited Max over to see some "unusual technology" at Dundee University's Cranfield Unit for Precision Engineering. The story goes that its designer Michael Clayforth-Carr played part of a record through a nondescript amplifier with unremarkable results, and then repeated it with a novel oil-filled damping trough in position. Max's jaw, "dropped to the ground", prompting him to thrust a cheque for a four figure sum into Dinsdale's hand. He duly called three British companies - including Garrard - to which he'd offered options, to tell them his project now had a sponsor. Thus was born the Townshend Rock.

The story begins back in the late 1960s, when Dinsdale was working as Professor of Mechatronics at Cranfield. While designing precision machine tools and instruments, he began to think that from a theoretical viewpoint (i.e. Newton's laws of motion, kinematics, lines of action and reaction of forces, etc), contemporary turntables broke many of the rules by which he was working. He also felt that a number of new ideas, techniques and materials were emerging that he could apply fruitfully to the problem of turntable design.

He duly started work on a "hydrodynamic non-contacting bearing", the patent for which the CUPE management opted to sell to "a successful British manufacturer of record decks", namely Garrard at Swindon. Its finances worsened as the company was famously acquired by Plessey who, in Dinsdale's words, "had no background or, it seems, interest in sound reproduction". It was duly sold on to the Brazilian company Gradiente, but to no avail. Sadly, throughout the twenty year duration of the patent's life (1972-1992) nothing was ever marketed using the technology, and it was never licensed or sold back to its creators!

After a serious illness, he moved to an academic appointment with the Cranfield Institute of Technology (now Cranfield University) to set up a new graduate teaching department in 1976. He formed a small group to begin working on a turntable incorporating novel thinking on both the bearing and tonearm. Rejecting the classic 'dashpot and piston' model for tonearm damping at the arm pivot because it "hardly solved the problem", they opted to suspend a dashpot over the turntable, just in front of the pickup where it could move along with the record. Thus was born the arc-shaped dashpot - or curved damping trough - that the Rock would use.

The idea was patented, the team set about integrating it with the bearing into a prototype turntable.
Dinsdale wanted a plinth with a stiff, very well damped material like synthetic granite, but this wasn't practical at the time, so high-density chipboard reinforced with aluminium sheet was used. A proprietary AC motor driving the platter via a belt was used. Finally, thanks to the happenstance of the 1979 Harrogate hi-fi show, Max Townshend heard the first complete Rock and duly became the sponsor.

The prototype was still far from a commercial reality, and it was at this point that an ex-Open University student, John Bugge, joined the course and decided to develop it. Dinsdale wrote that, "although he had no background in high quality audio, nor any particular interest in the subject, he set to with a will to tackle the design and manufacture of plinth and platter in synthetic granite, damping trough in the same material, hydrodynamic fluid bearing, and also the two areas which had not been worked on yet: the drive for the platter and the detailed design of the arm".

Following the completion of his Masters Degree in 1980, Bugge set up a company to manufacture the Rock player for Max's company Elite. To get to the market, Dinsdale says that, "some corners were cut which perhaps should not have been". The deck won a prize for Design and Engineering at 1983's Chicago Audio Show but in spite of this sales failed to materialise and Bugge's company was wound up later that year. What followed was the series of Elite Townshend Rocks we all know and love, spanning the original Rock (1981), the Rock II (1984), the Avalon (1987), the Rock Reference (1989) and the Rock Mk.3 (1992).

ROCK OF AGES

It's hard to understated just how different the original Rock was when launched. In a world dominated by independently sprung subchassis designs housed in conventional wooden plinths, it was quite something. Back in the early eighties, the template that Thorens laid down with the TD150 many years earlier still held sway - as evinced by the omnipresence of the likes of Linn's LP12, Ariston's RD11, Dunlop's Systemdek, Thorens' TD160S, STD305 et al.

The design was a classic case of form following function. With no dustcover (as standard - it was a £65 option) and just a simple on-off switch and power LED to play with, it offered neither the elegance of the Linn or the style of its Michell or Oracle rivals. Rather, it was a purposeful design built to maximise rigidity while storing the least amount of energy. The original plinth made much use of mineral filled resin for mass and damping, making it a weighty affair. In later models, this was replaced by gypsum, used both in the platter and plinth, which was encased in a fabricated metal skin.

The base and platter were acoustically decoupled from the outside world by an air-filled damped synthetic rubber suspension chamber. As the deck developed, further attention was paid to isolation. By the introduction of the Townshend Rock 3, Seismic Sink-style decoupling had been added to the main base unit with a pneumatic 'inner tube'. Three adjustable feet were used for levelling. Round the back, a pair of RCA phono sockets were fitted, the idea being - presumably - that you could choose your own interconnects.

A 24-pole synchronous AC motor (a la Linn, Rega, etc.) was used to drive the heavy 2.9kg platter via a thin rubber belt to the inner platter. Unlike the Mazak outer platter damped by a felt or rubber mat so beloved by its rivals, the Rock's disc damping was taken care of by the platter's plastic enamelled surface, later to become cast and turned acrylic. Speed change was effected by hand. The platter spun on an inverted fluid-damped bearing with a tungsten-carbide thrust pad, cut with a spiral groove to carry the oil upwards.

Interesting stuff, but the Rock was always most famous for its damping trough (originally metal, later plastic) mounted at the pickup - rather than arm pivot - end. Max Townshend argues that damping is essential for any pickup cartridge, but...
that the traditional way of doing it is largely ineffectual. It is, he says, akin to driving a car just on its springs, with the dampers (commonly called shock absorbers) removed. "Imagine how that would ride", he says.

The system, pioneered on the very first Rock, employs a headshell mounted outrigger moving along a silicon-filled trough that arcs across as the cartridge tracks the groove. Filled to within a millimetre of the lip with silicone fluid, it damps the arm/cartridge resonances around 10Hz before they can be fed into the system. Using it involved swinging the trough out, placing the LP on the platter, screwing the clamp down on the threaded spindle; swinging the trough back over the LP and cueing the stylus into the music. The result is a very organic, rhythmically believable, to the extent that where the recording permits, you can even hear the four walls. Then there's the combination of rhythms and dynamics - the deck strings the music's tiny variations of pitch and volume together in an incredibly cohesive way. Importantly however, all this insight doesn't earn the Rock the label 'analytical' in the sense that - for example - older Michell's could be. As well as all that focus, it has a beautifully organic quality.

Max Townshend (foreground) and Prof. Dinsdale with an evolutionary range of Townshend turntables...
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
Vandersteen Audio are responsible for 'speakers somewhat different from the norm. Bereft of a cabinet and in a bi-polar design, Simon Pope encounters the 2Ce Signature.

In the world of loudspeaker design there are two schools. One strives to create the best sound from the traditional front facing moving coil drive unit in a cabinet, the other dares to stick its neck out with something decidedly different. Doing something decidedly different of course leaves you open to criticism from the conformists and success is perhaps less certain. I'm sure there were doubters when Peter Walker first introduced the Quad ESL57 to an unsuspecting public back in the late fifties. Now the electrostatic is an industry benchmark and design classic.

Anyway, life's too short for boring hi-fi, so thank goodness for the likes of Vandersteen audio. Vandersteen have been on the fringes of the UK market for a few years now. After a few attempts at distribution, including at one stage, from Arcam, the company's range of 'speakers are now being brought to our shores by the newly revitalised Exposure Electronics. Being a slightly non-conformist design, in the mould of, say Shahinian or Carlsson, the response to their particular way of going about things has been somewhat varied but there's without doubt some interesting things going on here. The 'speakers we have here are the latest version of their 2Ce model, this time bearing the addition 'Signature' to the name.

Since the company's inception in 1977, Vandersteen has been playing with concepts such as "minimum-area" baffles for driver mountings that eliminate the cabinet edge. The model Two has developed from years of experience. It is a classic Vandersteen design of aligned drive units inside a steel frame covered with a fabric sock. The resultant look is rather like a Quad electrostatic on steroids (and so is the sound, sort of – more of which later!).

These 'speakers are not the prettiest puppy in the litter but at least there's a nod to the WAF (Wife Acceptance Factor) in the wood veneer trim at top and bottom. There is a hefty steel framed, spiked base which bolts to the bottom of the speaker for stability and to provide de-coupling from the floor.

Starting from the top down, the highly damped alloy dome tweeter is a dual-chamber design in an attempt to improve range and linearity. The particular alloy was chosen for its superior strength and resistance to break-up. Next down we have 4" midrange and 8" woofer cones that use cast-metal baskets. Both drive units use filled polycones to ensure high stiffness, superior internal damping and greater neutrality than metal alloy.

Lastly, at the bottom and firing out of the rear of the 'speaker there is a 10" "Active Acoustic Coupler" using a long fibre cone. This bass unit is responsible for supporting the front firing woofer and extending the low frequencies down to near trouser flapping level.

The 2Ce is a package that's distinctively different from the norm. Here's the good news, though. Although the aesthetics are definitely an acquired taste, the sound actually isn't.

With all that's going on in the 2Ce Signature they could suffer from over-complexity. However, I was somewhat taken aback by the sound quality of these 'speakers.

Firstly and most noticeably was the relative lack of boxiness and coloration, something that makes panel and electrostatic 'speakers so appealing. The lack of cabinet makes for a neutral and precise presentation that whilst not delivering ultimate detail, provides a fast and exciting sound.

Secondly, when placed in from a rear wall by at least two feet, their well-balanced and full frequency range coverage makes itself known. The 2Ce can deliver deep and fast bass that's not only impressive but also very well balanced with the rest of the frequency range. For a three-way
speaker it all seems to blend very well. Paul Weller's 'Stanley Road' (as you've probably guessed by now, one of my fave test discs) had amazing attack and excitement. The drum kit powered into the room, with the bass drum driving the sound on marvellously. Vocals were good and clean, and imaging was equally impressive, giving a loyal representation of the mix.

Nirvana's 'Nevermind' on vinyl confirmed to me that the 2CEs are a fine rock 'speaker. With 'Smells Like Teen Spirit' the bass drum again kicked like a mule and the chorus charged at me like a wounded buffalo.

Mahler's fifth symphony with Bernstein conducting the Vienna Philharmonic on DG showed just how big the Vandersteen's can really sound. With deft precision and speed, dynamics between the skeletal like passages and full orchestral tuttis appeared as realistic as you can get from a hi-fi — no mean feat! Strings were full sounding, but at higher frequencies a touch of scratchiness made itself known.

With their scale and power it would be easy to mistake the 2CEs with its stepped drivers this loudspeaker does not lend itself to nearfield measurement. The drivers integrated well in the far field though and our response shows that the basic balance of the loudspeaker is right. The many peaks and dips in our analysis are room effects, since we did not use an anechoic chamber.

This certainly isn't a loudspeaker to compete with today's 'super flat' designs from companies like KEF, for example, but then Vandersteen have their own set of claims and the 2CE is accurate enough for me to view it as satisfactory in this area. The noise test signal sounded a little characterful so the 'speaker isn't the most neutral available, and a metal dome tweeter with phase correction plate is not ideal either.

The rear firing bass unit reaches down to 75Hz, no less, so the 2CE will have deep bass and it should sound pretty solid.

As a load the 2CE hovers around 6ohms and is largely resistive. It is one of the easiest loads available so although the Vandersteen may be a little unconventional in some areas the 'speaker is reliably correct here. Sensitivity was a reasonable 86dB for one nominal watt of input (2.8V) and impedance measured 6ohms.

The 2CE will likely have its own particular presentation. It measures well enough, even if it isn't as accurate as many modern designs. NK

The 2CE Signature is a 3-way, bi-polar design

for a pair of brutes but they can recreate the intimate experience of Yo-Yo Ma playing Bach's cello suites. There was good body and warmth to the instrument and a fine level of detail and ambience.

I recommend these 'speakers highly. They were definitely a pleasant surprise. Practically, they're not the best bet as they need a biggish room in which to breathe and have to be placed a fair way from a rear wall due to that 10" rear firing bass unit. Also, they take a bit of driving — at least 80W to be safe (although a WAD 40W valve amp had a damn good go at it!). If you can cater for these traits and are after a 'speaker in the two grand range I'd eagerly suggest a listen. They have detail and clarity in abundance and a very powerful yet highly neutral sound. If pushed to far, they will shriek a little in the upper midrange but unless you're a deaf Motorhead roadie with a pair of top range Krell monoblocs this shouldn't be a problem. As I said earlier it's good to come across something different that actually delivers the goods. These are fine sounding 'speakers that whilst are undeniably unusual are pleasantly lacking in sonic quirks.

Vandersteen 2CE Signature £1999

Exposure Electronics
Tel: 01273 423877
www.exposurehifi.com

MEASURED PERFORMANCE

With its stepped drivers this loudspeaker does not lend itself to nearfield measurement. The drivers integrated well in the far field though and our response shows that the basic balance of the loudspeaker is right. The many peaks and dips in our analysis are room effects, since we did not use an anechoic chamber.

This certainly isn't a loudspeaker to compete with today's 'super flat' designs from companies like KEF, for example, but then Vandersteen have their own set of claims and the 2CE is accurate enough for me to view it as satisfactory in this area. The noise test signal sounded a little characterful so the 'speaker isn't the most neutral available, and a metal dome tweeter with phase correction plate
VINYL
For vinyl lovers, the basis for good sound has to be the support of the LP on the platter. Ringmat is the pre-eminent record mat for virtually all turntables, either the famous XLR at £50 or, even better, the new Anniversary at £70. Further improvements can then be achieved by using:
• LP Blue Statmat and Statcap to remove static, at £45;
• Ringcap, at £15, to remove vibrations emanating from the centre of the record;
• Ringmat Spacers to remove resonance from your turntable and platter and to fine tune stylus rake angle/VTA.
All of these can be purchased separately or in one fell swoop as the Ringmat Support System, the best value for money upgrade possible for any turntable at £205. Without it, the stylus of your cartridge will never track properly.

CD, SACD, DVD, CD-ROM
For digital sources, the CDi Blue Statmat at £37.50 will totally transform playback, removing all that edginess and those other unwelcome features associated with using the silver disc. You will find a staggering increase in performance from the most modest to the most expensive players. Close to the very finest in analogue reproduction without quite surpassing it. Can also improve picture quality when used with DVD and similar equipment.

PUTTING SOUND INTO FOCUS
from this... to this

YOUR WHOLE SYSTEM
All your components and speakers, even your TV, should be protected from static and other unwanted electronic fields by using a Statfoot underneath each one of them. From £12.50. Ringmat Feet and/or Ringmat Domes, our "soft feel" approach from £18.95, should also be used if you want the best sound (and picture) from your system.
The icing on the cake is Ringmat Audiophile Cables. We researched these because no other cable provided the level of performance required to realize the potential of other Ringmat and Statmat products. Available shortly.

UPGRADING
If you have earlier Ringmat or Statmat products, these can be exchanged for the latest versions at a special upgrade price.

MONEY-BACK GUARANTEE
All products purchased from us have a no-quibble money-back guarantee as well as help and advice in getting the best out of our products in your system.

RINGMAT DEVELOPMENTS
PO Box 200 Brentwood Essex CM15 9FB GB
call 01277 200 210
visit www.ringmat.com
or e-mail us at enq@ringmat.com

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
tel: +44(0)1684 573524
fax: +44(0)1684 577380
www.trichordresearch.com
all good things must come to an end...

The Sevenoaks Sale

Finishes 27.07.02
Debut II Turntable (Black) £114.95

The original Debut turntable romped away with a Product of the Year Award in 1999, and the MKII version continues the extremely good work. It’s a simple affair, that’s easy to set up, but don’t let the price fool you - it sounds a whole lot more expensive than that. This is a fine turntable, and it clearly reveals the benefits of listening to vinyl, with a rich and detailed soundstage, and a good dynamic response.

It’s available in six funky colours, so you should find one to suit your decor, and at just a smidge over £100, you can have no excuse not to keep that old vinyl collection in employment for a good few years yet.”

Awards 2000

Selected outlets are Project Turntable Centres. Colour Options are available at additional cost.

MUSICAL FIDELITY A3.2 Series

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

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

B&W Bowers & Wilkins

DM601 S3 Speakers £249.95

Ultimately it’s the 601 S3’s lack of any weakness that makes them so special. Their talent is so widespread that most of the competition is left reeling. Detail, resolution, dynamics, insight... everything is present and correct, and these speakers rate highly in every area.

What more can we say? These new B&Ws are a terrific buy. The price rise over their predecessors pits them against tougher rivals, but on this showing B&W has little to worry about. Unlike the competition...
### Amplifier Selection

<table>
<thead>
<tr>
<th>Amplifier</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arcam DIVA A65 Plus</td>
<td>£349.95</td>
</tr>
<tr>
<td>Arcam DIVA A75 Plus</td>
<td>£449.95</td>
</tr>
<tr>
<td>Arcam FMJ A32</td>
<td>£1099.95</td>
</tr>
<tr>
<td>Cyrus ACA7.5 Pre Amplifier</td>
<td>£699.95</td>
</tr>
<tr>
<td>Cyrus Smart Power Amplifier</td>
<td>£549.95</td>
</tr>
<tr>
<td>Denon PM-3055</td>
<td>£199.95</td>
</tr>
<tr>
<td>Linn Kudo Pre Amplifier</td>
<td>£494.95</td>
</tr>
<tr>
<td>Linn LK85 Power Amplifier</td>
<td>£494.95</td>
</tr>
<tr>
<td>Marantz PM4100</td>
<td>£139.95</td>
</tr>
<tr>
<td>Musical Fidelity A32 Pre Amplifier</td>
<td>£999.95</td>
</tr>
<tr>
<td>Musical Fidelity A32 Power Amplifier</td>
<td>£999.95</td>
</tr>
<tr>
<td>Musical Fidelity NuVista M3 Amplifier</td>
<td>£297.95</td>
</tr>
<tr>
<td>Roksan Caspian MkII Amplifier</td>
<td>£894.95</td>
</tr>
</tbody>
</table>

### DiVA CD72T CD Player

**Diva CD72**

- £429.95

**DiVA A85 Integrated Amplifier**

- £749.95

Save **£80** when CD72T and A85 purchased together (Package Price £1066)

### MONITOR AUDIO Silver 8i Speakers

- **£699.95**

**Save**

- **£30**

No other speaker in this test can match the Monitor Audios when it comes to delivering seismic basslines with sofa rattling power and weight. That part of the spectrum also enjoys plenty of speed and control confirms the Silver 8i's position as bass kings. A great speaker needs more than simply great bass, however, and the Silver 8i's far more than merely thump. With the likes of Curtis Mayfield's 'Move On Up', they produce a sound of such verve that it becomes hard to sit still... They produce music with plenty of excitement - but don't forget the subtleties too. Add excellent build and an easy load and these Monitor Audios make a formidable case for themselves.

### VideoLogic DRX-601ES Digital Tuner

- **£299.95**

Save **£30**

VideoLogic's DRX-601ES digital tuner is a major player in the digital tuner market. With this upgrade, VideoLogic goes one step further: it's still a DRX-601 at heart, but quite apart from the sleek silver styling and sexy blue LEDs it now has a better, white-on-blue display, and what the company calls 'Psycho-acoustic Compensation' - a form of signal processing designed to make the tuner sound less digital. And it works: the DRX-601ES has a presentation that's rich, clean and extremely informative. Bass is big and powerful, while the midband and treble are well controlled. The style alone would justify the slight price rise; the sound quality makes it a Product of the Year.
Kandy KA-1 "Roksan's entry-level amp is an impressive piece of equipment, with an exceptional finish and a feature list including a line-level input that can be switched to a MM phono stage. The power rating of 110W into 8ohms is one of the meatiest here and it pays dividends in the Roksan's powerful, dynamic performance. But it's not all about bluster: the Kandy displays its gentle and deft touch with Stravinsky's The Firebird, which is played with insight and detail. The soundstage is wide and well-defined, and the individual vocalists of the massed choir and performers are easy to follow. Things can get quite exciting at the top end with stringed instruments, but it doesn't get bright or hard. It's also capable of getting impressively loud while remaining in control and without colouration.

So all fared well, but there has to be a winner and for us it's Roksan's Kandy KA-1. Recent upgrades have served the KA-1 well, and apart from its exemplary build quality it sounds absolutely stunning. In testing it did everything that was asked of it, providing great insight with classical music and vocals, but also getting down and dirty with dance music's demanding beats and the crashing rhythms of rock. A first-rate product."

February 2001

Kandy KA-1 Amplifier
£544.95

Free Interconnect Cable worth £100 when Kandy KA-1 Amplifier purchased together.

Mission 78 Series

782 bases its performance on a 165mm Nomex bass unit fitted to a reflex enclosure ensuring excellent low frequency extension from a graceful and compact cabinet. The 783 houses a larger 200mm bass unit with massive motor system, capable of floor shaking, yet tightly controlled low frequency extension. Both use Keraform midrange drivers for outstanding clarity and midrange detail coupled to superb dynamic range together with Mission's silk dome tweeter.

The 780 and 781 are the pinnacle of Mission's research into creating a three dimensional soundstage, extensive bandwidth and dynamic range from the smallest possible cabinet dimensions. The 780 is massive in its sonic capabilities. Its 130mm Keraform bass unit is carefully matched to a novel reflex enclosure for full bodied bass extension, the qualities of Keraform produce a dynamic and ultra detailed midrange. In the 781 a 165mm Keraform driver takes advantage of a larger cabinet to extend bass performance and increase efficiency whilst maintaining that superb midband transparency and finely detailed treble.

780 "Versatile and with a sound that works well with a wide variety of hi-fi kit, these speakers were worthy of this title last year, and this year have achieved the tough task of making it the double."

5 May 2001

Q1 Speakers
£249.95

Overall the Q1s are excellent speakers. Some rivals may edge ahead on a short audition, but give these standmounters a little time and they're sure to impress. Are they better than the likes of B&W's 601S3 or Mission's 780s? The answer will have to wait for a group test. But until then it is fair to say that these are the most competitive speakers that KEF has had at this price point for years."

5 May 2002

Speaker Selection

Acoustic Energy Aegis Evo One £179.95
Acoustic Energy Aegis Evo Three £399.95
B&W CDM 1NT £749.95
B&W CDM 7NT £1249.95
B&W DM303 £179.95
B&W DM603 S3 £599.95
Cyrus CL5/70 (Black) £799.95
KEF CIesto 2 £999.95
KEF Q3 £399.95
Linn Katan (Maple) £634.95
Linn Kriga (Maple) £894.95
Mission 780 £249.95
Mission M71 £129.95
Monitor Audio Gold Reference 10 £799.95
Monitor Audio Gold Reference 20 £1499.95
Ruark Epilogue II £344.95
System Selection

- **Cyrus Quatro Ex Power Amplifier & Speakers** £849.95
- **Denon 201 Ex Speakers** £599.95
- **Denon DM50 Ex Speakers** £249.95
- **Marantz Eclipse 19 Inc Speakers** £249.95
- **Marantz Eclipse 21 Inc Speakers** £549.95
- **Marantz Eclipse 25 Inc Speakers** £699.95
- **Marantz Eclipse 22 Inc Speakers** £799.95
- **Tag McLaren Aphrodite Ex Speakers** £2994.95
- **Teac Reference 100 Inc Speakers** £269.95
- **Teac Reference 500 Ex Speakers** £679.95
- **Yamaha Pianocraft E150 Inc Speakers** £249.95

**Linn Classik Music System £999.95**

"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, liquid 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."

**Teac Reference 300 System £499.95**

"Teac's Reference 300 system is an absolute beauty. The company's Reference series has won lots of awards and many admirers in the past, and the 300 range at £200 less than the bigger 500 series, is no disappointment. Your £600 buys you everything but speakers: an amplifier, tuner, CD player and cassette deck... As beautifully built as we've come to expect from Teac, this system delivers the goods with style."

**Denon D-M30 CD Receiver SC-M50 Speakers**

- £199.95
- £69.95

"Denon's gorgeous D-M30 has a fine pedigree - and a record of success. Its forebear the D-M3 kept impressing us with its balance of good looks and great sound, winning two What Hi-Fi? Awards on the trot. Now the latest generation takes home a Product of the Year gong two years in a row. On its own merits, too, as this is much more than a rehash of the D-M3. Upgraded audio circuitry, improved power supply and the Mission-designed speakers all improve the package. The sound is superb, well-balanced and weighty... It's a big system in a very cute box."

**Optional Recorders:**
- CDR-M30 CD-RW Recorder
- DMD-M30 MinDisc Recorder
- DRR-M30 Cassette Deck

**Please Note:** Some products may not be available at all outlets. Advertisement valid until at least 27th July 2002, E&OE.

*From our selected range in store. Please ask for details.*
"The beautifully engineered Gyro SE not only looks the part but has a wonderfully clean and fluid sound."  *****  What Hi•Fi? July 1999

**free** Interconnect Cable worth £150 when Linn Genki & Majik purchased together

**LINN**

**Genki** CD Player £994.95  **Majik** Line Amplifier £694.95

**Genki** "Tempting though it is to think of Genki as a Glaswegian word, it's actually Japanese, and the nearest definitions we could find involve vitality, vigour and spirit. And used as adjectives, these words go a long way towards describing the sound of the Genki, which always manages to communicate the music first and foremost, and let the rest of the hi-fi thing look after itself.

It's a very well-thought-out player, too, from its clear and simple control layout to the provision of four sets of analogue outputs, two at fixed level, and two with level control. Completing the package is a 24-bit Burr-Brown DAC and Pacific Microsonics HCD filter. Few owners will worry about all that stuff, however, as they'll be too busy enjoying the way Genki plays music, its purity of tone and sense of drama on Mozart's Don Giovanni being a fine example of its talent. By any standards this is a superb player, and not just one for the army of Linn enthusiasts."  What Hi•Fi? March 2000

The Linn Majik is a sophisticated control amplifier complete with on-board stereo power amplifiers. A core entry level product for powerful and flexible control of hi-fi, video or multi-room installations. 'Sneaky' add-on modules expand its functions. It can accommodate many source components. The Majik is available in two versions: The Phono version has five line-level inputs and one Moving Magnet phono input and the Line-level version has six line-level inputs.

MUSICAL FIDELITY

3D CD Player £2999.95

"It's hard to put your finger on exactly why and how the 3D CD Player turns in such a performance and to a certain extent it's a pointless exercise: it just does. OK, so at three grand it's a serious financial commitment, but if you're after a CD player to last 'til you take your final breath it could well fit the bill. Get a move on, though, numbers are limited to just five hundred and they'll sell, believe me. Simply get a listen to one and go back to your reference player - all will be revealed."  Hi-Fi World October 2001

Please Note: Some products may not be available at all outlets. Advertisement valid until at least 27th July 2003. £&OE.  *From our selected range in store. Please ask for details.*
scotland and north
Aberdeen • 19 Union Street 01224 587070
Edinburgh • The Grassmarket 0131 229 7267
Glasgow • 88 Great Western Road 0141 332 9655 Open Sunday
Liverpool • 18 Lord Street 0151 707 8417
Manchester • 69 High Street 0161 831 7969
Newcastle • 19 Newgate Street 0191 221 2320
Preston • 40-41 Lune Street 01772 825777 Open Sunday
Sheffield • 635 Queens Road, Heeley 0114 255 5861 Open Sunday

midlands and east
Bedford • 31 St Peter's Street 01234 272779
Cambridge • 17 Burleigh Street 01223 304770
Ipswich • 12-14 Dogs Head Street 01473 286977
Leicester • 10 Loseby Lane 0116 253 6567
Lincoln • 20-22 Corporation Street 01522 527397
Nottingham • 39a St Giles Street 01603 767605
Oxford • 173 High Street 01865 272743
Peterborough • 36-38 Park Road 01733 897897 Open Sunday

midlands and west
Birmingham • 12 Queensway Arches, Canal Street 0121 233 2977
Bristol • 92-94 White Lion Street 0117 959 7768
Cardiff • 1 Waverley Street 029 2047 2899
Cheltenham • 44-45 Winchcombe Street 01242 241171
Nottingham • 36-38 Park Road 0113 873298
Oxford • 173 High Street 01865 272743
Sheffield • 635 Queens Road, Heeley 0114 255 5861 Open Sunday

London and south east
Brighton • 57 Western Road, Hove 01273 733338
Bromley • 39a East Street 020 8290 1988
Chelsea • 1 Kings Road 020 7325 9466
Crawley • 2 The Broadway 01293 507877
Croydon • 369-373 London Road 020 8665 1203 Open Sunday
Epsom • 2 Upper High Street 01372 720720 Open Sunday
Guildford • 73 North Street 01483 536666
Holborn • 144-146 Grays Inn Road 020 7837 7540
Kingston • 43 Fife Road 020 8547 0717 Open Sunday
Southampton • 33 London Road 023 8033 7770
Southgate • 12 Southgate Road 01372 720720 Open Sunday
Swiss Cottage • 21 Northwalks, Highbury 020 7325 9466
Tunbridge Wells • 80 High Street 01732 495955
Watford • 478 St Albans Road 01923 273533 Open Sunday
Wilham • 11 The Grove Centre 01483 501733

Who are sevenoaks?

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

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

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

Sevenoaks Online

The Sevenoaks Sound & Vision website has news and information on the Sevenoaks group and its 44 outlets nationwide. The website is designed to provide you with answers to the questions you may have when buying new equipment.

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

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

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

Stock Clearance

With over forty outlets nationwide, the Sevenoaks Sound & Vision group stock and display a wide range of products. As technology delivers improvements in performance, individual models and product ranges are changed or superseded.

The preceding models are made available at a reduced price, for clearance. Visit our Web site 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. Terms and conditions apply. Minimum balance £100. 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.

Please call to verify hours of business.

Contact our outlets via E-Mail: outlet@sevenoakssoundandvision.co.uk

www.sevenoakssoundandvision.co.uk
When one of Britain's most fervent exponents of 'purist' two channel audio systems comes up with a five channel preamp and matching power amps, you begin to realise that times are changing. David Price boogies down to Naim's new AV2/NAP 150/NAPV 175.

Naim Audio needs no introduction - it's arguably the most focused specialist hi-fi brand in the world. Followers of the marque know precisely why they love Naim, and its detractors are equally clear about what they dislike. As Linn has left 'the high ground of minimalist audiophile purism', now only Naim is regarded as carrying the flag. Such is its 'source direct' ethos that even the provision of remote control raised eyebrows a few years back!

Into this context steps Naim's brand new £2,200 AV2 preamplifier and £1,195 NAPV 175 three channel power amplifier which, for the very first time (in conjunction with an additional £795 NAP 150 stereo power amp), gives full on 5.1 channel surround. Don't think for a minute, however, that you're getting chunky brushed aluminium fascias, graphic equalisers, a multitude of DSP modes and multi-button learning remotes. No - this is multichannel Naim-style.

Of course, 5.1 channel systems are ostensibly there to reproduce the audio channels of DVD movie discs. But Naim will tell you (quite rightly) that its AV system is essentially a high end hi-fi that just happens to handle the extra 3.1 channels you need for home cinema. It's for Naim devotees wishing to move to multichannel and newcomers to the brand alike, with good old fashioned sound quality placed at a premium. It's also useful to point out that audio and video are converging apace thanks to the remarkable possibilities offered by DVD. Whether it's watching The Matrix or listening to a stunning multichannel mix of 'Hotel California', 5.1 is becoming harder and harder to live without.

Rather than launching a separate new AV range, Naim has taken the very sensible path of Cyrus et al, by introducing additional products to complement the existing hi-fi line up. This preamp looks and works like its stereo designs but offers basic additional multichannel functionality for when you want to put the LPs or CDs down and play movies or listen to your DTS, DVD-A or SACD multichannel music discs. So Naim fans needn't worry, there's been no dramatic break with the past. If it makes you feel better and helps you sleep at night then compare it with Pioneer's VSA-AX10 high end multichannel integrated, and the Naim combo seems laughably minimalist - like a Lotus Elise to the Pioneer's fully loaded Lexus. On-screen displays? Video switching? Not on your NAP250! So incidental is this sort of thing considered that you'll have to buy the optional VS1 video switching box!

What you do get - however - is the basic 'core' of essential AV functionality, including Dolby Digital, Dolby Prologic, DTS and DTS ES NEO decoding with automatic mode switching, fully programmable input.
Naim dealer.

The NAPV 175 is the new, partnering three-channel power amplifier, designed to be used with the current stereo NAPI50 power amp. Together, you get 5x50W RMS quoted output power. Although this may sound rather 'modest', tradition has it that thanks to the serious power supplies, Naim Watts tend to sound rather louder than most others! The cases are identical - like the AV2, they measure 58.4x432x301 mm. Round the back you'll find the NAPV 175 sports two
What's new, Pussycat?
Where do we start?!
Conrad Johnson - superb amps from the US. The fabulous MV60 power amp is on demo now, with the PV-10 preamp.
Duevel - omnidirectional speakers from Germany which are rapidly gaining loyal followers. We now have all 3 models on demo.
Kuzma - well respected turntable/tonearm.
Origin Live - their brilliant new tonearm, plus Rega arm wiring and counterweight mods.
ES Lab - British built full digital amp.
Gamut - solid state powerhouse from Denmark.
Trichord - the well known and liked Dino and Deiphini phono amps.
Plus loads more, too much to mention here. Come and see us now before our floor collapses!

---

If you want a massive leap in performance

"this is probably the best tonearm in the world right now...words can't express how good this is...one of the designs of the decade."

HI-FI WORLD 2002

Very occasionally a new product appears that is so advanced as to render all previous benchmarks obsolete. People believe the Silver 250 is just such a product and we invite you to experience an unprecedented leap in your system performance - regardless of your current tonearm. Arrange for an audition now - The Silver 250 is £599 and our top arm - the Silver Taper is £970. Both products carry a full no risk money back guarantee and are available via your nearest Origin Live dealer or by direct mail order.

FULL INFORMATION ON WEB SITE OR CONTACT
Origin Live, Unit 5, 362b Spring Road, Sholing, Southampton, SO19 2PB U.K.
Tel:- 023 80578877 / 80363249 Fax:- 023 80578877 e mail: originlive@originlive.com
web site: www.originlive.com
tendency towards stridency (thanked in part to the rather ‘basic’ recording of the disc itself, and the less than flattering 16/44 digital source), and a rather ‘brightly lit’ treble. This tends to invest the vocals with a small degree of sibilance and make the impassioned female backing vocals slightly hard work. You can’t really freeze the action and luxuriate in the texture and grain of all the different sounds on the disc in the same way you could with, say, an equivalently priced Unison Research tube amp. A DG CD of Pagani’s ‘24 Capricci per violino solo op. 1’ (Salvatore Accardo) showed the combo’s 2-channel character at its worst - shrill and sharp, even if it was gobsmackingly fast and fluid.

Interestingly though, move to multichannel and any ‘signature’ this Naim combo has becomes far less obvious. Cue up a DTS 5.1 music disc of Paul McCartney’s ‘Band on the Run’ (running at 16/48 resolution) and the title track positively shines. The same goes for DVD Audio. The NAPV 175 is (as you’d expect) a brilliant complement to the NAP150, and the result is dynamite - The Eagles’ ‘Life in the Fast Lane’ proved riotously good fun. On lesser systems it’s either thin and hard or soft and dull, but the Naim caught the mood perfectly. Guitars, hi-hats and snares showed stunning speed - I really got into the groove of the tune and felt the sense of great musicians playing brilliantly in time.

Those lightning attack transients made for a seat-of-the-pants AV experience, too. Whereas lesser sound systems smear and smudge the music’s constantly varying dynamic peaks and troughs, the Nains locked onto every inflection, accent and pause like a limpet. The supremely tight and grippy basslines and glass-clear midband made for a genuinely moving emotional experience playing music DVDs.

808 State’s ‘Optical’ was a riot of colour and sound, the Naim kicking out vast tracts of bass with unceasing verve. Despite the iffy codec that is Dolby Digital, these amps made a brilliant fist of it. The soundstage was alive with detail, yet it was all handled with so much grip and composure. Interestingly though, the opening part of Quentin Tarantino’s ‘Jackie Brown’ (complete with Bobby Womack’s brilliant ‘Across 110 Street’) showed the dramatic audio side slightly upstaging the visuals! Still, this was the exception not the rule.

All in all, Naim’s first multichannel system is a joy. Awesomely fast and dynamic, superbly insightful and with massive reserves of power, it’s so far ahead of most other multichannel systems, it’s almost off the map. My time listening to this system confirms what I’ve kind-of suspected for a long time, that Naim stuff is more neutral than many of its critics have come to think. Much of that famous ‘forwardness’ is the sound of 16/44 CD rather than any failings on Naim’s part. Now that ‘high resolution digital audio’ is here in DVD-A, SACD and DTS forms, Naim kit sounds all the more convincing. Gripping stuff.

Naim AV2/NAP150/NAPV175 £4,190

Naim Audio,
Southampton Road,
Salisbury,
Wilts
SP1 2LN
Tel: 01722 332266
www.naimaudio.co.uk

Many thanks to Audio Excellence, 65 Park St., Bristol BS1 5PB (tel: 0117 926 4975) for their help in preparation of this review.

### MEASURED PERFORMANCE

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distortion</td>
<td>0.01%</td>
</tr>
<tr>
<td>Noise</td>
<td>-104dB</td>
</tr>
<tr>
<td>Sensitivity</td>
<td>150mV</td>
</tr>
<tr>
<td>dc offset</td>
<td>15/7mV</td>
</tr>
</tbody>
</table>

### MEASURED PERFORMANCE

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distortion</td>
<td>0.01%</td>
</tr>
<tr>
<td>Noise</td>
<td>-104dB</td>
</tr>
<tr>
<td>Sensitivity</td>
<td>150mV</td>
</tr>
<tr>
<td>dc offset</td>
<td>15/7mV</td>
</tr>
</tbody>
</table>

**World Verdict**

A great way to enjoy multi-channel audio or video, and two-channel too. Expensive, but many will feel this is their ultimate home cinema system.

**Naim AV2/NAP150/NAPV175** £4,190

Naim Audio,
Southampton Road,
Salisbury,
Wilts
SP1 2LN
Tel: 01722 332266
www.naimaudio.co.uk

Many thanks to Audio Excellence, 65 Park St., Bristol BS1 5PB (tel: 0117 926 4975) for their help in preparation of this review.
David Price tries out Jamo's latest lifestyle loudspeaker system, the A410/A4SUB, "designed by women for women".

The idea behind this £507 loudspeaker system is that - surprise, surprise - the fairer sex puts aesthetics and design on a par with sonics. Its creators - industrial designers Brigitte Smedegaard and Sine Weis - were told to "go home and dream - and dream big". Hmmm.

The satellites are innocuous little things - frankly I've seen more attractive designs elsewhere. Although they're flat designs (measuring 220x110x88mm), they contain conventional moving coil drive units, namely a 25mm dome tweeter and 80mm midrange driver. Together, Jamo claim a frequency response of 120Hz-20kHz for them, along with 50W power handling and 6 ohm nominal impedance. The magnetically shielded cabs are sealed (no bass port is used) and made of high quality plastics weighing in at 1.6kg apiece. Again they're well built and finished, but I've seen better in the (rather unusual) shape of KEF's £499 KMS2002 'eggs'. They come with neat wall brackets, but Jamo offer a very natty pair of cast aluminium (90cm) STA410 stands for an additional £89.

The subwoofer is more strikingly styled. Reminiscent of a late 1970s Bang and Olufsien receiver, its hinged aluminium flap swings up to reveal the minor controls. Jamo say it's designed to be 'on show', rather than stuck under the coffee table as you'd do with your average black box sub. It's quite large and heavy (at 325x600x154mm and 11kg), and uses a long, slim sealed box with two relatively small 203mm drive units, one of which is powered and the other of which is passive. The latter duly acts as a passive 'auxiliary bass radiator', a form of reflex port. Inside is a 100W RMS amplifier possessing three controls, for volume, cut-off (60-200Hz) and phase (0-180 degrees), concealed under the aforementioned neat flap. Jamo says the sub works between 40-200Hz.

Being passive, the satellites connect directly your amp's loudspeaker terminals, while the sub plugs into one of your preamp outputs (or failing that, a tape out). I hooked the sats up to my World Audio K5881 power amp, and took a PRE OUT from my KLPI. Sources included my Michell Orbe/OL RB250/Ortofon Kontrapunkt B and a Pioneer DV-747A DVD-A player. No sensitivity figure is quoted by Jamo, but being small, closed-box designs they're hardly going to win any awards in this area.

Not since I had VideoLogic's Sirocco some three years ago have I heard something this small sound this big -
and this musical. Don’t think that you can stick the Jamos on the end of a cheapo mini system; they’re very open and demanding of their ancillaries. Kicking off with Steely Dan’s ‘Rikki Don’t Lose that Number’ on vinyl, I was staggered by how open and upfront they are. These speakers image incredibly boldly into the room, projecting out in an almost holographic fashion. Instruments and vocals hang in space in an almost eerie way, while the recorded acoustic drops back impressively far behind the plane of the speakers.

Despite such a direct and unfettered nature, the Jamos don’t sound harsh or forward in any way. Air’s ‘All I Need’ showed the midband to be bright and clean, but not hard or strident. It’s surprisingly good at textural detail too - the singer’s voice was deep and resonant - so rather than listening to the drive units you really feel you’re hearing the source.

Treble, by contrast, isn’t so hot. It’s perfectly adequate but a little curtailed and rolled off at the very top. The real star of the show is the speaker system at the price. Here is an interesting alternative to mid-price floorstanders, and one not to be overlooked!

--

Jamo A410 £ 79 each
A4SUB £ 349

Jamo UK Ltd.
Oakfield Park,
Bilton Road,
Rugby,
Warwicks CV22 7AL
Tel: 01788 556777
www.jamospeakers.com

MEASURED PERFORMANCE

The satellites of this system measure quite flat from a head-on position. There was some lateral asymmetry though, treble increasing to left of centre, but decreasing to right. This may well make the sound stage move right a little unless the satellites are perfectly positioned. The shallow cabinets had some colouration, likely producing the peak at 250Hz, but overall their frequency response was well controlled, with good treble extension and no crossover suckout. As a result they should sound detailed enough.

The subwoofer works from 200Hz down to 40Hz, before cutting off sharply. It is an active bass unit rather than a subwoofer; because there are no subsonics. All the same it has a smooth, well controlled response and matches the satellites seamlessly.

Impedance of the satellites starts to rise below 500Hz, reaching 8ohms at 200Hz, their lower response limit. Below this frequency impedance rises steeply, so they are not affected by bass signals, even though connected for full range working. Sensitivity of the system was a reasonable 86dB when set flat. The greatest limitation of small satellites though is usually limited maximum volume before harshness sets in.

Measurement showed this system is fundamentally quite accurate. It is also an easy amplifier load, so it measures up to hi-fi standards.

World Verdict

Despite the unusual, ‘lifestyle’ aesthetics, these are genuinely capable speakers, capable of taking on conventional box designs and winning.
SOUNDS PERFECTION

SPECIALIST IN ANALOGUE AND DIGITAL WE STOCK

J.M.LABS * LEXICON * PARASOUND PRIMARE * PROJECT * TRIANGLE REL SUBWOOFERS * VIENNA ACoustics * AVID * PROJECT * SME * ROKSAN * STRAIGHT WIRE * MICHELLE * ACOUSTIC DESIGN * AUDIONOTE * MONITOR AUDIO * BOSTON * SUIDEN
AUDIO ANALOGUE * GRAFF * NAD * PHILOSOPHY CABLES
PLUS MANY OTHER TOP BRANDS
NORDOST VALHALLA CABLES
PROJECT CENTRE OF EXCELLENCE

PRODUCT SALE LIST

ATC ACTIV EACH 50 ROSEWOOD 50 MINT $195
LEXICON MC 1 PROCESSOR NEW BOXED $295
LEXICON MC 1 PROCESSOR USED BOXED $195
SUSPEND MASTERCASE POWER AMP BOXED MINT $795
ATC SIA 315 INTEGRATED AMPER BOXED MINT $1195
LINN LP120 ELECTRODYNAMICS DUAL CUSP MINT (NO BOX) $1395
PRAIRIE AS3.5 AMPLIFIER NEW BOXED $1495
AUDIONOTE OT10 SE LINE BORD OR PATROL PSU $1195
VIENNA ACOUSTIC MOZART SPKS ROSEWOOD NEW BOXED $1995
PARASOUND DAC 2000 (JOHN CURL) SPECIAL BOXED $825
PRAIRIE D302 CD PLAYER MK 1 BOXED ONLY $795
BOSTON ACOUSTIC 3X5 SATELITE SET OF 4 MINT BOXED $795
AUDIONOTE ZERO 6 P8 & MONOBLOCKS MINT BOX $795
AUDIONOTE A4+ SPKS SPEAKERS BLACK $795
ELEMENTAL AUDIO REF SPEAKER STANDS BARGAIN $795
PRAMAR FOR DVD PLAYER NEW UNIT BOXED MINT $795
QUAD II SE MOVING BLOCKS CHROME MINT COND RARE $795
AUDIONOTE CD 1 PLAYER BOXED $795
MERIDIAN M35 ACTIVE CENTER MINT BOXED $895
AUDIONOTE PI SE POWER AMP BOXED $895
MUSICAL FIDELITY A3 CD PLAYER EXCELMO $355
ALCHEMIST 248T CD PLAYER BOXED $355
ELEMENTAL TIER REFERENCE STAND MINT $275
PRAIRIE AS3 Mk II DISPLAY ONLY, BOXED $575
VIENNA ACOUSTICS HANDWICHED NEW BOXED $549
MERIDIAN 555 POWER AMP BOXED $495
AUDIONOTE A23 SPEAKERS MARKED BOXED ONLY $475
TRIANGLE ZEPHYRS X5 BOXED $449
IPP K4 R/1 EX-COND. $375
PRAMAR AS3 AMPLIFIER MINT $375
PRAIRIE AS3 AMP DISPLAY ONLY $375
TRIANGLE COMETS X5 SPEAKERS MINT BOXED $375
PARASOUND CD-P1000 CD PLAYER $249
ARCA TORS BABY 2 NEW BOXED 2006 NEW BOX $295
NAD BM SPEAKERS EX CONO BOXED ONLY $225
ARCA TORS RB TBUTTLE EX CONO BOXED $195
ARCA ALPHA 3 CD PLAYER BOXED $175
HENLEY HMC 180 MM/MM PHONO STAGE $100

SECOND HAND AND EX DEM ITEMS FOR SALE

CD PLAYERS

Myryad T10 $399 Fin. Harbeth Compact 705 mkII cherry $1399
Myryad MCX600 $1299 Fin. Harbeth REBPS mkII cherry $299
NAD 5500 Silverline $1000 Fan. Monitor Audio speaker sets $429
Sagam C201 $995 Fan. Monitor Audio Silver 4i in wall speakers $299
Monitor Audio Silver 5i renaiss $450

AMPLIFIERS

Monitor Audio Gold Reference 30 black $1500
Audio Innovations Series 8000 power amplifier $850
Bryan ESP-400ST $375 Royal NJA rigiale $599
Creek 5500 $999 Royal Sounder SE $645

Crosman 610 power amp $450 Royal AMT7 conde $249
USB 700 power amp (usan, unius, old style cas) $699 Fraction 300 hifi inc cherry pearl $399

Myryad VP10/20 power with pre pump's l indulg $499
Myryad VP10/20/20 power $890

NAD 5500 silver series integrated $1399
Sonomer Cappiari integrated $599
Sonomer ARIA ex phone stage $995

1000 Sinfonie 5 shelf box $249

LOUDSPEAKERS

Sonic System's Seven shelf glass $189
Audio Physic Step $1299

check our website for up-to-date list : www.replaydial.pipex.com

definitive audio

Living Voice • Lowther • Vitavox • Electrofluidics • Art Audio • Boriter Patrol Canady • DINM • Susglen • Wavaric • Lyra • Monarchy • Western Electric • EMT Watia • Mischel • Stax • Tom Evans • Nott'm Analogue • SME • Van den Hul

Summer Shakedown of part exchanged items

MAGNUM DYNALAB ELUTE TUNER $600
SME 3019 Turntable $400
Gotham Type 39 - Western Electric manufactured 45w class A $850
Border Patrol 500SE B - very nearly new. $350
Art Audio Diavolo 300SE - black and gold - very tidy, very young. $3000
Art Audio VP1 Line pre-amp $600
S/J Model 1 pre-amp - Serious - rare. $700
S/J Model 2 pre-amp. - Very serious - more serious. $1400
Gary 5500 line pre-amp $400
Gary CA243 power amp $1000
Art Audio Concerto - tromol coupled 6500 power amp - spotless $1500

Art Audio Innovations Series 500 and 700 int. amps, classics. $550

Michell Orbe Full 4.5 years old. SME amplit. AC PSU. $650
Papertor motor QC $299

Michell Orbe Full, 1 year old x2 units $1600

Michell Orbe SE V nearly new. $1600
Wadia 880x battleship CD player - serious. $450
Living Voice Airsoul mkii - very rare opportunity - moving into arming cupboard forces sale. $950

Art Audio Innovations Series 500 and 700 int. amps, classics. $550
Ceremonial A2 rosewood - absolutely spotless - boxed. $900
Linn Kolidh - passive. Brown speaker. $400
Mirage 890. Canadian floorstander $450

Smell Type JII, two pairs with high mass stands - clasix. each - $500

Ortofon MC7500. 20hours use - fabulous opportunity. $1500

AudioNote DACS with 2x Border Pairs MB PSUs $600

Musical Fidelity NuVista CD player. $2000

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

64 FLIXTON ROAD
URMSTON
MANCHESTER
M41 5AB
0161 202 9522

FOR FRIENDLY SERVICE CALL NIGEL

01362 221372
MOBILE:- 07799 554357
Email: nigel@soundsperfection.co.uk
kathryn@soundsperfection.co.uk
Web: www.soundsperfection.co.uk

PAGE 40
AUGUST 2002 HI-FI WORLD
Simon Pope listens to three power cords designed to get your set-up singing a little better.

**ECOSSE REFERENCE BIG RED POWERCORD** £99

Five years ago Kimber (via UK distributor Russ Andrews) were one of the very, very few cable manufacturers to preach on the merits of clean mains and the importance of specialist shielded mains cable. Now the market is awash with rivals. The outside layer is double shielded by a foil and a braided thimble and the veins are all shielded with a ferrite socket. Inside the power plug sit an integrated coil and capacitors, which act as a mains filter, of sorts, adding another string to Kimber's bow.

**KIMBER LoPOWERCORD** £75

Unlike the others here, this company specialise solely in mains supply and filtering. The cablereviewed here is the lowest priced in this round up. Two versions of the KE Power Cables are available, again, one for power amplifiers and the other, reviewed here, for any other application. The technology used here is quite advanced for the humble price tag and echoes that of the Kimber cable. Conductors are internally shielded by a ferrite socket and double shielded externally with foil and a braided metal sleeve. Again, a coil and capacitors are located in the mains plug to act as filters.

**KEMP ELECTRONICS KE Lo-POWER CABLE** £36 per metre (£12 per extra 0.5 metre)

World Verdict

**KEMP ELECTRONICS KE Lo-POWER CABLE**

Good value for money, the Kemp cables are clean sounding and lucid.

World Verdict

**KIMBER LoPOWERCORD**

The first and still one of the best. Competition is now strong but the WATTGATE makes a big difference.

World Verdict

**ECOSSE REFERENCE Cables**

A good upgrade but not the cheapest option. Well focussed and clear sounding.
David Price thinks Unison Research's brand new Unico valve/MOSFET hybrid integrated amplifier is more than the sum of its parts.

Even though the Cold War is over, in hi-fi - at least - some people are still fighting it. Many folk still line up around 'the two' opposing transistor and valve camps, convinced that theirs is the superior system and that their rival has no redeeming merit. As far as they're concerned, never the twain shall meet. As for me, I don't care - I use both. I have a high-end valve system which gives me massive amounts of musical fulfillment and never fails to blow my socks off when called upon so to do. In another room is my 'mid-fi transistor' system, which varies between Cyrus and Naim electronics, and is no less compelling to listen to in its way. Both hit the button and make things magical, and both can do what the other can't. Frankly, I'd find it hard to be without either.

Unison Research - lest we forget - has built its name on producing some amazingly well suited and bootied single-ended triode valve amplification. Quintessentially Italian, its quirky, charismatic products have become famous for their combination of real wood and stainless steel finishes, and modern tube-based circuitry. Recently, its SRI integrated signalled a minor change of direction in its use of an ECC82 triode input stage and an output stage using complementary pairs of power MOSFETs. The idea was to combine the strengths of two respective technologies, to get the best of both worlds. The new Unico you see before you continues the plan.

At £750 (plus an extra £100 if you want the MM/MC phono stage), it's a lot cheaper than the SRI, but I'm afraid you lose those amazing looks and the undeniable sense of occasion they lend to any listening room. Instead you get a nicely made oblong steel box - not entirely dissimilar to Audio Analogue's Pucini in size and appearance (maybe a bit nicer), complete with two large control knobs - one for input, one for volume. The two accompanying LED indicators serve an additional purpose - when the amp is in its 'warm up' phase they flash rapidly until things have stabilised. Yes, it's even got its own self-diagnostics!

Look inside and you'll get a strong sense of deja vu - it's pretty much an SRI circuit complete with dinky valves, chunky MOSFETs and a big toroidal transformer dispensing the juice - even the 2x80W RMS rated power is the same. The circuit uses only a minimal level of feedback (8dB), and an overdrive LED shows when distortion levels exceed one per cent. Go round the back there are two pairs of chunky loudspeaker binding posts and a brace of gold plated RCA phono inputs and outs. The supplied remote is a joy - it's hewn from wood, offers just volume up/down control, and is RF powered rather than infra-red.

It's an interesting sonic proposition. No - don't expect a cheap, conventionally styled AudioNote Ongaku, or even 'just' a soberly styled Unison SET valve amp. It expressly does not sound like one of the aforementioned tubular belles - rather, it's very much like the SRI whose circuitry it largely shares. This means you get what in transistor terms would be described as a warm and sepia-tinted sound, or in tube terms is quite 'hard and punchy'. The Unico seeks to give a taste of both cultures, and in this respect - at least - succeeds brilliantly.

Cue up some smooth Stevie Wonder ('Lately') on your turntable (via a valve phono stage, preferably) and you get an impressively wide - panoramic even - soundstage, with loads of depth and atmosphere. Detail isn't quite as good as, say, a Cyrus 7, but there's still plenty for the taking. Maybe this is missing the point, because the fun comes from taking in all the textural detail. No,
this amp isn't as good as a decent (and far more expensive) tube amp in this respect, but you still get more than your money's worth of umbre and grain. Instead of Stevie's voice sounding like a very good hi-fi recreation (as the Naim Nait 5 would manage), you get a believable human crooning out in front of your fireplace. This is the magic of valves and the Unico - if not Marvo - is still quite adept at pulling rabbits out of hats.

Better still is when you feel you could use some sterner stuff. Up the pace a tad and add some Sly and Robbie and you've got Grace Jones' 'My Jamaican Guy'. Thanks to its complex syncopations and occasional slam on the bass drum, this track seems to really take it out of amplifiers, and often the tube type come out looking rather the worse for wear. The Unico wasn't in the least bit worried - in fact, it thrived. Again it set up a wide acoustic, with strongly articulated images and a great sense of depth. Tonaly it was smooth and just a little on the sweet side of neutral, with a warmish bass and silky treble. Although not overblown - or loose in the traditional tube sense - bass guitars had a pleasant 'bloom' that most definitely wasn't there when I switched to a Naim CDS.

Rhythmically, the Unico is also impressive. It's definitely 'up for it' when it comes to pushing a tune along, and really tries its best to impart the twists and turns of Grace Jones. Ultimately though, it simply doesn't have the grip of the Naim - it's fast alright, but the bass is just a little looser and it tends to sit on transients just a touch more, too. Still, that bass drum showed slam that can only come from an amp packing some serious firepower - the faster Naim simply didn't have the grunt to pin you back in your seat like the Unico, when it could be persuaded.

It's only when you play some beautifully recorded acoustic music that things start to err. Mahler's Symphony No.10 (Simon Rattle/Berliner Philharmoniker) on DVD-A shows the Unico is a little too coloured for comfort (if neutrality is an important criterion, that is). Everything seems to be invested with a faint 'orange glow', like an Autumn morning. It's great if you're playing nasty digitised pop like The Spice Girls '2 Become 1', but not if you're trying to hear what's on the disc. Oh well, can't have everything for £750, I guess! Overall then, a brilliant alternative to the Naim/Cyrus/Arcam (etc) treadmill - if you want something a little different, yet no less competent (or flawed!), then this is a brilliant bet. It's very rare to find sound and especially build quality at this price and it offers a superb option in the midprice integrated market. Bellisimo!

**MEASURED PERFORMANCE**

The MOSFET output stage of this amplifier delivers plenty of power, but it also produces a fair bit of distortion, perhaps a little too much. Delivering 98W into 8ohms and 144W into 4ohms, the Unico possesses levels of power delivery beyond most valve amps, so it capitalizes upon the use of solid-state devices. However, there was some odd-order (sharp sounding) distortion into low 4ohm loads, 1W at 10kHz throwing up 0.34%. Levels hovered around 0.2% or less into 8ohm loads, which is fair, but since an increasing number of loudspeakers these days are 4ohm the Unico sails a little close to the wind here. It is likely to have a fairly glassy bright sound, perhaps with a little hardness at times, according to the loudspeakers used. It should be matched with care, favouring warm/high impedance sound speakers like Catsles, rather than brighter/low impedance Missions for example.

Frequency response was very wide, stretching from 3Hz right past 150kHz, so the design is fine for DVD and SACD. Input sensitivity was typical enough at 400mV and noise low.

Speaker choice will be important with this amp. Because it is load sensitive. I would expect a bright, open and likely dynamic sound, but with brightness. NK

<table>
<thead>
<tr>
<th>Power</th>
<th>98watts</th>
</tr>
</thead>
<tbody>
<tr>
<td>CD/tuner/aux. Frequency response</td>
<td>3Hz-150kHz</td>
</tr>
<tr>
<td>Separation</td>
<td>58dB</td>
</tr>
<tr>
<td>Noise</td>
<td>-88dB</td>
</tr>
<tr>
<td>Distortion</td>
<td>0.18%</td>
</tr>
<tr>
<td>Sensitivity</td>
<td>400mV</td>
</tr>
<tr>
<td>dc offset</td>
<td>3/26mV</td>
</tr>
</tbody>
</table>

**World Verdict**

Another stormer from Unison Research - big, beguiling, punchy sound and great build and style make it a true audio bargain!
PARTNERING BUSINESS [1]

In April 1998’s HFW David Price discusses the Yamaha NS1000 speakers; "power amps such as Naim’s NAP250 which without soft Bextrene or polypropylene cones to hide behind, could sound – yes that’s right – forward, fatiguing and fizzy". Fine, but then we go to November 2000 and David concludes in another recommendation for the Yamaha speakers, “although they don’t really sound completely at home until there’s a NAP250 geeing them along".

Anyway his unerringly consistent approach certainly persuaded me and I’ve gone and bought a pair of Yams! Problem is what to do with my Naim amps?

Donald J O’Donnell
Glasgow

I’ve been quoted out of context again - and you could knock me down with a feather! But my general point is precisely as above - these speakers need a mucho macho amp to drive them, but - power output aside - they’re ruthlessly revealing of its tonality. The NAP250 is not, frankly, the world’s sweetest amp - so you’ll have to perform some remedial tweaking. To wit, use the best source you can - preferably vinyl (pre-Lingo LP12s work magically with NAP250s, methinks), with a tube phono stage - and junk your NACOS speaker cables in favour of DNM Reson or suchlike. Turn the Yams’ midrange controls down to -3dB, and the treble pots down to -1dB, and run them close to the rear walls slightly toed-in with the grilles on. Good luck - you should have an extremely powerful and musical sounding system if you manage to tame it!

DP

Mr. Price’s use of Yams is a World mail favourite topic...
Hi David,

I own a pair of Yamaha NS1000M loudspeakers. I have used them with Pioneer A400 and vintage Leak TL12.1 (KT66) and TL10 amps. They sound okay, but I would like to partner them with better amps. I gather you use these speakers as reference. Could you please let me know what other partnering equipment you use (amps, cables, stands, CD player, etc.)?

C Kohawita
Brisbane, Australia

Yamaha NS1000Ms are one of the most charismatic loudspeakers I've ever heard - and they seem to elicit vastly differing reactions. Many British hi-fi journalists for whom I have great esteem loathe them, whereas in Japan they seem more revered than Quad ESL57s. This is surely because they are incredibly transparent, thanks to the use of Beryllium domes for their treble and midband drivers. Chemistry students will know that this is the lightest metal in the periodic table. The combination of ultra low mass and ultra high rigidity (better than Titanium or Aluminium, for example) is almost ideal for loudspeakers, and gives stunningly low distortion with tremendous speed. The problem is that Beryllium is an extremely difficult (and thus expensive) material to machine safely, which is why Yamaha gave up making them after some twenty years.

The upshot is that the Yams sound smooth and fat through modern valve amps and grossly forward and harsh through in-your-face solid state amplification. They're so revealing, and valve amps and grossly forward and vastly differing reactions. Many British you use (amps, cables, stands, CD player, speakers. I have used them with Pioneer valve World Audio KLP-P1 with vice-like grip in the bass, but a bright, harsh through in-your-face solid state sound smooth and fat through traditional system decoder. Preauditing aid (LFD's SpiroLink 3 best suit me, along with DNH Reson speaker cable), plus a sturdy pair of stands (Asacama B200s).

While I don't consider myself an audiophile, I have a sizeable record and CD collection, which I like to hear well reproduced. To this end my main system comprises a Pioneer 301-disc multiplayer, playing through a Musical Fidelity X-ACT DAC, Audiolab 8000C and MF X-A50s and a pair of Quad ESL57s. I've recently become a reluctant convert to the world of home computing, and bought a well-specced PC (512k RAM, 40 gig hard drive, Windows XP with DVD & CD-RW), but I'm afraid I neglected its audio potential, so am in need of some sensible upgrade advice.

Firstly, the soundcard that came pre-installed sounds pretty dreadful, and when fed out to a spore NAD amp and Rega Kyles, it also produces sound at what seems like about half line level. It also struggles with Quicktime, producing a 'jittery' sound. Can you recommend a soundcard that gives me decent sound and volume, preferably also with the ability to decode Dolby 5.1 surround from the DVD drive?

Secondly, should I junk the inbuilt (nameless) CD-RW drive in favour of something like the TEAC S40E? At £140 this seems like a very cost-effective upgrade! Incidentally, what brand of blank CD-R would you recommend? Finally, what software should I be using to get the best audio potential from my PC? I imagine your response might be, 'depends what you want to do', but that's the whole point - I don't yet know what I can do, but I'm determined to make the most of what I've got!

Ian Hayward

With the right kit, you'll find that your PC can be an invaluable complement - rather than substitute for - your hi-fi. You're correct to identify your soundcard as the biggest problem - the bundled designs are invariably rubbish, and often contain weedy audio output stages that struggle to drive line level inputs, which explains your volume deficit. If you don't want 5.1 decoding, I'd unreservedly recommend TerraTec's AudioSystem EVX 24/96 for £150 - it's a great way of getting two channel audio in and out of your computer, and even offers real 24/96 resolution to boot.

Still, if you must have multi-channel, you could do a lot worse than Creative Labs' Audigy. Frankly its digital converters aren't as good, but they're still respectable and the whole package is brilliant for 'starters' such as yourself. It gives full 5.1 Dolby Digital decoding, and there's a wealth of software, including Steinberg's WaveLab Lite, which does hard disk recording, audio restoration and editing, and is an ideal introduction to computer audio. It also has very good hardware audio acceleration, which will end your 'jitters'. Factor in its handy 'LiveDrive' connector box (comeplete with front panel FireWire socket) and it's brilliant package.

As for CD burners, the TEAC 540 sounds great value, but why not try out what you've got first! It may be perfectly adequate given good 'brand name' media. Personally, I use Sony or TDK blanks, and try to buy them at £00 it's an unattainable one for many. You could always download Cool Edit 2000 from the company's website (www.syntrillium.com) for £69, and upgrade later. It's more powerful than WaveLab Lite (in some respects) and has much better user-interface.

Hi, I need your help again! Several years ago you gave me some good advice on room acoustics, which worked out fine. Current line-up is much the same as then: Pink Triangle LPT GTI with Tabrizzi

World Radio History
A3.2 Series
Machined, MIL-Spec aluminium front panel.
Powerful, robust, built.

For details of your nearest stockist ring 020 8900 2866. www.musical-fidelity.co.uk
Finding a pair of floorstanders to fit your criteria actually shouldn’t be too much of a problem, Steve. For the kind of characteristics you’re looking for, though, it looks like the upper end of your price bracket is where you’ll find the answer. I presume by “walls” you mean a rear wall, as very little around will work well positioned right in the corner of a room.

Sorry to bang on about the Mission 782s yet again, but they actually fit the bill very well. Being a closed cabinet design with no bass ports they can work very well close to a rear wall and they are slim and fairly small in stature. A side firing bass unit delivers the tight lower frequencies. This can be placed facing either inwards (good imaging and depth of stage) or outward facing (wider, more open breadth of sound). The treble won’t be a harsh as you’re finding with the B&Ws and the Missions are highly detailed, and due to the thick infinite baffle cabinet construction, very neutral without being sterile. They are also bang in the middle of your budget at £700.

The larger £1,000 783s are the same systems sound more bearable. Maybe this is my ageing ears, but then again it could have been me sticking my head down a PA stack at that Motorhead concert in 1984? Anyway, down to business.

Question - why didn’t you hear the system together before you bought it? To get it back on song I’m afraid you’re going to spend even more, so it was a false economy.

First, I doubt if your Arcam A85 is much of a problem, as long as it was purchased many years ago. It’s a very clean, dry, yet rewarding sound. The reverse seems to be happening! So what have I done wrong? Although I auditioned most of the kit before buying it, I never listened to the whole ensemble (and being offered a couple of good deals coloured my purchasing choices more than somewhat). Surely this lot should sound reasonably good in combination? Or is this a marriage of incompatibles? Tell me I can make it sound better without spending a shed-load of cash?

Finally, can you recommend a good second hand CD player for under five hundred quid?

Craig Harris
Manchester

Well, I was seventeen years old when CD reached Britain in 1983, and couldn’t believe how shrill the damn thing sounded. I was amazed that nobody else into hi-fi (invariably older than me) seemed to realise, either. Eventually I put it down to my callow lugholes, and some twenty years later, the same players through the same systems sound more bearable. Maybe this is my ageing ears, but then again it could have been me sticking my head down a PA stack at that Motorhead concert in 1984? Anyway, down to business.

Question - why didn’t you hear the system together before you bought it? To get it back on song I’m afraid you’re going to spend even more, so it was a false economy.

First, I dub your Arcam A85 is comprehensively better than your QED, which had a far sweeter (albeit less powerful) sound. Second, the Rotel phono stage is now thoroughly outclassed by the likes of Creek’s
OBH-8SE, which is smoother and more musical. Third, the MC15 has rather clinical tonality - a Dynavector DV10x4 would have worked far better in this context. Fourth, the standard RB300 can be a bit stark in the midband in some installations. From this we can surmise that you've got a poorly matched system.

Answers! A multi-pronged attack is the order of the day. First, get your Rega modded with the OL counter-weight stub. This will give a smoother, sweeter midband with a bigger, more fulsome bass. Second, change your phonostage for a Creek. Then when funds permit, go the whole hog and than thousands, but I feel part of the sound can be quite impressive with acoustic instruments or chamber or naturally recorded material from Novos, but with prestige modern digital recordings. My set up consists of the original Manos CD63 (with Musical Fidelity X-Act DAC and Musical Fidelity valve line stage X10D), the Pioneer A400X amplifier and Sony S-176E speakers. Other sources are a Rega Planor 3 with Bias cartridge, a Sony TC RX70ES cassette deck, a Kenwood KT 660L tuner, a Goodmans VN6000 Nicam video (frequently used for recording FM radio as well as TV) and a Sony TC-266 half track reel-to-reel machine only used in playback mode with the 400 odd 7” tapes I acquired from the estate of a BBC engineer! Please don't ask me when my eight track is arriving...

The problem is that everything works fine with the exception of CD, which as you can see I have taken the greatest trouble over, with the two Musical Fidelity add-on units. I should add that the problem is worse without the extra units. As now constituted the sound can be quite edgy and uncomfortable. Studying various old reviews it seems that the Pioneer, although highly regarded, is felt to sound hard on top and CD63 reviews suggest something similar. So have I just brought together two pieces of equipment that were...
never meant to be bedfellows even with the two Musical Fidelity "pillows" in between. The part of the Pioneer that is supposed to be a problem - the phono stage - has not proved to be so, at least with an MM cartridge. I did try it once with an MC (Sumiko BluePoint) and was disappointed.

My original plan was to change the amplifier but I cannot find an obvious replacement without paying £500+ (an Audio Analogue Puccini for instance). Secondhand Audiolab 8000As are fairly common but they too have a reputation for hardness in some quarters. I have also seen a cleanish second-hand Musical Fidelity B2 but know nothing of this amplifier, which looks like a later version of the A1. However, it may be better to replace the CD player until the money for a Puccini is available, as there is so much that the A400X does well.

The Cambridge 4SE, which regularly appears in "World Favourites", suggests itself or perhaps other models from the same stable. Would an Arcam Alpha machine be worth looking out for? Are there other models I should consider that would pair well with the Pioneer? Also, whatever I buy, is it likely to work best straight or using my Musical Fidelity units?

Richard Thomas,
Leics.

Wow. One step at a time, Richard! That's a real HFW classic, stir-fry system you've got there. But sometimes whilst looking like an explosion in a Lasky's warehouse (RIP), they can sound pretty cohesive and musical, often by mere pot luck.

Right, where do I start? At the source, of course. I know the DG feeling well. One of my favourite readings of Bruckner's ethereal seventh symphony is a mid-seventies analogue DG recording. On CD it sounds as if someone has hung two wet blankets over the 'speakers - but I still play it as it has a certain something, musically, over the competition. Their early digital efforts are even worse. The latest DG recordings are a vast improvement on these early digital nightmares of the eighties, with their frighteningly edgy violins and compressed and glassy sound, but they're not all perfect. I've heard some great ones and some howlers. It all depends on where it was recorded, who recorded it and, to an extent, which orchestra, conductor, etc. Remember bands such as American orchestras are decidedly 'brighter' sounding than their European (especially Austro/Germanic) counterparts.

Finding a CD player to meet the criteria you require at budget level is difficult, if not impossible. Generally, players up to £400 or so sound brighter and harder than their more expensive cousins. There are a few smoothies hiding among the ranks, though. Look to new products from NAD and Marantz. The new £220 CS2i is an involving and sweet player with all the classic NAD traits such as a fairly neutral and forward sound but doesn't sting like many others at the price. Further up the price scale at £300 there is the slightly long winded Marantz CD6000 OSE LE (Original Special Edition, Limited Edition!). Whils not being the most chocolatey smooth player around, it has a well balanced quality that belies its price tag.

Sony have some exciting and well detailed players under £300, such as the CDP-XB740E, but you may find this a little too hard with your dreaded DG recordings. The ideal is the Rega Planet, a very analogue sounding player, which at £498 is presumably over budget. Look out for a second hand Planet if possible.

As for amplifiers, you're on the right track with the Audio Analogue Puccini. This will give a less immediate and more subtle sound than the Pioneer. It may not have the ultimate clout but is better suited to classical music for my money. SP

ROUND AND ROUND WE GO

Hi-Fi World is a great mag - I like the balance between the subjective review and the instrumented analysis, even if they don't always seem to agree!

My turntable is a Thorens TD150MKII that I picked up last year for £10 in a record shop. I like the sound of it, but the tonearm has obviously not worn well over the years and there is clear friction in the bearing that is preventing it from tracking smoothly across the record. This is so bad that I have stopped using the bias weight on my test record the arm swings outwards, initially on the blank parts of the record, before stopping.

I have seen many good arms on eBay for reasonable money, but I do not have the kit to set up the suspension for a new arm.

My first question is - how much should I expect to pay for this service (suspension set-up)? I have been quoted a mindboggling £150 for this - because I am just a student, this makes up a significant percentage of my entire system!

Secondly, what arm would you recommend with this deck? And thirdly, why are DC brushless motors considered to be superior to inductive AC motors in the hi-fi community? The rest of my system comprises a Grado Prestige Blue, running into the Pro-Ject Phono Box. My amplifier is a Marantz PM-57, driving a pair of ageing Celestion Ditton 44s.

Des Weller

Hi Des, thanks for reading - and yes, if you read every last dot and comma of the mag you're bound to find contradictions, but please remember these are reviewers' individual opinions, and written in specific contexts too.

As for your Thorens, you can of course get it rebuilt, fit a new arm, etc., but the cheapest way to get good sound in the short term would be to buy a second-hand Rega Planar 3 for around £95 (if you look hard). The Thorens is ultimately more capable, but needs a lot of fettling and a decent arm (such as an OL modded Rega RB250) which would cost this much anyway. If it's a quick fix for the least amount of cash you want, get a Rega! By the way, any decent dealer should be able to strip and rebuild a deck for around £50 - in fact you can probably do it yourself if you've ever had a Meccano kit as a kid.

There are several reasons for going DC. First, they don't transmit 50Hz mains noise. As our mains supply is notoriously full of mush, any rubbish going into an AC motor will come out the other side and be fed into the record as it turns, manifesting itself as a blurring of bass notes and coloration further up the frequency spectrum. Second, they don't suffer from the 'cogging' effects of AC synchronous motors, giving a more stable speed (in theory). Third, the AC motors used in most turntables tend to be a variation of the Philips/Impex 24-pole type, which is a cheap, nasty, weedy and noisy little thing - and anything (in my opinion) is better than this! DP
Summer's here and the time is right for dancing in the street. But first, sit down and find out what we recommend for the purpose!

**SONY D-EJ1000 £165**

In Japan, portable audio is taken incredibly seriously. More than just the province of kids and students, vast numbers of Nipponese commuters fire up their trusty Walkman, Discman, MP3 player or MiniDisc twice a day. Trains, you see, are the normal way to get to work (because they run on time, and the nation’s network of toll roads aren’t the easiest to traverse). To wit, everyone seems to have a walkie, and so they’ve become as much a fashion statement as your tie, watch or handbag.

This is where Sony’s D-EJ1000 fits - in a land that built its fortune on miniaturisation, a country where ‘less’ really is ‘more’. This is the smallest, lightest, slimmest and sleekest CD portable around. Indeed, Sony has rather a tradition of this kind of thing - it was the first company to launch a CD Discman, and very soon introduced a ‘top of the range model’ which it has assiduously updated and refined over the past decade. Weighing just 129g and measuring a mere 13.2mm deep, the ‘1000 is the ultimate ‘little big man’!

This Japanese built machine’s charms are more than just vital statistics, though. Its top plate is cast from silver painted magnesium, making it exquisite to the touch. (The lower section is merely metalised plastic dressed up to look like the top!) The unit comes with Sony’s top stick remote, complete with a beautifully crisp, alphanumeric backlit LC display that even shows CD Text. There’s also a Palm Pilot-style base unit that functions as both a stand for your beautifully crafted portable and a charger too. Neat. Up to 115 hours of battery life is claimed - not bad considering the first Sony Discman gave six hours from four alkaline AA cells! The usual ‘G-Protection’ is provided, which resisted all my attempts to upset it. It also boasts CD-R/RW playability, but most Sonys for the past five years have performed this feat without so much as a word.

The player’s controls are mostly available from the remote, but are also neatly dotted around its circumference. They’re a pain to use, so Sony presumably expect you’ll stay with the stick. The headphone socket is separate from the line out, which also functions as an optical digital out. Be warned that this isn’t a standard TOSLINK connector, so you’ll have to buy a special Sony cable if you want to plug it into your hi-fi. Still, it’s a great feature if you have a portable MD recorder - two tiny units will take care of all your playing and recording needs. The pack also contains the two required rechargeables, a half decent set of in-ear phones and a neat carrying case.

This unit costs around £165 in the shops, which is a lot of money for a mere CD portable. Is it over three times better than the £50 Aiwa in this group? In terms of design and ergonomics - yes - but certainly not if sound quality is your major criterion. It’s undoubtedly tighter and more rhythmic than both the Aiwa and top Sony Discmen of yore - but that doesn’t tell the whole tale.

Feed it some high energy dance music and this is an impressive machine, but switch to acoustic rock, jazz or classical and you begin to think it’s very dry and barren sounding. Tonally there’s less ‘light and shade’ than either the Aiwa or the Panasonic. It’s detailed alright, with fast transients and a decent dynamic ability too, but there’s little sense of the tonality or ‘colour’ of the original recording. That said, all else is fine. Bass is even and tight, midband clean and smooth, and treble crisp and well described with no splash or undue brightness. It’s a satisfyingly mature and civilised listen - and as such unlike a great many lesser CD portables - but not a real music maker.

Make no mistake, this is a lovely thing to have - and is doubtless de rigueur for the most stylish commuters on the Yamanote line - but it’s not a major sonic advance on the Aiwa which costs under one third of its price. With this in mind, you’ll have to draw your own conclusions about its value for money - or lack thereof.
AIWA XP-V731 £50

Unlike either the Sony or Panasonic, this Aiwa will win no awards for style or construction quality. It is not a piece of inspired industrial design, an extension of your trendy 'high tech' lifestyle or something to pull out of your pocket and place casually on a table at a svelte wine bar. No, it's plastic, costs £49.99 and you'll probably find it in the Argos catalogue this Christmas.

All the more surprise then that the catchily named XP-V731 isn't half bad sounding at all. In fact - shock horror - in some respects, it's the best of the group. Which isn't to say that it's transcendentally splendidous, but rather that the others here have had all the extra cost of their purchase price spent on slinky designer bits and pieces (backlit remotes, cool plastic cases, base units, etc) and not on audio electronics.

This is a fairly small (little wider than the diameter of a Compact Disc) and slim (22mm) CD portable, or it is until you take a look at the Sony or of course the Panasonic. It's made in China, from Ford Escort dashboard-grade plastic, which has had a thin layer of silver paint applied that will doubtless start wearing off as soon as you take it on the road. The buttons are cheapo shiny plastic too, and the display - despite being decently comprehensive (it will show track number and time together, for example) - is hardly as crisp as the others here.

It has a range of features, ranging from 'Jog Beat' (which generates rhythmic tones to pace your exercises!) to 48 second anti shock (which works well), a handy timer switch off, a claimed 41 hour battery life from two AA cells and 'DSL Dynamic Super Bass' (go figure). There's an AC adapter supplied as standard, and standard AA rechargables can be used if you wish, but aren't supplied. The single 3.5mm headphone socket is controlled by an electronic volume control which on its maximum setting makes it a 'line out'. All in all, it's a classic value for money package, with most features you could reasonably want.

The remarkable thing about the Aiwa is its sound quality, or rather the fact that it won't peel paint off your walls or smash your patio doors - despite its low, low price. No, it is not a Linn CD12 - nor will it ever be - but neither is it so terminally nasty and unbearable that you'll be reaching for the Panadol. It's clean, smooth and has no obvious nasties - its sins are those of omission rather than addition. To wit, you can cue up a CD and get more than a passing hint of what was originally encoded onto it.

Indeed, it showed itself to have a wider tonal palette than both the Sony and the Panasonic, and made a fair stab at conveying the texture of the strings on the 4Hero track, and the grain of the singer's voice. Despite the decency wide and detailed midband, the frequency extremes were a little less impressive. Nothing was really amiss in the treble, it's just that hi-hats were slightly splashy and loose. Bass was weaker and less well articulated than the others here, lacking any real clout. Considering the unit's 'line out' volume was a little down on the Sony, this could be a symptom of a rather anaemic analogue output stage.

Overall, the Aiwa is brilliant at the price. Decent sound, a sensible range of facilities and reasonable ergonomics mean you simply can't go wrong. And, as you carry it around through the hustle and bustle of daily life, you needn't worry about damaging or scratching it either; simply because it's so cheap to replace. Genuinely excellent value for money.

World Verdict

AIWA XP-V731 £50
Not quite top of the sonic pile but excellent value for money.

Aiwa UK
Tel: 0870 168 9000
www.aiwa.co.uk
Is it really four years since Panasonic’s first SD Card-based AAC portable hit the shops in Japan? I was over there during France 98, and remember gazing in admiration when I say my first one. The £200 SD80 you see here is some three generations later on, and frankly looks and feels it, too. Whereas the original ‘70 measured 50.8x49.2x15mm - the latest is a trifling 42.2x41.6x15.8mm, which is even more ludicrously small than before. Factor in the 38g weight and you’ve got a product that is as easy to lose as your car keys when you’re late for work. Seriously - for me at least - this would be a real issue that would deter me from buying one.

The obverse of this, of course, is its inconspicuousness. Nice as the Sony Discman is, you can hardly stick it in your pocket and forget about it, but the Panasonic is the most ‘stealthy’ audio portable I’ve ever seen. It makes the dinky Vivanco Vmax - which only two summers ago seemed a ‘miracle of modern science’ - look like Babbage’s Analytical Engine. The finish is also exquisite – better even than the Sony. It’s sufficiently ‘flash’ enough to make you feel like James Bond after an hour with Q. Play/pause, track skip and volume buttons are all you get, but also all you need.

You get more accessories than even the Sony - there’s a protective carrying case, neck strap, armband for wearing the unit like a watch, docking station for recharging the internal battery, USB SD card reader/writer, in-ear phones (not bad sounding) and a set-up CD complete with USB driver for the card writer and a custom version of RealJukebox. Finally, there’s a 64MB SD card, which gives a good two hours of music using the impressively compact AAC coding format.

Getting going is like putting together a puzzle - you have to install the battery, place it in the docking station, plug in the AC adapter and wait for the red ‘charge’ light to appear. Then you plug the USB lead into your computer at one end, and the card reader at the other. Then insert the CD ROM into your PC, the card into the reader, and let the install program guide you. This done, RealJukebox will let you rip new AAC files from your PC’s CD-ROM drive, or convert existing MP3 files. Then you can drag and drop your music to the ‘Removable Disc’ (as Windows calls the card writer), and then unplug the card and insert it into the Panasonic player – and go! Frankly, using the most fiddly CD portable in the world is a dodger compared to all this, but I guess you get used to it.

Still, suitably hooked up to some headphones and taken out and about, this thing is peerless. Panasonic has even gone to great trouble about its power provisions. A small, rectangular nickel-metal-hydride rechargeable battery is supplied that gives around 18 hours of playback, but the player’s protective case has a slot for an additional AA battery which together gives nearly 50 hours. There’s a mode switch on the side, which gives access to four equaliser presets, but it’s fiddly. The tiny alphanumeric display isn’t easy to read either, and it’s a shame it isn’t backlit. My final gripe is the RealJukebox software, which is far less intuitive to use than, say, Windows Media Player 7.

For a tiddler, the SD-SV80 sounds mightily impressive. It has an excellent analogue audio stage, giving a clean and punchy sound with decent grip and dynamics. After that, it’s down to the codec, of course. With AAC running at 128kbps there was a rich and musical sound, with plenty of energy and impact. Treble was impressively sweet and clean, and bass quite warm and full - I was actually impressed by this unit’s musicality running compressed audio, compared to the rather clinical Sony running ‘raw PCM’. Overall then, a deeply satisfying bit of kit to use, if you can be bothered with all the file transferring and conversion you’ll need to get your player going. It’s also a stunning thing to behold, and will impress and amaze. If a ‘digital audio portable’ is for you, this is as cool as they come.

Panasonic UK
Tel: 08705 357357
www.panasonic.co.uk
SONY MZ-N1 £240

Touted as "the brand new technology that will revolutionise the use of MiniDisc," NET MD is the largest single development of a format that's now reached its tenth birthday. It's all about integrating the format with computers - which is where Sony perceives the portables market going. It's been done before, not least in the company's range of home-market VAIO PCs and the MDS-PCI (and its descendents) hi-fi separate, but NetMD is said to take things onto a higher level.

A brand new application interface that connects MiniDisc players to PCs via their Universal Serial Bus (USB) connectors, central to its ethos is - wait for it - copyright protection. 'Approved' music files can be transferred to (and from) the MZ-N1 at higher speeds - up to 1.8x for standard play mode and 1.6x for LP2 or 32x for LP4 Long Play modes. Music can also come from online NetMD-compliant electronic music distribution services. The player also recognises existing ATRAC and ATRAC3 audio codecs, so NetMD recordings can also be played on existing MiniDisc machines.

The £240 MZ-N1 is the flagship model in the new NetMD Walkman range (also including the MZ-N505 and the MZ-N707), boasting the obligatory magnesium body and kitchen sink-length feature list. It’s a beautiful thing to behold - nice and sleek at 78.7 x 71.8 x 16.9mm, and light at 117g including battery - but I can’t help thinking that earlier generation machines like the MZR 900 look nicer. The box contains the unit itself, the USB cradle, a rechargeable NiMH battery, an external AA battery case, stick remote control, in-ear phones, AC adapter, USB cable and carrying pouch. Also included is a CD-ROM with the OpenMG software (Windows 98, 98SE, 2000/XP and ME compatible). The USB cradle doubles as a charger, which in turn gives around 79 hours playback time from the supplied NiMH rechargeable and single AA cell. Charging time is around three and a half hours.

Despite the bewildering array of facilities, it's easy enough to use. The software installs easily and offers powerful 'playlisting' facilities, akin to a CD jukebox. The 'Group' function helps you keep track of up to 320 minutes of music, by letting you store a vast number of tracks in easily identifiable 'directories' by artist, album, genre, etc. There’s a three line alphanumeric display which thoughtfully includes separate left and right level meters, along with the one incorporated into Sony’s familiar stick remote. There’s a jog-dial to help negotiate the player’s menu system and smooth operation still further - last seen on the old R50 until the MZR-909 reinstated it last year.

This portable is as slick as they come to use then, but what of the sound? Interestingly, I got the best results from real time recordings in the SP (Standard Play) mode. Cleaner and more involving than music transfers made from my PC using the OpenMG Jukebox software, I found this was down to the different codecs being used. It seems that ATRAC DSP Type-R is used for 'conventional' SP recordings (at 292kbps), but not for high speed computer 'ripping'. To further confuse matters, in LP2 (132kbps) and LP4 (66kbps) modes, ATRAC3 (a la Sony’s Memory Stick Walkman) is employed! Confusing, no? ATRAC DSP Type-R is Sony’s 'flagship' audiophile MD codec, claiming twice the signal processing power of previous versions of ATRAC, with specific improvements at higher frequencies.

Providing you stick to the traditional style of recording, then, you get a very bouncy and enjoyable sound which is more polished in some respects than any other player here. Bass is strong and lithe, treble crisp and midband very vital and dynamic. By contrast, 'ripped' CDs sounded a tad dull and clinical, lacking the bounce and clarity of the recordings.

However, past experience suggests that even using DSP Type-R, rival Sharp units will sound fuller and more musical still.

Sonics aside, my only criticism is the Sony’s slightly flimsy feel - it’s very light and well finished, but doesn’t feel as robust as the older, aluminium bodied designs. The battery door, for example, doesn’t feel it’s sturdy enough for the rigours of the road. Overall though, it’s a brilliantly packaged little product, offering incredible sophistication in a tiny package. MiniDisc fans will love it, but whether it will win new converts to the venerable format, I’m not so sure.□
High end valve amps don’t get much slicker than GRAAF’s stylish designs. We listen to the GM 70, their brand new all valve phono stage.

Modena in northern Italy has two musical claims to fame. One is that it’s the birth place of a certain Luciano Pavarotti, the other being the fact the tubular high end experts, GRAAF are based there. Founded in 1985 GRAAF (Gruppo Richerche Audio Alta Fedelta) was the brainchild of a few high-end audiophiles one of whom was Giovanni Mariani, company partner and valve amp designer. The result is a range of high-end amplifiers renowned for their sweetness and style, the 200W GM 200 output transformerless power amplifier being their top dog.

The £2,000 GM 70 reviewed here features a full-size, black aluminium chassis, combined with transparent tinted front plate for a full, cool stylistic effect. When powered up you’ll spot, through the fascia, the glow of two pairs of PC900 tubes in the input stage and another two pairs of 6922 valves in the gain and outputs stage. RIAA e.q. is made by a completely passive network located after the gain stage and there is separate filtering for this stage, plus the RIAA and output stages.

The GM 70 is a switchable moving magnet/moving coil design. MM/MC selection is executed by use of one of the two snazzy piezoelectric switches (labelled ‘high gain’) located on the front with a slick skim of the finger; the other switch being for standby/on.

Round the back there is a power switch, a six position knob for various input loads and two sets of analogue inputs, plus one output. The second pair of inputs is for those who require a custom load of the exact value.

Sonically the GM 70 is a honey. It’s sweet and light sounding in the best tradition of the audio valve without lacking body or depth. Put on an open sounding recording such as the Sugarcubes’s “Birthday” and you’ll be amazed at the sheer space and light present. Drums were extremely realistic and clean and Bjork’s squeaky vocals were super clear, with great presence. This open aspect to the GM 70 highlighted a
The Graaf valve phono stage has two gain settings, measuring x200 for MM and x600 for MC. The first figure is on the high side, but since MMs peak at around 5mV from the average disc, my measurements show, the unit will give 1V out max, which is within its output limit of 6V.

The x600 figure for MC is a good median value, although very low output designs from Linn, for example, need more ideally, up to x1000 or thereabouts. The Graaf is best used with high output MCs, like Ortofons.

Distortion was low enough up to 1V out but it did start to rise above this figure, so the Graaf is best not pushed too hard. Frequency response measured flat right down to 5Hz. There’s no IEC warp filter below 40Hz to prevent cone flap in reflex loudspeakers, so warped records may be problematical. There will be plenty of good, deep bass though, since this unit followed the 3180s LF time constant better than most. Our response analysis clearly shows there’s no shortage of low frequency gain.

Equivalent input noise (output noise / gain) was a respectable 0.35uV (IEC A wtd.). This is fine for MMs and OK for high output MCs, although some hiss will be audible. It is too high for low output MCs though; where hiss will be audible.

The Graaf measured well in all areas. Good valve phono stages can be dramatically different from solid-state and I suspect the Graaf is a product well worth hearing. NK

**Frequency response**

- 5Hz-30kHz
- 81dB
- 0.02%
- 46dB
- 56dB
- 30mV, 6V out
- 10mV, 6V out
- 0.35uV
- 0.35uV

**Separation**

- 81dB

**Distortion**

- 0.02%

**Gain**

- MM x200, 46dB
- MC x600, 56dB

**Overload**

- MM 30mV, 6V out
- MC 10mV, 6V out

**Noise (input noise, IEC A)**

- MM 0.35uV
- MC 0.35uV

**World Verdict**

Not cheap, but sonically as sweet as a nut. Open, warm and highly detailed.

**Graaf GM 70**

UKD

23 Richings Way

Iver, Bucks

Slough, SL0 9DA

Tel: 01753 652669

www.ukd.co.uk

---

Deep soundstage that stretched right back to the rear of the room - very impressive. Moving on to Grieg's Peer Gynt Suite No.I on a very fine old Decca recording with the London Symphony Orchestra, the GRAAF made much of instrumental colour and timbre. The bass drum had beautiful depth and realism, woodwind sounded nicely open and strings very sweet. Indeed, the overall orchestral sound was beautifully lucid and spacious.

A wide selection of records, of varying musical styles and contrasting recording quality all came up trumps, but suffice to say, the better and more open the recording, the better the GM 70 sang.

Valve phono stages are the best way of gleaning detail from your vinyl, and the GRAAF GM 70 is one of the most neutral and natural sounding I've come across. It isn't as full or forward sounding as some rivals but what it lacks in ultimate presence it makes up for in its flawless detail retrieval, imaging and beautifully smooth treble. As far as value for money goes, £2,500 isn't cheap for a phono stage but if you have the money and you treasure your vinyl
The latest version of KEF's Uni-Q drive unit finds its way into the midprice market with the Q1. Dominic Todd listens to the entry level model in the new Q Series.

KEF's Uni-Q drive unit places the tweeter at the centre of the woofer cone. The benefits of this are noticeably superior imaging and a more 'solid' sound stage. KEF Uni-Qs have been well received since first launched in 1988. They have been revised regularly to keep them up to date.

The company recently launched a new "Q" range. Baby of this range is the Q1, the model I review here. It features a newly developed aluminium dome tweeter within a fairly standard looking 165mm Polypropylene woofer. Interestingly KEF hasn't opted for a Kevlar or carbon-fibre mix for the woofer, despite such materials being popular amongst rivals.

The shape of the cabinet shows flair with strong tapering to the rear but, whilst the finish is fine, it's at £250 a pair it's a shame real wood veneer instead of vinyl couldn't have been used. The KEFs look appealing and do a better job of harmonising with typical domestic interiors than many of their rivals. Rivals who aren't exactly thin on the ground. The greatest threats probably come from the Mordaunt Short 902 Signature (£200), B&W 603 S3 (£250) and Mission 780 (£300). Of course, intriguing technology is all very well but it's worthless unless the sound quality is up to scratch.

With this in mind I hooked the KEFs up to my usual system and began by listening to The Pet Shop Boys' 'Birthday Boy'. From the outset it was quite clear that I was listening to a coaxial design, and a well-engineered one at that. The sound staging was especially good for a 'speaker of this price, being particularly impressive in terms of the 'height' of sound. Furthermore, imaging was uncannily stable to the degree that vocals and instruments were always clearly defined within the stage. This wasn't solely due to the 'speakers' format, but also to fine integration between tweeter and woofer. Although the metal dome treble unit did add a slight sibilance to Lowe's vocals, generally the KEFs remained consistent and well behaved throughout their frequency range.

Perhaps as a consequence of such good manners, the bass response was just a little lightweight, but there was enough to underpin most types of music, including this pop. Also worthy of mention was the above average projection of sound away from the 'speakers and strong detail retrieval that gave electric guitar an especially convincing presence.

Jennifer Warne's 'The Panther' provided me with a beautifully resolved vocal response. This was supported by an excellent guitar timbre. The whole effect was one of a very pleasant, open and transparent sound. Although the tweeter had previously appeared a little bright, here it was in its element, revealing subtle nuances of detail from the percussion that some of its rivals would leave untouched. Yet, despite the Q1's being so informative and detailed, they managed not to sound mechanical or stilted. In fact, the opposite was very much the case, with the recording providing a most beguiling listen, such was their cohesiveness of presentation.

Turning the wick up somewhat with Jeff Healey's 'My Life Story' showed off the KEF's excellent timing characteristics. Timing was no doubt helped by the lack of any truly deep bass, but such was the pace and vigour of the track that this wasn't to the detriment of the overall sound. Once again, vocals were extremely well projected beyond the rest of the mix, and the Q1's pulled off the trick of defining individual instruments
I review whilst bonding the performers together. If I had one complaint, it was that piano did lack a little body, although it's fair to say that this can be quite a common problem in 'speakers of this price range.

The Q1 had fine tonal resolution; it was far from a 'grey sounding' loudspeaker. Plenty of colour and texture was given to both vocals and instruments alike.

Finzi's Eclogue for piano and strings proved surprising in some respects. It was presented in a mellifluous manner and ebbed and flowed with grace, yet it sounded curiously bland. The string tone in particular lacked a little bite although, in this case, piano timbre was fair.

Having said all that, the sound wasn't unpleasant to listen to and given the Q1's price, and the competition at this price, it would be unfair to expect too much from symphonic music.

KEF's perseverance with their coaxial Uni-Q drive technology seems to have paid off. In general the Q1s are a likeable 'speaker that show few unpleasant traits and work well with a wide variety of music. They do lack a little scale, and won't attempt to reach the sort of bass frequencies that some floorstanders of this price would have little trouble with. That metal dome tweeter could also just occasionally betray its construction by sounding a little harsh at times.

Other than these small gripes though, the KEFs impress with their expansive sound staging, excellent detail retrieval and generally cohesive nature. They're the sort of 'speaker that one could live happily for many years with, knowing that their sonic characteristics won't become tiring after time. Furthermore, such is their transparency, they could withstand several upgrades from amplifier and source before they became out of their depth. Highly recommended.

KEF Q1 £250
KEF Audio Ltd
Tovil
Maidstone, Kent
ME15 6QP
Tel: 01622 672261
www.KEF.com

MEASURED PERFORMANCE

The coaxial drivers in KEF's Uni-Q unit give a consistent radiation pattern, so they sound much the same wherever you are in the room, sitting or standing. The balance KEF have struck for the Q1 favours low frequencies, with highs falling away gently. This sort of characteristic gives a loudspeaker a full sound. There's a little peaking in the treble unit, a sign that it will likely display some characteristic metal dome brightness, and it may just be KEF have kept tweeter output down a bit to deflect attention from this. Since Uni-Q drivers usually sound quite lively and dynamic the Q1 should have punch.

Bass output from the driver reaches down to 40Hz and below this the port takes over. It has a broad, well damped characteristic, making a contribution down to 30Hz or so. The impedance curve shows it is symmetrically tuned for bass damping of the bass driver. Kef use a 3.6ohm bass driver though and this does draw current — more so than most.

The impedance curve dips very low, to 3ohms in fact, and there's substantial reactance at 3kHz, where the rate of change of impedance is steep. An impedance dip corresponds with the response peak here, suggesting both could be alleviated by a little re-tuning. Voltage sensitivity was high at 88dB, but this is to be expected in view of the low overall impedance value of 5ohms.

The Q1 will likely sound full bodied and dynamic. There may be a little character to the treble. As a load it is demanding, magnifying differences between amplifiers. It should be matched with care, NK.

World Verdict
Superb sound quality with excellent detail that's easily up there with the best at the price.
UK SUBSCRIPTION £27
VISIT OUR WEBSITE: www.hi-fiworld.co.uk

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.

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
Nakamichi's golden age was its mid-seventies 'ski-slope' cassette deck period, from where the 600 came, reckon David Price.

Back in 1973 cassette was, lest we forget, a 'joke format' designed by Philips a decade earlier for dictation purposes. It's hard to underestimate the importance of this company to audio's great pantheon - the 1000 went in and 'scorched the earth', changing everything. Suddenly cassette was a credible, high fidelity music carrier, capable of mixing it with top open-reel decks of the day.

The 1000 was a three-head, dual capstan, two motor machine running Dolby B noise reduction and DNL (Dynamic Noise Limiting). This was impressive, but it didn't explain the stunning sound. The answer was the machine's supreme engineering depth - everything had been designed up to a performance level, rather than down to a price.

Both EX and SX tape, lets you tailor the machine to the tape with great accuracy. No other rival design offered such adjustment, and the result was an incredibly convincing sound, even by today's standards.

Set up the 600 for TDK SA and you get a bright, powerful and lively sound which doesn't just impress in the hi-fi sense but also in terms of musicality. There's so much energy you wonder how cassette could ever sound so bad on other machines.

Bass is taut and powerful, with real slam and drive. Midband is wide open, with stacks of detail and strong image. Treble is deliciously crisp and atmospheric. In 2002 it sounds great, but in 1975 it must have blown people's minds! To put it into context, it's a far more natural sound than, say, Pioneer's perfectly good PD-R609 CD recorder.

These days you'll have to keep your eyes open for a 600, or its 600 II successor (from 1978-79, which adds a headphone socket to the formula). Still, you may be surprised by how inexpensive they are - this is because they're not the most prestigious of Naks (i.e. ZX-9, Dragon, CR-7E). You can pick them up for under £200 if you look hard. It's worth it though - no other deck offers the such a heady mix of brilliant sound and madcap seventies style.
<table>
<thead>
<tr>
<th>Location</th>
<th>Telephone</th>
<th>Description</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aberdeen</td>
<td>01224 587070</td>
<td>Jamo A410PDD Speaker Package</td>
<td>£799</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Arcam Alpha CA 800 System</td>
<td>£1699</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Onkyo 3850 DVD Player</td>
<td>£249</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Onkyo 3850 DVD Player</td>
<td>£149</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Onkyo 3850 CD Player</td>
<td>£99</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Onkyo 3850 CD Player</td>
<td>£399</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Onkyo 3850 CD Player</td>
<td>£1699</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Onkyo 3850 CD Player</td>
<td>£259</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Onkyo 3850 CD Player</td>
<td>£1999</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Onkyo 3850 CD Player</td>
<td>£279</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Onkyo 3850 CD Player</td>
<td>£299</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Onkyo 3850 CD Player</td>
<td>£329</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Onkyo 3850 CD Player</td>
<td>£349</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Onkyo 3850 CD Player</td>
<td>£379</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Onkyo 3850 CD Player</td>
<td>£499</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Onkyo 3850 CD Player</td>
<td>£499</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Onkyo 3850 CD Player</td>
<td>£599</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Onkyo 3850 CD Player</td>
<td>£599</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Onkyo 3850 CD Player</td>
<td>£699</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Onkyo 3850 CD Player</td>
<td>£699</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Onkyo 3850 CD Player</td>
<td>£729</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Onkyo 3850 CD Player</td>
<td>£799</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Onkyo 3850 CD Player</td>
<td>£799</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Onkyo 3850 CD Player</td>
<td>£849</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Onkyo 3850 CD Player</td>
<td>£849</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Onkyo 3850 CD Player</td>
<td>£999</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Onkyo 3850 CD Player</td>
<td>£999</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Onkyo 3850 CD Player</td>
<td>£999</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Onkyo 3850 CD Player</td>
<td>£999</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Onkyo 3850 CD Player</td>
<td>£999</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Onkyo 3850 CD Player</td>
<td>£999</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Onkyo 3850 CD Player</td>
<td>£999</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Onkyo 3850 CD Player</td>
<td>£999</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Onkyo 3850 CD Player</td>
<td>£999</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Onkyo 3850 CD Player</td>
<td>£999</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Onkyo 3850 CD Player</td>
<td>£999</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Onkyo 3850 CD Player</td>
<td>£999</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Onkyo 3850 CD Player</td>
<td>£999</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Onkyo 3850 CD Player</td>
<td>£999</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Onkyo 3850 CD Player</td>
<td>£999</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Onkyo 3850 CD Player</td>
<td>£999</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Onkyo 3850 CD Player</td>
<td>£999</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Onkyo 3850 CD Player</td>
<td>£999</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Onkyo 3850 CD Player</td>
<td>£999</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Onkyo 3850 CD Player</td>
<td>£999</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Onkyo 3850 CD Player</td>
<td>£999</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Onkyo 3850 CD Player</td>
<td>£999</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Onkyo 3850 CD Player</td>
<td>£999</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Onkyo 3850 CD Player</td>
<td>£999</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Onkyo 3850 CD Player</td>
<td>£999</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Onkyo 3850 CD Player</td>
<td>£999</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Onkyo 3850 CD Player</td>
<td>£999</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Onkyo 3850 CD Player</td>
<td>£999</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Onkyo 3850 CD Player</td>
<td>£999</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Onkyo 3850 CD Player</td>
<td>£999</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Onkyo 3850 CD Player</td>
<td>£999</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Onkyo 3850 CD Player</td>
<td>£999</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Onkyo 3850 CD Player</td>
<td>£999</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Onkyo 3850 CD Player</td>
<td>£999</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Onkyo 3850 CD Player</td>
<td>£999</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Onkyo 3850 CD Player</td>
<td>£999</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Onkyo 3850 CD Player</td>
<td>£999</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Onkyo 3850 CD Player</td>
<td>£999</td>
</tr>
</tbody>
</table>
AudioValve from Germany specialise in beefy sounding valve amplifiers. Simon Pope grapples with the Avalon, their latest monobloc power house.

Think of Germany’s contribution to hi-fi technology and perhaps you’ll come up with manufacturer’s whose products are at the cutting edge of technological design, such as Burmester or T&A. These use battleship build quality to underline the German’s prowess in engineering and combine it with that unmistakable German high-end sound - smooth and detailed, but with an intricacy and cool detachment that can leave some listeners cold.

The German audiophile circuit does, however, have a hardcore group of DIY and valve enthusiasts, even if they are somewhat overshadowed by the solid-state camp. Browse the magazine shelves at a German airport you will likely find a journal dedicated to all things DIY in audio, with the editorial intro accompanied by a picture of the editor hacking away at a speaker cabinet or aiming a soldering iron at a biscuit tin with two 300Bs protruding from the lid!

With their strong engineering background it’s odd then that few German valve designs make the headlines. Perhaps the most famous of them is AudioValve whose latest power amp monoblocks are featured here. All AudioValve products are designed by a certain Herr H. Becker (no relation to his Wimbledon-winning compatriot, I presume) and feature fairly advanced and modern circuitry combined with the natural characteristics of the audio valve. Their products usually deliver a power output more akin to their solid-state colleagues and in this respect can be thought of as like a hybrid design, combining the best of both worlds - solid state power with valve sweetness.

The Avalon monobloc amps we have here are no exception to this power rule. They deliver a muscular claimed 75W from each amp which is no mean feat from a valve amp of their relatively humble size (w-d-h 210 x 320 x 220 mm). Weighing in at 15kg apiece these aren’t exactly back breakers but neither are they of build quality attributable to Fisher Price. The one thing that doesn’t exactly grab you is the styling. The gold lettering and red plastic switches aren’t exactly going to win any design awards but at least you can say it’s unique! The chassis is constructed from 4mm laser cut steel and plastic in the company’s individual ‘double decker’ design, with the double PCB layout and valve configuration under the tinted plastic top plate for all to see.

The Avalons, like all other AudioValve products, feature automatic bias regulators (i.e. autobias) to ensure uniform current flow and match all the valves used. These amps are a more powerful addition to the line up of monoblocs in their PPP30 and 45 Series. Using eight EL34 valves and one ECC82 and 883 the Avalon, like all AudioValve power amps, uses a parallel push-pull circuit. Round the back there are ‘speaker outputs for both 4 and 8ohm loads.

Those familiar with the sonic traits of valve amplifiers may get something of a shock at first listen to the Avalon. Switching from our own 32W EL34 push pull design to the AudioValves was a real eye (or rather, ear) opener. The Avalon has an unmistakable touch of the solid-state sound to it. I was immediately hit by the visceral, muscular quality of the sound. It has weight and power in abundance and a speed which belies the ten valves glowing atop of the chassis. This is certainly no single-ended purist design sound. The emphasis here is on immediacy and power as opposed to ultimate transparency and instrumental timbre.

Radiohead’s ‘Insomniaic’ on 10” vinyl highlighted the forwardness of the sound. In the excellent ‘Pyramid
Song' Thom Yorke's plaintive vocals were well placed between the 91dB Living Voice Avatar 'speakers, and the piano had excellent body and presence. As the drum kit joined the mix an added oomph of bass extension was felt and the sound oozed weight and clout. Paul Weller’s Stanley Road on CD had the Avalons dredging the depths of the low frequencies to come up with some powerful and gripping rhythmic traits. These amps know how to deliver a beat.

You’d have guessed by now that traditional valve characteristics are not to the forefront of the Avalon’s arsenal but that's not to say they don’t exist. OK, so don’t expect the same variety of timbres and colours that you’d achieve with a 7W single ended but there’s a little more here than to be found with your average 100W solid state. In the Paul Weller disc there was a deep and realistic sound stage that’s found with good valve designs. Instruments were also well placed in the mix and layers of sound were easily discernable. Where the Avalons are a bit lacking is in the midrange. Good valve amps open up the midrange to create a natural and rounded sound. The Avalons are a bit rougher around the edges than I’d expect from a valve amp, creating a hardness when pushed that also crossed over into the treble, despite the EL34 being renowned for its sweetness. This also restricts the openness of the sound with good acoustic and classical recordings. André Previn’s Teldec recording of Straus’s Alpine Symphony with the Vienna Philharmonic is a fine, transparent reading but failed to open up here as well as it could. Very good when compared to a solid-state sound, however; but in comparison to other valve amps a little thin and closed in. This said, most other pure valve design can’t quite match the clout and pace that the Avalons have, or the dynamics for that matter.

If you’re looking to move from solid-state to valve but don’t wish to lose rhythmic grip or bass extension, for example, they may be an appropriate choice. If you want that pure open midrange and valve transparency though, you won’t find it here. A high quality 20W with those traits partnered with a good, sensitive pair of floorstanders would be better.

Think of the Avalon as a solid state with a warmish tint, though, and you’re nearer the mark. Worth a listen if not quite top of the pile.

**Audio Valve Avalon £ 2,195**

Wollaton Audio
134 Parkside
Nottingham NG8 2NP
Tel: 0115 852 3858
www.audiovalve.de

### POWER

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power</td>
<td>55 watts</td>
</tr>
<tr>
<td>Frequency response</td>
<td>16Hz-22kHz</td>
</tr>
<tr>
<td>Noise</td>
<td>-89dB</td>
</tr>
<tr>
<td>Distortion</td>
<td>0.2%</td>
</tr>
<tr>
<td>Sensitivity</td>
<td>840mV</td>
</tr>
</tbody>
</table>

---

**World Verdict**

Good power, rhythmic muscle and bass extension for a valve amp but not the last word in warmth or transparency.
These are our new 6550 series amplifiers. A pure class A design providing 40 watts into an 8 ohm load. (available in a 4 ohm version if required). A truly high end design by Andy Grove, using Svetlana 6550Cs in push-pull configuration. They give 15 watts into an 8 ohm load - plenty for medium sensitivity loudspeakers. The 6550 is one for those who like a valve sound married to the attack and clout of a good quality solid state design.

**KiT6550 VALVE INTEGRATED AMPLIFIER KIT & KAT6550 VALVE POWER AMPLIFIER KIT**

**£595**

**£580**

**NEW KITS**

With valves or 220mm(h) with cage. Simon Pope says - "If you favour attack and rhythmic grip, together with a smoothness of sound that's 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".

K£184 VALVE INTEGRATED AMPLIFIER KIT

This is our brand new, low cost, beginner level amplifier kit. It features a pair of EL84 valves per channel in push-pull configuration. They give 15 watts into an 8 ohm load - plenty for medium sensitivity loudspeakers. The K£184 has very low hum, to solid-state standards. 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. The phono input sockets and 4mm banana socket speaker terminals are gold plated.

At rear is a mains switch, an IEC power input and an earth post. This kit is aimed at beginners. The instructions include pictures as well as diagrams, making them very easy to follow. At a UK price of £278.00 all inclusive you cannot ignore K£184. Simon Pope says, "The quality that can be gleaned from this amp is a fine introduction to the joys of the valve sound. The K£184 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."

K£184 weighs 10kg. External dimensions with valves are 300mm(w) x 270mm(d) x 150mm(h).

**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 SU4, with a combination of a hefty 10H chokes and 2 x 100uF 500V capacitor in a pi filter configuration, giving superb smoothing. This feedbackless design provides 8.5 watts into an 8 ohm load, so a good sensitivity speaker is required above 91 dB. 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 extremely impressive piece of kit, good imaging, wide sound stage, nicely extended on the high frequency and tremendous bass thump - I want one".

Weights - 20kg, external dimensions with valves fitted - 390mm(w) x 360mm(d) x 220mm(h).
DIY KITS IN THE WORLD

MILTON KEYNES, BUCKS MK16 OEE - CALL FOR DETAILS ON 01908 218836

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) £215.00

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 brings together the best sonic virtues of our KIT88, KEI34 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)

300E1 PSU UPGRADE KIT NEW £150

300B PSE 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 SLM rectifier valve in the power supply, in combination with a 10H choke, giving an extremely quiet supply. Both mains and output transformers we EI pattern.

For purists, feedback is switchable and the kit is totally hard wired. For those that require valves we provide the superb 300B, Russian 5U4 and European 6AU6 & 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.

HD83 VALVE HEADPHONE AMPLIFIER KIT

The HD83 headphone amplifier is a beautifully simple design using Mullard ECC83 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."

Weight 4kg, External dimensions - 16cm(w) x 8cm(h) x 4.3cm(d)

300B PSU UPGRADE KIT NEW £150

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 8 Ohm 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 40hm and Bohm 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. At £649.00 a pair, a definite valve winner. Each monobloc weighs 12kgs., external dimensions with valves: 25cm(w) x 38cm(h) x 22cm(d) per monobloc.

£649 A pair

© World Radio History August 2007 Page 46
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.

Also available are products by World Audio Design, Michell, Trichord, Lowther and ReThm loudspeakers.

Millennium Hi-Fi & Av
500-1-3 First Floor, Wisma Indah (Sheen Court), 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

NEW DEMONSTRATION ROOM NOW OPEN AT 12A SPRING GARDENS, NEWPORT PAGNELL, MILTON KEYSNES, BUCKS MK16 0EE. CALL FOR DETAILS ON 01908 218836

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.

Also available are products by World Audio Design, Michell, Trichord, Lowther and ReThm loudspeakers.

Millennium Hi-Fi & Av
500-1-3 First Floor, Wisma Indah (Sheen Court), 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

NEW DEMONSTRATION ROOM NOW OPEN AT 12A SPRING GARDENS, NEWPORT PAGNELL, MILTON KEYSNES, BUCKS MK16 0EE. CALL FOR DETAILS ON 01908 218836

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.

Also available are products by World Audio Design, Michell, Trichord, Lowther and ReThm loudspeakers.

Millennium Hi-Fi & Av
500-1-3 First Floor, Wisma Indah (Sheen Court), 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>Amplifier Kit</th>
<th>Description</th>
<th>Order No.</th>
<th>QTY</th>
<th>Price (UK)</th>
<th>Price (Overseas)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2A3 PSE Valve Integrated Amplifier Kit (with valves)</td>
<td>2A3 PSE with valves</td>
<td>2A3 PSE</td>
<td>1</td>
<td>£550.00</td>
<td>£600.00</td>
</tr>
<tr>
<td>2B3 PSE Valve Integrated Amplifier Kit (without valves)</td>
<td>2B3 PSE (without valves)</td>
<td>2B3 PSE</td>
<td>1</td>
<td>£395.00</td>
<td>£450.00</td>
</tr>
<tr>
<td>KT6650 Valve Power Amplifier Kit (with valves)</td>
<td>KT6650 with valves</td>
<td>KT6650</td>
<td>1</td>
<td>£450.00</td>
<td>£500.00</td>
</tr>
<tr>
<td>KT6650 Valve Power Amplifier Kit (without valves)</td>
<td>KT6650 (without valves)</td>
<td>KT6650</td>
<td>1</td>
<td>£300.00</td>
<td>£350.00</td>
</tr>
<tr>
<td>KT6550 Upgrade Kit</td>
<td>KT6550 upgrade kit</td>
<td>KT6550</td>
<td>1</td>
<td>£120.00</td>
<td>£150.00</td>
</tr>
<tr>
<td>KT6560 Valve Integrated Amplifier Kit (with valves)</td>
<td>KT6560 with valves</td>
<td>KT6560</td>
<td>1</td>
<td>£300.00</td>
<td>£350.00</td>
</tr>
<tr>
<td>KT6560 Valve Integrated Amplifier Kit (without valves)</td>
<td>KT6560 (without valves)</td>
<td>KT6560</td>
<td>1</td>
<td>£200.00</td>
<td>£250.00</td>
</tr>
<tr>
<td>KT34 Valve Amplifier Kit (with valves)</td>
<td>KT34 with valves</td>
<td>KT34</td>
<td>1</td>
<td>£300.00</td>
<td>£350.00</td>
</tr>
<tr>
<td>KT34 Valve Amplifier Kit (without valves)</td>
<td>KT34 (without valves)</td>
<td>KT34</td>
<td>1</td>
<td>£100.00</td>
<td>£150.00</td>
</tr>
<tr>
<td>KT84 Valve Integrated Amplifier Kit (with valves)</td>
<td>KT84 with valves</td>
<td>KT84</td>
<td>1</td>
<td>£250.00</td>
<td>£300.00</td>
</tr>
<tr>
<td>KT84 Valve Integrated Amplifier Kit (without valves)</td>
<td>KT84 (without valves)</td>
<td>KT84</td>
<td>1</td>
<td>£150.00</td>
<td>£200.00</td>
</tr>
<tr>
<td>KT88 Valve Integrated Amplifier Kit (with valves)</td>
<td>KT88 with valves</td>
<td>KT88</td>
<td>1</td>
<td>£200.00</td>
<td>£250.00</td>
</tr>
<tr>
<td>KT88 Valve Integrated Amplifier Kit (without valves)</td>
<td>KT88 (without valves)</td>
<td>KT88</td>
<td>1</td>
<td>£100.00</td>
<td>£150.00</td>
</tr>
<tr>
<td>Black Gate 470V 16Vdc Electrolytic Capacitor</td>
<td>470V 16Vdc</td>
<td>470V 16Vdc</td>
<td>1</td>
<td>£80.00</td>
<td>£95.00</td>
</tr>
<tr>
<td>Black Gate 470V 16Vdc Electrolytic Capacitor</td>
<td>470V 16Vdc</td>
<td>470V 16Vdc</td>
<td>1</td>
<td>£30.00</td>
<td>£40.00</td>
</tr>
<tr>
<td>Black Gate 100V 16Vdc Electrolytic Capacitor</td>
<td>100V 16Vdc</td>
<td>100V 16Vdc</td>
<td>1</td>
<td>£10.00</td>
<td>£15.00</td>
</tr>
<tr>
<td>Black Gate 100V 16Vdc Electrolytic Capacitor</td>
<td>100V 16Vdc</td>
<td>100V 16Vdc</td>
<td>1</td>
<td>£5.00</td>
<td>£10.00</td>
</tr>
<tr>
<td>Black Gate 50V 60Vdc Electrolytic Capacitor</td>
<td>50V 60Vdc</td>
<td>50V 60Vdc</td>
<td>1</td>
<td>£2.50</td>
<td>£3.50</td>
</tr>
<tr>
<td>Safety Gloves (pair)</td>
<td>650V Safety Gloves</td>
<td>650V Safety Gloves</td>
<td>1</td>
<td>£10.00</td>
<td>£15.00</td>
</tr>
</tbody>
</table>

## Loudspeaker Kits

<table>
<thead>
<tr>
<th>Loudspeaker Kit</th>
<th>Description</th>
<th>Order No.</th>
<th>QTY</th>
<th>Price (UK)</th>
<th>Price (Overseas)</th>
</tr>
</thead>
<tbody>
<tr>
<td>KLS3 Gold Mk II Drive Units</td>
<td>KLS3 Gold Mk II Drive Units + Crossover Kit etc</td>
<td>KLS3-G</td>
<td>1</td>
<td>£495.00</td>
<td>£550.00</td>
</tr>
<tr>
<td>KLS10 Drive Units</td>
<td>KLS10</td>
<td>KLS10</td>
<td>1</td>
<td>£343.00</td>
<td>£395.00</td>
</tr>
<tr>
<td>KLS10 Drive Units + Crossover Kit</td>
<td>KLS10-Subwoofer Drive Units</td>
<td>KLS10-C</td>
<td>1</td>
<td>£237.00</td>
<td>£275.00</td>
</tr>
<tr>
<td>KLS10 Drive Units + Crossover Kit etc</td>
<td>KLS10-SubC</td>
<td>KLS10-SubC</td>
<td>1</td>
<td>£164.00</td>
<td>£187.00</td>
</tr>
</tbody>
</table>

## Parts Description

<table>
<thead>
<tr>
<th>Part Description</th>
<th>Order No.</th>
<th>QTY</th>
<th>Price (UK)</th>
<th>Price (Overseas)</th>
</tr>
</thead>
<tbody>
<tr>
<td>KT6650 Main Transformer</td>
<td>KT6650</td>
<td>1</td>
<td>£110.00</td>
<td>£130.00</td>
</tr>
<tr>
<td>KT34 Main Transformer</td>
<td>KT34</td>
<td>1</td>
<td>£85.00</td>
<td>£100.00</td>
</tr>
<tr>
<td>KT88 E/A Choke</td>
<td>KT88 E/A</td>
<td>1</td>
<td>£39.00</td>
<td>£45.00</td>
</tr>
<tr>
<td>KT88 Valve Integrated Amplifier (with valves)</td>
<td>KT88</td>
<td>1</td>
<td>£150.00</td>
<td>£175.00</td>
</tr>
<tr>
<td>KT88 Valve Integrated Amplifier (without valves)</td>
<td>KT88</td>
<td>1</td>
<td>£100.00</td>
<td>£130.00</td>
</tr>
<tr>
<td>2A3 PSE E/A (each)</td>
<td>2A3 PSE E/A</td>
<td>2</td>
<td>£6.50</td>
<td>£7.50</td>
</tr>
<tr>
<td>300B PSE Choke (pair)</td>
<td>300B PSE Choke</td>
<td>1</td>
<td>£4.00</td>
<td>£5.00</td>
</tr>
<tr>
<td>2A3 PSE E/A (each)</td>
<td>2A3 PSE E/A</td>
<td>2</td>
<td>£12.00</td>
<td>£14.50</td>
</tr>
<tr>
<td>2A3 PSE E/A (each)</td>
<td>2A3 PSE E/A</td>
<td>2</td>
<td>£16.00</td>
<td>£20.00</td>
</tr>
<tr>
<td>300B PSE Choke</td>
<td>300B PSE Choke</td>
<td>1</td>
<td>£2.00</td>
<td>£2.50</td>
</tr>
<tr>
<td>2A3 PSE E/A (each)</td>
<td>2A3 PSE E/A</td>
<td>2</td>
<td>£3.00</td>
<td>£3.50</td>
</tr>
<tr>
<td>300B PSE Choke</td>
<td>300B PSE Choke</td>
<td>1</td>
<td>£1.00</td>
<td>£1.50</td>
</tr>
<tr>
<td>KT88 Printed Circuit Board</td>
<td>KT88</td>
<td>1</td>
<td>£12.00</td>
<td>£15.00</td>
</tr>
<tr>
<td>KT88 Printed Circuit Board</td>
<td>KT88</td>
<td>1</td>
<td>£7.00</td>
<td>£9.00</td>
</tr>
<tr>
<td>KT88 Printed Circuit Board</td>
<td>KT88</td>
<td>1</td>
<td>£3.00</td>
<td>£4.00</td>
</tr>
<tr>
<td>KT88 Printed Circuit Board</td>
<td>KT88</td>
<td>1</td>
<td>£2.00</td>
<td>£3.00</td>
</tr>
<tr>
<td>KT88 Printed Circuit Board</td>
<td>KT88</td>
<td>1</td>
<td>£1.00</td>
<td>£2.00</td>
</tr>
<tr>
<td>KT88 Printed Circuit Board</td>
<td>KT88</td>
<td>1</td>
<td>£0.50</td>
<td>£1.00</td>
</tr>
<tr>
<td>Tag Board 2 x 16 connections (hard wiring)</td>
<td>Tag Board</td>
<td>2</td>
<td>£5.00</td>
<td>£6.00</td>
</tr>
<tr>
<td>Abs Blue Audio Grade 50K dual diaphragm potentiometer</td>
<td>Abs Blue</td>
<td>1</td>
<td>£3.50</td>
<td>£4.00</td>
</tr>
<tr>
<td>Abs Blue Audio Grade 50K dual diaphragm potentiometer</td>
<td>Abs Blue</td>
<td>1</td>
<td>£2.50</td>
<td>£3.00</td>
</tr>
<tr>
<td>Abs Blue Audio Grade 50K dual diaphragm potentiometer</td>
<td>Abs Blue</td>
<td>1</td>
<td>£1.50</td>
<td>£2.00</td>
</tr>
</tbody>
</table>

## World Audio Design Amplifiers Fully Built from Malaysia

<table>
<thead>
<tr>
<th>Amplifier Type</th>
<th>Description</th>
<th>Order No.</th>
<th>Price (UK)</th>
<th>Price (Overseas)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2A3 PSE Valve Integrated Amplifier Kit (with valves)</td>
<td>2A3 PSE</td>
<td>2A3 PSE</td>
<td>£550.00</td>
<td>£600.00</td>
</tr>
<tr>
<td>2B3 PSE Valve Integrated Amplifier Kit (without valves)</td>
<td>2B3 PSE</td>
<td>2B3 PSE</td>
<td>£395.00</td>
<td>£450.00</td>
</tr>
<tr>
<td>KT6650 Valve Power Amplifier Kit (with valves)</td>
<td>KT6650</td>
<td>KT6650</td>
<td>£450.00</td>
<td>£500.00</td>
</tr>
<tr>
<td>KT6650 Valve Power Amplifier Kit (without valves)</td>
<td>KT6650</td>
<td>KT6650</td>
<td>£300.00</td>
<td>£350.00</td>
</tr>
<tr>
<td>KT6550 Upgrade Kit</td>
<td>KT6550</td>
<td>KT6550</td>
<td>£120.00</td>
<td>£150.00</td>
</tr>
<tr>
<td>KT6560 Valve Integrated Amplifier Kit (with valves)</td>
<td>KT6560</td>
<td>KT6560</td>
<td>£300.00</td>
<td>£350.00</td>
</tr>
<tr>
<td>KT6560 Valve Integrated Amplifier Kit (without valves)</td>
<td>KT6560</td>
<td>KT6560</td>
<td>£200.00</td>
<td>£250.00</td>
</tr>
<tr>
<td>KT34 Valve Amplifier Kit (with valves)</td>
<td>KT34</td>
<td>KT34</td>
<td>£300.00</td>
<td>£350.00</td>
</tr>
<tr>
<td>KT34 Valve Amplifier Kit (without valves)</td>
<td>KT34</td>
<td>KT34</td>
<td>£100.00</td>
<td>£150.00</td>
</tr>
<tr>
<td>KT84 Valve Integrated Amplifier Kit (with valves)</td>
<td>KT84</td>
<td>KT84</td>
<td>£250.00</td>
<td>£300.00</td>
</tr>
<tr>
<td>KT84 Valve Integrated Amplifier Kit (without valves)</td>
<td>KT84</td>
<td>KT84</td>
<td>£150.00</td>
<td>£200.00</td>
</tr>
<tr>
<td>KT88 Valve Integrated Amplifier Kit (with valves)</td>
<td>KT88</td>
<td>KT88</td>
<td>£200.00</td>
<td>£250.00</td>
</tr>
<tr>
<td>KT88 Valve Integrated Amplifier Kit (without valves)</td>
<td>KT88</td>
<td>KT88</td>
<td>£100.00</td>
<td>£150.00</td>
</tr>
</tbody>
</table>

## Contact Information

- **Tel/Fax:** 01908 218 836
- **Email:** Tel: 019 082 188 36 Fax: 019 082 188 36
- **Address:** 13 Jalan Pendekar 2, Taman Skudai Baru, 81300 Skudai, Johor DT, Malaysia
- **Website:** www.worldaudiodesign.co.uk

---

**WARNING:** World Audio Publishing Ltd. is not responsible for any kits, parts or modifications made to the kits. All kits come with a 12-month warranty. Please read the instructions carefully before assembling the kits. If you have any questions, please contact us via email or phone. We are always happy to help you with any inquiries. Thank you for choosing World Audio Design. World Audio Publishing Ltd. is a registered company in the UK. Contact us at info@worldaudiodesign.co.uk for more information. Enjoy your crafting experience!

This is a classic reference handbook for all who are interested in the design and application of audio amplifiers and radio receivers, and deals with basic principles and the practical design of all types of audio amplifiers, radio receivers and record-playing equipment, up to the inversion of the transistors and units forming valves, valve testing, general theory and components, audio and radio frequencies, power supplies, design of complete FM and PM receivers, and reference information. 1408pp, 216mm x 138mm Hard back Code No. 1660 £39.99 + £6.00 P&P (UK)

Valve Amplifiers by J. L. Hood

The author of this handbook is a leading electronic expert who has contributed much to the world of audio equipment. This book describes the most important valve amplifiers and how they work, and includes full designs for eleven power and line amplifiers and other important circuits. 142pp, 8” x 10” Paperback Code No. 1710 £17.95 + £4.00 P&P (UK)

Fundamentals of Radio-Valve Technique by J. Duley

This book covers the theoretical background necessary for the successful design and construction of audio amplifiers and valve receivers. It is designed to give the reader a practical knowledge of the fundamentals of radio-valve technique, and is suitable for all who are interested in valve work. 254pp., 6” x 9” Paperback Code No. 1630 £10.50 + £2.50 P&P (UK)

THE JOY OF AUDIO ELECTRONICS by Bruce Rosenblit

This is the ultimate guide for anyone with a practical interest in electronics. It covers all aspects of electronics, from the basics to the advanced topics, and includes many practical projects that can be built at home. 353pp. 6” x 9” Paperback Code No. 1650 £10.50 + £2.50 P&P (UK)

An Approach to Audio Electronic Valves in Audio Frequency Amplifiers by R. W. Weeks

This book describes the theoretical background necessary for the successful design and construction of audio amplifiers and valve receivers. It is designed to give the reader a practical knowledge of the fundamentals of audio-frequency valve amplifiers, and includes full designs for many important circuits. 240pp. 235mm x 156mm Paperback Code No. 1670 £14.95 + £5.50 P&P (UK)

Vacuum Tube Amplifiers by Valery Valyj

This book is a comprehensive guide to the design and construction of vacuum tube amplifiers, including detailed descriptions of many important circuits. 744pp. 140mm x 210mm Paperback Code No. 1670 £25.95 + £4.00 P&P (UK)

Practical Electronic Fault-Finding and Troubleshooting by Robin Pain

This book provides a comprehensive guide to the practical aspects of electronic troubleshooting, covering all aspects of the process, from the basics to the advanced topics. It includes many practical projects and tips for the successful troubleshooting of electronic circuits. 240pp. 235mm x 156mm Paperback Code No. 1630 £29.95 + £4.00 P&P (UK)

Valve Amplifiers (second edition) by Hilary Jones, Audio Engineer

This book provides a comprehensive guide to the design and construction of electronic amplifiers, covering all aspects of the process, from the basics to the advanced topics. It includes many practical projects and tips for the successful troubleshooting of electronic circuits. 240pp. 235mm x 156mm Paperback Code No. 1630 £25.95 + £4.00 P&P (UK)

The Joy of Radio Amplifiers by Charles Hanson

This book provides a comprehensive guide to the practical aspects of radio amplifiers and receiver design, covering all aspects of the process, from the basics to the advanced topics. It includes many practical projects and tips for the successful troubleshooting of electronic circuits. 240pp. 235mm x 156mm Paperback Code No. 1630 £29.95 + £4.00 P&P (UK)

An Introduction to Electronic Test Equipment by D. T. Williamson

This book provides a comprehensive guide to the practical aspects of electronic test equipment, covering all aspects of the process, from the basics to the advanced topics. It includes many practical projects and tips for the successful troubleshooting of electronic circuits. 240pp. 235mm x 156mm Paperback Code No. 1630 £25.95 + £4.00 P&P (UK)

Build your own Audio Valve Amplifiers by Maxine Z. Lindle

This book provides a comprehensive guide to the practical aspects of electronic test equipment, covering all aspects of the process, from the basics to the advanced topics. It includes many practical projects and tips for the successful troubleshooting of electronic circuits. 240pp. 235mm x 156mm Paperback Code No. 1630 £25.95 + £4.00 P&P (UK)

Fundamentals of Radio-Valve Technique by J. Duley

This book covers the theoretical background necessary for the successful design and construction of audio amplifiers and valve receivers. It is designed to give the reader a practical knowledge of the fundamentals of radio-valve technique, and is suitable for all who are interested in valve work. 254pp., 6” x 9” Paperback Code No. 1630 £10.50 + £2.50 P&P (UK)

Valve & Transistor Audio Amplifiers by J. L. Hood

This book describes the most important valve amplifiers and how they work, and includes full designs for eleven power and line amplifiers and other important circuits. £11.50 + £2.25 P&P (UK)

BUILD YOUR OWN Electronic Test Instruments by Electkor

This book describes 13 designs for electronic test instruments, including a digital multimeter, a digital oscilloscope, and a digital sound level meter. Code No. 1330 £8.95 + £1.75 P&P (UK)
Getting the most out of Vacuum Tubes
by Robert B. Torner
From the cover, "Types and causes of tube failures, what to expect from tubes, testing methods and all about tube maintenance programs." This book is intended to offer explanations of why tubes fail and what to do about it. Discussions of catastrophic and degenerative failures, selecting tube types and tube testing and predicting tube performance.
160pp. 140mm x 216mm Paperback
Code No. 1190 £13.95 + £2.20 P&P (UK)

Loudspeakers: The Why and How of Good Reproduction
by G.A. Briggs
An easy to understand book on building loudspeakers, using empirical techniques that pre-date computer analysis. Strongly recommended for beginners.
88pp 8 1/2" x 11" Paperback
Code No. 1070 £16.95 + £1.50 P&P (UK)

Modern High-End Valve Amplifiers Based on Toroidal Output Transformers
by Menno van der Veen
Explains the why and how of toroidal output transformers at various technical levels. Discussed extensively within this book are designs for inverters from 10 to 100 watts. Finally, the author gives some attention to a number of special valve amplifiers and to the theory and practice of negative feedback.
235pp 170mm x 240mm Hard back
Code No. 1170 £24.95 + £5.50 P+P (UK)

Sylvania Technical Manual by Sylvania Electric Products Inc.
This 13th edition contains data on over 1300 vacuum tube types and semiconductor devices. Reprinted here without the TV picture tube section, this manual contains detailed information on Sylvania's devices including charts and diagrams. A master index is found in the front of the book for reference.
516pp 140mm x 216mm Paperback
Code No. 1100 £16.95 + £3.50 UK p&p

The Loudspeaker Design Cookbook, 6th edition (new) - by K. N. O. Dinsdale
This best seller offers up-to-date information for the home experimenter. It uses modern Thiele-Small theory and parameters.
308pp 8 1/2" x 11 1/2" Paperback
Code No. 1090 £29.95 + £4.00 P&P (UK)

Horn Loudspeaker Design by Mr J. Dinsdale
A collection of papers by Mr J. Dinsdale that discuss the design and theory of the "wonder horn" horn loudspeakers. It contains all you need to know.
320pp 140mm x 210mm Paperback
Code No. 1130 £29.50 + £5.50 P+P (UK)

Audio Acoustics & Psychoacoustics 2nd Edition by David M. Howard & James Angus
An introduction to acoustics, covering human perception of sound, noise and harmony, musical dynamics, tension of musical instruments, acoustic models for musical instruments, hearing in music, different environments, deciding the onset of onset, and printing sound electronically.
236pp 248 x 34mm paperback
Code No. 1120 £29.99 + £3.50 P+P (UK)

Please send (Code No.) (enter codes clearly)
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.P. Ltd. 12A Spring Gardens, Newport Pagnell, Milton Keynes, MK16 9EE ENGLAND TEL/FAX: 01908 218836 ORDER ON LINE Website: www.worldaudiodesign.co.uk E-Mail: nick@worldaudiodesign.co.uk
Please contact us for overseas P&P charges. Allow 28 days for delivery. All orders subject to availability. If further space is required please attach separate sheet.
Antique Sound Lab
Amplifiers and phono stages

Distributed in the UK exclusively by Absolute Analogue
Address: PO Box 30429, London, NW6 7GY  Tel/Fax: 020 8459 8113  Email: Absolute_Analogue@email.msn.com
As I contemplate the shambles of what remains of my hi-fi system after a reviewing session, the notion of a hi-fi reviewer being equipped with a mystically perfect hi-fi system takes on a curious irony. But readers want to know what reviewers use because of all people they have heard the greatest number of products and should know which are best. But I am not so sure it is as simple as that...

My favourite amplifier sits forlornly on the floor, because it needs to be used with my favourite speakers, which are 60 miles away being used as World Audio Design demonstrators. My favourite preamp was a prototype, which means it was thrown together and can be a little temperamental, as under-cooled voltage regulators and such like slowly expire.

Ask me what I listen to at home and my answer is: everything and nothing!

Everything because the constant flow of equipment into and out of my lounge is prodigious; at the limits of what Westminster traffic wardens will allow as I load and unload.

Nothing because what I actually relax in front of to listen to, rather than review, spends so little time in place it might as well not be there. Then there is the matter of taste, as well as professional necessity.

Whilst reviewers may well be able to agree on what is the best cassette deck, or perhaps the best tuner, war breaks out over the best loudspeaker. At extreme left field we have something like Quad's wonderful electrostatics. The original 'radiator' ESL-57 could sound awful, or wonderful, depending upon the room. I had a pair, then the German Braun variant and finally a pair of ESL-63s. The poor ESL-63s were subjected to every assault possible and now lie, wrecked, in my loft. Quads suit me, there's no doubt, and they are a great reviewing tool, but size and price will always limit their appeal. Quads might be a necessity for reviewers, but they are not going to make it into Comet tomorrow because people want to get a better take on Rock Steady Crew.

My beloved Quads had to suffer every amplifier going, as well as becoming the center of a DIY project. Finally, I took to designing World Audio Design loudspeakers so they made way for boxes. Valve amps need better load characteristics than those of most commercial loudspeakers, and designing a loudspeaker to be an easy load for an amplifier really isn't so difficult. All the same, there are few loudspeakers available that use good modern drive units, have high sensitivity and offer either a well defined 4ohm or Bohm load. Manufacturers understandably feel that solid-state amps are able to cope with what they produce, although I am not so sure.

Can I name a good loudspeaker? There are lots of good ones, but other than the Quads, no great ones that really stand out. I am attracted by the idea of mating an Audax HD3P gold dome piezo tweeter to a beryllium dome Fostex unit in order to get a smooth polar radiation pattern and an even forward response. The thinking here is that the HD3P is far and away the best tweeter I have ever heard but it is an imperfect match to any cone midrange unit - and most domes too. The result would be similar to Yamaha's now defunct NSI000s, that have been appearing in our letters pages recently. The NSI1000s may have had more going for them than we realize; I suspect a good dome treble and midrange arrangement might give delightful results, but 'speakers like this are not commercially available so there is plenty of scope in the field of loudspeakers, even now. Until recently I haven't been too impressed by surround-sound systems. Most AV amps are hard, crude sounding devices - and they take up more real estate than glowing valves. DVD players have tended to major on providing a picture, with more slow modes than a Reliant Robin. Now though, things are starting to get serious. Philips new DVD 962SA I reviewed last month was a fine CD player and had an excellent 24/96 audio replay section - but sadly it would not play DVD-A. All the same, a player like this opens up a lot of possibilities. If 24/96 recordings start to become common a good player like the Philips is quite a blast to listen to. To date, most players could not do justice to 24/96. The DVD962SA could - and it gave the sort of jaw dropping dynamics most people think of as the sound of hi-fi. With a true audiophile amp like the Marantz PS17 it looks as if surround-sound may be losing its Home Cinema crudity in an attempt to appeal to those who don't want to have their ears sonically syringed.

There is of course one other problem with surround-sound, the universal one of how to get a cable past the door. I am already eyeing the floorboards, planning some sort of underfloor cabling system to make the rear speaker cables a permanent and invisible installation. Once the floorboards are up the destruction of my listening room will be complete. This matter of what a reviewer listens to – it isn't so simple you know!

Ask me what I listen to at home and my answer is: everything and nothing!
Hand-crafted and professional electronics...

Mark Levinson No.383 integrated amplifier

Nothing compares to the world's pre-eminent audio brand. High ideals, three decades building on success and an enviable scale of research and development

New! ADAGIO CD PLAYER

SUGDEN

MasterClass range:
Britain's High-end Phono amp, fully balanced pre-amp, stereo and Mono Class-A amps, integrated CD player

NEW! Integrated ClassA amplifier (£2,995)

CALLISTO 2200 INTEGRATED AMPLIFIER

ART Audio

www.artaudio.com

DIAVOLO monos (£5,995 per pair)

ART Loudspeakers

New Models

ART Audio

-Handcrafted in Scotland
individually calibrated to
musical accuracy by a
blend of high
technology and
professional
musicians.
Listen, and
become
Involved.

ATC Active Tens
ProAc D15
ProAc Tablet Ref 8

ART Loudspeakers

Britain's High-end! Phono amp, Cumulus • MasterClass range

New! PROCEED AVP2

fully balanced pre-amp, stereo and Mono Class-A amps, integrated CD player

NEW! Integrated ClassA amplifier (£2,995)

DIAVOLO monos (£5,995 per pair)

Art loudspeakers

-Handcrafted in Scotland
individually calibrated to
musical accuracy by a
blend of high
technology and
professional
musicians.
Listen, and
become
Involved.

ATC Active Tens
ProAc D15
ProAc Tablet Ref 8

5 CROWN TERRACE - HYNDLAND - GLASGOW G12 9HA - SCOTLAND

f: 0141 - 357 5700
f: 0141 - 339 9762
e: info@audiosalon.co.uk

Web phase 1 launch 1 JUNE 2002
- MONTHLY NEWSLETTER
- USED AND DEM EQUIPMENT (1 MONTH IN ADVANCE)
- USED CABLES AND AUDIO UPGRADES
- AUDIO CABLES SECRETS - HINTS AND TIPS
- LINKS, AND MUCH, MUCH MORE

export + mail order

World Radio History

UK: Next Day Delivery incl. Insurance, Overseas 2-4 days by UPS
When I recently reviewed Acoustic Energy's Aesprit 300 'speakers I was told they had been designed to look good in the modern home. This implied that some aspect of their design had changed in order to satisfy this criterion. Yet, to my eyes at least, they looked like a thoroughly conventional pair of 'speakers, veneered in a light maple wood. They didn't look very different, except for the veneer.

What this comment reveals is that many manufacturers feel under threat. Under threat from the post-chintz IKEA world, under threat from the trend for city living and under threat from the previously unconventional.

With DVD just having made it into the Guinness World Records book as the fastest growing paid for consumer entertainment product in history, you'd have thought that 'speaker manufacturers would be going great guns on the coat tails of the AV industry. Yet there is real concern that the conventional loudspeaker just isn't popular with buyers today. In short the average loudspeaker is, or at least perceived as being, often too big, roughly finished, sombre in colour, and designed to deliberately dominate and impose itself upon the room. In some situations this is exactly what's needed. For the bedroom DJ, for example, it's desirable, yet for many others it's not. Even the bachelor in his pad is turning away from such products in favour of subtle metals, light woods and compact curvaceous designs. It's not such bad news for all involved in the 'speaker industry though.

Although ridiculed by many in hi-fi, Bose are now seen as leaders in the field of domestic acceptability. Their brand image is built on this. It's an association others would give their eye teeth for, given half a chance. In my opinion the sound quality of the sub/sat systems produced by Bose isn't as good as a decent conventional loudspeaker system but there can be no doubting their suitability in terms of aesthetics for the home and compactness for in-car applications. Such is their reputation outside of the hi-fi industry that a car advertisement could read: "...air conditioning, electric seats, BOSE, CD etc". The presumption being that everyone, at least in the market for a premium car, knows exactly what and who Bose are. Could you imagine the same advert with the Bose name substituted by KEF, Tannoy or Celestion? It seems unlikely at the moment, despite the three being lead players within the UK 'speaker market.

Bearing this in mind, it came as little surprise to hear of Celestion's bid to return to the mainstream with what they term a "SoundStyle" range of products. As Bose apparently already own the license for the name LifeStyle, Celestion's SoundStyle system (also registered) is their attempt to gain a chunk of the same market. With this will hopefully come increased brand recognition for a company whose name and image has faded from public view over the past few years. Looking at the new range, which includes some particularly attractive glass and aluminium designs, the signs look good. Yet, there's a part of me that feels it would be a great shame if companies such as Celestion focused upon lifestyle products to such an extent that their range of conventional 'speakers withered and, eventually, died. After all, their current A and F series are amongst the best designs at their respective price ranges, and not even unbearably ugly either!

Celestion are by no means alone here. Most of their UK based rivals, such as Mordaunt Short, are either entering the sub/sat field, or tweaking existing designs to make them appear more domestically acceptable. Here I am thinking of the Acoustic Energy's I mentioned earlier or Tannoy's Eyi range.

All these manufacturers should realise that despite the success of DVD and the pressure put upon them by dealers crying out for domestically unobtrusive designs, there is still a good market for conventional, decent sounding 'speakers. Many people predicted Compact Disc player sales would collapse as DVD players took off, but this hasn't happened. Sales are down a few percent amongst most retailers. This is without the effect of SACD, which may or may not kick in to boost the CD market further.

I would caution manufacturers rushing to join this fray, although innovation is important and valuable. NXT's flat panel technology is still in its infancy but it's showing real promise from a range of designs, from PC add-on to the high-end. What's more, current home cinema 'speaker packages show that by adapting an existing technology new markets can be explored, without compromise on performance.

If manufacturers start to consider 'speaker aesthetics a key element of overall design then this can only be a good thing. I just hope we see improvements in performance, rather than the virtual absence of hi-fi standards that good design in the past seemed to bring as an inevitability. Then a standard box with maple veneer won't be seen as innovative.
A selection of our ever changing offers for sale

**AMPLIFIERS**

<table>
<thead>
<tr>
<th>Model</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Burmester 826 MK III Bola Power-Amp</td>
<td>1950.00</td>
</tr>
<tr>
<td>Balanced Audio Technology (BAT) YK 3-3 (Remote Control Valve Pre-Amplifier) MINT</td>
<td>1895.00</td>
</tr>
<tr>
<td>The Vissi 849 1-Pr. / Unison Power (2 x 20 Watts Valve Amplifier) MINT / As New / Boxed</td>
<td>2035.00</td>
</tr>
<tr>
<td>Audio Synthesis Passion Passive Pre (Votaryl Controls / Silver-Wired) Matching</td>
<td>800.00</td>
</tr>
<tr>
<td>Precision Stage Also Available</td>
<td>395.00</td>
</tr>
<tr>
<td>Micromega Tempo Inn. (2 x 50 Watts) MINT / Manuals</td>
<td>700.00</td>
</tr>
<tr>
<td>Meridian 1018 Pre-Amp. (Black) (Moving-Coil Turner Available) / Manuals</td>
<td>1170.00</td>
</tr>
<tr>
<td>Artisan Alpha 2 Inn. Ampl. / VGC</td>
<td>150.00</td>
</tr>
<tr>
<td>N.V.A. A-40 Power Amplifier MINT</td>
<td>550.00</td>
</tr>
<tr>
<td>Creek A-J 4 Power Amplifier MINT / Boxed</td>
<td>280.00</td>
</tr>
<tr>
<td>Creek 400-2 32 Inn. Ampl. (Moving-Coil Stage) VGC / Manuals</td>
<td>180.00</td>
</tr>
<tr>
<td>QED A-230 Inn. / Pre. (Moving-Coil Turner Available) / Manuals</td>
<td>180.00</td>
</tr>
<tr>
<td>Kenwood KA-1060 Inn. / Stage-Stage / G/C</td>
<td>150.00</td>
</tr>
</tbody>
</table>

We welcome part-exchange on any of the above.

**TUNERS**

<table>
<thead>
<tr>
<th>Model</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technics ST-410L (Pre-Sets / Digital Display) MINT / Manuals</td>
<td>120.00</td>
</tr>
<tr>
<td>Denon TU-260 II (L-Band RDS Tuner) MINT / Boxed / Manuals</td>
<td>140.00</td>
</tr>
<tr>
<td>Marantz ST-48 (RDS Tuner) MINT / Boxed</td>
<td>140.00</td>
</tr>
</tbody>
</table>

**SYSTEMS**

affordable-audio will happily "build" Systems to your individual requirements, and if you purchase three or more components, i.e. (C.D. Player, Amplifier, & Loudspeakers), we will give you a 15% Discount on the total price! Please enquire for further details.

*(Does Not Apply To Commission-Based Sales)*

**LOUDSPEAKERS**

<table>
<thead>
<tr>
<th>Model</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Epic ES-30 (Light Cherry) (200 Watts / 8Ω)</td>
<td>1195.00</td>
</tr>
<tr>
<td>JVC LS-620 (Hi-End Monitor) MINT</td>
<td>1195.00</td>
</tr>
<tr>
<td>Mission 702e (Bi-Wire Monitors) MINT / Boxed Manuals / 5 x No Grip</td>
<td>200.00</td>
</tr>
<tr>
<td>Carbon Grey Speaker Grilles NEW</td>
<td>3950.00</td>
</tr>
<tr>
<td>Carbon Grey Speaker Grilles NEW</td>
<td>995.00</td>
</tr>
</tbody>
</table>

**MISCELLANEOUS**

<table>
<thead>
<tr>
<th>Model</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Epos ES-30 (Light Cherry)</td>
<td>1195.00</td>
</tr>
<tr>
<td>Canon 5001H (Black)</td>
<td>200.00</td>
</tr>
<tr>
<td>Rotel RCD-965 (Bi-Wire)</td>
<td>219.95</td>
</tr>
<tr>
<td>Wharfedale Diamond D9-BW (Black)</td>
<td>249.95</td>
</tr>
<tr>
<td>Tannoy 30 Precision (Cherry) MINT</td>
<td>200.00</td>
</tr>
<tr>
<td>Canon 5001H (Black)</td>
<td>200.00</td>
</tr>
<tr>
<td>Wharfedale Diamond D9-BW (Black)</td>
<td>249.95</td>
</tr>
<tr>
<td>Tannoy Mercury MC (Shielded Con-Speaker) MINT</td>
<td>120.00</td>
</tr>
<tr>
<td>BWI DH-12a (2-Way Con-Speaker) / Manuals</td>
<td>39.95</td>
</tr>
</tbody>
</table>

Phone anytime with your wants, stock changing daily. All equipment is sold with warranties. All major credit cards accepted.

We welcome part-exchange on any of the above affordable-audio is always keen to buy, (or part-exchange) Good quality Hi-Fi separates in good condition. Especially top British manufacturers products!
Well, last month’s feature about fitting a decent arm to Technics’ SL 1200 turntable elicited a tremendous response. It seems that we have more younger readers into vinyl than we ever imagined. After all, the club and DJ scene is based around vinyl replay and what do you read for hints and tips - the NME? Stewart Wenner’s brilliant modification has got countless Technics-owning readers and DJs interested in unlocking the potential of their decks. But what of the DJs for whom he originally conceived the arm transplant? I’ve had contact from Family Tree’s Stephen Naylor who shared his thoughts on living with his newly revitalised tool of the trade.

"In my 25 years of being a DJ, Stewart is the only sound engineer I have actually got to know professionally. My own fault perhaps, for not learning more about the hardware, and concentrating too much on the software - so to speak!

The underlying fact is that most DJs have very little knowledge about sound systems and how they work, let alone hi-fi knowledge. In fact, considering that they get let loose on equipment worth considerable sums of money, it doesn’t seem important to the club owner that the person they have just hired may not actually know how to use it properly! If the owner’s car was treated like his sound system, it would probably end up in the scrap yard. Now then - add an Origin Live-modded tone arm and you suddenly have the best of both worlds!

If the owner’s car was treated like his sound system, it would probably end up in the scrap yard.

When our ‘sound system’ got together to compare the turntables - we found the improvement from Stewart’s modification became instantly apparent. The long drum intro of John Cutler’s ‘It’s Yours’ (Chez records US 12in) sprang to life - the music became sharper and lyrics so much clearer. The beats of the music were more clearly defined, both through the system and the headphones (which are important for mixing). Old records were improved too. Side Effect’s ‘Always There’, a seventies classic (on Fantasy Records US 7in) is an example of how the modification ‘cleaned up’ the recording and made it smoother, bringing out sounds that even long familiarity with the record had not been noticed. The record we always use to check the system - ‘The Nervous Track’ by Ni Yorican Soul (on US Nervous Records 12in) sounded fresher and the bass tighter and sharper.

In all, Stewart has replaced the arms on four turntables for us so far. The arm is easy to use when cueing or mixing, and we have had no problems whatsoever with the modification. After listening to it at home, it felt like hearing a new system. It can most certainly be recommended.

These comments from Stephen echo quite a few letters we’ve had from fellow audiophile DJs who are experimenting with, or searching for ways of making their DJ decks sing like a proper hi-fi turntable. After all, just like hi-fi addicts, DJs are there to enjoy the communicative properties of music and the best way of doing this is to make it sound as good as possible.

This advancement is brilliant for the hi-fi community as it brings in fresh blood. Unlike many professional musicians, DJs are actually bothered about how reproduced music sounds and only the specialist hi-fi market can cater for their needs. You never know, one simple arm transplant could lead to a full scale body replacement in the matter of a few months. Keep reading, guys (and gals)!

David Price
This is a comprehensive directory of Hi-Fi Dealers throughout the UK and Ireland.
ACOUSTICA - 17 Hoole Rd, Chester CH2 3NH. Tel: 01244 344227. See our main entry under "Chester".

NORTHAMPTON

CLASSIC HI-FI At Classic HI-FI we cover the best in quality sounds. Be it a question of taste, a question of balance or a question of price, we're the ones to help. We stock: Marantz, Nad, Pioneer, Rotel, Seilburg, Sony, Technics, Yamaha. Proceed - plus many more. For more details call: 01536 310855.


NOTTINGHAMSHIRE

NOTTINGHAM HI-FI CENTRE

120-122, Affric House, 23126Ior Tel: 01933 27328 I Mobile: (0370) 877893. All that's best in HI-FI Home Cinema from quality manufacturers including Naim, B&W, Musical Fidelity, Rotel, Sotetto Projectors, Kent, Rega. Tel: 01244 254905 - Colin Grundy.

NORTH WALES

ACOUSTICA - 17 Hoole Rd, Chester CH2 3NH. Tel: 01244 344227. See our main entry under "Chester".

ACTON GATE AUDIO - 4 Rushton Road. Westhoughton. Tel: 01695 598728. See our main entry under "Chester".

RIVERSIDE HI-FI CENTRE - 42 Richmond Road, East Molineux, M50 3BZ. Tel: 0117 9102211. Brands inc. AR, B&W, Cambridge, Denon, Definitive Technology, Kef, Meridian, Mission, Musical Fidelity, NAD, Plasma. Ideal for the discerning hi-fi enthusiast. We accept direct debit and major credit cards. Open 10.30-7.00 Tues - Fri. Open 10.30-5.30 Sat & 9.00-4.00 Sun.

SUFFOLK

ANGLIA AUDIO - The Street, Hessett, Bury St. Edmunds, IP30 9AZ. Tel: 01284 737021. "Hi-Fi and speaker centre dedicated so quality since 1971. Highly trained staff. Facilities. Home trials available. Subject to status. Written details available on request. Orders received 24 hours. Major credit cards accepted. Tel: 01284 737021.

A.R.T. Audio Physic, AVI, Blueroom, Epos, Harbeth, Manchester. M41 5A8 Tel 0161 202 9922. Audio "Cheshire".

Living Voice. Monitor Audio, Neat, PMC, Royd. Lots of cards. Open 10am-5.30pm Mon- Sat. Easy free parking. BADA Dealer. Established 1968. Mon- Sat 9.00-5.30. Thu 9.00-8.00. Fri 9.00-6.00. Afternoon only. Demonstration rooms, service and installation. BADA member VISA / MASTERCARD / AMEX / JCB. Tel: 01782 3530. Email: info@thehifistudios.freeserve.co.uk - Web Address: www.thehifistudios.freeserve.co.uk

Music matters: Absolute Sounds, DCS, Kora, Plinius, Siltech, Arcici. The HI-FI STUDIOS

3-5 King Cross St. Halifax. 01422 366832. Brands inc. AR, B&W, Cambridge, KEF, Marantz, Musical Fidelity, NAD, Plasma, Sony, Yamahas. For sensible reissues and audiophile products. Also UK installation. Please phone anytime for stock update. Tel: 01933 27328 / Mobile: (0370) 877893.

SWAP. Open:- 10-5.30 Tuesday to Saturday. Late on Friday for live DJ. Expert Advice, Cable Dressing and MultiRoom installations. Plasma • Installation Service

BADA member VISA / MASTERCARD / AMEX / JCB - switch. Open-10.30 Tuesday to Saturday Late night Thursday (not Stourbridge). Demonstration rooms, service and installation. BADA member VISA / MASTERCARD / AMEX / JCB. Web: www.thehifistudios.freeserve.co.uk

THE HI-FI STUDIOS - 4 Richmond Road, Northampton NN1 4DB. Tel: 01604 446468. Brands inc. B&W, Cambridge, Cytus, Denon, KEF, Marantz, Musical Fidelity, NAD, Plasma, Sony, Yamahas. For sensible reissues and audiophile products. Also UK installation. Please phone anytime for stock update. Tel: 01933 27328 / Mobile: (0370) 877893.

DIVERSE VINYL 10 Charles Street Newport, NP20 1JU. Tel/Fax: 01633 259661/256261.


HERSEYSIDE

ACOUSTICA - 114 Wolverhampton Rd. Stafford ST17 4AA. Tel: 01782 251500. All that's best in Hi-Fi & Home Cinema from quality manufacturers including Naim, B&W, Musical Fidelity, Rotel, Sotetto Projectors, Kent, Rega. Tel: 01782 251500. Carefully chosen Hi-Fi and AV equipment includs AR, B&W, Nautilus, Denon, Linn, Rega, Rotel and others etc 3 demo rooms incl. Home cinema & Cinema Link and service. 20% off standard labour rates. Service Department. Home installations. Instant. Credit and major credit cards accepted. Closed Monday. Phone for chat and more details.

www.soundory.co.uk

YORKSHIRE (SOUTH)


YORKSHIRE (WEST)

HORDERSFIELD HI-FI CENTRE

The old school. School Road, Bacron (Nr Norwich), Norwich, NR1 1BH. Tel: 01603 270029. Stockists of the following: LED Audio Amplifiers. Breyton, Briston, Denon, Epos, Harbeth, Meridian, PMC, PMC, Rega. Yamaha. Telephone & Televisions. Arca. BADA members, 2 comprehensive demo rooms.

DEMON STRATEGIES are relaxed and informal and help and advice free! Phone or visit our web site www.replay.dialp.com or www.hifiworld.ntl.co.uk

YORKSHIRE (EAST)


DEMON STRATEGIES are relaxed and informal and help and advice free! Phone or visit our web site www.replay.dialp.com or www.hifiworld.ntl.co.uk

YORKSHIRE (EAST)

A reference guide to Britain's manufacturers and distributors

AFFORDABLE VALVE COMPANY 4600 Valve amplifier: Powerful 40 watts. Heavy bass. Set photograph cover in 'Specifi fi Hi- Fi Dealers' section. Mr Andrew Everard in Gramophone Magazine "delivers a sound that's both smooth and refined...allied to a sound of clarity, depth and refinement". http://www.affordablevalvecompany.com

AUDIOPHILE FURNITURE LTD The Square, Forest Row, East Sussex RH13 5ES Tel: 01342 826262. Fax: 01342 826226. Custom made Hi-Fi Furniture. Prices of components:фанеры, все детали: and Final Control Power Amplifiers and high end Motorised Audio Support System. These Products are endorsed by Hi-Fi and Audio magazines and have won various awards. Contact for complete range of audio and audiovisual products are available in the UK. For further information or a free Immediate quotation.

AUDIMAT TECHNOLOGY loudspeaker cables insulated in silicone give you a more natural feel. They also offer very good composite priced home cinema cables from the best. AED 2500, Tel: 020 8361 4133, Fax: 020 8361 9201.

BLACK RHODIUM 32, Dentworth Business Centre, High Street, Stourbridge, West Midlands, DY9 7TJ. 01384 423363. E-mail: info@blackrhodium.co.uk. BLACK RHODIUM offers a complete line of cable solutions from British made wires for hi-fi and home cinema. Our custom cables deliver that at deliver at cost as much improvement in listening experience as upgrading expensive components. BLACK RHODIUM Component Video cables let you enjoy the highest possible picture quality by using silver plated pin wire. Price starts from AED 1500 to 3000. E-mail: info@blackrhodium.co.uk.

BORDER PATROL 63 Bertr Macedonia Ave, Nome, AK 99701. Tel/Fax: 011 312 363 1300, Fax: 011 312 2006 69. Email: enquiries@blackrhodium.co.uk. BLACK RHODIUM offers a complete line of cable solutions from British made wires for hi-fi and home cinema. Our custom cables deliver that at deliver at cost as much improvement in listening experience as upgrading expensive components. BLACK RHODIUM Component Video cables let you enjoy the highest possible picture quality by using silver plated pin wire. Price starts from AED 1500 to 3000. E-mail: info@blackrhodium.co.uk.

CREEK AUDIO LTD 2 Bellevue Road, Friern Barnet, London N11 3ER Tel: 020 8361 8864. Fax: 020 8361 4133. Email: info@creekaudio.com. Web: www.creekaudio.com. creekaudio.com Innovative design and superior sound distinguishes Creek products from other brands in a similar price category. Adhering to the EIAO tradition of musicality and communications, the new M12 follows closely the style of the successful M11, and was awarded five gold stars in the March 2001 edition of Hi-Fi+.(..) For more information about the M12 or the M15 please see our home page or call us for leaflets.

FALCON ACOUSTICS LTD Tabor House, Norwich Road, Milton, Norwich, NR1 4BT. Tel: 01603 599235. Manufacturers of high quality integrated amplifiers and stereo power amplifiers. Falcon Audio Technologies is one of the leading manufacturers of high end audio equipment. Price starts from AED 5000 to 10000. E-mail: info@creekaudio.com. Web: www.creekaudio.com.

J EDWARDS The Old Chapel, 282 Sedge Road, Harrogate, Tork (Tel: 01423 53044). Somewhere you must build more storage spaces for CDs, Music, Hi-fi, books, etc. than Jim Edwards. But until he appears, why not send for the brochure showing a selection of HAND MADE units. To do this please send 3 x 2nd class stamps.

JEM DISTRIBUTION (FI RAXX) Spryfield Mills, Spa Ouse Westfield, WY5 8BN. Tel: 01746 273766. Fax: 01746 273759. F-Raxx offers a new dimension in audio visual racking. High quality aluminium construction finishes available to your choice. Fully adjustable 6mm glass shelving, sound insulation on shelves. Credence made to suit your system. Free delivery throughout the UK. Further information or a free brochure contact JEM Distribution.

LANGREX SUPPLIES LTD 1 Mary Road, Claydon, Surry CV8 2QD. Tel: 01483 264846. Fax: 01483 264835. One of the largest distributors of electronic, hi-vol, radio, tape and semi-conductors in the UK, and USA manufacturers. Stock: We specialise in obsolete types including original UK and USA made audio valves, telephone/sea fax for an immediate quotation.

NORTH TONETECH LTD Manufacturers of the acclaimed AirPower LM1 Power Supply. 4 Rodferey Avenue, Cheshunt CM2 9BQ. (01279) 383133.

NOTTINGHAM ANALOGUE STUDIO Tel: 07717 776477 Digital and manufacture of quality analogue audio. We're in the business because we realise how important music is. Your earbuds and carcabs are not just for transporting the sound, but for delivering a sublime sonic experience.

PIONEER MEET- YOUR- MAKER

PLATINUM 7 Highest quality marble PLATFORMS for all makes of equipment. Complete Range of RACKSTANDS. An elegant way to upgrade improves clarity, better Bass control. 3 Abbotts Drive, NorthWesley, Midhurst, H44 3SB Tel: 020 8864 3446. Also NEILGARD DISTRIBUTION Tel/Fax 01296 24756.

PMC BRYSTON Award winning manufacturers of the highest quality loudspeakers and amplification. Industry standard in Mastering, Film Recording, Broadcast and Radio (5,81 & Stereo). PMC loudspeakers, Compact, Floorstanders, and Large passive & active monitors. Prices range from £500 to £7500. Finished in a rich red wood veneer. PMC loudspeakers are available in horizontal mirrored pairs and complement home surround sound systems. PMC's balanced range of products includes PMC Preamps, Integrated, Amp modules for all the PMC products, and Power Amps 400W to 900W on 2 Ohm. 1 channel THX amplifiers. Surround processors, all with distortion figures and build quality to die for. Every product is available in silver or black backed by a 20 year warranty. PMC Ltd 43-45 CRAWLEY Green Road, Luton, LU2 8AA. Tel: 01582 44104 Fax: 01582 44014 Email: sales@pmc-speakers.com. Web: www.pmc-speakers.com

REL ACOUSTICS North Road, Bridgend Ind Est, Bridgend, Mid Glamorgan, CF31 3TF Tel: 01656 768 777, international +44 865 768 777 Fax: 01656 766 293 international +44 865 766 293 Mail: sales@rel.com. Web: http://www.rel.com. The UK's only specialist sub- bass audio specialists. 6 Months guarantee. Call us for advise on how much to add to your equipment for the best performance and the location of your nearest dealer.

SOUND IMAGE UK LTD. 3 Milton Road, London. Sw4 6PP. Tel: 020 8855 8484. Importers and distributors of the finest audio equipment, featuring the stunning Boulder 2000 series and the complete range from Norwegian manufacturer Electrocompaniet.

J E SUGDEN & CO LTD Works Valley, Station Lane, Haverfordwest, West Yorkshires, WPE 1W. Tel: 01646 404030 Email: jespwen@compuserve.com. Superb amplifiers and compact disc players from the original J & A Company. Our unique British Masterclass series sets new standards in sound reproduction. Please contact us for details. We have just up-graded to 180 Watt balanced mono-blocks. Prices start from £950.00 for the incrediblycredicible T-Audio T-699 for the legendary Silver A21. Contact us now for further information and purchase details. British owned - British built.

TALK ELECTRONICS Unit 12, Farmworth Business Centre, Eelmore Road, Farnborough, Hampshire, GU14 7XA. Tel: 01252 278283. Please ring for details.

TAG McLAREN AUDIO The Summit, 11 Latham Road, Huntingdon, Cambs, PE16 9PS. Tel: (+44) 800 415601 Fax (+44) 01480 512519. Combining science and technology with distinct style, TAG McLaren Audio's complete range of audio and audiovisual products are designed to bring maximum pleasure to the discerning listener. A wide range of speakers, centre channels and complementary subwoofers are available to suit your system. Free delivery throughout the UK. Further information or a free catalogue is available on the website. Tel: (+44) 800 415601. Email: info@tagmclarenaudio.com or our contact us on info@tagmclarenaudio.com

techlink distributes some of the best performing hi-fi and hi-fi accessories currently available in the UK. These products are endorsed by Hi-Fi and Audio magazines and have won various awards. Contact for complete range of audio and audiovisual products are available in the UK. For further information or a free Immediate quotation.

To advertise in Meet Your Maker please call Amanda Sweeney on 020 8864 4760.
BEFORE YOU BUY PLEASE MENTION HI-FI WORLD

LONDON

INSTANT 0% FINANCE AVAILABLE SERVING LONDON FROM BATTERSEA

ORANGES & LEMONS

Jewel associates from London's finest Cinema and Home Cinema retail er. Telephone demonstrations or just pop in. All the usual, i.e.
trendy and efficient service, free home installation + credit cards.

THE INNOVATOR AUDIO VISUAL HI-FI RETAILER ARCAM, 
COLEMAN, CHICO, ODEN, ERGO, MARANTZ, LODI, 
NAVI, REGA, ROKSAN, HOTEL, ROYD, RUARK, SOUNDSTYLE, 
STANDS UNIQUE, VANILLA.

NOW IN OUR SEVENTH SPARKLING YEAR.
020-7924 2040
61/63 WEBBS ROAD, SW11
Visit www.orangesandlemonshifi.com

We aim to provide a well chosen selection of quality hi-fi and 
accessories including:

FJH, ARCAN, B&W, NAUTILUS, 
DYNAVORTEX, LINN, LOEWE, MERIDIAN, 
MAX, NAIM, PIONEER, PROCEED, 
NEAT, REGA, ROTEL, SHANIHAN, 
YAMAHA + more

www.infiidelity.co.uk

9 High Street, Hampton Wick, 
Kingston upon Thames, Surrey KT1 4DA
Tel: 020 8943 3530

NORTH

BASICALLY SOUND
NORWICH NORFOLK

Audio Analogue, Brixton, Carlton, China, 
Chord Co. Demon, Epos, Final & Audio, 
Num Audio, PMC, Profig, Rega, Stair, 
Talk Electronics, TEC, HQ Video, 
Audio Note and many others...

The Old School, 
School Road, Prickwillow, 
NR35 1DL Archant Norfolk
Tel (01358) 712829

SOUTH

WORTHING AUDIO

20 Trevalyne Gate, W.Sussens BN11 1UA
01903 212133

This friendly shop with the best sound system in the South,
Tele Electronics - Friendly Advice - 3 Year Guarantee
Easy Parking - Open Mon-Sat, 10am-6pm.
Late Night West 7.30pm.
Agencies include: Dynaudio, Ruark, Gradient, Roksan, 
Rostek, Onyx, Sonetters, Kora, Cymbol, Talk Electronics, 
and many more.........

SOUTH WEST

SOUTH WEST ANALOGUE

SME - MICHELL - NOTTINGHAM ANALOGUE - 
LORICRAFT GARRARD - PROJECT - ORTOFON - 
TUBE TECHNOLOGY 54HT Valve CD Player, Remote 
Control Hybrid Integrated Valve Amplifier CROFT 
VOODOO Isolation platforms/Loudspeakers, 
Experiment Stands and Timbregrave lift off Perspex Covers. 
Record cleaning service - Secondhand equipment
01643 851 351
graham@southwestanalogue.fsnet.co.uk

EAST

STOW SOUNDS

These And More Available From:

Creek Epos Exposure
JM Labs Living Voice Neat Acoustics

For A Demonstration & Expert Advice Call 
Stowmarket (01449) 675060
Stone Farm, Borough Lane, Chelmerford, Stowmarket.

MAIL ORDER

Rus Andrews Accessories 
Hi-Fi Home Cinema Cables & Accessories
Mail Order Direct

FREE UPGRADE!

Before you spend lots of money on better equipment for your Hi-Fi or Home Cinema system, request our Free 72 page booklet 'The Power & The Glory: How to Upgrade Your Mains'. You'll be amazed at how a few simple tips will make your so much better.

Call and request your FREE copy today on UK Freephone 0800 373467 and quote AH2

www.russandrews.com

downloaded now

0800 373467 and quote AH2

THE DIRECT DISC

THOUSANDS OF RECORDS ALWAYS IN STOCK. 
+ A FULL RANGE OF RARE NEW FAST DISCS. 
EXTENSIVE SEARCH SERVICE FOR CUSTOMERS.

COMPREHENSIVE 96 PAGE FULL CATALOGUE 
AVAILABLE AT £10.00

CALL 01992 477164 OR VISIT OUR WEBSITE 
www.thedirectdisc.demon.co.uk

CHERISHED RECORD CO

UK SUPPLIERS OF VPI TURNTABLES, 
RECORD CLEANING 
MACHINES AND ACCESSORIES.

HUGE SELECTION OF NEW & USED LPS & CDS
www.cherished-record-company.co.uk

01579 363 603

VALVES & TUBES

Cheilmer Valve Company

Buy CVL, PREMIUM Hi Fi valves direct from us.
All valves processed for Improved performance.
We also have stock of MAJOR BRAND types inc. 
MULLARD, GEC, BRUIM, RCA, GE, PHILIPS, etc.

The Nuthurst, Badwood Park, Great Riddles, 
Chichester, West Sussex, PO18 5QJ
Tel: 01243 475475 or 01243 475841
Email: sales@cheilmervalves.com

£600

Mr Andrew Dorrin in Gramophone Magazine
"delivers a sound that's both smooth and refined 
... allied to a good degree of clarity and Romance" 
Hi-Fi Choice It's a 'classic valve sound... warm and 
intimate; vocals are generally lively and involving" 
FREE colour literature. £600 with free delivery.
Phone 01634 374500 anytime. 1 month home trial
www.affordablevalvecompany.com

SERVICES & CONSULTANTS

Front End Problem?
Contact 
the Cartridge Man

It doesn't have to cost an arm and a leg to get the best - listen to any 
Kestrel or Decca-cartridge...

Also agents for Croft, Audience, E.A.H. Mitchell 
and Muhr.

plus cartridge re-tipping service
020 8685 6656

Website: www.thecartridgeman.com

atv

ATV SERVICES 
LEATHERHEAD
01372 456921

TO ADVERTISE PLEASE CALL 
AMANDA SWEENEY ON 
020 8864 4760
This month we have four Pro-ject Debut turntables to give away, courtesy of distributor Henley Designs. Henley Design distribution was founded in 1997 by Laurence Armstrong, Nick Fuller and Paul Latham who between them had experience of over 35 years in retail and distribution and worked together in Ortofon and Pro-ject distribution before the launch of Henley Designs. The initial brands the company dealt with were only Pro-ject and Ortofon but in the period of five years their portfolio has expanded to accommodate British hi-fi stalwarts Roksan, Austrian speaker manufacturer Vienna Acoustics and American cable specialists Audioquest, as well as the German headphone company Beyerdynamic.

Since the early days before Henley's inception, when the partners shared premises with Hayden Laboratories, the company's expansion meant they had to move premises no less than three times. The current varied portfolio of brands and products signifies their belief in system synergy. The latest of these moves resulted in Henley being based at new premises consisting of over 12,000 sq feet of office and warehouse space, so there is adequate room for natural expansion. The set up includes a full service dept., sales and accounts, customer service and warehousing.

The Pro-ject Debut was launched in 1999 and became one of hi-fi's benchmark products in a couple of weeks. The package of turntable, arm and cartridge at a little over £100 ensured that this Pro-ject would become a success story. And it all came true, as more than 1000 Debuts are being sold a month. In these days of digital audio that's no mean feat. Rumours of vinyl's demise have been greatly over emphasised, as Henley will attest with their success over the years.

First using Pro-ject back in 1992 where they found out that they worked well with the Ortofon cartridges they distributed, the founders of Henley took over UK distribution. In 1993 the Pro-ject 6 was given an award for best turntable and from here on Henley worked with Pro-ject to develop new products. One of the results of this was the Debut turntable which took the market by storm and undoubtedly helped to contribute to the recent rise in the vinyl LP's popularity. In the UK more turntables are sold than both tuners and cassette decks combined and last year Henley alone sold more than 14,000 turntables - a mind boggling figure. Consequently Pro-ject are apparently now the largest manufacturer of turntables in the world. At HFW we found the debut to be an outright bargain. It delivers a solid and precise sound that gets your old (or new) vinyl records singing like Canaries. And getting your hands on one couldn't be easier. Simply answer the questions below on a postcard and send it to the address below by July 31st. The first four correct entries out of the bag will receive one of these cracking turntables.

CONGRATULATIONS!
...to Mr. Kevin J. Holland of Glasgow, the winner of our June competition. An Exposure Electronics 2010 CD player and matching 2010 integrated amplifier is on its way to you!
THE MAGIC NUMBER

Will Elac’s new 301 'micro monitor' loudspeaker be the classic that the Garrard of the same name became? David Price investigates.

Elac’s dinky 301 monitors are pretty impressive little things. True, you can buy a hi-fi bookshelf design of far more sizeable dimensions for the same money, but you’d never get this kind of build quality. For their tiny 121x91x92mm size, the 1.2kg cabinets feel incredibly solid, thanks to their extruded aluminium structure with non-removable metal grilles. Underneath this you’ll find Elac’s proprietary ‘ring-dome’ tweeter paired to an 80mm long-throw woofer with high-power voice coil, ferrofluid cooling and that famous aluminium cone. The ‘audiophile’ crossover splits the two drivers at 3.850Hz, and has bass filtering which means the unit can be connected directly to hi-fi amp terminals directly, without overtaxing the driver. The result is a claimed 80-21,000Hz (+/- 3dB) and a claimed 50W RMS power handling. The 301 is fully magnetically shielded, and comes with chunky, gold-plated, offset binding posts, plus wall brackets for mounting.

At 300x200x270mm and weighing 8kg, the SUB301 looks like a fully-fledged hi-fi speaker. The micro monitor’s metal cab is no longer in evidence, but the silver lacquer finish is nice all the same (like the 301 micro monitor, black is also available). The 180mm alloy sandwich driver is front firing, ported and aspirated by an 80W RMS amplifier. An electronic
crossover offers overdrive protection, an adjustable crossover frequency from 40-180Hz (which suits the 301 nicely), volume level adjustment and a phase switch. There's a choice of both loudspeaker inputs and RCA phono inputs. Elac claims a frequency response of 30Hz-240Hz (+/- 3dB). The unit comes complete with all leads needed, a front grille and a spike kit.

I have to say that my first moments listening to the 301 sat/sub combo were disappointing. Driven from a Pioneer DV-747A (in CD mode) feeding a Cyrus 7/PSX-R integrated amp (with the PRE OUT jacks driving the sub), they sounded rather lightweight. But perseverance paid off - the sub was tightly spiked to the floor and run firing at the rear wall from about 30cm away, while the satellites were Blu-tacked to my marble mantelpiece, pressed hard against the wall Linn Kan-style and toed in by about 15 degrees. With a bit of running in and decent speaker cables, suddenly things got dramatically better. In fact, after a few hours running criminally high volumes I just kept trying new music, just for the fun of it.

Essentially, with such small and rigid cabinets, you're not going to get much in the way of bass bloom or overhang. The result is that - along with the all-aluminium driver complement - things sound incredibly tight and fast and engaging. They do not, however, sound coarse or hard - rather, it's like opening the curtains to a bright summer morning - the light shines in, to sometimes quite alarming effect. Rod Stewart's 'Maggie May' has rarely sounded so crisp and percussive, with that sublime guitar (and mandolin) work propelling the song along with incredible gusto. Here is a speaker that loves to boogie. With this in mind I tried some electronic dance, in the shape of LTJ Bukem. The combo show brilliant transient ability and true grit when it came to handling high volumes - even at very high levels they failed to sound compressed, unlike KEF's rival KMS 2002 'eggs'. Most impressive was integration with the sub - you'll need some careful fettling, but suitably adjusted and located the system is tight and fluid with just a hint of boxiness from the sub at high volumes. There's certainly no sense of a hole in the upper bass, as you get with many sat/sub systems - although I ran the sub crossover frequency just a little higher than the implied 100Hz optimal level. Best of all was the sub's ability to go seriously loud with no undue signs of distress.

Overall then, here's a brilliantly crisp sounding system with a clean, detailed, fast midband that projects brilliantly into space and drives even big rooms well. The only downside was the treble, with was just a little too 'metal dome' for my liking - clean and fast but with a hint of its own coloration. The silk dome fitted to, say, Mission's 782 hi-fi floorstander is a lot more self-effacing.

Elac 301 Micro Monitor £199
Elac Sub 301 £399.00
www.elac.com

World Verdict
Rhythmically entralling performers in an impressively compact package.
ON THE ROAD

David Price goes out and about with Creative Labs' brand new Extigy external portable USB soundcard.

With over one hundred and fifty million soundcards shipped, Creative Labs must be doing something right. The company made its name with the SoundBlaster, then the Live, and most recently the Audigy. Each new generation of card has added vast new tracts of functionality, connectivity and software - almost to the extent that there's so much to learn and install that it detracts from the product's usability. Quite simply, it would be hard to know what more to ask for. Except.

The Extigy you see here answers the one last line of my wish list - as its name alludes to, it's external. This means that rather than having to fiddle around with a screwdriver opening your PC's case and poking around with the motherboard, you simply plug it into the USB port (fitted to almost every PC since 1997) and go. At least, that's the theory.

In truth, installing the Extigy proved a pain - for me, at least. First, when you first plug the thing in, Windows does its usual thing and says it's detected new hardware. Creative Labs resolutely refuses you to go along this simple, well-worn installation route - putting the driver disc in, pointing Windows in the right direction and letting the OS finish the job. Rather, you have to hit the cancel option, and insert the installation disc and follow Creative Labs' own long-winded rigmarole. All well and good, except that a third of the way through the installation process, the system hung up for no apparent reason. To cut a long story short, the uninstallation file was corrupted and I eventually had to reinstall my entire Windows OS. Not a great start, and a lot more long-winded than putting a soundcard in a PC - which I can do in under five minutes! Still, don't let that dissuade you - I presume it was a one-off disc read error, or suchlike. I just wish they'd let you have the option of installing the drivers directly.

Anyway - assuming your computer isn't as tetchy as mine - you should find the Extigy reasonably easy to install. There's a drivers-only install option (from the Creative Labs installer) which takes just a minute or two. But if you wish to avail yourself of the generous bundle of software provided, expect a long evening beside your PC. It takes 160MB and an age to get onto your hard drive. Yes, it's all very nice but frankly there's too much. After installation, Creative Labs software pops up everywhere, from first-boot to your control panel. It's almost as if they've got designs on Bill Gates' job.

So, it's a great idea to have an easy-to-install external PC soundcard, it's just that with the Extigy, the 'easy to install' bit kind of got lost in translation. If you can live with this, then this new product still has things going for it.

First, being outboard - so to speak - its sensitive audio circuitry is a good distance away from the maelstrom of mechanical and electrical noise you get inside the average PC. Having the digital converters and analogue output stage a cable's length from your computer's switched mode power supply is no bad thing. In theory at least, this should give better sound. Another thing that should help with the sonics is the fact that it has - shout it out - 24-bit, 96kHz digital converters with a claimed 100dB signal-to-noise ratio.

Hurrah! The problem is that, like the Audigy, the Extigy downsamples to 48kHz as soon as its datastream reaches the outside world, so it's not quite as nice as it seems. Oh well.

Still, you can't argue about the fact that it's a great upgrade to notebook soundcards, which are in all cases terminally unpleasant and crude devices. You can replace your desktop PC item relatively easily, but until now you've been stuck with the one in your portable. The Extigy ends this tyranny however, and also offers a stack of new ways of connecting to the outside world. There are seven outputs (including optical digital) and five audio inputs (including optical and coaxial digital), letting you connect it to MiniDisc and CD recorders, DVD players, home-theatre systems, surround-sound speakers, microphones, and even MIDI sequencers and musical instruments.

Specifically, the front panel offers TOSLINK in and outs, line in, mic in (with level control), headphone jack (with volume control) that doubles as a line out. Round the back there's the USB jack, MIDI in and out, S/PDIF in and out, and 3.5mm analogue output.
through a Cyrus 7/PSX-R driving Mission 782 loudspeakers, with my Rock P3-600 notebook doing the number crunching.

First, CD playback (using Creative’s bundled PlayCenter software and my PC’s internal TEAC CD-ROM) was head and shoulders above the sound of my notebook’s bundled soundcard. It’s smooth and clean, with a good degree of detail and a reasonable rhythmic snap. Compare it to a hi-fi CD player like a Marantz CD-6000 OSE and you’ll find it wanting - there’s a lack of tonal colour and bass and treble are both slightly curtailed. However, there’s absolutely no sense of listening to AM radio that you get with cheap soundcards. Blondie’s remastered ‘Parallel Lines’ proved bouncy and crisp, with satisfyingly sweet hi-hat sounds and no coarseness to vocals. The A-D converters weren’t that bad either, decently smooth and clean with no digital nasties audible. MP3 playback was surprisingly good. PlayCenter offers a full range of bitrates, up to 320kbps and also fast streaming. I won’t go into the SETTINGS/CONTROL PANEL/DEVICES/AUDIO compression codecs, and switched my beloved Fraunhofer codec back to priority 1. I went into the SETTINGS/CONTROL PANEL/DEVICES/AUDIO compression codecs, and switched my beloved Fraunhofer codec back to priority 1. This done, I found the Extigy a pleasant player of compressed audio - sweet and smooth with few artefacts. Shame there’s no AAC on offer, though. My only real criticism was that - through my steam age PC - there was an occasional jumping, as my computer struggled to squirt its audiostream through the bundled software - Audio Clean-Up (which removes scratches, pops and hisses from tapes and LP records), Time Scaling (which lets you speed up or slow down audio while maintaining accurate pitch), DREAM (ahem - Dynamic Repositioning of Enhanced Audio and Music, which allows the interactive repositioning of stereo content in a surround 5.1 environment) and EAX 1.0 and 2.0 (positional technology for games). Oh, and this is all controllable via the supplied remote control!

All in all then, the Extigy has enough to keep the saddest gadget fan happy until Sony releases the new PlayStation 3. So how does it sound? When it is hooked up via USB to a PC, it also offers a stack of clever DSP effects under the guise of Creative Labs’ EAX function. It offers - through the bundled software - Audio Clean-Up (which removes scratches, pops and hisses from tapes and LP records), Time Scaling (which lets you speed up or slow down audio while maintaining accurate pitch), DREAM (ahem - Dynamic Repositioning of Enhanced Audio and Music, which allows the interactive repositioning of stereo content in a surround 5.1 environment) and EAX 1.0 and 2.0 (positional technology for games). Oh, and this is all controllable via the supplied remote control!

All in all then, the Extigy has enough to keep the saddest gadget fan happy until Sony releases the new PlayStation 3. So how does it sound? When it is hooked up via USB to a PC, it also offers a stack of clever DSP effects under the guise of Creative Labs’ EAX function. It offers - through the bundled software - Audio Clean-Up (which removes scratches, pops and hisses from tapes and LP records), Time Scaling (which lets you speed up or slow down audio while maintaining accurate pitch), DREAM (ahem - Dynamic Repositioning of Enhanced Audio and Music, which allows the interactive repositioning of stereo content in a surround 5.1 environment) and EAX 1.0 and 2.0 (positional technology for games). Oh, and this is all controllable via the supplied remote control!

All in all then, the Extigy has enough to keep the saddest gadget fan happy until Sony releases the new PlayStation 3. So how does it sound? When it is hooked up via USB to a PC, it also offers a stack of clever DSP effects under the guise of Creative Labs’ EAX function. It offers - through the bundled software - Audio Clean-Up (which removes scratches, pops and hisses from tapes and LP records), Time Scaling (which lets you speed up or slow down audio while maintaining accurate pitch), DREAM (ahem - Dynamic Repositioning of Enhanced Audio and Music, which allows the interactive repositioning of stereo content in a surround 5.1 environment) and EAX 1.0 and 2.0 (positional technology for games). Oh, and this is all controllable via the supplied remote control!

All in all then, the Extigy has enough to keep the saddest gadget fan happy until Sony releases the new PlayStation 3. So how does it sound? When it is hooked up via USB to a PC, it also offers a stack of clever DSP effects under the guise of Creative Labs’ EAX function. It offers - through the bundled software - Audio Clean-Up (which removes scratches, pops and hisses from tapes and LP records), Time Scaling (which lets you speed up or slow down audio while maintaining accurate pitch), DREAM (ahem - Dynamic Repositioning of Enhanced Audio and Music, which allows the interactive repositioning of stereo content in a surround 5.1 environment) and EAX 1.0 and 2.0 (positional technology for games). Oh, and this is all controllable via the supplied remote control!

All in all then, the Extigy has enough to keep the saddest gadget fan happy until Sony releases the new PlayStation 3. So how does it sound? When it is hooked up via USB to a PC, it also offers a stack of clever DSP effects under the guise of Creative Labs’ EAX function. It offers - through the bundled software - Audio Clean-Up (which removes scratches, pops and hisses from tapes and LP records), Time Scaling (which lets you speed up or slow down audio while maintaining accurate pitch), DREAM (ahem - Dynamic Repositioning of Enhanced Audio and Music, which allows the interactive repositioning of stereo content in a surround 5.1 environment) and EAX 1.0 and 2.0 (positional technology for games). Oh, and this is all controllable via the supplied remote control!

All in all then, the Extigy has enough to keep the saddest gadget fan happy until Sony releases the new PlayStation 3. So how does it sound? When it is hooked up via USB to a PC, it also offers a stack of clever DSP effects under the guise of Creative Labs’ EAX function. It offers - through the bundled software - Audio Clean-Up (which removes scratches, pops and hisses from tapes and LP records), Time Scaling (which lets you speed up or slow down audio while maintaining accurate pitch), DREAM (ahem - Dynamic Repositioning of Enhanced Audio and Music, which allows the interactive repositioning of stereo content in a surround 5.1 environment) and EAX 1.0 and 2.0 (positional technology for games). Oh, and this is all controllable via the supplied remote control!

All in all then, the Extigy has enough to keep the saddest gadget fan happy until Sony releases the new PlayStation 3. So how does it sound? When it is hooked up via USB to a PC, it also offers a stack of clever DSP effects under the guise of Creative Labs’ EAX function. It offers - through the bundled software - Audio Clean-Up (which removes scratches, pops and hisses from tapes and LP records), Time Scaling (which lets you speed up or slow down audio while maintaining accurate pitch), DREAM (ahem - Dynamic Repositioning of Enhanced Audio and Music, which allows the interactive repositioning of stereo content in a surround 5.1 environment) and EAX 1.0 and 2.0 (positional technology for games). Oh, and this is all controllable via the supplied remote control!

All in all then, the Extigy has enough to keep the saddest gadget fan happy until Sony releases the new PlayStation 3. So how does it sound? When it is hooked up via USB to a PC, it also offers a stack of clever DSP effects under the guise of Creative Labs’ EAX function. It offers - through the bundled software - Audio Clean-Up (which removes scratches, pops and hisses from tapes and LP records), Time Scaling (which lets you speed up or slow down audio while maintaining accurate pitch), DREAM (ahem - Dynamic Repositioning of Enhanced Audio and Music, which allows the interactive repositioning of stereo content in a surround 5.1 environment) and EAX 1.0 and 2.0 (positional technology for games). Oh, and this is all controllable via the supplied remote control!
As any MiniDisc user knows, adding titles to discs can be a right pain. David Price looks at an interesting new gadget claimed to make life easier, the MD Tltler.

The best way of spotting an audio anorak is to check out his MiniDisc collection (assuming he has one, and if he’s serious then he will). Load one of his MDs into the player and wait approximately two seconds - if the disc title comes up on the display then it looks likely. Cue up the first song, and if the track name appears too, then he most definitely is.

You see, titling MiniDiscs is one of the most boring and time consuming activities known to man (okay, apart from polishing your mains plug fuses.), so if someone has taken the trouble it basically means they should get out more. Indeed, in Japan, the word for ‘nerd’ is ‘otaku’, which literally translated means ‘stay at home’ - is it any coincidence that MDs are so popular there?

There are, of course, a few ways around ‘the problem’ (if you are serious enough to regard the issue of titling your tracks as such). You could always buy a Sony MDS-PC3 which comes with a hardware link and software that lets you type names in via your PC. Alternatively, certain Sony home recorders have a socket that you plug in a computer keyboard directly (but you wouldn’t want to be seen with this: “what’s this for darling?”,”Errm... it’s for titling my MiniDiscs.”, “oh, I see, goodbye”).

So, to the rescue comes one Dan Morelle, whose MD Tltler (point your browsers at http://go.to/mdtitler) costs £35 including UK post and packing. It doesn’t work with every MD machine, rather it’s aimed specifically at Sony portables (currently the MZ-R37,55,70,90,91, 700, G750 and 900).

The kit comprises a Titling unit that plugs into the back of your PC’s parallel port (which is nice and stealthy, lest for some reason you shouldn’t want others to discover your covert MD titling activities) and the MDCOM 1.0 software. It’s compatible with Windows 95, 98, 2000, ME & XP but you may have to download the NTport driver from the website. Sadly though, Mac users are ignored completely. The other end of the Tltling unit goes straight into your MD portable’s remote socket (which is situated right next to the headphone output) via the supplied cable.

To commence your nefarious titling activities, first check that no one is looking, then install the software, screw in the Tltling unit to your PC’s printer port and connect the cable to your MD machine (which should be switched on), and do a restart (because it isn’t USB, you can’t just plug and go). Next click on the MiniDisc Control Centre icon, and you’re off.

The software comes up in a small window, and offers a number of facilities. Firstly, the remote control functions are duplicated, meaning you’ve got control of your player’s transport (i.e. play/pause, record, stop, etc.). You can also add or remove tracks from the disc’s table of contents displayed in the window. Last but not least, you can type both the disc name and assign names to all tracks present - in a matter of seconds via your keyboard.

Once you’ve typed them all in, press ‘Go!’ and the Tltling unit takes over. It works by issuing remote control commands (via the software, which switches the resistance between two of the remote control pins - the value of the resistance determines what function is issued). You can watch in amazement as the display on your MD portable changes, letter by letter, cycling through its entire character set at high speed and then stopping when it reaches the relevant one, then moving on to the next, etc. It’s just as you’d add titles via the machine’s menu, but about one hundred times faster!

There’s little more to say - it does what it says on the label, so to speak. It would be nice if there was a Mac version, and a USB connector rather than the clumsy, old-hat parallel port. The software is pretty bullet-proof, but this too could look a little more modern, I guess. If titling your MiniDiscs is - as Austin Powers would say - “your bag, baby”, then you can’t really fault this quirky little product. Warmly recommended.

MD Tltler £35 (inc. free MD)
http://go.to/mdtitler

(World-wide shipping takes 5-10 days with online tracking, UK postage takes 3-5 days via Recorded Delivery. Secure online ordering available via PayPal)
LaCie has come up trumps with its new aluminium cased Fusion external CD writer, says David Price.

When Nokia launched its 8850 mobile phone just over a year ago, the ad copy went something like, "because you don't buy watches just to tell the time". That - in a sentence - is precisely why I think this is the best CD burner you can buy right now.

In my humble opinion, CD burners are just about the most boring thing it's possible to review. Suppose interconnects come close, but even they can be more easily distinguished between, thanks to their inevitable sonic footprints. No, if I have to review a computer CD writer, I have to take a sharp intake of breath and pray I'll get to the end of the page without nodding off.

With this in mind, I was frankly amazed when I opened up the box of LaCie's new Fusion external CD-RW. Why? Because it's more than a machine to burn digital optical media, it's a piece of art in its own right. I'd had high hopes for Sony's Digital Relay a couple of years back - but opening the box revealed a beautifully drawn bit of kit, with the build quality of mid seventies Ford Escort Popular Plus. Frankly, it made your average 'own brand' cornflake packet look like a Panzer Tank. Not so this LaCie - it is exquisitely designed - and - built.

Okay, I admit it's not technologically state of the art. If we're to be brutally frank then all the latest CD recorders should have a FireWire interface for sizzling transfer speeds (and a DVD-ROM facility wouldn't hurt, either), but you simply can't have it all - this is the sexiest computer peripheral ever made and costs just £129 plus VAT. Think of it as the PC equivalent of a Cyrus hi-fi separate - the rare coming together of form, function, build and finish.

Just to rehearse the arguments in favour of not turning out your stuff in tawdry plastic cases: aluminium is stronger, less prone to cracking, and lighter. It is less resonant, generally, and won't look like it's been dragged through a hedge backwards after you've used it a couple of times. In Japan, everyone knows that Sony's prize project is MiniDisc - to compromise this would mean a huge loss of face to the Japanese giant - with the result that it had never (until recently) made an MD portable that didn't come in the aforementioned metal case. Enough said?

Now that we've established the Fusion's finer aesthetic points, it's time for the meat in the sandwich. It offers the new USB 2.0 interface. It has a 24x12x40x mech, which means it can record a full CD in less than 4 minutes, meaning data backup can be performed at 12x and the drive reads CDs at 40x. It weighs 570g, and measures a highly portable 35x130x173 mm.

USB 2.0, lest we forget, means it's hot-pluggable (so it connects to any USB-equipped computer and can easily be shared between users, and is easily installed in a few seconds without rebooting) and also a lot faster than the original USB 1.1 generation of devices. USB 2.0 is expected to gradually come as standard on new PCs. Forty times faster than USB 1.1, the new interface delivers transfer rates of up to 480 Mb/s while retaining backward compatibility with USB 1.1 controllers. When plugged into a USB 1.1 port, the LaCie Fusion downshifts to 4x4x6x speeds.

The package comes complete with an international power supply, USB 2 cable, and user manuals on CD. It's also bundled with Easy CD Creator for Windows 98SE/2000/ME/XP, and a two-year warranty. It's easy to use - just switch on and plug in, and your Windows OS says it's detected new software and is searching for the drivers. Point it in the direction of the supplied set-up CD, and you're off - simple as that. Then it's just a case of loading the supplied EzCD 5 CD authoring software. This, as regular readers will know, is a fine piece of code, but it's tailored for ease of use, rather than 'power users'. To wit, if you want to know where every sector of the data you're writing is going, you'll have to get Nero instead.

The LaCie works brilliantly. It feels great to use and burns fine sounding CDs, but as always if it's audio CDs you're burning it's safest to keep the speeds down. Sound is excellent - clean and smooth with just the merest scintilla of blurring and softening of the soundstage. If FireWire and BURN-Proof functionality aren't at the top of your list, then this is the one. Beautiful!
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 TRANSPORTS**

**ARCAM FMJ CD23** £1100
The British-bred player is extremely versatile. (Aug 97)

**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. (Nov 97)

**LINN KARIK** £1775
Under rated and overlooked, the final Karik is a gem. (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 98)

**MARANTZ CD-63** MKII KI-S* £400
Similar to the CD-635E 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. (Jan 99)

**MERIDIAN 506 20-BIT** £1100
Very detailed and revealing player. More cerebral than visceral sounding, however. (May 95)

**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)

**NAI D 5000** £1000
This dynamic cop of the range Silverline spinner delights with any type of music. Exciting, sophisticated sounding and highly recommended. (Jun 2000)

**ROKSAN CASPIAN** £955
The Caspian has a smooth, slightly bright sound with some of the clearest treble in the business. Very engaging, dynamic character. (Aug 97)

**ROTEL RCD 951** £300
HDCD capability at a mid-range price. Plain Jane looks but solid construction. There is some higher than average measured distortion which may take the edge off this otherwise tempting product. (Aug 99)

**TEAC VRDS-T1** £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 99)

**DACs**

**CAMBRIDGE AUDIO DACMAGIC 3** £199
Superb value for money with extensive facilities and solid, detailed sonics. Upgrades any sub-£300 player. (Sep 98)

**DCS ELGAR** £8500
Fuser-proof converter which will handle 24/96 and 24/192. Extremely open and natural performer. (Nov 97)

**DPA LITTLE BIT 3** £299
A taste of the high end on a budget. Rich, clean, punchy sound transforms budget CD players. (Jun 99)

**HADCOCK 242 SE** £649
Laccest of a long line of unipivot arms. Added mass makes the 242 suitable for both low compliance MCs and straw-in-the-wind high compliance types. Revised geometry and chromium plating completes a first-class job. (Jan 99)

**MICHELL GYRODEC SE** £775
Exquisitely built, infinitely upgradeable deck that gives true high end sound at mid-fi prices. (Sep 98)

**MICHELL ORBE** £2000
Fantastically capable all rounder with commanding, powerful, detailed sound that gets the best from almost any arm and cartridge. Supreme build, brilliant value. (Apr 95)

**ORIGIN LIVE STANDARD (KIT)** £145
Good in standard form with AC motor; frighteningly good with a DC motor and battery PSU. (Sep 98)

**PINK TRIANGLE TARANTELLA 6600** £850
Not only does the Tarantella have more style than a catwalk full of models, it also combines PT's usual clarity with real authority. (Oct 97)

**REGA PLANAR 2** £214
Brilliant starter deck with extremely polished manner. Better built £274 Planar 3 is a great all-in-one package that eats mid-price CD players for breakfast. (Jun 99)

**REGA RB300** £180
Some may prefer the simpler RB250 at £130. Detailed, tight, rhythmic sound but tonally rather gray and cold-sounding. Still excellent value, though.
YES! I want to subscribe to Hi-Fi World for:—

- £27.00 for 12 months

Your Details

<table>
<thead>
<tr>
<th>Title</th>
<th>Initial</th>
<th>Surname</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Address</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Post Code</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Daytime Tel:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Start Issue</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Delivery Address (if different)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

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
Japan. Can be picked up for peanuts second-hand. High output version works a treat. The best modern budget MC combines delicious sweet sound with fantastic get-up-and-go. Very reasonable price for such an able performer. (Jul 93)

DNM MICA £185

Builds on the strengths of the Campion with aluminium arm tube and detachable headshell. Tight, neutral sound with good tonality but lacks the IV's pace and precision. Like the older SME 3009 series, this arm is also available in 10" and 12" versions. (Jan 93)

MONOBLOCS £1995

Builds on the strengths of the Campion with aluminium arm tube and detachable headshell. Tight, neutral sound with good tonality but lacks the IV's pace and precision. Like the older SME 3009 series, this arm is also available in 10" and 12" versions. (Jan 93)

GOLDRING 1042 £130

One of the best Moving Magnet cartridges going, with beautiful treble and muscular bass. New low price makes it a bargain. (Apr 96)

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)

CREEK OBH-8 SE £180

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

DAVYNEVECTOR DV20K-H £299

The best modern budget MC combines deliciously sweet sound with fantastic get-up-and-go. High output version works a treat with valve phono stages too.

DENON PMA-250SE £160

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

ROKSAN ARTAXERXES X £950

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

MISSION CYRUS 2 £299

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

DENON MA6800 £3735

The MA6800 not so much plays music as takes control of it, with effortless bass drive. (Sep 95)

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)

MICHELL DELPHINI MONOBLOCS £1995

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

NAIM NAIT 3 £575

Superb rhythms and dynamics make for great music making, but tonally monochrome.

ORPHEUS TOBE £2995

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

PUNCHY SE £995

Warm, sumptuous, sweet sound h/phone amp.

PROJECT PHONO BOX £19

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 impedences.

ROKSAN ARTAXERXES X £950

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

LFD MISTRAL £577

Mistral has a warmth and involvement that many pricier stages sound over priced.

Linn CD12 CD Player normal price £12000

Genuine bargains are few and far between!

*****

This is your chance to own a premium Linn or Naim product with a substantial saving on the normal retail price. Both are current specification, mint condition ex-demonstration units, with a full two year warranty. Don't delay, book an audition today. A credit free period is available for 9 or 12 months if required (call for details) & installation with system overhaul is included.

Linn CD12 CD Player normal price £12000

Naim NAP 500 Power Amp normal price £10995
SONNETEER SEDELEY £399
Combines transparency and fine dynamics with excellent rhythmic ability (May '98)

PRE-AMPLIFIERS

AMC 1100 £150
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)

AUDIO ANALOGUE BELLINI £475
Showcases AA's characteristic mix of clarity and musicality and blazes the competition. (Apr '98)

CHORD CPA1800 £1800
Clarity, insight and control are second to none - an addictive mixture. (Mar '98)

CROFT VITALE £350
A modestly priced valve pre-amp with exceptional transparency and involvement. A positive dreadnought of a tuner. (Apr '97)

CHORD SPM400 £1000
Almost valve-like in its smoothness, the line level Pre-1 is warm and seductively clear. (Nov '96)

POWER AMPLIFIERS

ARCAM 9* £400
With 70W on tap, the 9* will drive most loudspeakers with a spacious and detailed sound. Good bass welly too. (Dec '96)

CHORD SP4400 £1400
There's a sense of effortless power to the Chord that gives music real scale and presence. (Mar '98)

MARANTZ MODEL 9* £800
Authentic reproduction monoblocs still more than cut the sonic mustard. Highly expensive and highly sought after. (Mar '97)

MICHELL ALECTO £1989
Crisp, clean and beautifully controlled with gorgeous styling. Partnered with the £1650 Orca this is a superb winning combo. (Oct '98)

MUSICAL FIDELITY X-A200I £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. (Aug '98)

TUNERS

CAMBRIDGE T300 £180
An extremely engaging tuner with a performance at odds with its low price. Not exactly a Troubridge, but you may not notice... (Feb '99)

CREEK T43 £399
Excellent detail, separation and dynamics. A great little tuner and unbeatable at this price. (May '98)

MARANTZ ST17 £600
A positive dreadnought of a tuner. Sweet and refined but with a heavy punch when needed. A tuner of this quality demands a decent aerial. (Jul '99)

MISSION CYRUS FM7* £300
Clear and lucid sound puts it up with the best. Superb build too. (Apr '94)

NAIM NAT03 £595
The NAT03's warm, atmospheric sound is further proof of Naim's proficiency with tuners. (Sep '93)

SONY ST-SA3ES* £250
Beguiling RDS tuner for the sonically discerning. Good ergonomics and sensitive too. (Apr '97)

CASSETTE DECKS

AIWA AD-S570* £200
A very musical sound. (April 2000)

AIWA AD-S950* £300
An outstanding high sensitivity loudspeaker with first-rate sound. Comes fitted with Dolby B, C and the dead handy Dolby S. (May 99)

KENWOOD KX-3080* £160
A simple deck, but excellent-quality head and transport give top quality sound. (Oct '96)

PIONEER CT-5740S £430
A great piece of engineering from Pioneer, with first-rate sound. (Jun '96)

YAMAHA KX-5805E* £250
The 'SE' tag is more than a marketing gimmick. Sound is solid and clear with Dolby S. (Sep '97)

LOUDSPEAKERS

CASTLE EDEN £469
Impressively pricey 'speakers that offer great transparency and involvement. One of a select band that simply makes music regardless. (Mar '97)

EPOS ES12* £495
Strong, punchy bass is allied to finely detailed, articulate midrange and sparkling treble. (Oct '96)

ALNICO T43 £99
Great transparency and involvement. One of a select band that simply makes music regardless. Note... (Feb '99)

KEF CRESTA £100
Deftly sophisticated presentation for the price. Won't blow the roof off, but will deliver a very musical sound. (April '00)

KLIPSCH HERESY II £1100
An outstanding high sensitivity loudspeaker with midrange and treble horns coupled with infinite baffle 12" bass driver. Effortless, fast and accurate. (May '99)

MISSION 752 £495
Excellent detail, separation and dynamics. A remarkable item in all respects. (Feb 2000)

MISSION 771 £170
Characteristically fast, punchy Mission sound from the Aerogel mid/bass and silk-dome tweeter. (Jul '98)

Mission summer promotion for Klimax and 5125 Amplifiers

The Mission summer promotion this year revolves around the stunning Klimax twin and 5125 multi channel power amp. It you are a Mission owner and would like to upgrade to the Klimax or activate your system with the 5125, both with huge savings please contact Ian Ridge on either number above or email IanR@billyvee.co.uk

- Free delivery (U.K. Mainland) & local installation included
- Five year parts and two year labour warranty on this system
- Deferred & Interest Free Credit available 0% APR - Call for details.
- Arcam, B&W, Linn, Naim, Rega, TAG & more available for audition

Available from June, Call now to arrange your audition
MINIDISC PLAYERS

KENWOOD DM-9090 £500
One of the best MD players yet. ATRAC 4.5 gives clean and very musical recordings from this Kenwood. (Jan 98)

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-JESSIES £530
The best sounding MD deck so far, thanks to awesome build and heroic ATRAC DSP Type R coding.

DVD PLAYERS

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. (Sep 99)

SONY DVP-5725 £490
One of the best buys in the DVD market. Available in a dodgy 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 2000)

DVD PLAYERS

SONY TCD-8 DATMAN £599
One of the first twin deck recorders/players that boasts high speed dub facility. Playback could be warmer, but still a bargain. (Oct 99)

SONY MDS-JE555ES £1300
MiniDisc recorder £520
Excellent MDs. (Apr 98)

SONY MDS-JA50ES £1300
Excellent mid-priced CD recorder that both plays and records with equal panache. (Oct 99)

SONY MDS-JB930 £250
One of the best MD players yet. ATRAC 4.5 coded sound, although not as good as many more expensive boxes. Never mind the price. let your ears decide. (May 97)

SONY MDS-JE555ES £1300

DVD PLAYERS

SONY CARDIOVUE £599
An excellent tool for home recording, with a clarity and a controlled, exciting way with CD replay. (Sep 99)

DENON DVD-5000 £1600

LOUDSPEAKER CABLE

BLUE HEAVEN 
RUMOUR £9.55/m
The Rumour is our reference at the price. Tight and tuneful bass mixed with air and space results in a cracking cable for the money.

BLUE HEAVEN £150/m

RUMOUR 
9.95/m
Miraculous transparency.

ULTIMATE THE FIRST £50/3m pair
Very low phase and a controlled, exciting way with CD replay. (Sep 99)

Sennheisser HD-490 £50
Good value cans with an exciting and bassy sound. Everything one should look for in headphones at a sensible price.

Nordost Blue Heaven £375/3m pair
This isn't cheap, but it sounds absolutely fab. An open and spacious sound that simply carries music.
CASSETTE

NAKAMICHI DR-2
A great machine with Nakamichi’s legendary heads. The 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 ski-slope looks got it a cult following once it had ceased to be simply ugly.

CD PLAYERS

MERIDIAN 201
Beautifully built two-box with pre-amp stage. Very musical although not as refined as modern Bitstream 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
Ancestors 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 E860 pence 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.

NAD 3020
You can't argue with success! NAD's budget transistor gave thousands their first taste of hi-fi and remains great value.

QUAD 33/301 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 111 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.

TECHNICS SE-AS 4M2
Nice transformer and electronics, shame about the casework. With tweaking, this 150watt can sound sweet.

LOUDSPEAKERS

KLIPSCHORN
Not exactly plentiful or cheap but a splendid beast. For efficiency they have seldom been equalled. Space hungry!

AUDIO ILLUSION

23 Langley Broom
Langley, Berkshire SL3 8NB
2 mins Junc.5 off the M4
TEL: (01753) 542761 FAX: (01753) 772532
www.audioillusion.co.uk
email:audioillusion@btinternet.com

PRE-OWNED / EX.DEMO EQUIPMENT FOR SALE

<table>
<thead>
<tr>
<th>MAKE</th>
<th>MODEL</th>
<th>DESCRIPTION</th>
<th>STATUS</th>
<th>LIST (£)</th>
<th>SALE (£)</th>
</tr>
</thead>
<tbody>
<tr>
<td>AERIAL ACOUSTICS</td>
<td>1OT</td>
<td>Reference Loudspeakers in Santos Rosewood including Special Plinths</td>
<td>Ex.Demo/Mint</td>
<td>£6700</td>
<td>£5750</td>
</tr>
<tr>
<td></td>
<td>7B</td>
<td>Loudspeakers in Natural Cherry including Special Plinths - 5 Star Best Buy - Home Cinema Choice*</td>
<td>Ex.Demo/Mint</td>
<td>£5000</td>
<td>£3150</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>Loudspeakers in Natural Maple including Special Plinths</td>
<td>Ex.Demo/Mint</td>
<td>£2755</td>
<td>£1930</td>
</tr>
<tr>
<td></td>
<td>CC3B</td>
<td>Centre Speaker in Natural Cherry + Special Adjustable Floor Stand - 5 Star Best Buy - Home Cinema Choice*</td>
<td>Ex.Demo/Mint</td>
<td>£1800</td>
<td>£1135</td>
</tr>
<tr>
<td></td>
<td>SW12</td>
<td>400W Active Remote Control Subwoofer with Parametric Equaliser finished in Rose Walnut. *<em>5 Star Best Buy - Home Cinema Choice</em></td>
<td>Ex.Demo/Mint</td>
<td>£1800</td>
<td>£1135</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CLASSE AUDIO</td>
<td>CAV-150</td>
<td>Multi-Channel Switchable Power Amplifier - 3,4,5, or 6 Channels (6x150w to 3x300w), SE Inputs, Silver/Black</td>
<td>Ex.Demo/Mint</td>
<td>£2800</td>
<td>£1995</td>
</tr>
<tr>
<td></td>
<td>NANDA Face Nord</td>
<td>Preamp with 2 Analog Channels, Dual Mono, 3 Transformers, Balanced Inputs/Outputs, (Silver) 65w 100w</td>
<td>Ex.Demo/Mint</td>
<td>£1000</td>
<td>£625</td>
</tr>
<tr>
<td></td>
<td>K5.5</td>
<td>6 x 100w Multi-Channel Amplifier, 6 Transformers (Silver) *<em>5 Star Best Buy - Home Cinema Choice</em></td>
<td>Ex.Demo/Mint</td>
<td>£1500</td>
<td>£945</td>
</tr>
<tr>
<td></td>
<td>MIRAGE</td>
<td>250w Active Bipolar Subwoofer (Piano Black)</td>
<td>Second Hand/Mint</td>
<td>£2300</td>
<td>£995</td>
</tr>
<tr>
<td></td>
<td>OM-C3</td>
<td>2-Way, 3- Driver Shielded Centre Speaker or L / C / R (Matte Black)</td>
<td>Second Hand/Mint</td>
<td>£995</td>
<td>£495</td>
</tr>
</tbody>
</table>

AERIAL ACOUSTICS

acurus : TRICHORD
Mirage: Barclay : AVM
CHORD: MICHELL
PIEGA: Acoustic Signature 
aramon: STANDS UNIQUE
Renaissance Audio
LEAK SANDWICH
Rather warm sounding big infinite baffle but cheap with it. With a reasonably powerful amp can sound quite satisfying.

LOWTHER PM4A
High quality full-range driver, still manufactured. High sensitivity, as fitted to many classic horn designs.

MAGNEPLANAR SMPs
Touch dry in the bass but a technological loudspeaker with genuinely musical abilities.

MISSION 770
Father of the 77 range which continues to this day. Well mannered with a warm sound and a kind loud to amplifiers.

QUAD ESL57
Unrivalled. Properly serviced there is nothing like them. Their natural presentation may make them covet to the generic.

YAMAHA NS1000M
Hi-tech favourites of the Japanese and Americans. Viewed more warily in the UK but can give excellent results.

TANNOY GRF 8i AUTOGRAPH
—14.000 Gauss magnet and extended frequency range. Inexpensive too!

THORENS TD 124
Everlasting classic tone-arm. Spares available now.

TUNERS

LEAK TROUGHLINE (ORIGINAL)
Arguably the best-sounding tuners ever.

LEAK TROUGHLINE II & III MONO
Arguably the best-sounding tuners ever.

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

MARANTZ STB
Possibly the ultimate Tardis console, including an oscilloscope for checking the strength of signal. Expensive even now.

Mantra Audio
Specialist Suppliers of Audio Accessories

Cartridge Selection

GOLDRING

Eroica LXH £113 £101
Eroica LS £113 £101

Motor

Kontrapunkt B £543 £407
Mcintosh MC 30 £452 £392
MC 25 £382 £322

Shure

M75 £130 £125
M75 ¥105 ¥90

Price for a Goldring

Any make/model of cartridge accepted

GOLDRING

Eroica LXH £113 £101
Eroica LS £113 £101

Motor

Kontrapunkt B £543 £407
Mcintosh MC 30 £452 £392
MC 25 £382 £322

Shure

M75 £130 £125
M75 ¥105 ¥90

Any make/model of cartridge accepted

Headphone Selection

Series S 1 £58

Reference S 1 £58

Series S 2 £40

All items guaranteed authentic new originals
see our website for full selection of accessories
order direct from our secure online catalogue

All items guaranteed authentic new originals
see our website for full selection of accessories
order direct from our secure online catalogue

Mail Order 11-10 Days) Prices inclusive of PAP - Insurance for UK Delivery £12 for European Delivery £14.95 for worldwide delivery to cover insurance for orders over £150 Value

Deliveries to:

UK £12
Europe £14.95
US £25
Australia £30

Newly manufactured. High sensitivity, as fitted to many classic horn designs.

ACOS LUSTRE
Very honest piece of kit, well made and easily adjustable.

ARISTON RD1
A one-time king of turntables very similar to the Linn LP12. Now disposed but worth a look at the right price.

TANNOY YORK, LANCASTER
Ideal experimenters' driver. High sensitivity, as fitted to many classic horn designs.

WHARFEDALE SUPER 8 RS DD
Great deck for the kitchen table enthusiast. High quality, as fitted to many classic horn designs.

MISSION 770
A kind load to amplifiers.

RATHER WARM SOUNDED BIG INFINITE BALLENG BUT CHEAP WITH IT. WITH A REASONABLY POWERFUL AMP CAN SOUND QUITE SATISFYING.

LOWTHER PM4A
HIGH QUALITY FULL-RANGE DRIVER, STILL MANUFACTURED. HIGH SENSITIVITY, AS FITTED TO MANY CLASSIC HORN DESIGNS.

MAGNEPLANAR SMPs
TOUCH DRY IN THE BASS BUT A TECHNOLOGICAL LOUDSPEAKER WITH GENUINELY MUSICAL ABILITIES.

MISSION 770
FATHER OF THE 77 RANGE WHICH CONTINUES TO THIS DAY. WELL MANNERED WITH A WARM SOUND AND A KIND LOUD TO AMPLIFIERS.

QUAD ESL57
UNRIVALLED. PROPERLY SERVICED THERE IS NOTHING LIKE THEM. THEIR NATURAL PRESENTATION MAY MAKE THEM COVET TO THE GENERIC.

YAMAHA NS1000M
HI-TECH FAVOURITES OF THE JAPANESE AND AMERICANS. VIEWED MORE WARILY IN THE UK BUT CAN GIVE EXCELLENT RESULTS.

TANNOY GRF 8i AUTOGRAPH
—14.000 GAUSS MAGNET AND EXTENDED FREQUENCY RANGE. INEXPENSIVE TOO!

THORENS TD 124
EVERLASTING CLASSIC TONE-ARM. SPARES AVAILABLE NOW.

TUNERS

LEAK TROUGHLINE (ORIGINAL)
INTERESTING ORNAMENT BUT NO LONGER HI-FI. LIMITED COVERAGE OF 88MHz TO 100MHz ONLY.

LEAK TROUGHLINE II & III MONO
ARGUABLY THE BEST-SOUNDING TUNERS EVER.

LEAK TROUGHLINE III STEREO
EXCELLENT TUNER WITH INDIFFERENT STEREO DECODING CIRCUIT. BEST WHEN ADAPTED TO USE MODERN OUTBOARD DECODER.

MARANTZ STB
POSSIBLY THE ULTIMATE TARDIS CONSOLE, INCLUDING AN OSCILLOSCOPE FOR CHECKING THE STRENGTH OF SIGNAL. EXPENSIVE EVEN NOW.

Mantra Audio
Specialist Suppliers of Audio Accessories

Cartridge Selection

GOLDRING

Eroica LXH £113 £101
Eroica LS £113 £101

Motor

Kontrapunkt B £543 £407
Mcintosh MC 30 £452 £392
MC 25 £382 £322

Shure

M75 £130 £125
M75 ¥105 ¥90

Any make/model of cartridge accepted

GOLDRING

Eroica LXH £113 £101
Eroica LS £113 £101

Motor

Kontrapunkt B £543 £407
Mcintosh MC 30 £452 £392
MC 25 £382 £322

Shure

M75 £130 £125
M75 ¥105 ¥90

Any make/model of cartridge accepted

Headphone Selection

Series S 1 £58

Reference S 1 £58

Series S 2 £40

All items guaranteed authentic new originals
see our website for full selection of accessories
order direct from our secure online catalogue

All items guaranteed authentic new originals
see our website for full selection of accessories
order direct from our secure online catalogue

Mail Order 11-10 Days) Prices inclusive of PAP - Insurance for UK Delivery £12 for European Delivery £14.95 for worldwide delivery to cover insurance for orders over £150 Value

Deliveries to:

UK £12
Europe £14.95
US £25
Australia £30

Newly manufactured. High sensitivity, as fitted to many classic horn designs.

ACOS LUSTRE
Very honest piece of kit, well made and easily adjustable. Vinyl beginners could do very much worse.

ALPHASON HR100S
First class arm, up to present-day standards. Buy carefully, though, as there's no service available now.

TANNOY YORK, LANCASTER
Ideal experimenters' driver. High sensitivity, as fitted to many classic horn designs.

WHARFEDALE SUPER 8 RS DD
Great deck for the kitchen table enthusiast. High quality, as fitted to many classic horn designs.

MISSION 770
Father of the 77 range which continues to this day. Well mannered with a warm sound and a kind loud to amplifiers.

QUAD ESL57
Unrivalled. Properly serviced there is nothing like them. Their natural presentation may make them covet to the generic.

YAMAHA NS1000M
Hi-tech favourites of the Japanese and Americans. Viewed more warily in the UK but can give excellent results.

TANNOY GRF 8i AUTOGRAPH
—14.000 GAUSS MAGNET AND EXTENDED FREQUENCY RANGE. INEXPENSIVE TOO!

THORENS TD 124
Everlasting classic tone-arm. Spares available now.

TUNERS

LEAK TROUGHLINE (ORIGINAL)
Interestingly ornament but no longer Hi-Fi. Limited coverage of 88MHz to 100MHz only.

LEAK TROUGHLINE II & III MONO
Arguably the best-sounding tuners ever.

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

MARANTZ STB
Possibly the ultimate Tardis console, including an oscilloscope for checking the strength of signal. Expensive even now.

Genius, Pure Genius

Leak Troughline II Mono
Arguably the best sounding tuner ever

Leak Troughline II Mono
Arguably the best sounding tuner ever
Choice hi-fi makes it easy for you to fulfill 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.

**Power amplifiers**

- **Transfiguration** Harmon Kardon AVP1
  - Exposure VII pre + XII psu
- **Exposure** Kenwood L1000C pre/ L1000M Power Amp
- **Goldmund** Audible Illusions 3/2 Amp (bal)
- **Krell** FPB 250c
- **Krell** HTS (AV Processor)
- **Cary** SLA 70 mk II Silver
- **Meridian** 602 Transport
- **Wilson** 5.1
- **Voyd** Vafchi/ Orion

**CD PLAYERS & DACS**

- **Audiolab** 8000 QI Pre
  - **Boulder** 2012 SL (Black)
- **Boulder** 1012 (pre amp/ 24.96 dad Phono)
- **Hovland** HP100 Line Pre
- **Acuphase** 91/92
- **Sony** CDPi/ DSA R1

**PLAYERS BY LOEWE**

- **Loewe** Xelos + Std
- **Loewe** Planus + Std
- **Loewe** Aconda

**TURNTABLES, ANALOGUE, VARIOUS**

- **Musical Fidelity** A6500 A
- **Musical Fidelity** A 300 int
- **Musical Fidelity** RX30 monoblocks
- **Bryston** B60
- **Boston** AE
- **Acoustic Energy** Aura

**AV COMPONENTS**

- **Rotel** RA 1050/1070
- **Rotel** RA 1150/1170/1570
- **Rotel** RA 1580/1470
- **Rotel** RA 1580/1470 (Series 100)
- **Rotel** RA 1580/1470 (Series 2000)
- **Rotel** RA 1580/1470 (Series 3000)
- **Rotel** RA 1580/1470 (Series 4000)
- **Rotel** RA 1580/1470 (Series 5000)
- **Rotel** RA 1580/1470 (Series 6000)
- **Rotel** RA 1580/1470 (Series 7000)
- **Rotel** RA 1580/1470 (Series 8000)
- **Rotel** RA 1580/1470 (Series 9000)
- **Rotel** RA 1580/1470 (Series 10000)
- **Rotel** RA 1580/1470 (Series 11000)
- **Rotel** RA 1580/1470 (Series 12000)
- **Rotel** RA 1580/1470 (Series 13000)
- **Rotel** RA 1580/1470 (Series 14000)
- **Rotel** RA 1580/1470 (Series 15000)

**LPS/LCD/PROJECTORS**

- **Sanyo** TH-42PWD4
- **Panasonic** TH-42PWD4
- **Panasonic** TH-42PWD4
- **Panasonic** TH-42PWD4
- **Panasonic** TH-42PWD4
- **Panasonic** TH-42PWD4
- **Panasonic** TH-42PWD4
- **Panasonic** TH-42PWD4
- **Panasonic** TH-42PWD4
- **Panasonic** TH-42PWD4
- **Panasonic** TH-42PWD4
- **Panasonic** TH-42PWD4
- **Panasonic** TH-42PWD4
- **Panasonic** TH-42PWD4
- **Panasonic** TH-42PWD4
- **Panasonic** TH-42PWD4
- **Panasonic** TH-42PWD4
- **Panasonic** TH-42PWD4
- **Panasonic** TH-42PWD4
- **Panasonic** TH-42PWD4
- **Panasonic** TH-42PWD4
- **Panasonic** TH-42PWD4
- **Panasonic** TH-42PWD4
- **Panasonic** TH-42PWD4
- **Panasonic** TH-42PWD4
- **Panasonic** TH-42PWD4
- **Panasonic** TH-42PWD4
- **Panasonic** TH-42PWD4
- **Panasonic** TH-42PWD4
- **Panasonic** TH-42PWD4
- **Panasonic** TH-42PWD4
- **Panasonic** TH-42PWD4
- **Panasonic** TH-42PWD4
- **Panasonic** TH-42PWD4
- **Panasonic** TH-42PWD4
- **Panasonic** TH-42PWD4
- **Panasonic** TH-42PWD4
- **Panasonic** TH-42PWD4
- **Panasonic** TH-42PWD4
- **Panasonic** TH-42PWD4
- **Panasonic** TH-42PWD4
- **Panasonic** TH-42PWD4
- **Panasonic** TH-42PWD4
- **Panasonic** TH-42PWD4
- **Panasonic** TH-42PWD4
- **Panasonic** TH-42PWD4
- **Panasonic** TH-42PWD4
- **Panasonic** TH-42PWD4
- **Panasonic** TH-42PWD4
- **Panasonic** TH-42PWD4
- **Panasonic** TH-42PWD4
- **Panasonic** TH-42PWD4
- **Panasonic** TH-42PWD4
- **Panasonic** TH-42PWD4
- **Panasonic** TH-42PWD4
- **Panasonic** TH-42PWD4
- **Panasonic** TH-42PWD4
- **Panasonic** TH-42PWD4
- **Panasonic** TH-42PWD4
- **Panasonic** TH-42PWD4
- **Panasonic** TH-42PWD4
- **Panasonic** TH-42PWD4
- **Panasonic** TH-42PWD4
- **Panasonic** TH-42PWD4
- **Panasonic** TH-42PWD4
- **Panasonic** TH-42PWD4
- **Panasonic** TH-42PWD4
- **Panasonic** TH-42PWD4
- **Panasonic** TH-42PWD4
- **Panasonic** TH-42PWD4
- **Panasonic** TH-42PWD4
- **Panasonic** TH-42PWD4
- **Panasonic** TH-42PWD4
- **Panasonic** TH-42PWD4
- **Panasonic** TH-42PWD4
- **Panasonic** TH-42PWD4
- **Panasonic** TH-42PWD4
- **Panasonic** TH-42PWD4
- **Panasonic** TH-42PWD4
- **Panasonic** TH-42PWD4
- **Panasonic** TH-42PWD4
- **Panasonic** TH-42PWD4
- **Panasonic** TH-42PWD4
- **Panasonic** TH-42PWD4
- **Panasonic** TH-42PWD4
- **Panasonic** TH-42PWD4
- **Panasonic** TH-42PWD4
- **Panasonic** TH-42PWD4
- **Panasonic** TH-42PWD4
- **Panasonic** TH-42PWD4
- **Panasonic** TH-42PWD4
- **Panasonic** TH-42PWD4
- **Panasonic** TH-42PWD4
- **Panasonic** TH-42PWD4
- **Panasonic** TH-42PWD4
- **Panasonic** TH-42PWD4
- **Panasonic** TH-42PWD4
- **Panasonic** TH-42PWD4
- **Panasonic** TH-42PWD4
- **Panasonic** TH-42PWD4
- **Panasonic** TH-42PW...
DIY NEWS

TJOEB UPGRADE
Are Upgrades Really Worth it? Neville Roberts finds out.

BOOK REVIEW
GEC Audio Tube Data, reviewed by Andy Grove

DIY LETTERS
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

Back year sets of Speaker Builder, Audio Amateur & Glass Audio, plus the Audio Anthology Set.

Send for our FREE price list to:- (Dept HFW) Tabor House, Norwich Road, MULBARTON, Norwich, Norfolk. NR14 8LT Tel: 010)1508 578272

Audio Kits, Modules, Components

Altogether 50+ hooks and 50+ Audio Amateur's magazine year sets. 2001 year sets on CD-R on request, Back year sets of Speaker Builder. Audio Amateur & Glass Audio, plus the Audio Anthology Set.

Send for our FREE price list to:- (Dept HFW) Tabor House, Norwich Road, MULBARTON, Norwich, Norfolk. NR14 8LT Tel: 010)1508 578272

Falcon Acoustics Ltd

Full Price List and Focal details on Web Site
http://www.falcon-acoustics.co.uk

DRIVE UNITS: by FOCAL & SEAS, and a pick of the best from other manufacturers. 100+ CROSSOVER NETWORKS: - Active & Passive, Components, Accessories, COMPONENTS

Send for our FREE price list to:- (Dept HFW) Tabor House, Norwich Road, MULBARTON, Norwich, Norfolk. NR14 8LT Tel: 010)1508 578272

WHITE NOISE
II STATION ROAD
BEARSDEN
GLASGOW
G61-4AW

http://homepage.ntlworld.com/david.white38
Email: david.white38@ntlworld.com
Tel: 0141-942-2460 (until 9pm)
Fax: 0141-587-7377

The Stable, Baddow Park, Great Baddow, Chelmsford, Essex CM2 7SY
Tel: +44 1245 241300 Email:sales@chelmervalve.com
Fax: +44 1245 241309 www.chelmervalve.com

 Sukut 2 Motor Suspension kit
SAU 2 Headshell
SAU 2 Connecting Lead

GARRARD/LENCO

Recommended Lubrication set - early 301 or 301/401 (specify) £ 7.20 £ 2.50
Replacement 301 motor pulley (-2%), (-1%), (Std). (+1%) each £ 16.50 £ 2.50
Replacement 301 suppressor unit £ 7.20 £ 2.50
Replacement 301 control knobs On-Off/Speed select pair £ 21.50 £ 2.90

To put it simply, stock the justifiably famous brands such as Brimar, GECC, 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.

TECHNICAL & GENERAL

SOME NECESSITIES - FROM THE ORIGINAL CLASSIC TURNTABLE SPECIALISTS

TECHNICAL & GENERAL

NEW Focal Unit Range

Focal Electronics, Basically Sound
HI-FI WORLD DIY SUPPLEMENT

Falcon Acoustics Ltd

Full Price List and Focal details on Web Site
http://www.falcon-acoustics.co.uk

DRIVE UNITS: by FOCAL & SEAS, and a pick of the best from other manufacturers. 100+ CROSSOVER NETWORKS: - Active & Passive, Components, Accessories, COMPONENTS

Send for our FREE price list to:- (Dept HFW) Tabor House, Norwich Road, MULBARTON, Norwich, Norfolk. NR14 8LT Tel: 010)1508 578272

THE CVC STANDARD 401/402 SERIES

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.

TECHNICAL & GENERAL

SOME NECESSITIES - FROM THE ORIGINAL CLASSIC TURNTABLE SPECIALISTS

TECHNICAL & GENERAL

NEW Focal Unit Range

Focal Electronics, Basically Sound
HI-FI WORLD DIY SUPPLEMENT

Falcon Acoustics Ltd

Full Price List and Focal details on Web Site
http://www.falcon-acoustics.co.uk

DRIVE UNITS: by FOCAL & SEAS, and a pick of the best from other manufacturers. 100+ CROSSOVER NETWORKS: - Active & Passive, Components, Accessories, COMPONENTS

Send for our FREE price list to:- (Dept HFW) Tabor House, Norwich Road, MULBARTON, Norwich, Norfolk. NR14 8LT Tel: 010)1508 578272

THE CVC STANDARD 401/402 SERIES

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.

TECHNICAL & GENERAL

SOME NECESSITIES - FROM THE ORIGINAL CLASSIC TURNTABLE SPECIALISTS

TECHNICAL & GENERAL

NEW Focal Unit Range

Focal Electronics, Basically Sound
HI-FI WORLD DIY SUPPLEMENT

Falcon Acoustics Ltd

Full Price List and Focal details on Web Site
http://www.falcon-acoustics.co.uk

DRIVE UNITS: by FOCAL & SEAS, and a pick of the best from other manufacturers. 100+ CROSSOVER NETWORKS: - Active & Passive, Components, Accessories, COMPONENTS

Send for our FREE price list to:- (Dept HFW) Tabor House, Norwich Road, MULBARTON, Norwich, Norfolk. NR14 8LT Tel: 010)1508 578272

THE CVC STANDARD 401/402 SERIES

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.

TECHNICAL & GENERAL

SOME NECESSITIES - FROM THE ORIGINAL CLASSIC TURNTABLE SPECIALISTS

TECHNICAL & GENERAL

NEW Focal Unit Range

Focal Electronics, Basically Sound
HI-FI WORLD DIY SUPPLEMENT

Falcon Acoustics Ltd

Full Price List and Focal details on Web Site
http://www.falcon-acoustics.co.uk

DRIVE UNITS: by FOCAL & SEAS, and a pick of the best from other manufacturers. 100+ CROSSOVER NETWORKS: - Active & Passive, Components, Accessories, COMPONENTS

Send for our FREE price list to:- (Dept HFW) Tabor House, Norwich Road, MULBARTON, Norwich, Norfolk. NR14 8LT Tel: 010)1508 578272

THE CVC STANDARD 401/402 SERIES

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.

TECHNICAL & GENERAL

SOME NECESSITIES - FROM THE ORIGINAL CLASSIC TURNTABLE SPECIALISTS

TECHNICAL & GENERAL

NEW Focal Unit Range

Focal Electronics, Basically Sound
HI-FI WORLD DIY SUPPLEMENT

Falcon Acoustics Ltd

Full Price List and Focal details on Web Site
http://www.falcon-acoustics.co.uk

DRIVE UNITS: by FOCAL & SEAS, and a pick of the best from other manufacturers. 100+ CROSSOVER NETWORKS: - Active & Passive, Components, Accessories, COMPONENTS

Send for our FREE price list to:- (Dept HFW) Tabor House, Norwich Road, MULBARTON, Norwich, Norfolk. NR14 8LT Tel: 010)1508 578272

THE CVC STANDARD 401/402 SERIES

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.

TECHNICAL & GENERAL

SOME NECESSITIES - FROM THE ORIGINAL CLASSIC TURNTABLE SPECIALISTS

TECHNICAL & GENERAL

NEW Focal Unit Range

Focal Electronics, Basically Sound
HI-FI WORLD DIY SUPPLEMENT

Falcon Acoustics Ltd

Full Price List and Focal details on Web Site
http://www.falcon-acoustics.co.uk

DRIVE UNITS: by FOCAL & SEAS, and a pick of the best from other manufacturers. 100+ CROSSOVER NETWORKS: - Active & Passive, Components, Accessories, COMPONENTS

Send for our FREE price list to:- (Dept HFW) Tabor House, Norwich Road, MULBARTON, Norwich, Norfolk. NR14 8LT Tel: 010)1508 578272

THE CVC STANDARD 401/402 SERIES

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.

TECHNICAL & GENERAL

SOME NECESSITIES - FROM THE ORIGINAL CLASSIC TURNTABLE SPECIALISTS

TECHNICAL & GENERAL

NEW Focal Unit Range

Focal Electronics, Basically Sound
HI-FI WORLD DIY SUPPLEMENT

Falcon Acoustics Ltd

Full Price List and Focal details on Web Site
http://www.falcon-acoustics.co.uk

DRIVE UNITS: by FOCAL & SEAS, and a pick of the best from other manufacturers. 100+ CROSSOVER NETWORKS: - Active & Passive, Components, Accessories, COMPONENTS

Send for our FREE price list to:- (Dept HFW) Tabor House, Norwich Road, MULBARTON, Norwich, Norfolk. NR14 8LT Tel: 010)1508 578272

THE CVC STANDARD 401/402 SERIES

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.

TECHNICAL & GENERAL

SOME NECESSITIES - FROM THE ORIGINAL CLASSIC TURNTABLE SPECIALISTS

TECHNICAL & GENERAL

NEW Focal Unit Range

Focal Electronics, Basically Sound
HI-FI WORLD DIY SUPPLEMENT

Falcon Acoustics Ltd

Full Price List and Focal details on Web Site
http://www.falcon-acoustics.co.uk

DRIVE UNITS: by FOCAL & SEAS, and a pick of the best from other manufacturers. 100+ CROSSOVER NETWORKS: - Active & Passive, Components, Accessories, COMPONENTS

Send for our FREE price list to:- (Dept HFW) Tabor House, Norwich Road, MULBARTON, Norwich, Norfolk. NR14 8LT Tel: 010)1508 578272

THE CVC STANDARD 401/402 SERIES

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.
**DYNAMITE SITE**

This a wonderful hi-fi web-zine, available in English or Italian. The great thing about this site is that it is created by a non profit organisation so all reviews are impartial. The site covers all areas of hi-fi, including listening tests of amplifiers, loudspeakers etc., interviews, monthly editorials, book reviews, plus DIY and Tweaking. The site is rich in content and definitely worth a look.

www.tnt-audio.com

---

**AWAY IN A MANIA**

Sunday 30 June sees the second Audiomania jamboree which will be held at the Castle Sports complex in Spalding, Lincolnshire. Described as being "the friendly show for anyone interested in audio" admission is £2 and there will be a wide range of stalls ranging from audiophile recording specialists, Vivante and Direct Disc to exhibitors such as Transcription Horns and Icon Audio. Classic audio products are, of course, also on sale.

For further details ring 01775 680030 after 1 pm

www.nightsstormer.com

---

**STORMING AHEAD**

www.nightsstormer.com is one great loudspeaker DIY site, created to assist in the design and build of home constructed loudspeakers. It has an easy to use audio glossary, covering all those hi-fi terms that you may not fully understand. There is a frequently asked questions section that covers some very fundamental topics and a useful conversions and formulas page to save you scouring through your copy of Loudspeaker Design Cookbook. Also, it details numerous audio articles and technical data.

www.nightstormer.com

---

**CROSS CHANNEL TUBES**

Take hi-fi back into the dark ages with tsf.com. This is a French site that specialises in old radios and phonographs, and even if this isn't your cup of tea it is definitely worth a look. Don't worry if your French isn't up to scratch, just click on the British flag in the top left hand corner of the home page. www.tsf.com is a large site with huge amount of information, detailing lots of vintage equipment, the history of wireless and of 78 rpm records. It has lots of hints and tips on antique radios and phonos. If you have a old Bakelite radio from the Thirties that your grandfather gave you, this is the site to use to find out a bit more about your heirloom. This is a proper museum site. Just have a look at this Pericaud battery radio of 1922 for all example of what to expect.

www.tsf.com

---

**JENSEN INTERCEPTION**

For all DIYers and tweakers looking for an upgrade path, Audio Specialists have announced that they are the UK distributors for the Tobias Jensen range of products. The line includes aluminium, tin, copper and silver foil audio signal capacitors. The company also offer a full service for Quad II amplifiers and a rewiring service for all vintage tube amps using high purity silver wire throughout. For details contact the company at:

audiospecialists@talk21.com

---

**LONDON LOVES**

On a recent search around the web we came across this interesting site. As the name suggest it is a band of brothers located in the London area who have a passion for the world of DIY Hi-Fi. The website, created in 1997, discusses members' projects, interesting tales from the world of audio, links to other sites of importance and they have a bi-monthly newsletter. It's open to all comers as long as you have an interest in DIY! The great thing about this group is they meet up regularly at various venues around London for discussions. No doubt great alliances have been forged within this friendly Hi-fi Circle. Keep it up, chaps.

www.earthcurrents.com/london-live
Upgrading the Njoe Tjoeb 4000 Valve CD Player - Are Upgrades Really Worth it?
Neville Roberts

In DIY Supplement No.64 enclosed with the April 2002 issue of Hi-Fi World, I reviewed the impressive A'H! Njoe Tjoeb 4000 valve CD player from the Dutch firm of DE HIFIWINKEL who design and supply the A'H! range of products (their web site can be found at http://www.hifi-notes.com and their companion site at http://www.hifi-planet.com for their own designed A'H! products). The standard model I reviewed is fitted with the A'H! valve output stage, AC NoiseKiller and SuperCrystal oscillator.

The 'Super' version includes, amongst other things, quality feet, a quality mains lead, CD Mat and Tjoeb Ribs for extra damping on the valves. All these items are available as upgrades, as well as special op-amps, as well as the latest item to emerge from the A'H! engineers - a TjoUpSampler. But do these sort of upgrades really make a noticeable difference or are the manufacturers exploiting the inveterate 'tweaker' in us all? I decided to put all the claims to the test.

Before proceeding, I have heard a number of people express concerns about after sales service if they buy products from another country. In my experience of this company, the courteous service I have enjoyed has been nothing short of superb with items turning up as quickly or quicker than if they had been ordered locally! I would argue that it is easier to place an order via the Web than driving into town and finding somewhere to park, etc. Incidentally, if any readers do not have access to the Web, the company can also be contacted as:

DE HIFIWINKEL BV
Stratumseind 67h
5611 NC Eindhoven
The Netherlands
Tel +31 40 211 33 88
Fax +31 40 211 77 34

Anyway, following an exchange of emails with Herman van den Dungen, a founder of the company, a package of 'goodies' duly arrived.

My first task was to fit the new feet (aka 'Tjoeb Sjoes'). Knowing how important it is to decouple the equipment from its surroundings, I was not surprised to experience a subtle but discernable overall improvement in clarity, especially at higher volumes, with the new feet.

This was further to an improvement in clarity I had achieved previously by fitting a bituminous sound-deadening panel to the inside of the lid. The lid of the Njoe Tjoeb 4000 is simply constructed from a thin sheet of metal folded to form the top cover. The addition of a sound-deadening panel noticeably improved detail, especially at lower frequencies. The sound-deadening material can be purchased from car accessory shops and it is self-adhesive and laminated with metal foil.

Turning my attention to the mains lead, it was a relatively straightforward job to replace the standard two-core lead with the 'AC Direkt' power cord supplied by Herman. Further listening tests revealed a general cleaning up of the sound, with better imaging and detail.

Next up was to fit the 'Tjoeb Ribs' to each valve. These cost just over £3 for both valves and consist of 3 rubber rings that fit over the glass of each valve, spaced to give a sinister 'Dalek' look! The theory behind this is that microphony induced by external vibrations is effectively exterminated. These rings are relatively easy to remove and refit quickly. Repeating this process and playing the same piece of music a number of times demonstrated an overall tighter sound with better imaging, predominantly in the lower registers. Again, this was more evident at higher volumes, as you might expect.

All the above upgrades collectively yielded subtle, but clearly noticeable improvements. Indeed, removal of any one of the above upgrades, although a time consuming process, revealed that each item makes a positive contribution to the listening experience.

Moving on to the next item out of the box, I fitted the CD Mat to the copy of Vivaldi Violin Concertos, Op.6 (Decca 455 653-2) I had been using for the other tests and hit the 'Play' button. Before I proceed, I'd better detail.
Connecting the power cable

describe where I'm coming from. Whilst a record is a mechanical device, a CD is simply storing numbers that are read by a laser and these numbers are used to define an analogue signal so any changes to the mechanical properties of the CD won't affect the sound, right? WRONG! This is one of those startling improvements that seem to defy logic. Strings sounded sweeter - less harsh yet clearer - more accurate in detail without sounding clinical. The cellos' bass registers were more refined and accurate. This is, in my opinion, a 'must have' addition for any make of CD player and at a little over £10 it is excellent value.

Next for consideration were the op-amps. The Njoe Tjoe 4000 is supplied with Burr Brown OPA604, but upgrades are available in the form of an Analog Devices AD825 and Burr Brown OPA627; the former is based on a plug-in 'mini board' that sports two silver mica capacitors in addition to the op-amp. A pair of AD825s cost around £19 and the OPA627s cost just under £32.

The two op-amps are fitted in sockets on the PCB to the left of the Philips DAC chip, and index finger and pulling. Due to the force you will need to exert to hold it, it will flip round as it comes out of the socket and impale itself in your thumb. This is surprisingly painful and tends to elicit little sympathy from other members of the household!

The correct method is to gently slide a small screwdriver between the IC and the socket on one side and gently prise it a little from the socket. Repeat on the other side. Do this alternately until the IC becomes free and then lift it out. To insert, carefully position the IC on the socket being careful to align the pins with the holes using a screwdriver before pressing down. If you don't do this, you run the risk of bending a pin. Should this happen, don't despair. Remove the IC and straighten the pin(s) using a small pair of flat bladed pliers and try again.

Back to the listening tests. Changing the original OPA604s to the Analog Devices AD825, I ran the player for a while to allow the new devices to run-in, as recommended by AH! I then repeatedly swapped over the devices while listening to the first track of BWV527 on Bach Trio Sonatas (Hyperion CDA66843), which has an oboe, a violin and an organ providing the bass line. The 825s yielded a sound that was warmer than the 604s. A very easy sound to listen to - bright, yet laid back, blending the instruments together making you feel the performers were working together and enjoying the music.

Repeating the test with the 604s up against the 627s, the latter device produced a cleaner sound, more detailed with considerably better imaging than either the 604s or the 825s. The bass was tighter and well controlled. Overall, there was a greater sense of realism, with the performers being there with me in the living room. The fingering on the oboe was clear and I could easily hear the valves on the instrument closing with a gentle 'click' in the solo passages! A friend summed up the effect when he exclaimed, "Gosh Neville, your CD player is sounding more vinyl"!

Returning to Vivaldi and the last movement from RV105 on a Harmonia Mundi CD HCX3957046 entitled "Seven Concertos", there was startling clarity with all the instruments. I could hear all the ancillary mechanical noises from the instruments, such as the harpsichord, bringing striking realism to the sound.

For me, there is a clear winner in the 627s, given the kind of music I listen to. I felt the sound of the 604s almost too warm - to the point of melting! However, I can see someone who is into jazz in a cool night club with a smoky atmosphere preferring the easy sound of the Analog Devices. Their brighter
CLASSIC TURNTABLES

Technical & General
P.O. Box 53, Crowborough, East Sussex TN6 2BY
Tel: 01892 65 45 34

The original specialist source of spares, replacements and expertise for the classic turntables. Years of actual experience and comprehensive range of parts (originals and re-manufactures), manuals, ancillaries. No dubious "improvements" - no harmful modifications. Our specialties: Connoisseur, Garrard, Goldring, Lexicon, S.M.E., Thorens, Watt, Ortofon, Shan, Cambridge and styli for 78s, Mono LPs, Stereo LPs.

COMPONENT SUPPLIERS

Audio-Links
7 Fairmont Crescent, Scunthorpe, North Lincolnshire DN16 1EL
Tel: 01724 870432
Fax: 01724 870540
Email: audio-links@ukonline.co.uk

Extensive stock of specialist audioophile components for valve and solid state enthusiasts. Supplier of the largest range of high-end audio volume controls in Europe. 30 page catalogue - Free via e-mail or £30.00 posted.

LOUDSPEAKER KIT SUPPLIERS

Audio Note (UK Ltd)
Unit C, Peacock Ind. Est, 125-127 Daventry Road, Hove, East Sussex BN13 1SG
Tel: 01273 220511
Fax: 01273 317398

Suppliers of a large amount of components for the Audioophile Kit builder. Valve amplification data and vintage circuits is also available. See the double page spread in the back section of the main issue for extra & more detailed information.

Falcon DIY Speakers
Falcon Acoustics Ltd., Tabor House, Norwich Road, Mulbarton, St Albans, Herts AL2 3TS
Tel: 01508 578272

UK distributors of FOCAL drive units & kits, and ETON loudspeakers. Super low noise discrete regulators. A 50-page valve catalogue is available on request. Major stockists of the excellent Billington Gold brand. Contact us for quotations - attractive price on larger orders.

IPL Acoustics, Chelsea Villa, Torr Park, Ilfracombe, North Devon, EX34 8AY
Tel/Fax: 01271 867 429
Website: www.iplacoustics.co.uk

IP Acoustics supply a range of 7 Transmission line, 3 conventional speakers, 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 cones drivers. Also included is a range of capacitors, inductors and quality cable.

Write, phone or email for a free catalogue. Mail order only.

SPECIALIST UPGRADE SERVICES

Audio-Com (UK)
Unit 14 Pier Road
Pembroke Dock
Pembrokeshire, SA72 6TR
Tel: 01646 685601
Fax: 01646 685602
Website: www.audiocom-uk.com
E-Mail: enquiries@audio-com-uk.com

Release the full potential of your digital source with CD/DVD upgrades from audio-com Available is the highly acclaimed "SUPERCLOCK" master clock oscillator (Dave Berrirnan fits the S-Clock to the Teac VRDS-10SE and comments "there was not one area of music reproduction which didn't improve")

SUPERCLOCK 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, 28 Banks Avenue, Golcar, Huddersfield, West Yorks HD7 4LZ
Tel: 01484 654650/844554
Fax: 01484 654599
E-Mail: willson@zoo.co.uk

We stock over 2,500 different types of valves. N.O.S. and New. Please send a S.A.E. for full list. No charge for matching. Most major credit cards accepted.

Watford Valves
3 Ryhill Close, Brickett Wood, St Albans, Herts AL2 3TS
Tel: 01923 893270
Fax: 01923 679207

Specialist in new old 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, Siemens, Telefunken, RCA and others.

We supply a wide range of electronic valves, tubes and semi-conductors in the UK by original UK and USA manufacturers. Obsolete types are a speciality. Telephone or fax for an immediate quotation.

Billington Valve Ltd.
1 Elgin Mills Trading Estate, Billington, West Sussex RH14 9EZ
Visitors by appointment only please
Tel: 01403 785319
E-Mail: sales@bel-tubes.co.uk
Website: www.bel-tubes.co.uk

Specialists in guaranteed new old stock, current production valves & tubes. Also CRT for audio, hi-fi (as well as industrial uses). A vast archive of vintage and obsolete types including limited quantities of Mullard, GE, Siemens, Philips, Brimar, Telefunken, RCA and others. Large stocks of Chinese, Russian, EL and Tesla etc. A 50-page valve catalogue is available on request. Major stockists of the excellent Billington Gold brand. Contact us for quotations - attractive price on larger orders.

Audio Specialist
W Marriott
75 Stonyford Road, Sutton-In-Ashfield, Nottingham, NG17 2DL
Tel: 01623 461128
Fax: 01623 461128
E-Mail: wmarriott@talk21.com

Transformers. One of the worlds widest range manufactured. Mains chokes, output transformers etc. From the standard HE M6 to the awesome Hi-B nickel double C-Core's wound with the superb 6N cardas copper cable. All types of transformers manufactured. One off's a speciality. A superb range of accessories and components supplied. We do not stock cheap copies of our transformers. All our transformers are available for that special project. All transformers are built to BE demanding standards. We are always looking for work. No catalogue £3.50 redeemed on first order over £30.00

To advertise in the Hi-Fi & Component Suppliers page please call 020 8644 5740
E-Mail: diyadverts@ihifi-world.co.uk
feature

The new op-amps awaiting trial!

yet smooth sound may suit the smaller loudspeaker set-up that can be rather clinical.

Next to be auditioned were alternatives to the supplied Philips Jan 6922 valves. In my previous article, I compared these against similar offerings from Sovtek and Harma. This time, it was the turn of some Russian Navigator 6H23 NOS valves and Siemens E288CCs supplied by Herman, costing £38 and £130 a set respectively. Both sets were allowed to burn in for 24 hours by running them with a CD playing continuously before commencing the listening tests.

The only way to thoroughly test these, as with my previous valve-swapping experiments, was to undertake the lengthy process of exchanging the valves and allowing them to warm up fully before listening again. It was a credit to the rugged valve bases that they have shown no signs of deterioration throughout these tests.

So how did they compare against the Philips? I have to say that I really liked the Navigators. The bass was more controlled and there was much better detail, with a very similar sound to the Harmas - lively and energetic. As for the taller Siemens with their gold-plated pins and higher heater current, could they justify their hefty price tag? They too had better control over the bass than the Philips and excellent detail, but a much fuller, open sound. Strings were easier to listen to and the overall sound was more refined. These valves took everything in their stride. Nothing was going to be a problem to them and they handled whatever the CD threw at them effortlessly. They were good and they knew it! My verdict - if you can afford it, try the Navigators - you won't be disappointed.

Finally, it was the turn of the TjoUpsampler to come under the spotlight. Priced at about £205, this is a 24/192 DAC/upsampler which replaces both the op-amps and the Philips DAC chip and consists of a PCB and a 22 pin connector 'on stilts' that fits into the two op-amp sockets. The six pins in the middle of the connector have no connection and the DAC socket is left vacant - this can be seen on the left hand side in the photograph. In addition, the output from the drive mechanism board is unplugged from the Tjoeb board and plugged into the Upsampler which, in turn, connects into the now vacated Tjoeb board socket. This may sound somewhat complicated, but is, in fact, a quite straightforward process.

Another subtle upgrade? I think not! The effect was like removing a veil from the front of the sound stage. All the detail was there - I could hear the breathing of the solo violinist in the aforementioned recording of Vivaldi Op.6. Image placement was considerably more accurate - open and spacious, with superb depth. Bass was more extended, yet tighter. Allegros were altogether more thrilling and exciting - there was more going on. Playing a variety of recordings confirmed my initial assessment. Choral music is particularly challenging, as this can often sound muddy. Not so with the upsampler! My recording of Faure's Requiem (Decca 436 486-2) left my record deck quaking in the corner fearing it had met its match at last! This will definitely convince even the hardened vinyl addict that there is much more on a CD waiting to be discovered than we thought possible. This is, in fact, reminiscent of records in the 70s when huge strides were made in cartridge design.

In summary, all of the options produced a noticeable improvement in sound quality. Overall, the CD Mat would probably win the prize for greatest improvement at lowest cost, whatever your CD player. This item, along with the ribs, feet, mains cable and a digital output transformer are all included with the 'Super' model for an additional £65 or so, which is a very worthwhile investment.

A valve upgrade is definitely worthwhile, with the Siemens as worthy champions and the Navigators a good value runner-up. Clearly, the TjoUpsampler catapults the player into a different league, but if you can't stretch your budget, the op-amps should very much be considered. One of the beauties of the Njoe Tjoeb 4000 is that you can upgrade in stages, as funds permit. In any case, this is half the fun of Hi-Fi — saving up for the next upgrade. ■ ▲
The bulk of this book contains data and circuits concerning the three best known MO Valve power tetrodes, the KT66, KT77 and KT88, (the KT77 was GEC's answer to Mullard's EL34), some data on the FX4 and PX25 triodes, plus some other stuff. I say this because I think that most people will buy this book for reprinted MOV data sheets and application notes for the aforementioned valves. Being a valve nerd I have originals of the KT66 data, but not for the KT77 or KT88. I managed to get the originals from MOV when they were still open. God knows why I didn’t ask for the 77 and 88 at the same time!

In relation to their closure, let me quote a phrase from first section of the book, entitled “Audio Valves in Competition With Semiconductors”: “However, from about 1975 onward, there has been a resurgence of interest in valves . . . . Typical British “grey men in grey suits” management - close the company just as sales are about to pick up again. Anyway, this preliminary section basically gives a case as to why valves were regaining popularity at the time.

The first full section concerns preamplifiers of various types and there are some fairly whacky things in there, including some pointers as to designing a low noise MC phono input sans transformer, using a high transconductance valve, the 5842 (very similar to the 417A), not a transistor as the input device. There is also a whole load of information regarding equalisation, tone controls, filters and suchlike.

Two whole preamplifier circuits are provided. These may or may not be of interest to the reader as they are of the “old style” with tone controls, and various scratch filters and so on. I believe, however, that given a garnish of high quality components and a flambé of minor tweaks they would sound pretty good.

To most readers the following sections will be the ones read with a torch under the duvet. These are the reprints of the MOV datasheets and applications notes. The data is very comprehensive and concisely presented. Full curves are given for each valve and various operating conditions, with their attendant distortion figures and power outputs provided too. There is an emphasis upon Ultra Linear operation of the tetrodes and plots are given which show the relation of UL (Ultra-Linear) tapping point to IM and THD figures, very interesting. There are circuits given for the valves, including a huge parallel push-pull KT88 design; this one should be called the MOntser.

The power goes up and up through the book, reaching a climax with the KT88 MOntser, then you turn the page and find details describing two of the finest ever audio triodes, the PX4 and PX25. An excellent book for all valve heads. AG U

ORDER FORM

Please send (Code No.) (enter codes clearly)

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.P. Ltd. 12A Spring Gardens, Newport Pagnell, Milton Keynes, MK16

UK postage

Available from our World Library GEC Audio Tube Data paperback 120 pages 135mm x 215mm book code 1780 price £14.95 + £2.00

ORDER ON LINE Website: www.worldaudiodesign.co.uk E-Mail: nick@worldaudiodesign.co.uk Please contact us for overseas P&P charges. Allow 28 days for delivery. All orders subject to availability. If further space is required please attach separate sheet.
**300B OR NOT 300B - THAT IS THE QUESTION**

Dear Andy,

Congratulations on your 300B PSE Monobloc Amplifiers.

As I am about to purchase a pair of the above amplifiers, I thought I would write to you, to ask a few questions. The reason I do this is because I have about 60 genuine 6SN7WGTA valves from various manufacturers.

What modifications are required to the above amplifier circuits, to enable me to substitute the ECC82 valves with 6SN7WGTA valves? If it requires a different voltage and current than the standard transformer supplied with the kit, could I have the power transformers wound locally, or could they be supplied with the kit? Also, could the value of the resistors in the power supply be recalculated?

I'm hoping that by substituting the ECC82 valves with 6SN7WGTA will not have a loading effect on your circuit as to alter the overall performance. I'm hoping that because the role of the dual triode valve, configured as a dual cathode follower, placed between the 6AU6 pentode and the 300Bs, could be replaced by a 6SN7 if the power requirement of the 6SN7 is provided, or will the performance of the 6AU6 pentode be affected by my proposed modification? I hope not, as I have plenty of 6SN7 valves that I can use as replacements should one ever become faulty.

If you feel a circuit modification of this nature is not just a matter of altering a few resistors in the valve circuitry and in the power supply and will result in changes in circuit impedances and parameters, then I will forget the idea.

Hope it's not a complicated modification and I eagerly await your reply.

Richard Lawrence Lewellin, Australia

Dear Richard,

The 6SN7 and ECC82 valves are quite similar in their electrical parameters and as 1) The driver valve is operated as a cathode follower and,
2) The 300Bs obtain a large proportion of their bias from their cathode resistors, no modification to the audio circuit will be necessary. The 6SN7 will perform excellently in this respect. The heater voltages are the same at 6.3V but the heater current of the 6SN7 is 600mA. The heater winding of the mains transformer should be OK with this, however. Your biggest problem is going to be the fact that the ECC82 has a B9A base but the 6SN7 has an octal base so you'll need to make the mounting hole considerably bigger to accommodate it. Unfortunately, there is not a convertor available on the market, which your 6SN7s could plug directly into with no need for metal work changes. Obviously if you are DIY minded you could make one up. The pinouts are also different. As you may be aware we have used the 6SN7 in our new 2A3 PSE. The valve has a huge following in single ended amplifiers and once you hear it you'll know why. Have a look at the accompanying circuit diagram (p105) which incorporates the 6SN7 in place of the ECC82.

Good luck! AG
**LANGREX SUPPLIES LTD**

DISTRIBUTORS OF ELECTRONIC VALVES, TUBES AND SEMI-CONDUCTORS AND I.C.S.

1 MAYO ROAD * CROYDON * SURREY CR0 2QP

PHONE 020 8684 1166

24 HOURS EXPRESS MAIL ORDER SERVICE ON STOCK ITEMS

E-MAIL LANGREX@AOL.COM

---

**A selection of our stocks of New Original Valves/Tubes.**

Many other brands available.

---

<table>
<thead>
<tr>
<th>STANDARD TYPES</th>
<th>SPECIAL QUALITY TYPES</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECC83</td>
<td>E.J.</td>
</tr>
<tr>
<td>ECC85</td>
<td>RFT</td>
</tr>
<tr>
<td>ECC88</td>
<td>BRIMAR</td>
</tr>
<tr>
<td>ECC89</td>
<td>MULLARD</td>
</tr>
<tr>
<td>ECC181</td>
<td>MULLARD</td>
</tr>
<tr>
<td>ECC83/A</td>
<td>MULLARD</td>
</tr>
<tr>
<td>EL36</td>
<td>PHILIPS</td>
</tr>
<tr>
<td>EL37</td>
<td>MULLARD</td>
</tr>
<tr>
<td>EL37</td>
<td>MULLARD</td>
</tr>
<tr>
<td>EZ81</td>
<td>MULLARD</td>
</tr>
<tr>
<td>EZ80</td>
<td>MULLARD</td>
</tr>
<tr>
<td>EZ39</td>
<td>MULLARD</td>
</tr>
<tr>
<td>E120/37</td>
<td>MULLARD</td>
</tr>
<tr>
<td>5Z4</td>
<td>MULLARD</td>
</tr>
<tr>
<td>6BW7</td>
<td>BRIMAR</td>
</tr>
<tr>
<td>12BH7</td>
<td>BRIMAR</td>
</tr>
<tr>
<td>12E1</td>
<td>STC</td>
</tr>
<tr>
<td>13E1</td>
<td>STC</td>
</tr>
<tr>
<td>807</td>
<td>HYTRON</td>
</tr>
<tr>
<td>811A</td>
<td>RCA</td>
</tr>
<tr>
<td>6080</td>
<td>MULLARD</td>
</tr>
</tbody>
</table>

---

**AMERICAN TYPES**

| 5R4G | RCA | 7.50 |
| 5U4G | SYLVANIA | 15.00 |
| 5Y3GT | SYLVANIA | 5.00 |
| 6B4G | G.E. | 7.50 |
| 6FQ7 | SYLVANIA | 22.00 |
| 6L6G | G.S.Y. | 20.00 |
| 6L4/A | G.S.Y. | 15.00 |
| 12AX7/WA | SYLVANIA | 6.00 |

---

**OTHER TYPES**

| ECC82 | TCL | 4.00 |
| ECC82/P | RFT | 3.00 |
| ECC84 | RFT | 6.00 |
| ECC85 | RFT | 8.00 |
| ECC86 | RFT | 8.00 |
| ECC87 | RFT | 6.00 |
| ECC88 | RFT | 10.00 |

---

**WORLD AUDIO DESIGN UPGRADE**

Many readers have enjoyed the huge improvements made to these fine W.A.D. kits simply by fitting specially selected valves. They are guaranteed to provide tighter bass with improved detail and lower noise with increased dynamics. So take advantage of this special offer and make a great audio upgrade whilst stocks last.

**KIT 6550 & KAT 6550 Upgrade**

4 x 6550C Svetlana matched

2 x ECF80 GE

2 x 6U4G Russian

£99 the set + vat & carriage

**KIT 34 & KAT 34 Upgrade**

4 x EL34 Svetlana matched

2 x ECF80 GE

2 x 6U4G Russian

£55 the set + vat & carriage

**KEL 80 MonoBlock Upgrade**

8 x EL34 Svetlana matched

2 x 6AU6 WC Philips

2 x 6H6B7W Philips

£90 the set + vat & carriage

**300B PSE MONOBLOC Upgrade**

4 x JJ Tesla 300B matched

2 x Philips 6AU6 WC

2 x Philips ECC82

2 x Harma 6U4G

£284 the set plus vat & carriage

---

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 679207

www.watfordvalves.com
300B PSE MONOBLOC
CIRCUIT DIAGRAM

SIGNAL CIRCUIT - modified to incorporate 6SN7 at V2 position

VALVE PIN LAYOUT

Views are from underneath valve or valve holder
b, b1, b2 - heater b, b2 - heater centre tap e = cathode a = anode g = grid n = no connection
WINTER NOISE

AUDI KITS, MODULES, COMPONENTS

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

http://homepage.nltworld.com/david.white38
Email: david.white38@nltworld.com
Tel: 0141-942-2460 (until 9pm)
Fax: 0141-587-7377

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 & MBS, and a pick of the best from other manufacturers.
100+ CROSSOVER NETWORKS: - Active & Passive, Components, Accessories, COMPONENTS.
SOLEN Polypropylene capacitors, 0.1µFd to 100µFd.
Polyester and Polycarbonate Film Capacitors, 0.1µFd to 10µFd.
ALCAP Reversible Electrolytic Capacitors (Non-Polar), 50v, 11µF & Low Loss, 2µF, to 600µF.
FALCON Custom-wound Inductors.
AIRCOGED 0.56 - 1.25mm wire; IRON DUST, 1mm wire.
TAPPED INDUCTORS: 0-10mH in 1mH steps & 0-1mH in 0.1mH steps.

SUMMER SALE
Valid to the end of August 2002
10% off all books and magazines
and
15% off Maximus and C800 II (Antea) Total Kits. (whilst stocks last)

Suppliers to the Trade Since 1972

Visit our Web Site at www.falcon-acoustics.co.uk

New Focal Unit Range
as pioneered in the Utopia range of systems.
Price List & Unit Specs FREE on Web site - available in pdf format

Audio Amateur Publications
Back year sets of Speaker Builder, Audio Amateur & Glass Audio, plus the Audio Anthology Set. Altogether 68 books and 58 Audio Amateur's magazine year sets. 2001 year sets on CD-R only

Page 106 August 2002 Hi-Fi World DIY Supplement
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.

English Analogue

Supplier of quality second-hand classical records
Reasonable prices for truly collectable original vinyl from the 1950s to the 1970s. Labels include:

- DECCA - SXL, SDD, SET, RCS, SPA, PFS
- HMV - ALP, ASD, SAN, SLS
- COLUMBIA - 33CX, SAX
- RCA - SB - 2000/6000, VICS, SER
- DEUTSCHE GRAMMOPHON, PHILIPS
- etc, also available

To increase your satisfaction, all the records sold are cleaned and audibly checked before being sold, free of charge, as well as a guarantee. The records are also supplied with a new innersleeve, as well as the old, to ensure a high standard. In addition, if you have any classical LPs you wish to sell or want a free catalogue, please contact:

3 Naseby Rise, Newbury, Berks, RG14 2SF, England
Tel: 44 (0) 1635 40242/44 (0) 7786 060994
Fax: 44 (0) 1635 524239

www.multiplex.co.uk/Records

High Efficiency Speaker?

Audio Classics "C"

93 dB / Watt
High Mass Cabinet
Pleated Surround / Paper Cone
Full Range Main Unit / Very Easy Load

Designed with Valves and Vinyl in mind.

Tel / Fax 01942 25 75 25
www.audioclassics.co.uk/modelc.htm
There's More!
For all the latest stock please check our
WEB SITE
hifi-tradingstation.com
UP-DATED DAILY

Sonus Faber Signum £1999 £1699
Sonus Faber Electra Amator II £2698 £2198
TDS Audio Transformer £349 £286
Thetis Pro/Line Converter £1449 £1099
Thetis Dredgat S £6999 £5176
Thetis Cosarona Pre £4788 £3596
Thetis Cosarona (Multi) £5632 £4499
Thorens TD2000 (CD player) £1000 £746
Triangle Hux 4S £325 £247
Triangle Corne XS (Slight damage) £400 £177
Unison Research Unico (Manual) £795 £697
Unison Research Unico (Remote) £895 £747
Unison Research Power 35 £1500 £1097
Unison Research Performance One £1595 £1196
Unison Research Simply 4P £1595 £1197
Unison Research Simply 4 £1595 £1197
Unison Research 58 £2950 £2346
Unison Research Feather 1 £2950 £2147
Unison Research Feather 1 Remote Control version £845 £647
Unison Research Power Supply (For Feather 1/Simply Phono) £350 £297
Wilson Cab speakers (Black Laminite) £5495 £4125
Wilson Cab speakers (Gloss) £6890 £4995
Wilson 6 & 510 (Ex-demon) £19998 £14998
Wilson WIN 1 £5801 £4996

The Hi-Fi Company's
Trading Station
35 Cowgate
Peterborough PE1 1LZ

World Radio History

There's More!
For all the latest stock please check our
WEB SITE
hifi-tradingstation.com
UP-DATED DAILY

0870 608 8211
FAX: (01733) 358141
email: audiotrader@talk21.com
SHOP HOURS: TUES - SAT: 10am - 5.30pm
CLOSED ALL DAY MONDAY

Nothing to Pay For Six Months then choose either Interest Free Settlement or competitive repayment terms*
Midland Audio X-change are looking for Audio Research, Krell, Mark Levinson, Naim Audio, Theta, Wadia, cash paid call John Roberts on 01562 822236 now!

Midland Audio X-change is looking for good used British & American Hi-Fi

cash paid call John Roberts on 01562 822236

Midland Audio X-change

www.midlandaudiox-change.co.uk
MANA Audio LTD
www.mana.co.uk

"Now I can only say that until I had the Mana equipment table fitted, my hi-fi system was at best half-cooked." Alan Sircom Hi-Fi Choice March '95

For information on MANA products please contact: Unit E, Amtwch Ind. Est. Amtwch, Anglesey Wales. LL68 9BX. Email: post@mana.co.uk
Scales: 01248 751 043 Factory: 01407 830 530 Fax: 01407 830 535

E-Mail: sales@musical-images.co.uk

NOT VALID WITH ANY OTHER OFFERS OR PROMOTIONS E&OE
MAF AUDIO

Burton-on- Trent Staffordshire

For NAD Silver line, Mirage, Bryston, Seleco, Sanyo

Ex dem audio & av equipment

<table>
<thead>
<tr>
<th>Equipment</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bryston 4B ST 250wpc power amp</td>
<td>£2050</td>
</tr>
<tr>
<td>Bryston Bp-25 Pre amp R/C</td>
<td>£1550</td>
</tr>
<tr>
<td>Bryston 9BiXs 5 x 120 wpc</td>
<td>£3300</td>
</tr>
<tr>
<td>Classe 151 integrated amp 150wpc</td>
<td>£1995</td>
</tr>
<tr>
<td>Classe 3 CD player superb sound</td>
<td>£1375</td>
</tr>
<tr>
<td>Dynaudio audience 8 speakers s/h</td>
<td>£1300</td>
</tr>
<tr>
<td>Dynaudio C120 + centre speaker</td>
<td>£400</td>
</tr>
<tr>
<td>NAD 760 av amp dbs. dolby digital</td>
<td>£650</td>
</tr>
<tr>
<td>NAD 550 DVD Player decoded</td>
<td>£550</td>
</tr>
<tr>
<td>EVO int amp 75wpc R/C new</td>
<td>£775</td>
</tr>
<tr>
<td>EVO Cd player bal out &amp; se</td>
<td>£650</td>
</tr>
<tr>
<td>Mirage on 7 omnispeakers</td>
<td>£2000</td>
</tr>
<tr>
<td>Mirage on 9 omnispeakers</td>
<td>£1300</td>
</tr>
<tr>
<td>Mirage onc3 centre new</td>
<td>£300</td>
</tr>
<tr>
<td>Mirage onc2 omnispeaker centre</td>
<td>£600</td>
</tr>
<tr>
<td>Mirage FRX 5 Floorstanding speakers</td>
<td>£400</td>
</tr>
<tr>
<td>Mirage micro avs 500 system + sub</td>
<td>£648</td>
</tr>
</tbody>
</table>

On Dem Sanyo PLV30 Projector with Iscan Pro

PHONE 01283 538882 ANYTIME

IAN HARRISON HI-FI

Tel: 01283 702875

9am - 9pm including Sundays

TRADE IN YOUR OLD MOVING COIL CARTRIDGE AND SAVE UP TO 60% OFF THE RRP.

Cartridges & Stylus

<table>
<thead>
<tr>
<th>Cartridge</th>
<th>Style</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Denon</td>
<td>MM</td>
<td>£1300</td>
</tr>
<tr>
<td>Shure</td>
<td>MC</td>
<td>£1300</td>
</tr>
<tr>
<td>Audionote</td>
<td>MC</td>
<td>£1300</td>
</tr>
<tr>
<td>Goldring</td>
<td>MC</td>
<td>£1300</td>
</tr>
<tr>
<td>Sumiko</td>
<td>MC</td>
<td>£1300</td>
</tr>
<tr>
<td>Trans...</td>
<td></td>
<td>£1300</td>
</tr>
<tr>
<td>Figuratio...</td>
<td></td>
<td>£1300</td>
</tr>
<tr>
<td>London...</td>
<td></td>
<td>£1300</td>
</tr>
<tr>
<td>Grado</td>
<td>MD ...</td>
<td>£1300</td>
</tr>
<tr>
<td>Foskans</td>
<td>MD ...</td>
<td>£1300</td>
</tr>
<tr>
<td>Van den Hul</td>
<td>CD</td>
<td>£1300</td>
</tr>
<tr>
<td>Ortofon</td>
<td>MC</td>
<td>£1300</td>
</tr>
<tr>
<td>Audio Note</td>
<td>MC</td>
<td>£1300</td>
</tr>
<tr>
<td>Reson</td>
<td>MC</td>
<td>£1300</td>
</tr>
<tr>
<td>Clear Audio</td>
<td>MC</td>
<td>£1300</td>
</tr>
<tr>
<td>Koetsu</td>
<td>MC</td>
<td>£1300</td>
</tr>
<tr>
<td>Bowers</td>
<td>MC</td>
<td>£1300</td>
</tr>
<tr>
<td>Minidiscs</td>
<td></td>
<td>£1300</td>
</tr>
</tbody>
</table>

Headphones

<table>
<thead>
<tr>
<th>Headphones</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sony</td>
<td>£2700</td>
</tr>
<tr>
<td>Panasonic</td>
<td>£2050</td>
</tr>
<tr>
<td>Denon</td>
<td>£1600</td>
</tr>
</tbody>
</table>

Tonearm

<table>
<thead>
<tr>
<th>Tonearm</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Denon</td>
<td>£1375</td>
</tr>
<tr>
<td>Audio Note</td>
<td>£1375</td>
</tr>
<tr>
<td>Tungsten</td>
<td>£1375</td>
</tr>
</tbody>
</table>

Turntables

<table>
<thead>
<tr>
<th>Turntable</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Denon</td>
<td>£1375</td>
</tr>
<tr>
<td>Audio Note</td>
<td>£1375</td>
</tr>
<tr>
<td>Tungsten</td>
<td>£1375</td>
</tr>
</tbody>
</table>

Accessories

<table>
<thead>
<tr>
<th>Accessory</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nifi News Cartridge Alignment Gauge £5</td>
<td>Milly Zerostat 3 £30</td>
</tr>
<tr>
<td>Nifi News Test Record &amp; Audio Technica Stylos Cleaning Fluid £15</td>
<td>Cleaning Carbon Fibre Brush £14</td>
</tr>
</tbody>
</table>

Hifi, Hi-Fi World

www.nifi.co.uk

All items are brand new and boxed with full UK guarantees. A service is available to display items, but must be arranged in advance. Items are subject to prior ordering. All goods are brand new & a boxed with full UK. All goods are supplied on approval. Sorry, no general catalogue, please phone or write for specific reviews, brochures or prices.

Mail order only from: Ian Harrison, 7 Mill Hill, Repton, Derby, DE5 5GO. Tel: 01283 702875. 9am - 9pm incl. Sundays.
We are best known for our single-ended 300B power amplifiers and power supply upgrades for valve amplifiers, but did you know that we supply complete systems, new and used equipment, and components? We also provide support and servicing for Audio Innovations' valve products. For full information visit www.borderpatrol.net or ring 01273 276716.

passion, grace & fire
www.borderpatrol.net

Selected products from:
BorderPatrol • Living Voice • SME • Audio Note • Cartridge Man • Goldring
Western Electric • Electrofluidics

BorderPatrol Brighton UK
Tel/Fax +44 (0)1273 276716
e-mail: bp@borderpatrol.net
www.borderpatrol.net

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 NEW WEBSITE
www.musonic.co.uk

Trade and Export enquiries welcome
### Transparent Music Link (TML) Balance

**Krell 250P Preamplifier**
**Krell KPS25sc CD Player**
**Musical Fidelity A3 Preamplifier/Power Amplifier Ex Demo**
**Musical Fidelity A3 CD Player Ex Demo**
**Audio Analogue Puccini Se Non Remote Ex Demo**

**Sonus Faber Concertos Piano Black**
**Audio Research D130 Power Amplifier Ex Demo**
**Audio Research LS7 Preamplifier**
**Monitor Audio MA7 Gold Speakers**
**Naim 90.3 Power Amp**
**Naim CDX Ex Demo**
**Naim 250 Power Amp Ex Demo**
**Audiolab 8000S Amplifier**
**Audio Research VT60 Power Amp**
**Copland CD 266**
**Lexicon MCI An Processor**
**Rega Planets CD Player MKII**
**Revox B26i Tuner**

**Agences include Acoustic Energy, Alpha., Atacama, Atc, APcsaa, ct, R Superb Service is Memel Fodelory, NAD, Nam, Nec Gas Plasma Screens, Onkyo, Parasound, Ponte, ProAc, Sonus Systems, Soundstyle Stands, Unique, Stewed Screens, Tannoy, Targa McLaren, Transparent Lesson.**

**Now Demonstrating**

<table>
<thead>
<tr>
<th>Product</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revox B2M Tuner</td>
<td>£395 SH</td>
</tr>
<tr>
<td>Rega Planet CD Player MKI</td>
<td>£315 SH</td>
</tr>
<tr>
<td>Copeland CD 266</td>
<td>£795 SH</td>
</tr>
<tr>
<td>Wilson Benesch Act One Cherry As New</td>
<td>£4500 SH</td>
</tr>
<tr>
<td>Audio Research V740 Power Amp</td>
<td>£950 SH</td>
</tr>
<tr>
<td>Lexicon MCI A/V Processor</td>
<td>£3250 SH</td>
</tr>
<tr>
<td>AudioLab 8000s Amplifier</td>
<td>£330 SH</td>
</tr>
<tr>
<td>Naim 250 Power Amp Ex DEM</td>
<td>£1350 XD</td>
</tr>
<tr>
<td>Naim CDX Ex DEM</td>
<td>£1895 XD</td>
</tr>
<tr>
<td>Naim 90.3 Power AMP</td>
<td>£250 SH</td>
</tr>
<tr>
<td>Monitor Audio Mag Gold Speakers</td>
<td>£1050 SH</td>
</tr>
<tr>
<td>Audio Analogue Bellini Preampli Silver</td>
<td>£295 SH</td>
</tr>
<tr>
<td>Audio Research LST Preamplifier</td>
<td>£795 SH</td>
</tr>
<tr>
<td>Audio Research CA300 Integrated Amp Ex DEM</td>
<td>£2485 XD</td>
</tr>
<tr>
<td>Audio Research LS79 Preamplifier</td>
<td>£895 SH</td>
</tr>
<tr>
<td>Audio Research D130 Power Amplifier Ex DEM</td>
<td>£985 XD</td>
</tr>
<tr>
<td>Audio Research D100.2</td>
<td>£2795 XD</td>
</tr>
<tr>
<td>Sonus Faber Concertos Piano Black</td>
<td>£595 SH</td>
</tr>
<tr>
<td>Wilson System 5.1</td>
<td>£695 SH</td>
</tr>
<tr>
<td>Wilson System 6.1 Ferrari Grey</td>
<td>£4995</td>
</tr>
<tr>
<td>Audio Analogue Puccini Se Non Remote Ex DEM</td>
<td>£475 XD</td>
</tr>
<tr>
<td>Musical Fidelity A3 Preamplifier Power Amp Ex DEM</td>
<td>£1295 XD</td>
</tr>
<tr>
<td>Krell CD DSP CD Player Glass Lid Top Loader</td>
<td>£1695 SH</td>
</tr>
<tr>
<td>Krell KSL Preamplifier</td>
<td>£995 SH</td>
</tr>
<tr>
<td>Krell KPS26 CC CD Player</td>
<td>£995 SH</td>
</tr>
<tr>
<td>Krell 500.3</td>
<td>£2995 SH</td>
</tr>
<tr>
<td>Krell 200P Preamplifier</td>
<td>£1400 XD</td>
</tr>
<tr>
<td>Krell K-Audio CD Player</td>
<td>£1995 SH</td>
</tr>
<tr>
<td>Krell 300 Amplifier As New</td>
<td>£2195 SH</td>
</tr>
<tr>
<td>Transparent Music Link BAL 1M</td>
<td>£145 SH</td>
</tr>
</tbody>
</table>

**SH - Second Hand XD - Ex Demonstration**

### Reference Information

**Oxford Audio Consultants Ltd.**

- **Address:** Cantay House, Park End Street, Oxford OX1 1JD
- **Telephone:** Oxford (01865) 790879
- **Fax:** Oxford (01865) 791665
- **Email:** ox@oxfordaudio.co.uk
- **Website:** www.oxfordaudio.co.uk

**Sales List - June 2002**

- **0% interest free credit**
- **VAT No. 726583133**
- **Central Audio**

<table>
<thead>
<tr>
<th>Product</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acoustic Energy Aegis Centre Black</td>
<td>RRP £145</td>
</tr>
<tr>
<td>Advantage A300 Power Amp</td>
<td>£2800</td>
</tr>
<tr>
<td>Advantage M300 Mono's New Sealed Box</td>
<td>£4600</td>
</tr>
<tr>
<td>Art Audio Quintet Valve Power</td>
<td>£1600</td>
</tr>
<tr>
<td>AudioLab 8000M Monos</td>
<td>£1600</td>
</tr>
<tr>
<td>Audio Research D115 MK11</td>
<td>N/A 115</td>
</tr>
<tr>
<td>Audio Research SP5 MK 11</td>
<td>N/A 85</td>
</tr>
<tr>
<td>Audio Synthesis DAX</td>
<td>£2000</td>
</tr>
<tr>
<td>Audio Synthesis Passion Phono MC Phono Stage</td>
<td>£1300</td>
</tr>
<tr>
<td>Balanced Audio Technologies V950SE Remote</td>
<td>£7950</td>
</tr>
<tr>
<td>Balanced Audio Technologies V900X INT Remote</td>
<td>£4795</td>
</tr>
<tr>
<td>Bks 107 Supreme Ribbon Hybrid</td>
<td>£2500</td>
</tr>
<tr>
<td>Bow Technologies Wazool Integrated Amp</td>
<td>£2500</td>
</tr>
<tr>
<td>Bow Technologies Wazoos Integrated Amp</td>
<td>£2000</td>
</tr>
<tr>
<td>Burmester 001 CD with Volume and Remote</td>
<td>£8775</td>
</tr>
<tr>
<td>Burmester 935 Pre</td>
<td>£3200</td>
</tr>
<tr>
<td>Burmester 956 Power</td>
<td>£5425</td>
</tr>
<tr>
<td>Cary SL-50 Valve Pre</td>
<td>£1400</td>
</tr>
<tr>
<td>Charo Syntar 100 Tower Black</td>
<td>£450</td>
</tr>
<tr>
<td>Copland CTA 505 Power Amp</td>
<td>£1900</td>
</tr>
<tr>
<td>Counterpoint 5 Speaker Surround System</td>
<td>£1500</td>
</tr>
<tr>
<td>Cyrus Disc DAC Master</td>
<td>N/A 595</td>
</tr>
<tr>
<td>Cyrus PSX3R</td>
<td>N/A 195</td>
</tr>
<tr>
<td>Grappt GM 30</td>
<td>£3300</td>
</tr>
<tr>
<td>Hovland HP-100 + MC Phono</td>
<td>£5750</td>
</tr>
<tr>
<td>Hovland Saphiri Power Amp</td>
<td>£7000</td>
</tr>
<tr>
<td>JLM Labs Mini Utopia + Stands</td>
<td>£6250</td>
</tr>
<tr>
<td>Linea SARA + Stands Aftromusia</td>
<td>N/A 256</td>
</tr>
<tr>
<td>Linea Next Classic 3MTs Old</td>
<td>£1000</td>
</tr>
<tr>
<td>Link KAN MARG 1 WEEK OLD</td>
<td>£325</td>
</tr>
<tr>
<td>Link KANOL KIT Silver 3 Weeks Old</td>
<td>£520</td>
</tr>
<tr>
<td>Link Kudenaur Silver 3 Weeks Old</td>
<td>£575</td>
</tr>
<tr>
<td>Link L58K Silver 3 Weeks Old</td>
<td>£525</td>
</tr>
<tr>
<td>Lowman K-351 Cassette Deck</td>
<td>N/A 595</td>
</tr>
<tr>
<td>Magna Digital MB10 Virtual Decoder Ex DEM</td>
<td>£700</td>
</tr>
<tr>
<td>Mark Ratz SD2 12 New Unused</td>
<td>£3500</td>
</tr>
<tr>
<td>Mark Levinson NO28 Pre Balanced Phono</td>
<td>£3500</td>
</tr>
<tr>
<td>Mark Levinson 331</td>
<td>£5250</td>
</tr>
<tr>
<td>Mark Levinson NO29 Poweramp</td>
<td>£1500</td>
</tr>
<tr>
<td>Mark Levinson NO39</td>
<td>£5000</td>
</tr>
<tr>
<td>Martin Logan Ascent</td>
<td>£3250</td>
</tr>
<tr>
<td>Meridian 506 2BIT</td>
<td>£1200</td>
</tr>
<tr>
<td>Meridian 606 DAC</td>
<td>£1500</td>
</tr>
<tr>
<td>Meridian 506 Transport</td>
<td>£1450</td>
</tr>
<tr>
<td>McIntosh MC 2000s</td>
<td>£1500</td>
</tr>
<tr>
<td>McIntosh CIOO Two Box Pre</td>
<td>£650</td>
</tr>
<tr>
<td>McIntosh MR85 Tuner</td>
<td>£1695</td>
</tr>
<tr>
<td>McIntosh C29 Pre</td>
<td>N/A 495</td>
</tr>
<tr>
<td>McIntosh MR73 Tuner</td>
<td>N/A 495</td>
</tr>
<tr>
<td>Michell ISO</td>
<td>N/A 195</td>
</tr>
<tr>
<td>Michell Argo Hera</td>
<td>N/A 395</td>
</tr>
<tr>
<td>Monitor Audio Studio 5 Black Ash</td>
<td>£700</td>
</tr>
<tr>
<td>Monster ZR Reference Speaker Cable 2X10 FT</td>
<td>£350</td>
</tr>
<tr>
<td>Mox Mox 8226 Dvdvto Trans2 &amp; 24/96 kHz DAC</td>
<td>£2950</td>
</tr>
<tr>
<td>Naim Phono Boards Various</td>
<td>£80</td>
</tr>
<tr>
<td>Naim IXO</td>
<td>£250</td>
</tr>
<tr>
<td>Naim NBL Cherry EX DEMO</td>
<td>£7800</td>
</tr>
<tr>
<td>Naim T 15 New Style</td>
<td>£3600</td>
</tr>
<tr>
<td>Naim Credo Ebony</td>
<td>£1350</td>
</tr>
<tr>
<td>Naim CDI MK2</td>
<td>£2000</td>
</tr>
<tr>
<td>Naim NS 2</td>
<td>£800</td>
</tr>
<tr>
<td>Naim 92 MC Phono</td>
<td>£550</td>
</tr>
<tr>
<td>Naim 903</td>
<td>£550</td>
</tr>
<tr>
<td>NHT 1.3A Speakers Piano Black Ex DEM</td>
<td>£500</td>
</tr>
<tr>
<td>NHT 1.1 Speakers Piano Black Ex DEM</td>
<td>£400</td>
</tr>
<tr>
<td>Pink Triangle Da Capo 1307 Filter</td>
<td>£1800</td>
</tr>
<tr>
<td>Pink Triangle Anniversary SME 309 ATC7 LIGHT OAK</td>
<td>£4000</td>
</tr>
<tr>
<td>Prodigy Response SE Black</td>
<td>£2000</td>
</tr>
<tr>
<td>Prodigy CC2 Centre Black</td>
<td>£1000</td>
</tr>
<tr>
<td>Proceed AMP 3 (3 channels) THX</td>
<td>£3000</td>
</tr>
<tr>
<td>Quad 77 Pre + System Remote</td>
<td>£650</td>
</tr>
<tr>
<td>Quad 99 Monoblocks</td>
<td>£1300</td>
</tr>
<tr>
<td>Hega Curassa/MAIA Pre Power</td>
<td>£1000</td>
</tr>
<tr>
<td>Revella Ultima Gm Piano Black + stands</td>
<td>£8000</td>
</tr>
<tr>
<td>Rog ER404 Integrated Valve</td>
<td>£2500</td>
</tr>
<tr>
<td>SAT DCG 24/38 kHz With Upsampler New Sealed Box</td>
<td>£995</td>
</tr>
<tr>
<td>Sony TA-N9000ES 5 Channel Power AMP</td>
<td>£1000</td>
</tr>
<tr>
<td>Sony SACD 1</td>
<td>£4000</td>
</tr>
<tr>
<td>Sony DVP-S7700 DVD Multi Region</td>
<td>£1500</td>
</tr>
<tr>
<td>Sonus Faber Concerto Grand</td>
<td>£1800</td>
</tr>
<tr>
<td>Piano Black Marble Base</td>
<td>£2000</td>
</tr>
<tr>
<td>Std Turntable SME 3009 Shure V15</td>
<td>N/A 195</td>
</tr>
<tr>
<td>Sudden A21 Integrated</td>
<td>N/A 195</td>
</tr>
<tr>
<td>Tannoy Meridian 3Q</td>
<td>£250</td>
</tr>
<tr>
<td>Tannoy Lancaster 15 Monitor Gold</td>
<td>N/A 995</td>
</tr>
<tr>
<td>Targa Labs RSC Master Generation 2 Balanced 3MR</td>
<td>£1200</td>
</tr>
<tr>
<td>Teac P30 Transport</td>
<td>£1750</td>
</tr>
<tr>
<td>Teeta Carmen CD/DVD Transport Black</td>
<td>£3400</td>
</tr>
<tr>
<td>Teeta Data 11 Transport AT</td>
<td>£400</td>
</tr>
<tr>
<td>Van Den Hul Revelation HB 2X 1.5 PAIR</td>
<td>£800</td>
</tr>
<tr>
<td>Wadia 630</td>
<td>£795</td>
</tr>
<tr>
<td>XLO 4.1 Sig Digital Cable 1 MTR</td>
<td>£395</td>
</tr>
<tr>
<td>Yamaha SW 160 Subi</td>
<td>£275</td>
</tr>
</tbody>
</table>

**Central Audio**

**Quality Used Equipment, Bought, Sold, Part Exchange**

**URGENTELY REQUIRED Linn, Naim, Mission, Oxford, Monitor, Cash Waiting**
Sound Investment

If you have invested expertise and money in building up a sound system to your own unique specifications, then why compromise with indifferent housing units?

Fi-Rax offers a new dimension in audio visual racking - from a range of standard designs to the flexibility to custom create a unit to suit your particular sound system and lifestyle.

*High quality aluminium construction.  
*Finished to your choice.  
*Fully adjustable 8mm glass shelving.  
*Sound isolated on shelving/feet.  
*Custom created to suit your system.  
*Free delivery throughout the UK.  

Fi-Rax - a sound investment for those who want the best from their equipment.

Are you making the right connections?

Send for Britain's biggest catalogue of specialist cable and connections.  
All available by mail order.
Phone 020-8942 9124 or clip the coupon for your Free copy.
www.custome-cable.co.uk

CUSTOM CABLE SERVICE
PO Box 4007, London SW17 8XG

Soundcraft HiFi.com

At 40 High Street, Ashford, Kent. TN24 8TE

Our exciting range includes: Arcam, DIVA & FMJ, Chord Electronics, Linn, Lexicon, MC-12, Naim, Rega, Musical Fidelity, Denon, Yamaha, Rotel, B&W Nautilus, PMC, Ruark, Kef, Loewe TV, Hitachi & Pioneer Plasma, Sim 2 DPL!  
Hotline: 01233 624441  Fax: 01233 640333.

AV Separates (l = demonstration)

B&W DM-303 (maple)  £160!  
M/4 A3 Amplifier  £650

Castle Richmond ant/oak  £199!
M/4 HT-6005 Amp+HTP Pro  £3000!!

Castle Harlech ant/oak  £199!
Naim CD5/Cdps  £2999

KEF Q-35 (apply)  £299
KEF Concerto  £299!  
Naim Hi Cap  £599

Linn Index III+ Stands  £199  
Nakamichi MB-10 CD  £399

Linn LK240 Phono amps (pair)  £399!  
Pioneer PDS-707 CD Player  £199!

Linn CD-12 I  £7995!  
Rega Jura's (cherry)  £399!

Linn Minid Mc  £499  
Logic DM-104 Tumbatable  £295!

Marantz DV-7000 DVD  £349!  
Sony DVP S-7700 DVD player  £199!

M/F XA 1 Amplifier  £349!  
Sony DVD S-7700 DVD player  £149!

Sound Visual Furniture

For further information or a free brochure contact: JEMA Distribution, Springfield Mills, Spa Street, Ossett Wakefield WF5 0HS.  
Tel: 01924 277626  Fax: 01924 270759

Special CLEARANCE Sale August 2002

Hi-Fi Separates (l = Ex - demonstration)

B&W DM-303 (maple)  £160!  
M/4 A3 Amplifier  £650

Castle Richmond ant/oak  £199!
M/4 HT-6005 Amp+HTP Pro  £3000!!

Castle Harlech ant/oak  £199!
Naim CD5/Cdps  £2999

KEF Q-35 (apply)  £299
KEF Concerto  £299!  
Naim Hi Cap  £599

Linn Index III+ Stands  £199  
Nakamichi MB-10 CD  £399

Linn LK240 Phono amps (pair)  £399!  
Pioneer PDS-707 CD Player  £199!

Linn CD-12 I  £7995!  
Rega Jura’s (cherry)  £399!

Linn Minid Mc  £499  
Logic DM-104 Tumbatable  £295!

Marantz DV-7000 DVD  £349!  
Sony DVP S-7700 DVD player  £199!

M/F XA 1 Amplifier  £349!  
Sony DVD S-7700 DVD player  £149!

Send to: Custom Cable Service  
PO Box 4007  
London SW17 8XG

Send for Britain's biggest catalogue of specialist cable and connections.  
All available by mail order.
Phone 020-8942 9124 or clip the coupon for your Free copy.
www.custome-cable.co.uk

CUSTOM CABLE SERVICE
PO Box 4007, London SW17 8XG

Are you making the right connections?

Please send us your FREE Custom Cable Catalogue

Name
Address
Postcode

Send to: Custom Cable Service  
PO Box 4007  
London SW17 8XG

Are you making the right connections?

Send for Britain's biggest catalogue of specialist cable and connections.  
All available by mail order.
Phone 020-8942 9124 or clip the coupon for your Free copy.
www.custome-cable.co.uk

CUSTOM CABLE SERVICE
PO Box 4007, London SW17 8XG

Are you making the right connections?
Second hand ex dem deals

Audiophysics Tempo 3 loudspeakers. Excellent in cherry veneer. Bi-wire terminals (an extra £30 option). £395 with all packaging (£3350) £1695

DOM M1200 XL line level amplifier, latest spec. Remote volume control with RC5 handset (not included). Perfect condition. Unboxed £1350

Lexicon MC1 7 channel + sub A/V processor. DTS, AC3, pretty well the works. Boxed, mint, my demonstration unit. Drives the new ACT active cinema packages (currently with the Active 10 based system) with aplomb £(5000) £3500

Monitor Audio "J" loudspeakers. Compact floor standingers finished in real "rosewood" veneer. Originally £600. S/H, good condition but no boxes £150

STAX SRM 007 valve electrostatic headphone energizer. Excellent condition. Months old. Boxed £950 £650

Sugden Masterclass CD player. My demonstration unit in excellent condition. Finished in "Ceylon cream" sort of high gloss paint. Set with full warranty £(2500) £1750

Sugden Steenfort SF60 integrated amplifier. 60wpc. Cost £550 new. S/H boxed. One silver, one black. £300

Nordost specials

All ex demo, trade - ins or special orders that went, um, wrong. All in good condition.

1m pair Magic Interconnect (£50) £40
1m pair Blue Angel Interconnect 5 pin DIN - 2 phone (£60) £40
1m pair Black Knight "KT" leads single XLR to 2 phone (£50) £80
Single length bass line 2m Sub lead (phono) (£30) £20
1m Single length 5m Red Dawn XLR Interconnect (£125.00) £80
Single length 2m Red Dawn (phono) Interconnect (£250) £90
1m pair Quadroflora XLR (in box) (£390) £85
1m pair Quadroflora phone (in box) (£190) £85
0.6m pair Quadroflora 5 pin DIN to RCA (£160) £70
2m audio physio direct cable (£125) £85
1m pair Shure single wire (spades) (£150) £85
1 x 2.5m pair SG control XLR (£70) £50
1m pair Shure single wire (spades) in box £90

Nordost Specials

Items To Clear Some 50% Reductions

Spendor S6's Cherry £950
Rega Planar 2 Turntable £100
BSB Audio Tech. Cart. £150
Rega Mira Int.Amp £395
Musical Fidelity A3.24 DAC £695
Musical Fidelity Nu- Vista Pre Amp Mint £675
Musical Fidelity A300 Cr Power Amp £650
Listening: 2 x Turntable £50
Sugden A21A Int. Amp Latest Spec £695
Spendor 8's Cherry £950
Lexicon MCI 7 channel £1000
Tecno Arros Maple £800
Bow Wazoo XL line level amplifier £250

All M good condition.

1m pair Magic Interconnect (£95) £65
1m pair Blue Angel Interconnect 5 pin DIN - 2 phone (£95) £60
1m pair Blue Angel Interconnect 5 pin DIN - 2 phone (£90) £60
1m pair Blue Angel Interconnect 5 pin DIN - 2 phone (£80) £60
1m pair Blue Angel Interconnect 5 pin DIN - 2 phone (£70) £60

1m pair SG control XLR (£70) £50
1m pair SG control XLR (£60) £40
1m pair SG control XLR (£50) £40
1m pair SG control XLR (£40) £40

1m pair SG control XLR (£30) £20
1m pair SG control XLR (£20) £15
1m pair SG control XLR (£10) £5
1m pair SG control XLR (£5) £3
1m pair SG control XLR (£3) £2
1m pair SG control XLR (£2) £1
1m pair SG control XLR (£1) £0

V’S Hi-Fi Consultants

Visual Hi-Fi

I have to confess it has become difficult to find something to talk about regarding ‘Hi-Fi’, due to the huge upsurge in home cinema, which is the majority of my business these days. This is hardly surprising as I specialise in projectors and with the new true 16:9 format Sim2 HT300 HD at £9k, the average home cinema customer spends more than the average Hi-Fi customer. Nevertheless, a good projector/screen setup can cost as little as £2k/3k, and apart from being so much better for films, one mustn’t ignore it’s advantage when watching music DVD’s of pop/classical concerts/ballets etc, where the sound quality is excellent and can rightly be considered an extension of Hi-Fi, hence my reference to it here. If anyone had suggested to me some years ago that the visual side of an album such as the Eagles ‘Hells Freezes Over’ would have been so much more enjoyable than just listening to the CD, I wouldn’t have believed them, but it’s true! Even more than with a solo artist, as it’s great to watch the individual soloists from the band. Watching ballet DVD’s in particular is superb and a better seat than going to Convent Garden. So if you want to see what it’s like, do give a ring for a demo.

www.vaudio.co.uk

V’s Audio Hi-Fi Consultants

36 Drud Hill, Stoke Bishop, Bristol BS9 1EJ
Tel/Fax 0117 988 6005

PHONE STEVEN ON 01527 450500 / MOBILE : 07773198336
E-MAIL: Apexsmn@aol.com
www.apexacoustics.co.uk
Bocchino Audio Connectors

Australia's finest range of high-end phono connectors
Upgrade your phone cable connectors from the low-conductivity, brass types
to Bocchino Brenda phono plugs.
Each plug is fabricated from one-piece of HIGH CONDUCTIVITY, OXYGEN FREE COPPER

Brenda™ B7S (single bay, short) - £99/pair
Brenda™ B7 (dual bay) - £109/pair (top left picture)
Brenda™ B9 (dual bay) - £149/pair (top right picture)

Common features: Each plug machined from a solid billet of 99.94% pure High Conductivity Oxygen Free Copper, plated with 15+ micron silver and 1.0+ micron hard gold. Signal tips plated with 3.0+ micron hard gold and fitted into Teflon® insulator cores

NEW FOR SUMMER - BTSS - Silver Plated throughout - ideal for pure Silver cables -
Now available from specialist accessory dealers.
Or BUY DIRECT via our SECURE website at: www.bocchino-audio.co.uk

Trade/OEM enquiries welcome - please contact sole UK distributor -
Distributed by: Wavelength Distribution
Tel: 01622 201983 Fax: 01622 761560

SONIC DESIGN® DAMPING FEET
Virtues of using Sonic Design Damping Feet

These feet will give a substantial decrease in loudspeaker cabinet movements. This is apparent when you put one finger softly against the top of the front baffle, as it vibrates much less after damping. The transmission of vibrations from the cabinet into the floor will also be reduced. The music will be cleaner, with a less coloured sound quality.

There are two types available for Loudspeakers:
Audiophile Damping Feet provide the best possible isolation and damping but it is important that the feet are optimised to the weight of your loudspeakers. Both the stiffness and size of the feet are selected to achieve this. Speakers within the range 5 to 200 kg can be optimised. Let us know the mass of your loudspeakers and we can advise you the correct set to purchase. Audiophile Damping Feet provide the best possible isolation and damping but it is important that the feet are optimised to the weight of your loudspeakers. Both the stiffness and size of the feet are selected to achieve this. Speakers within the range 5 to 200 kg can be optimised. Let us know the mass of your loudspeakers and we can advise you the correct set to purchase. Audiophile Damping Feet provide the best possible isolation and damping but it is important that the feet are optimised to the weight of your loudspeakers. Both the stiffness and size of the feet are selected to achieve this. Speakers within the range 5 to 200 kg can be optimised. Let us know the mass of your loudspeakers and we can advise you the correct set to purchase. Audiophile Damping Feet provide the best possible isolation and damping but it is important that the feet are optimised to the weight of your loudspeakers. Both the stiffness and size of the feet are selected to achieve this. Speakers within the range 5 to 200 kg can be optimised. Let us know the mass of your loudspeakers and we can advise you the correct set to purchase. Audiophile Damping Feet provide the best possible isolation and damping but it is important that the feet are optimised to the weight of your loudspeakers. Both the stiffness and size of the feet are selected to achieve this. Speakers within the range 5 to 200 kg can be optimised. Let us know the mass of your loudspeakers and we can advise you the correct set to purchase. Audiophile Damping Feet provide the best possible isolation and damping but it is important that the feet are optimised to the weight of your loudspeakers. Both the stiffness and size of the feet are selected to achieve this. Speakers within the range 5 to 200 kg can be optimised. Let us know the mass of your loudspeakers and we can advise you the correct set to purchase.

The Standard Loudspeaker Damping Feet have a large overload margin, and are lower priced than the Audiophile version. The resonance frequency is a few Hertz higher. The colour is not brown, except for the stiffest feet which are grey. The standard feet are produced in four different weight classes and do not need to be fine tuned to specific loudspeaker models. Standard Damping Feet are available in four sizes: upto 12kg, 12-28kg, 28-50kg, 50-100kg. Price per set of eight feet: £60.00.

The Standard Loudspeaker Damping Feet have a large overload margin, and are lower priced than the Audiophile version. The resonance frequency is a few Hertz higher. The colour is not brown, except for the stiffest feet which are grey. The standard feet are produced in four different weight classes and do not need to be fine tuned to specific loudspeaker models. Standard Damping Feet are available in four sizes: upto 12kg, 12-28kg, 28-50kg, 50-100kg. Price per set of eight feet: £60.00.

And there is one set specifically for CD, SACD, DVD Players:
The CD Damping Feet are made from the same material as the Standard Damping Feet. If the sound of your CD/DVD player is sensitive to vibrations, the CD Feet will be the way to go. The sensitivity to shock and the accompanying mistracking will be reduced with the use of the CD Feet. They can also be used with any other audio product that you would like to isolate from vibrations. The set contains four small and one large foot. The large foot is used if the centre of gravity is off-centre or for those CD/DVD players that have five feet. CD Feet cost £9.99 per set.

And there is one set specifically for CD, SACD, DVD Players:
The CD Damping Feet are made from the same material as the Standard Damping Feet. If the sound of your CD/DVD player is sensitive to vibrations, the CD Feet will be the way to go. The sensitivity to shock and the accompanying mistracking will be reduced with the use of the CD Feet. They can also be used with any other audio product that you would like to isolate from vibrations. The set contains four small and one large foot. The large foot is used if the centre of gravity is off-centre or for those CD/DVD players that have five feet. CD Feet cost £9.99 per set.

Visit our website at www.sonicdesign.co.uk to see more details or to read satisfied customer feedback.
Sonics 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, on the internet at: www.sonicdesign.co.uk
Distributed by: Wavelength Distribution
Tel: 01622 201983 Fax: 01622 201983
**CLASSIC SOUND (LEICESTER) INC. ONE THING. VINTAGE HI-FI &amp; VALVE SPECIALIST**

We buy, sell, part exchange quality Hi-Fi.

**AMPLIFIERS / RECEIVERS**
- **Amp:** Krell KAV150/2 150/280/420 £1,000 - £1,500
- **Amp:** Krell KAV750 £1,500 - £2,000
- **Amp:** Audio Technica 2000 New Power £750
- **Amp:** Linn 500 £500
- **Amp:** Pranny B6 £600

**CD PLAYERS**
- **CD Player:** Sony CDP-200 £500 - £600
- **CD Player:** Sony CDP-500 £600 - £700
- **CD Player:** Sony CDP-560 £700 - £800
- **CD Player:** Sony CDP-600 £800 - £900
- **CD Player:** Sony CDP-610 £900 - £1,000
- **CD Player:** Sony CDP-650 £1,000 - £1,100
- **CD Player:** Sony CDP-700 £1,100 - £1,200
- **CD Player:** Sony CDP-750 £1,200 - £1,300
- **CD Player:** Sony CDP-800 £1,300 - £1,400

**TUNERS**
- **Tuner:** Brion Vincent CDX 1 £500 - £600
- **Tuner:** Brion Vincent CDX 2 £600 - £700
- **Tuner:** Brion Vincent CDX 3 £700 - £800
- **Tuner:** Brion Vincent CDX 4 £800 - £900
- **Tuner:** Brion Vincent CDX 5 £900 - £1,000

**SPEAKERS**
- **Speakers:** Brion Vincent D3 £200
- **Speakers:** Brion Vincent D4 £250
- **Speakers:** Brion Vincent D5 £300
- **Speakers:** Brion Vincent D6 £350
- **Speakers:** Brion Vincent D7 £400
- **Speakers:** Brion Vincent D8 £450
- **Speakers:** Brion Vincent D9 £500
- **Speakers:** Brion Vincent D10 £550

**QUAD ESL 57 & ELS6A PANELS, ETC.**
Reconditioned Quad ESL7 speakers from only £700.00. Why spend £600.00+. Have your ESL7s refurbished for only £349.00. Pars. For full details.

**TRANSLUCENT (somewhat of a bargain) Hi-Fi World. Jun 1999**

**PURE SILVER INTERCONNECT CABLE**
- **Cable:** 99.99% pure silver conductors. Quality gold plated RCA phono plugs.
- **Cable:** Half Metre terminated £60.00. One metre terminated £80.00.

**NEW. Translucent pure silver mains cable. 3 amp Intro offer. £199.00. One Thing Mains cables. Class 1 RFI suppressed. Silver plated conductors. Voltage spike protection. Only £5.50. 6 way mains block & lead only £199.00.**
Visit our website or clip the coupon for details and prices of all of the above.

Web: wvAv.audiovector.co.uk
Maidstone, ME15 9YT Tel: 01622 201983

Name

Please send me info on Audiovector Industrial Estate, Coldred Road, New MSub Active subwoofer

including Signature version

New AV3C Improved centre channel, including Signature version

New MSub Active subwoofer

Visit our website or clip the coupon for details and prices of all of the above.

Brenda™ B7S (single bay, short) - £99/pair
Brenda™ B7 (dual bay) - £109/pair (top left picture)
Brenda™ B9 (dual bay) - £149/pair (top right picture)

Common features: Each plug machined from a solid billet of 99.94%+ pure High Conductivity Oxygen Free Copper, plated with 15+ micron silver and 1.0+ micron hard gold. Signal tips plated with 3.0+ micron hard gold and fitted into Teflon® insulator cores.

NEW FOR SUMMER - B7SS - Silver Plated throughout - ideal for pure Silver cables -

Now available from specialist accessory dealers. Or BUY DIRECT via our SECURE website at: www.bocchino-audio.co.uk

Trade/OEM enquiries welcome
- please contact sole UK distributor -
Distributed by: Wavelength Distribution
Tel: 01622 201983 Fax: 01622 761560

www.supradirect.co.uk
The ONE-STOP SECURE WEBSITE for SUPRA cables to improve your Hi-Fi and/or Home Cinema system.

* ONLINE CREDIT CARD PURCHASES via 128bit SSL *

NOW IN STOCK!! SUPRA LoRad CE-approved, worldwide patented, 3x 2.5mm OFC shielded mains cable.
Reduce the amount of RF induced in your system by replacing the mains cable with LoRad shielded mains cable. Available as untempered lengths off the reel.

Hi-Fi Nuts
Upgrade your existing cheap audio cables and enjoy better sound quality with AWARD-WINNING SUPRA speaker and interlink cables!

Home Cinema Users
Choose from SUPRA’s range of composite, s-video, or RGB/Component video cables to improve your picture quality.
Or use Supra co-ax digital or fibre optic cables from DVD to AV processor/amp/receiver

4 Quick and easy steps for better sound:
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 make your purchase
4 - ENJOY

SONIC DESIGN® DAMPING FEET
Virtues of using Sonic Design Damping Feet

These feet will give a substantial decrease in loudspeaker cabinet movements. This is apparent when you put one finger softly against the top of the front baffle, as it vibrates much less after damping. The transmission of vibrations from the cabinet into the floor will also be reduced. The music will be cleaner, with a less coloured sound quality.

There are two types available for Loudspeakers:
Audiophile Damping Feet provide the best possible isolation and damping but it is important that the feet are optimised to the weight of your loudspeakers. Both the stiffness and size of the feet are selected to achieve this. Speakers within the range 5 to 200 kg can be optimised. Let us know the mass of your loudspeakers and we can advise you the correct set to purchase.

Standard Damping Feet have a large overload margin, and are lower priced than the Audophile version. The resonance frequency is a few Hertz higher. The colour is nut brown, except for the stiffest feet which are grey. The standard feet are produced in four different weight classes and will also be reduced. The music will be cleaner, with a less coloured sound quality.

Bocchino Audio Connectors
Australia's finest range of high-end phono connectors
Upgrade your phono cable connectors from the low-conductivity, brass types to Bocchino Brenda phono plugs.
Each plug is fabricated from one-piece of HIGH CONDUCTIVITY, OXYGEN FREE COPPER

Brenda™ B7S (single bay, short) - £99/pair
Brenda™ B7 (dual bay) - £109/pair (top left picture)
Brenda™ B9 (dual bay) - £149/pair (top right picture)

Common features: Each plug machined from a solid billet of 99.94%+ pure High Conductivity Oxygen Free Copper, plated with 15+ micron silver and 1.0+ micron hard gold. Signal tips plated with 3.0+ micron hard gold and fitted into Teflon® insulator cores.

NEW FOR SUMMER - B7SS - Silver Plated throughout - ideal for pure Silver cables -

Now available from specialist accessory dealers. Or BUY DIRECT via our SECURE website at: www.bocchino-audio.co.uk

Trade/OEM enquiries welcome
- please contact sole UK distributor -
Distributed by: Wavelength Distribution
Tel: 01622 201983 Fax: 01622 761560

SONIC DESIGN Damping Feet are available from all good specialist hi-fi & accessory retailers.

Or, in case of difficulty, on the internet at: www.sonicdesign.co.uk
Distributed by: Wavelength Distribution
Tel: 01622 201983 Fax: 01622 201983
Listening

PHONE FOR LATEST LIST
NEW, EX-DEM AND CLEARANCE ITEMS

RRP | SALE
---|---
Acoustic Energy AE1 MKII | £995.00 | £695.00 | D
Arcam Alpha 10 | £799.00 | £549.00 | D
Arcam Alpha 8R Amp. | £350.00 | £259.00 | N+D
Cyrus SL Amp | £400.00 | £250.00 | D
Cyrus AV Master Processor | — | £200.00 | D
Krell AV 500i Int. Amp. | £5,498.00 | £3,495.00 | D
Linn Kaber | £1,995.00 | £695.00 | D
Linn Kerosa | £499.00 | £369.00 | D
Meridian 500 Transport (mint) | £1,350.00 | £849.00 | D
Meridian M33 Active speakers | £1495.00 | £999.00 | N+D
Mission 701 speakers | £160.00 | £119.00 | N
Neate Mystique | £735.00 | £499.00 | D
ProAc 3.8 | £3,990.00 | £2,990.00 | D
Rotel RX965RDS A/V receiver | — | £950.00 | D

MUSICAL FIDELITY SPECIAL OFFERS
A3 Int. amp | £849.00 | £599.00 | D+N
A3 CD | £799.00 | £589.00 | D+N
A3 power amp | £999.00 | £699.00 | D+N
A3 pre amp | £999.00 | £699.00 | D+N
A300 integrated amp | £1399.00 | £995.00 | D
A300 power amp | £1399.00 | £1049.00 | D
Musical Fidelity XP100 | BARGAIN! | £799.00 | £549.00 | N

D = EX DEMONSTRATION, N = NEW, S/H = 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 0LJ
TEL: 020-7244 7750/59 FAX: 020 - 7370 0192
www.listeningrooms.com E-mail: trl@dial.pipex.com
Mon-Sat 10-6pm
quality control. With different moving coil input options, this unit will lit the most demanding 01 audiophile
through MM type cartridges. It is enclosed in a tough, rigid metal case and is fully "CE" type approved.

Top to the range the Deluxe 834P comes in stunning chrome and gold cabinet, and has extra attention and

MC3 ' the ultimate state for MC matching with 3 lined transformer taps to cover

The classic 834P uses the same circuit architecture as its more expensive brothers, and shares the same high
systems. For the true vinyl enthusiast, price £800.00

When first launched, the 834P was the only valve phono stage you could buy with facil-
ties for both good quality moving coil (MC) and moving magnet (MM) cartridges. In addi-
tion, the unit could be paralleled with a voltage output, allowing direct connection to a power amplifier. New

All music types are replayed beautifully, offering a remarkable near-field listening experience. We guarantee superb sound quality at sensible price points.

Mail order service for quality Swiss headphones
Free next day delivery hotline 01924 406016

ERGO ago-go

ERGO MODEL ONE £109.00

ERGO MODEL TWO £149.00

ERGO MODEL AMT £599.00

ERGOPHONES are designed for fatigue free listening and can be used for many pleasure filled hours without discomfort. Acting as a true earspeaker, they have a wide bandwidth capability coupled with low distortion figures of less than 0.30%.

All music types are replayed beautifully, offering a remarkable near-field listening experience. We guarantee superb sound quality at sensible price points.

More info available at www.precide.ch and info@audiosynergy.co.uk

Distributed in the UK by Audio Synergy Limited

SUGDEN HEIL AMT PRECIDE MDM ACE ERGO JECKLIN FLOAT
UK SUBSCRIPTION £27
VISIT OUR WEBSITE: www.hi-fiworld.co.uk

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.

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 □
Almair USA, Canada, Australia, Japan, Korea & China £70 □
Surface Mail £40 □

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


QUAD II monoblock amplifiers Serial Nos 42779 & 65515 G.W.O. paintwork a bit tatty. £450. Tel: 01527 546048. Email: geoffg2r@cisca.li.co.uk (Aug(I))

ONY MDS JA 30S minidisc deck. Mint. With Russ Andrews 4' high current power-erok (Watgate IEC) and 1m optical lead £280. Tel: 01752 773369 (Aug(I))

ROTHWELL "INDUS" passive pre-amp seven inputs. Gold and beech. Record one input play other. Boxed. Instructions. Sounds better than "no pre-amp". If you know what I mean!! £395 Tel: 01202 481386 (Dorset) (Aug(I))

SONAB OA6 Omnim directional loudspeakers, in built amplifier model, excellent condition £300. Tel: 01134 388 399 (Aug(I))

A.V.I. S2000m monoblocks. 1 pair. 100 Watts per channel. S 2000m pre amp, integrated, phono stage. £1600. Spendor BC1 speakers. one pair, £275. Spendor SPI speakers, one pair £275. Rogers LS7 speakers. one pair, £225. Hiw 6900 pair £275 Rogers LS2/A2 100w power amp. £2695 ono. Tel: 0161 304 7444. Mobile: 07970 908619 or Email: response.autos@virgin.net (Aug(I))

SHANINIAN COMPASS loudspeakers oak finish £799. Very good condition. Large record collection, all vinyl in vgc. Ring for list classical, rock, jazz etc. Tel: 01457 834465 (Aug(I))

MUSICAL FIDELITY A3CR Pre, A300CR power, new in unopened boxes, 5 year warranty (£3200) £1800. Meridian 207. 205 x 2, 204, 203. £1400 excellent condition. Tel: 07866 434488 (Aug(I))

QUAD 405-2 100w power amplifier, excellent condition, phono inputs, boxed, manuals £248. Rogers LS2/A2 100w black mint, manuals £138. Tel: 0141 337 2744 (Aug(I))

MUSICAL FIDELITY A1000 pre-main MM/MC £700. Quad 33/303/FM3 ALPS/VOL phono inputs, boxed, manuals £700. Quad 33/303/FM3 ALPS/VOL phono £250. All vgc. Tel: 01531 640280 (Herefordshire) (Aug(I))

QUAD 989 speakers. Black, boxed (£4600) £2300 ono. Also wanted, Rotel RB5000 power amp or Pioneer Spec 2 power amp or similar 70w power amp (big) Tel: Conrad 07712 589572 or 01942 720220 (Wigan) (Aug(I))

NORDOST'S SUPERLATIVE Valhalla interconnect 0.6m length carefully fitted with bullet plugs in excellent condition. Sounds incredible! £1050 (new £1900) Tel: 0208 879 0364 (Aug(I))

SONY TA-FA30 ES integrated amplifier excellent condition £150. Tel: 0121 744 1528 (Aug(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 internet magazine April 2000.

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 provides 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 consists of a high grade dc motor, soldered regulator board and power supply at 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 made transformer is also available as an optional extra at £175.

New breakthrough design -
Laminar flow interconnect

A high end sound with a sensible look and price tag
HI-FI WORLD July 2001
The Ultra’s are a deeply satisfying musical product and a supreme bargain
STEREO TIMES Aug 2001
“...the reference interconnects are a must listen...highly recommended and another winner”
STEREO TIMES Feb 2002

The new Laminar flow range of interconnects embody an all new ground-breaking design. The “Ultra” version is guaranteed to outperform all other interconnects up to 4 times it’s price and the “Reference” is a cable that reviewers use to judge other cables due to it’s incredible transparency and musicality.

Don’t purchase a more expensive interconnect until you have heard new laminar flow cable. With a full 3 week, cast iron money back guarantee if not satisfied, arrange an audition with your local Origin Live dealer or place an order with us directly.

Turbocharging your Rega arm

“Nothing less than total dynamite”
HI-FI WORLD

If you are the proud owner of any Rega tonearm, you are now in the enviable position to catapult it’s performance into the league of super arms with modifications offered by Origin Live - the 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 SUPPLEMENT NOV 97 (structural modification to an RB250)

What HI-FI magazine gave this modification a 5 star rating.

For arm modifications we normally return your arm in 2 - 3 days

FOR FULL INFORMATION SEE WEB SITE OR CONTACT
Origin live, Unit 5, 362b Spring Road, Sholing, Southampton SO19 2PB
Tel: 023 80578877 / 80363249  Fax: 023 80398605  E Mail: originlive@originlive.com

WEB SITE: http://www.originlive.com
VINTAGE ROGERS BBC monitor speakers 3-way £200. Tel: 01481 263891 (Aug(I))

MANA REFERENCE 4 stand fabulous for CD or record players £395 (£750 new). Slate Audio speaker stands, wonderful sound and beautifully crafted £295 (£550 new). Both items excellent condition Tel: 01446 792727 (Sep(I))

DPA 200s pre and power amps includes Audioquest Emerald interconnect (£200) be quick £359. Amps given best buy £50. Tel: 01224 646473 (Aug(I))

GOERTZ M13 Big Boy speaker cable 3m pair terminated with factory bananas. Boxed £225. Solo 4.1B Signature AES/EBU digital interconnect 0.5m – the best £150. Superb C-Core mains transformers. Tel: 01384 271571 (Aug(I))

TUNERS FOR SALE: Pioneer FD-504 RDS Precision £75. Aura TU80 black £60. Both boxed with instructions and in excellent condition. Call 020 7772 5863 (work) or 0207 221 8033 (home) (Aug(I))

AUDIO INNOVATIONS 1000 Mk3 valve monoblocks, 50 watts. Class A, no box hence £575. DPA “The Power”. Mains filters, 4-off £50 each. Re-advertised because answering machine lost messages! Tel: Mike 0032 2 512 0952 (equipment in North London) (Aug(I))

WANTED: TUNABLES and tonearm. All items considered from Linn to Transcriptor, but decks by British companies like NVA, Griffin, Monitor Audio, IMF, Gale especially. Also any associated accessories etc. Tel: 01455 613 489 (Aug(I))

PROJECT PERSPECTIVE w/Ortofon MC25FL £550. Nakamichi CR4E £100. Yamaha KX480 cassette w/remote £100. Yamamura Churchill M4000 3m speaker cables £450. All vgc/mint. Tel: Chris 020 8543 5311 evenings (Aug(I))

ROTEL RCD 991 CD player, 2 years old £450 ono. Tel: 0161 286 7832 or 07941 743 312 (Aug(I))

QUAD 34 with 4052 £350. Quad 34, 405/2 with Audiophile upgrades and separate power supply, offers. Musical Fidelity A100 amplifier £200. Infinity Kappa Reference loudspeakers £350. Wharfedale S.2 loudspeakers £50. Tel: 01224 646 473 (Aug(I))

LEAK STEREO 20 with One Point pre £250. Tonearms; SME 3009 with fluid damper £120. Manticore Musician £120. Decca £40. Connoisseur SAU2 £20. Thorens £20. Garrard 401 motor unit £120. Tel: 01224 646 473 (Aug(I))


WANTED FOR Spares or repair: Faulty or non working Quad 405 power amps. Quad 33, 44 preamps. Quad FM3 tuners. Also required, Denon DL103 cartridges. Contact Mike 01758 613 790 (Aug(I))

LINN Karik 3 CD player £500, Kairin phono preamp (non Brilliant power supply) £500, LK 100 x 2 power amps £240 each, LK280/Spark (LK280 is factory LK2 conversion) £250, 2 x 5m LK400 bi wire cable (terminated) £45. All boxed, very good condition. Tel 0781204471 (Lancs) (Aug(I))

TOTEM Model 1 Signature speakers £795, boxed as new: XLO 1m interconnects £195 ono. Precious Metal 100 1m interconnects £70 ono. Precious Metal 100 1.5m AES/EBU cable £40 ono. All cables are balanced. Tel: 01636 830 944 (Aug(I))
SILVER - SILVER - SILVER both LAT and AUDUSA Eupen mains cable available with silver plated (heavy duty plating 5-8 microns) MK Tough plug and IEC connectors. Upgrade to the silver plated versions LAT International add £6, AUDUSA Eupen add £6. Plugs available separately - MK Tough Plug £8, O Heil IEC £7, M Kayser IEC, Male IEC, Side entry IEC, Bottom entry IEC - £6 each.

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 is 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.

AUDUSA EUPEN GNLM 5.0 mains cable

£48 for 1.0m
£58 for 1.5m
£68 for 2.0m
Off the reel £30 for 1st meter, £20 per m thereafter.

Fitted with IEC (Martin Kaiser) and MK Tough Plug. Figure of eight, 16 amp IEC, Bulgin etc also available as well as USA, European Schuko, 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 NJ USA - all cables now with SILVERFUSE conductors

LAT AC-2 HI-FI CHOICE - SEPT 2001 - RECOMMENDED MAINS CABLE

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 Teflon; the best insulation available. Fitted as standard with an IEC and MK Toughplug. Other connectors are available incl Schuko, 16 amp IEC, Figure of eight, Australian, Danish plugs etc. 60cm £62, 90cm £75, 1.2m £88, 1.5m £101, 1.8m £112 etc. Other lengths available. Off the reel at £45 per meter.

Add £6 for heavy duty silver plated contacts on IEC and MK Tough plug 4, 6 and 8 way all steel mains distribution blocks fitted with UK, Schuko or USA type sockets. CE tested and approved mains distribution units manufactured out of heavy gauge steel, finished in black and fitted with high quality Wadsworth 13amp sockets. It has no filter, circuit breakers, surge protection, transformers, resistors, capacitors, LED’s, on/off switches, chokes, regulators, just fitted with 3ft of LAT AC-2 mains cable. From £166 for 4 way, £198 for 6 way, £229 for 8 way.

LAT INTERNATIONAL - Analogue, Digital and Video interconnects and Speaker cable. Refer to www.audusa.com for further details or ask for reviews etc - www.audusa.com for list for exam cable and sub-woofers, power amplifiers, pre-amp processor, CD players etc.

SUNFIRE CORPORATION

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 017 Bell Street, London, NW1 5BY. Tel: 020 7258 3448 Fax 020 7258 3449 Email: vwirelesslondon@aol.com

FORMER KLIPSCH distributor, has some ex-demo and N.O.S. speakers for disposal. You may demonstrate your own equipment on Klipsch before deciding to buy. Call Guy on 0121 430 7817 or 0121 705 1060 (Sep(I)

ROGERS LS 5/8 £350 pr, EMT 250 £950, Nastra E-Mono £400, 4 stereo £1200, Revox B760 tuner £550, B260S £750, B77 HS £650, PR99 MkIII £1200, Studer A710 £400, B67 VU £750, A80 £800, A810 £550, A807 £750, A727 £750, A725 £600, D780 £850. Tel: 01246 275479, Fax: 01246 7258 3449 Email: vwirelesslondon@aol.com (Oct02(I)

YORKSHIRES NEW approach to Hi-Fi and Audio Visual. Visit Hifi Hut asap. I offer Bryston 550421 (Aug(I), 01246 275479, Fax: 01246 7258 3449 Email: vwirelesslondon@aol.com


YORKSHIRES NEW approach to Hi-Fi and Audio Visual. Visit Hifi Hut asap. I offer Bryston 550421 (Aug(I), 01246 275479, Fax: 01246 7258 3449 Email: vwirelesslondon@aol.com

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
In a rush to get your advert published? Why not use our Instant Internet Advert to get on our website immediately.
Only £15 per week (7 days)

**FREE** internet adverts are published three weeks AFTER the magazine has been published

### 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

| Instant Internet Only Advert Private or Trade published immediately | £15 per week       |
| Private magazine advert plus **FREE** internet advert | £10 per month       |
| Private magazine advert display black box plus **FREE** internet advert | £15 per month       |
| Trade magazine advert plus **FREE** internet advert | £10 per month       |
| Trade magazine advert display black box plus **FREE** internet advert | £15 per month       |

Please tick here if you **DO NOT WANT** your **FREE** internet advert

### 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

### Private & Trade Classified Ads Order Form

**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.

### Advertisers Index

<table>
<thead>
<tr>
<th>Absolute Analogue</th>
<th>70</th>
</tr>
</thead>
<tbody>
<tr>
<td>Affordable Audio</td>
<td>74</td>
</tr>
<tr>
<td>Apex Acoustics</td>
<td>116</td>
</tr>
<tr>
<td>Arcam</td>
<td>44</td>
</tr>
<tr>
<td>Audio Classics</td>
<td>107</td>
</tr>
<tr>
<td>Audio Illusions</td>
<td>92</td>
</tr>
<tr>
<td>Audio Salon</td>
<td>72</td>
</tr>
<tr>
<td>Audio Synergy</td>
<td>122</td>
</tr>
<tr>
<td>Audio Vector</td>
<td>117</td>
</tr>
<tr>
<td>Audio Xpress</td>
<td>106</td>
</tr>
<tr>
<td>Audusa</td>
<td>128</td>
</tr>
<tr>
<td>Billy Vee</td>
<td>89,90,91</td>
</tr>
<tr>
<td>Bocchino</td>
<td>117</td>
</tr>
<tr>
<td>Central Audio</td>
<td>114</td>
</tr>
<tr>
<td>Chelmer Valve</td>
<td>96</td>
</tr>
<tr>
<td>Choice Hi-Fi</td>
<td>94</td>
</tr>
<tr>
<td>Classicise Sounds</td>
<td>119</td>
</tr>
<tr>
<td>Custom Cables</td>
<td>115</td>
</tr>
<tr>
<td>Definitive (Notts)</td>
<td>40</td>
</tr>
<tr>
<td>Definitive Audio</td>
<td>113</td>
</tr>
<tr>
<td>Diverse Vinyl</td>
<td>121</td>
</tr>
<tr>
<td>English Analogue</td>
<td>107</td>
</tr>
<tr>
<td>Falcon Acoustics</td>
<td>96</td>
</tr>
<tr>
<td>Heathcote</td>
<td>124</td>
</tr>
<tr>
<td>Heatherdale</td>
<td>115</td>
</tr>
<tr>
<td>Henley Designs</td>
<td>14,97</td>
</tr>
<tr>
<td>Hi-Fi Trading Co.</td>
<td>108,109</td>
</tr>
<tr>
<td>Hicam</td>
<td>112</td>
</tr>
<tr>
<td>Ian Harrison</td>
<td>112</td>
</tr>
<tr>
<td>Jam Distribution</td>
<td>115</td>
</tr>
<tr>
<td>Kit &amp; Components</td>
<td>100</td>
</tr>
<tr>
<td>Langrex</td>
<td>104</td>
</tr>
<tr>
<td>Listening Rooms</td>
<td>121</td>
</tr>
<tr>
<td>Maf Audio</td>
<td>112</td>
</tr>
<tr>
<td>Mana</td>
<td>111</td>
</tr>
<tr>
<td>Mantra Audio</td>
<td>93</td>
</tr>
<tr>
<td>Matrix</td>
<td>118</td>
</tr>
<tr>
<td>Midland Audio Exchange</td>
<td>110</td>
</tr>
<tr>
<td>Mission</td>
<td>8C</td>
</tr>
<tr>
<td>Musical Fidelity</td>
<td>46</td>
</tr>
<tr>
<td>Musical Images</td>
<td>111</td>
</tr>
<tr>
<td>Musonic</td>
<td>113</td>
</tr>
<tr>
<td>Naim</td>
<td>23</td>
</tr>
<tr>
<td>Origin Live</td>
<td>36,126</td>
</tr>
<tr>
<td>Oxford Audio</td>
<td>114</td>
</tr>
<tr>
<td>Progressive Audio</td>
<td>113</td>
</tr>
<tr>
<td>Quad</td>
<td>IBC</td>
</tr>
<tr>
<td>Replay</td>
<td>40</td>
</tr>
<tr>
<td>Retro Reproductions</td>
<td>122</td>
</tr>
<tr>
<td>Ringmat</td>
<td>26</td>
</tr>
<tr>
<td>Sevenoaks 27,28,29,30,31,32,33</td>
<td>33</td>
</tr>
<tr>
<td>Sevenoaks</td>
<td>60,61</td>
</tr>
<tr>
<td>Signals</td>
<td>116</td>
</tr>
<tr>
<td>Sonic Design</td>
<td>117</td>
</tr>
<tr>
<td>Sound of Music (Crewe)</td>
<td>119</td>
</tr>
<tr>
<td>Sound Stage</td>
<td>118</td>
</tr>
<tr>
<td>Soundcraft</td>
<td>115</td>
</tr>
<tr>
<td>Sounds expensive</td>
<td>124</td>
</tr>
<tr>
<td>Sounds Perfection</td>
<td>40</td>
</tr>
<tr>
<td>Stowsounds</td>
<td>118</td>
</tr>
<tr>
<td>Supra Direct</td>
<td>117</td>
</tr>
<tr>
<td>Technical &amp; General</td>
<td>96</td>
</tr>
<tr>
<td>Trichord Research</td>
<td>26</td>
</tr>
<tr>
<td>UKD</td>
<td>IFC</td>
</tr>
<tr>
<td>V’Audio</td>
<td>116</td>
</tr>
<tr>
<td>Walrus</td>
<td>36</td>
</tr>
<tr>
<td>Watford Valves</td>
<td>104</td>
</tr>
<tr>
<td>White Noise</td>
<td>96</td>
</tr>
<tr>
<td>Williams Hart</td>
<td>117</td>
</tr>
<tr>
<td>Xi-Electrical</td>
<td>119</td>
</tr>
</tbody>
</table>
For many audiophiles, the age of the transistor left a big hole in the emotion and pleasure provided by good valve amplification. The hi-fi world became orientated around numbers and statistics and a new product was bought largely on numerical specifications.

Based on the styling of and reflecting Peter Walker’s circuit topology from the original, but brought up to date by the remarkable skills of our mechanical and audio engineers, this new system provides not only significantly more power, but also brings a richness and weight to any recording without the colouration many expect from such amplifiers.

The highest quality components have been used throughout to add a completely addictive dimension to this new pre/power combination. Detail and subtlety are nothing short of remarkable through the entire frequency range creating one of the most pleasurable listening experiences you’ll ever have.

Quad Electroacoustics Ltd, IAG House, Sovereign Court, Ermine Business Park, Huntingdon, PE29 6XU
Tel: 0845 458 0011 Fax: 01480 431767
www.quad-hifi.co.uk
Simple Perfect Sound

tel: +44 (0) 1480 423700
www.mission.co.uk