

# hi-fi

»»

# WORLD

NOVEMBER 2005 UK £3.40

**COMPETITION**  
win a pair of Pinsh  
One mini monitors  
worth £1,200!

## FIRE POWER

Eastern Electric M520 tube integrated vs.  
Sugden A21a, Marantz PM-15SI and  
Lyngdorf SDA1 2175



### POWER SPECIAL

USHER R1.5 - CLASS A POWER  
ARCAM FMJ C31/ P1 PRE POWER  
DENSEN B-250/ B-330 PRE-POWER  
MUSICAL FIDELITY kW750 PRE-POWER  
SONIC IMPACT T-AMP TWEAKING SECRETS  
AMPLIFIER-SPEAKER MATCHING EXPLAINED  
VALVE POWER STATION: T+A V10 INTEGRATED  
THE POWER GAME: CLASSES A, AB AND D FACE OFF  
ELAC FS 607 X-JET FLOORSTANDING LOUDSPEAKERS

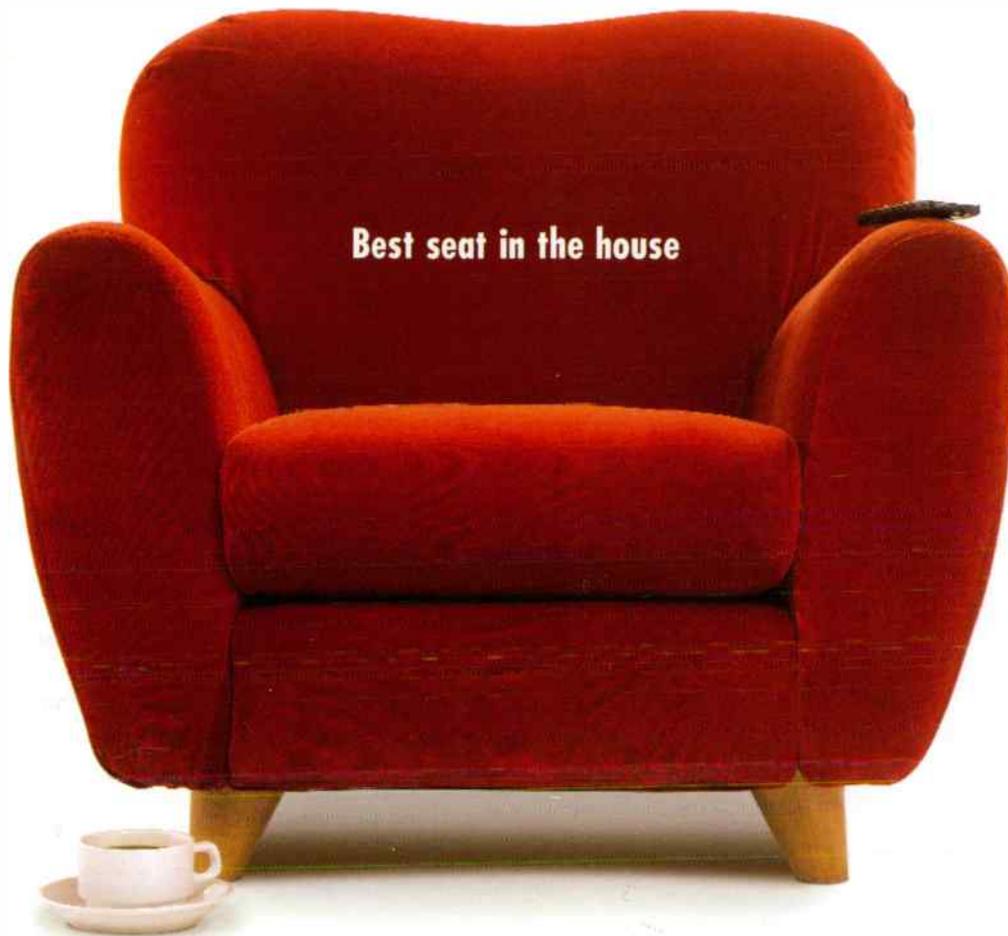
NOVEMBER 2005



**SIMPLY STAX  
SUBSCRIPTION  
PROMO**  
see p71

**10 PAGES OF HI-FI Q&A \* CLASSIFIED ADS**

World Radio History



The experiences this chair has had! The amazing performances, concerts and gigs it has witnessed from all around the musical world.

From the front row at Carnegie Hall to the stalls at Brixton Academy, from the dress circle of the Sydney Opera House to the bar in Ronnie Scott's – this chair has been there! It has experienced music as it should be heard – alive and vibrant, with every nuance and emotion as clear as the musicians intended.

The Rotel O2 Series is a new range of hi-fi from a company with a reputation for delivering award-winning sounds at realistic prices. The O2 Series' superb sound is the result of Rotel's Balanced Design Concept – an integrated approach that ensures five star performance.

To find out how the Rotel O2 Series can take you to the world's greatest musical venues, visit [www.rotel.com](http://www.rotel.com).

## The Rotel O2 Series

*including the RA-03 amplifier*



**Rotel RA-03**  
May 2005



B&W Loudspeakers, Dale Road, Worthing, West Sussex BN11 2BH, United Kingdom, 01903 221500

**World Radio History**



**Rotel RA-03**  
April 2005

# welcome

## EDITOR

David Price  
tel/fax: +44 (0) 1275 371 386  
e-mail: [editorial@hi-fiworld.co.uk](mailto:editorial@hi-fiworld.co.uk)

## DESIGN EDITOR

Faiza Chunara  
tel: +44 (0) 20 7625 3129  
fax: +44 (0) 20 7328 1844  
e-mail: [adproduction@hi-fiworld.co.uk](mailto:adproduction@hi-fiworld.co.uk)

## PRODUCTION EDITOR

David Noble  
tel: +44 (0) 20 7625 3134  
fax: +44 (0) 20 7328 1844  
e-mail: [classifieds@hi-fiworld.co.uk](mailto:classifieds@hi-fiworld.co.uk)

## ADVERTISING

Debi Silver  
tel: +44 (0) 20 7372 6018  
fax: +44 (0) 20 7328 1844  
e-mail: [advertising@hi-fiworld.co.uk](mailto:advertising@hi-fiworld.co.uk)

## ACCOUNTS

Sharon Mehlhom  
tel: +44 (0) 20 8841 8892  
fax: +44 (0) 20 8841 9144  
e-mail: [accounts@hi-fiworld.co.uk](mailto:accounts@hi-fiworld.co.uk)

## WORLD AUDIO DESIGN

[www.worldaudiodesign.com](http://www.worldaudiodesign.com)  
tel: +44 (0) 845 257 5600  
e-mail: [sales@worldaudiodesign.com](mailto:sales@worldaudiodesign.com)

## PUBLISHER

Noel Keywood  
e-mail: [publisher@hi-fiworld.co.uk](mailto:publisher@hi-fiworld.co.uk)

## PRIVATE & TRADE CLASSIFIEDS

tel: +44 (0) 20 7625 3134  
fax: +44 (0) 20 7328 1844  
e-mail: [classifieds@hi-fiworld.co.uk](mailto:classifieds@hi-fiworld.co.uk)

## SUBSCRIPTIONS

tel: +44 (0) 1442 879097  
fax: +44 (0) 1442 872279  
e-mail: [hifiworld@webscribe.co.uk](mailto:hifiworld@webscribe.co.uk)

## WRITERS

Dominic Todd  
Channa Vithana  
Neal Gibbons  
Stewart Wennen  
John May  
Steven Green  
Peter J Comeau  
Paul Rigby

## hi-fi world

SUITE G4, ARGO HOUSE  
KILBURN PARK ROAD  
LONDON NW6 5LF  
[www.hi-fiworld.co.uk](http://www.hi-fiworld.co.uk)

## testing

*Hi-Fi World* has its own advanced test laboratory and acoustically treated listening room, and a dedicated team of experienced listeners. We review thoroughly by extensive auditioning, rather than by quick-fire group listening tests. Our engineering team designs a wide range of products in-house. No other hi-fi magazine is so expert and dedicated.



If journalism, as G.K. Chesterton famously put it, is 'literature in a hurry', then it's the 'hurry' bit that seems to sell magazines...

Conventional wisdom goes that 'scoop' reviews sell, and timing is all important. Readers, it appears, are desperate to know all about new bits of kit - but only if it's before their friends and family!

Well, although this magazine has more than its fair share of brand new product reviews (indeed some of our rivals manage to 'scoop' something after it's been on our front cover months before!), I'm not convinced that they're so much use to those wanting the best possible sound.

You see, it simply doesn't follow that the latest 'awards winner' will actually deliver the sonics goods in your system, despite the shower of purple prose lavished upon it by over enthusiastic hi-fi hacks in a hurry to hit their deadlines.

The beginning and end of system sound is synergy - and discovering great combinations of amplifiers and speakers (the critical meeting point in any system) doesn't lend itself to magazine production schedules or front cover razzmatazz...

(Think how it would be touted, "unlikely pairing of two well established products that aren't award winners found to work surprisingly well together shocker"! Not exactly sexy, and unlikely to sell more magazines - but very useful to audiophiles.)

That's why this month's issue focuses on the critical conjunction of amplifiers and loudspeakers. We're asking if power is really all that's needed to move you (and your speaker cones), and how best to get it. Our supertest (p15) looks at pure Class A operation from transistors and tubes, plus Class AB and Class D amplifiers too.

We look at monster amplifiers from Musical Fidelity (the kW750, p10) and Usher (the R1.5, p34). We try two different pre-power combos (Arcam's new C31/P1, p36; Densen B-250/B-330, p44), each with three different types of loudspeaker. We audition Elac's stunning FS607 X-Jet with the best tube and transistor amplification around on p48.

On p59, Mission's erstwhile Director of Acoustic Design Peter Comeau explains the problems faced when matching amplifiers to loudspeakers. Valve guru Noel Keywood gives T+A's high end V10 integrated the treatment on p52 and on p63, arch tweaker John May goes to work on the best sounding 4W amp ever made, the Sonic Impact T-Amp.

Although system synergy isn't always headline news, it's vital for serious sound, which is why I think you'll find *Hi-Fi World* the most useful read around.

David Price, editor

## verdicts



**OUTSTANDING**

**EXCELLENT**

**GOOD**

**MEDIocre**

**POOR**

**VALUE**

simply the best

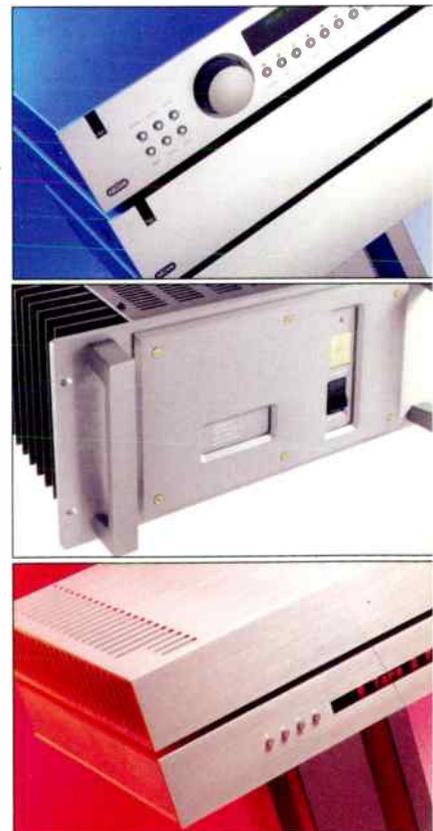
extremely capable

worth auditioning

unremarkable

seriously flawed

keenly priced



Distributed by Seymour Distribution Ltd 86 Newman Street London, W1T 3EX Tel: +44 (0) 20 7396 8000 Printed by St. Ives, Plymouth Tel: +44 (0) 1752 349 413  
Our Agents in Malaysia Millennium Hi-Fi & AV Simon Chang Showroom & office, 500-1-3 First Floor Wisma Indah (Shen Court), Jalan Tun Razak 50400 Kuala Lumpur, Malaysia  
Tel: 603 9283 8171 Fax: 603 9281 3762 e-mail: [info@millennium-audio.com](mailto:info@millennium-audio.com)

All unsolicited submissions and goods are at the owner's risk. We accept no responsibility for such submissions, nor do we undertake to return them.  
No material may be reproduced from this magazine without the publisher's written permission. © Audio Publishing Ltd

# 15

Sugden A21a Class A integrated meets Class AB and Class D rivals...



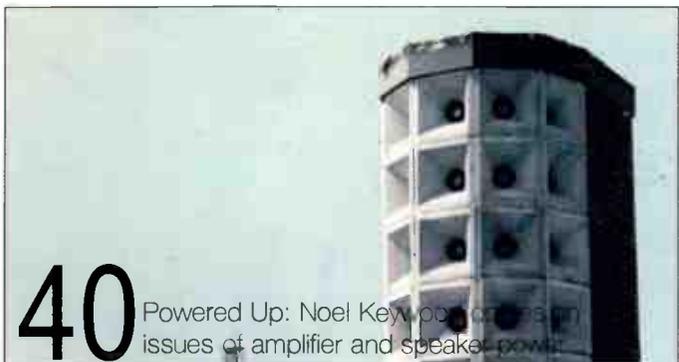
# 48

Elac FS607 X-JET - stunning towers of power, but worth £5,000?



# 40

Powered Up: Noel Keywood covers the issues of amplifier and speaker power



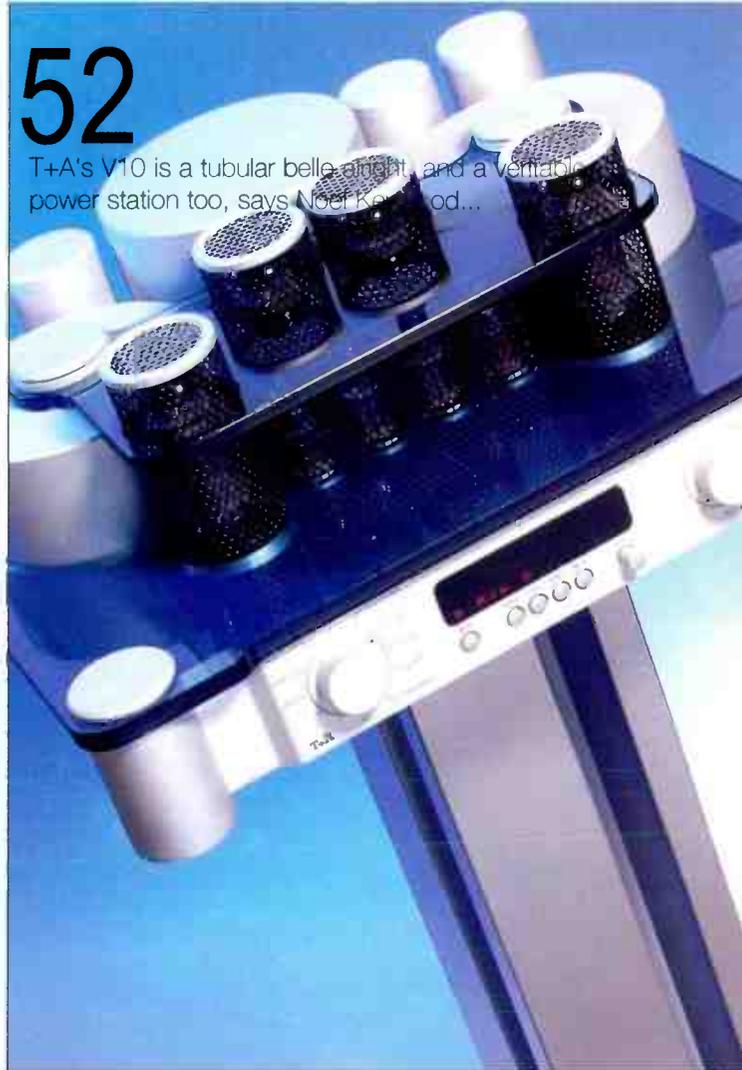
# 63

John May shows you how to tweak the world's best bargain integrated; Sonic Impact's T-Amp.



# 52

T+A's V10 is a tubular belle d'night, and a veritable power station too, says Noel Keywood...



# 27

Eastern Electric's Minimax 520 is the other Class A contender in this month's supertest: read the verdict here...



### POWER SPECIAL ISSUE:

#### ABSOLUTE POWER 10

Channa Vithana auditions Musical Fidelity's monster-ous kW Hybrid Line Pre-amplifier and kW750 Power Amplifier.

#### FIREPOWER 15

Four integrated amplifiers from Sugden, Marantz, Lyngdorf and Eastern Electric, running Classes A to D, face off...

#### HEAVY METAL 34

Usher's R1.5 is a pure Class A power amplifier with a difference, says Stewart Wennen.

#### NEW MONEY 36

Dominic Todd auditions Arcam's new C31/P1 high end pre-amplifier/power amplifier combo with three different types of loudspeaker.

#### POWERED UP 40

Noel Keywood pontificates on matters of power...

#### COOL RULER 44

Densen's svelte B-250/B-330 power amplifier combo gets the treatment from Channa Vithana and three pairs of loudspeakers...!

#### JET STREAM 48

Bristling with trick technology, Elac's FS607 X-JET is an interesting loudspeaker, but does it fly? David Price stands by...

#### V10 POWER 52

There's nothing anaemic about T&A's V10 tube integrated amplifier, says Noel Keywood...

#### INTERFACES 59

Peter J Comeau explains the art of matching amplifiers to the outside world...

#### D-LITE! 63

Sonic Impact's diminutive 'T-amp' can easily be tweaked to better exploit its true potential, explains John May...

#### LJK SETRIGHT: A TRIBUTE 80

Linn Products' Ivor Tiefenbrun pens a paean of praise to the late, great Leonard Setright.



# 5

#### 7 NEWS

words from the front...

#### 69 COMPETITION

Win a pair of superb Pinsh One loudspeakers worth £1,200 in this month's great competition!

#### 71 SUBSCRIPTIONS

Ensure your copy every month and save money too.

#### 72 VINYL VAULTS

Paul Rigby rounds up the latest audiophile vinyl releases

#### 74 WORLD AUDIO DESIGN

Superb sounding valve amplification for do-it-yourselfers.

#### 76 WORLD LIBRARY

A wide selection of specialist audio books for sale.

#### 78,79,81 OPINION

The team get to grips with matters music, hi-fi and life!

#### 83 WORLD CLASSICS

Brilliant designs that have stood the best of times, listed.

#### 91 WORLD STANDARDS

Our fave raves - the latest and greatest from the world of hi-fi.

#### 98 KIT & COMPONENTS

Purveyors of specialist hi-fi services.

#### 99 MAIL

Ten pages of your views and comments.

#### 109 MARKETPLACE

Masses of pre-owned audio equipment for sale.

#### 118 DIAL-A-DEALER

A comprehensive guide to UK hi-fi retailers.

#### 120 SPECIALIST HI-FI DEALERS

Purveyors of specialist hi-fi services.

#### 121 MEET YOUR MAKER

Who makes what and how to get in touch.

#### 123 CLASSIFIEDS

Five pages of second-hand bargains.

#### 128 NEXT MONTH

Here is but a small selection of what we hope to bring you in the next sizzling issue...

#### 129 ADVERTISERS' INDEX

#### 130 CLASSIC CUTS

Frank Sinatra's 1957 gem, 'Come Fly With Me', gets an affectionate tribute from Paul Rigby..

# TRUST YOUR SENSES



PURE INSTINCTS | PURE SOUND | NO DIRTY DIAPERS



*"This DALI speaker is brimming with talent and seduction."  
"A new candidate in the world of top-of-the-range speakers  
at competitive prices."*

Robert Lacramp & Jean Hiraga | Revue Du Son & Home Cinema | '04



Golden Eye Award - 2004  
The Perfect Vision

*"In stereo configuration, the Helicon 400 ascended to the top  
of a very short list of premium \$4k-per pair floorstanders."*

Neil Gader | The Perfect Vision | Nov/Dec '04

*"Imaging is superbly spacious and "out of the box",  
with precise focus and good depth layering."*

Paul Messenger | Hi-Fi Choice | March '05



Golden Ear Award - 2004  
The Absolute Sound

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

Neil Gader | The Absolute Sound | Dec '04/Jan '05

## FEATURES

- Wide Dispersion
- 3D Audio
- Low Resonance Cabinets
- Time Coherence
- Hand Crafted
- Amplifier Optimized



www.dali.dk

IN ADMIRATION OF MUSIC

World Radio History

enigade/larsen

news@hi-fiworld.co.uk

# news



## NEW MUSIC

The ever prolific Musical Fidelity is expanding its not inconsiderably sized kW range with a new separate kW 25 transport and DAC. The new £1,999 kW DM25 transport offers turntable-style suspension with user-adjustable ride height, twin choke power regulation for transport, AES/ EBU digital balanced output separate for left and right at 96kHz, claimed to ensure maximum possible information transfer to the DAC. All the electronics associated with the 96kHz digital balanced AES/EBU output have a sophisticated regulated power supply. The custom-made extruded front panel, handles, and side panels are all from high quality milspec aluminium. The £1,995 kW DM25 DAC has two inputs, the first being dedicated to the DM25 transport (AES/EBU digital balanced at 96kHz) left and right separately, the second for standard digital format in either coax or optical. It will accept and automatically switch between 32kHz, 44.1kHz, 48kHz, 88.2kHz and 96kHz. The input stage has its own separately regulated power supply for each stage. The DAC is dual differential (one entire dual DAC for each channel) and upsamples to 24bits at 192kHz. It is said to have extraordinary linearity, incredibly low noise and ultra low distortion across the bandwidth. Importantly, because it's upsampling at 192kHz, any digital artefacts are way out of the audio band and cannot create any in band intermodulation. The digital filters are at least an octave and a half above 20kHz - way, way above human audibility. The DM25 DAC has two output stages operating in parallel; one tube configuration and the other solid state Class A. Watch out for an exclusive review in *Hi-Fi World* next month, or for more information now you can call Musical Fidelity on 020 8900 2866 or click on [www.musicalfidelity.co.uk](http://www.musicalfidelity.co.uk).

## BLACK IS BACK

Black Rhodium's new and improved Rhapsody stereo audio interconnect is claimed to deliver "an exceptionally impressive, natural, smoother and much clearer musical performance". Benefiting from improved production techniques, every pair of New Rhapsody cables is twisted together, which is said to "achieve the most remarkable and natural improvement in musical performance, with smoother natural clarity of sound". Rhapsody Interconnect is hand crafted at every stage of assembly, using high quality materials and finished in bright yellow. It has 24 strand 0.2 mm diameter tinned copper conductors insulated in Low Loss Silicone Rubber, twisted and terminated with high quality chrome phono plugs for easy insertion and extraction from equipment. Price is £30/m. For more information, click on [www.blackrhodium.co.uk](http://www.blackrhodium.co.uk).

## ENIGMA VARIATIONS

Italian audio specialist Audio Analogue's products are invariably svelte and stylish (as well as sonically very accomplished), so it was interesting to hear of this, the new Enigma 'multifunction audio unit'. Said to be, "the perfect one-box solution for today's space and style-conscious customers", it boasts a high quality 50 watt integrated amplifier, CD player and an AM/FM tuner. Add to this its use of valve technology for improved sound quality and a price tag of under £500 and it's an interesting bit of kit alright. For more information, click on [www.ukd.co.uk](http://www.ukd.co.uk).

## SLIM DEVICES

NAD's new T514 DVD/CD Player has a slim chassis that's 'stylish and attractive' enough to partner to any one of NAD's high performance A/V Receivers, the company says. Its DACs are capable of reproducing 24bit, 96kHz audio resolution and Progressive Scan with 3:2 pull down (film detection mode), with Component Video.

The T514 also supports DTS surround sound formats, with the assistance of an external decoder; as well as Dolby Surround formats. The analogue output stages are fed from separate regulated power supplies, and use audiophile quality parts. The NAD T514 is available now from selected NAD specialist retailers at a suggested price of around £159.95. For more information, click on [www.nad.co.uk](http://www.nad.co.uk).



## Radialstrahler

The revolutionary construction of MBL speakers is capable of producing three-dimensional sound that reflects the acoustic nature of real instruments. This concept is as simple as it is brilliant.

Like musical instruments, the "Radialstrahler" radiates the sound waves omnidirectional - not only in one direction like conventional speakers.

Spacious and crystal clear sound - that's MBL

Our passion is two channel high-end stereo in combination with outstanding quality and vanguard design.

Hand manufactured in Germany since 25 years.



# A class of its own

Just arrived:

Finally, the stunning MBL audio systems are available in the UK. Unique radial emitting "Radialstrahler" speakers, accompanied by extremely musical sounding CD transports and D/A converters, as well as powerful yet subtle amplifiers are the results of our demand for perfection in high-end.

Proudly distributed by  
**SOUND VENTURE**  
Audio Systems



MBL Distributor for the UK and Ireland  
T: +44- (0)1932 - 86 45 48  
[www.soundventure.co.uk](http://www.soundventure.co.uk)  
email: [sales@soundventure.co.uk](mailto:sales@soundventure.co.uk)



## PORSCHE DESIGNS

Etón Corporation has a new Porsche Design radio line, consisting of four primary product platforms, ranging from the Porsche Design P' 7131, a revolutionary table-top digital audio solution, to the Porsche Design P' 7136, a compact, travel-friendly portable radio. The range begins with the launch of the P'7131, said to be the world's only AM/FM/SW and XM Ready Radio Receiver, offering the ease and convenience of listening to radio from local, distant, and orbiting origins. The P'7131 features sound through



two front-firing speakers (hidden in the front controls) and enclosed, powered subwoofer, to bring users the ultimate listening experience. Etón is headquartered in Palo Alto, California, and has offices in Berlin, Germany and Toronto, Canada. Porsche Design is a global luxury men's brand and is determined by engineered products. Professor Ferdinand Alexander Porsche established the Porsche Design brand in 1972. For more information, click on [www.etoncorp.com](http://www.etoncorp.com).

## RIP AND BURN

CDlabs offer CD ripping to the FLAC digital music file format using Hi-Pro Encode, the name given to the company's new bulk ripping service. The recent popularity of new home network audio players such as the Sonos DMS, Squeezebox and Roku Soundbridge have led to an increased interest in true high fidelity digital music, and FLAC is becoming one of the most popular of these 'lossless' formats - music files that suffer no loss in audio quality when converted from CD. CDlabs now offers FLAC as part of its standard encoding service, which uses rigorous CD data extraction and encoding algorithms which guarantee superb quality results - with MP3 (vbr to 320kbps), WMA, AAC, and others. Tagging is also highly accurate as it uniquely cross references data from several CDDB sources. The address is Completely Digital Labs Ltd., 170 Brook Road, Waltham Abbey, Essex EN9 1JH or point your browser at [www.cd-labs.co.uk](http://www.cd-labs.co.uk)



## POD FI

Boston Audio Design has a new 'Hi-Fi Industry Podcast Series', said to be the first podcast series to focus exclusively on high-end audio. The podcasts will be in live interview format with questions submitted by the public, released monthly and may be downloaded automatically via RSS or manually by visiting the Boston Audio Design website. The podcasts are free of charge. By allowing the public to ask questions directly of leading industry manufacturers and personalities, the podcasts will give audiophiles worldwide a new way to learn about and interact with the audio community. Also, by syndicating the podcasts through hubs like Apple's iTunes, the podcasts will help promote hi-fi to a wider audience. The first podcast will be available this fall and will feature a rare interview with artist and turntable designer Simon Yorke of Simon Yorke Designs. Remember that Podcasts do not require the use of an iPod - the MP3 files can be listened to on a computer or burned to a CD. Click on [www.boston-audio.com](http://www.boston-audio.com) for information.

## NEW ENERGY

Acoustic Energy, commonly associated with high end mini monitors, has unveiled the world's first Wi-Fi internet radio capable of accessing over 10,000 stations across the globe! The AE Wi-Fi radio is said to be the first streaming media device capable of accessing over 99% of internet radio stations broadcast online anywhere in the world. Compatibility with all three major streaming formats gives the AE Wi-Fi radio unrivalled choice of content from London's BBC Radio 1 to Sao Paulo's Radio Calypso! No subscription to pay, no signal coverage problems and no international content boundaries. Designed in the UK by AE in conjunction with internet radio technology expert Reciva, the radio automatically links into your existing Wi-Fi network (with WEP encryption if enabled) and uses your broadband connection to access Reciva's internet radio Gateway. The Reciva Gateway then uploads channel listings alphabetically by country and genre to your AE Wi-Fi radio. There are currently over 2,500 stations registered on the Reciva Gateway and more are added every day. You simply select the station name you want using the rotary control knob and clear LCD display, and press play - as simple as that. It should sound good - its twin AE drivers in a ported compact cabinet playing high bit-rate stations can give better clarity than DAB radio. Price is under £200, on sale before Christmas. For more information, click on [www.acoustic-energy.co.uk](http://www.acoustic-energy.co.uk).



## TIVOLI THREE

Ruark Acoustics has expanded the DAB options in its Tivoli range with the Tivoli RADIOWORKS DAB system. Comprising a MODEL DAB, MODEL DAB STEREO SPEAKER plus MODEL CD, this system provides Tivoli's unparalleled radio DAB and AM/FM tuner, remote control CD player and twenty watts of stereo sound. The Tivoli Model DAB offers the best of analogue and Digital Radio for radio lovers everywhere, all wrapped up in Tivoli's distinctive



Adding the Model DAB Stereo Speaker provides true stereo reproduction of FM broadcasts. The Tivoli Model CD Compact Disc Player fits the requirements of those in need of a smaller-sized CD player to add to a home stereo system, with a front-loading slot design similar to most in-car CD players, making loading a disc easy. The credit card sized remote control adds Shuffle, Repeat, Volume, Intro, and Direct Track Access functions. The Model CD will play any standard CD as well as CDR. The system is available in Classic Beige/Walnut for £499.99 from a wide range of specialist audio retailers and department stores such as Conran, Harrods, Selfridges, and John Lewis.



## UNESOTERIC

From the same company responsible for some of the very best digital transports ever made, comes an altogether more affordable purchasing proposition in the shape of Teac's new DV-20D universal disc player. Able to play back all major formats - SACD, DVD-Audio, DVD-Video and CD - it also has progressive-scan video output, and DTS and Dolby Digital processing behind its ultra-slim aluminium front panel. The diminutive digital disc spinner measures a silph-like 435x64x330mm, weighs 3.3kg and costs under £200. For more information, click on [www.teac.co.uk](http://www.teac.co.uk).

# Absolute Power

Channa Vithana brings out the big guns, in the imposing forms of the Musical Fidelity's kW Hybrid Line Preamp and kW750 Power Amplifier.

**T**he new "substate kW range" from Musical Fidelity, judging by the gargantuan dimensions, is clearly competing with the bigger powerhouses from the likes of Krell and Chord Electronics. However both the kW Preamp and kW 750 Power Amplifier dramatically undercut their rivals in price, if not size!

The kW 750 Power for instance is conservatively rated at a quoted 750W/8ohms and 1.1kW/4ohms. In the context of Musical Fidelity's own archive, the new £11,497 combination of kW Preamp, kW 750 Power Amplifier and kW Phono Phonostage looks like very good value when you consider they have been developed from the previous 2003 kW Tri-Vista kWPre/kW pre-power amplifiers (dubbed the kW Monsters) which cost £22,500 in total. Additionally for the sum of just £247 over the half price point of the original £22,500 Tri Vista kW's, you also get a standalone higher quality version of its inbuilt phonostage.

This new kW series is finished in style reminiscent of the 1992-95 era MF F series. The older F series had finely ribbed details across the top and bottom of the fascia, elaborate expensive-looking heat sinks and beautiful curved black motifs at the sides. The new kW's physical description has a very thick frosted silver fascia which is angle-profiled at the top and bottom. The sides feature ribbed heatsink type extrusions which is shared across the complete kW range. All the kW's also feature the glowing feet brought over from the Tri-Vista series where, incredibly, they actually work in volume proportionality - considering the large case sizes to break up the great expanses of metal. With the exception of the kW Power PSU's feet which are always blue, approximately thirty five minutes later they turn from red and amber to a surprisingly easy-on-the-eye soft blue.

All the kW casework is very thick aluminium to the front, sides and back plus thick, solid steel base plate. The new kW's also benefit from flush mounted hex-head fixings to the top plates, which are far superior to the unsightly dome topped ones used in the previous Tri-Vista and Nu-Vista Monster series. Overall build is for high-end very good and solid but not spectacular - in terms of an ultra-luxurious finish or sophisticated design like Chord Electronics for instance. Still, they're far less expensive!

## HEAVY METAL

The kW Hybrid Line Preamp is huge for a preamp; measuring 483x167x450mm and with a weight of 20.55kg, it resembles a large power amplifier! A massive volume control dominates the centre of the silver aluminium fascia. This Cyclops-like dial features a six segment design at its front face with some nice grooved details and an inlaid circular marker designating position. It is an interesting Art Deco style idea in design terms and it simplifies the two knob approach of the previous kWPre preamp but I would have preferred something proportionally slightly smaller with more machined design tactility apart from the sheer size, to draw me in. For instance, the Tri-Vista kWPre had three black ring grip

details inlaid into each of its knobs while the much cheaper £799 Musical Fidelity X-150 integrated has a nicely designed volume control which is reminiscent of the sublime and esoteric Mark Levinson era Cello audio laboratory style design. Still the kW volume control rotates with a well-oiled precision which is confidence inspiring. Internally the kW Preamp features an Alps K27 volume control and one 6112 6µV Vista1 valve per channel. Musical Fidelity describes the kW Preamp as having incredibly low distortion, low noise and a ridiculous overload margin, so that it is impossible for any available line source to overload it under any circumstances. The output stage is quite breathtaking; it is capable of an easy 20 (watts) RMS continuous. It will, in fact, drive efficient loudspeakers better than many amplifiers. The output stage has a peak power capacity of about 100 watts, so that any inter-connect cable will present no problem whatever!

The £5,999 solid state stereo kW 750 Power Amplifier is a two box affair. The main unit measures a substantial 483x167x553mm and weighs 34.1kg. It is a beast, and has some finely rib-detailed heat sinks running across its sides, although great care is needed as the shape, bulk and those heat sinks make it a mandatory two-person lift. The front panel has a set of blue protect/supply LEDs for both channels and a blue LED illuminated power on/off button. The rear panel has some very solid looking bi-wirable speaker binding posts, separated left/right inputs and a pair of left/right loop outputs for bi-amping! Below these are left/right PSU inputs and a control PSU input. The kW 750 PSU is a separate dedicated power supply for the main unit which measures a relatively smaller 365x167x279mm but weighs 18.4kg. The separate power supply houses three toroidal transformers; the two larger ones are approximately 1kVA rated for the left and right channels. It features a solitary LED illuminated master power button on its

front panel and the rear features corresponding power output sockets to the Inputs of the main unit. The left and right power is transferred individually by chunky silver coloured cables terminated in high-quality Neutrik Powerfon NAC3FCB connectors which must be securely, forcibly, twisted and clicked into place (this was not mentioned in the instructions). The central low-level control supply from the smaller transformer uses a standard-looking cable fitted with XLR-type connectors. The IEC main input is a big 16-Amp type with corresponding power cable.

great bass dexterity alright, with powerful bass lines and midrange richness which emphasised well-rounded timbre to the saxophone, vocals and percussion. I opted to compare the £8,998 pairing of kW Pre and kW Power compare to the £6,000 Densen B-250/B-330 using the same Musical Fidelity kW Phonostage. On Elgar's 'The Dream Of Gerontius' the Densens had a wider spatiality to both vocals and instrumentation. There was also more clarity and atmospheric compared to the kW duo. The non-lead vocals had superior definition and timbre while the musical timing was also slightly superior in comparison where dramatic changes in emotional emphasis were more heightened and this led to a more free-flowing presentation compared to the kW's. However in the lead vocals to Elgar, the kW Pre and Power had a deeper timbre to the Densens and in the dramatic crescendos the kW had discernible extra weight, which is clearly down to the kW 750 power amplifier. Additionally the kW duo had better bass extension but the more important bass dexterity was equal to both sets of amplifiers.

The Densens had a wider, deeper spatiality to 'This Must Be The Place I Waited Years To Leave' by the Pet Shop Boys. There was clearer enunciation of vocal passages and a cohesive whole with superior musical timing where the music was free-flowing and also inclusive of excellent musical separation compared to the kW duo. The dynamics were the same compared to the Densens - however away from the bass dexterity and the higher frequencies of the midrange and treble, the kW duo did have better bass extension. The same circumstances applied to the Damned's 'Street Of Dreams' between the Densens and kW's, with the kW's having the edge on bass extension. I swapped round the preamplifiers using the kW Pre and Densen B-330 power and the difference was interesting as the kW pre was smoother and did have some bass extension over the B-250 preamplifier but not as much as with the kW 750 Power. The sound was also a tad warmer but the superb higher resolution, clarity and musical timing of the Densen duo was slightly lessened.

## CONCLUSION

There's no doubting the stunning performance of this threesome; you'll struggle to find better all round performance from any combination of high end amplification. But obviously, even a combination such as this has its star players, and that is surely the £5,999 kW 750 Power Amplifier. This isn't just in terms of its prodigious power output but also its driving ability and bass extension, and furthermore the kW 750 will find itself at home with virtually any speaker currently on the market and especially in extremely large listening rooms where people tend to sit much further away from their speakers. I found the £2,999 kW Preamplifier had a superb volume control but was slightly less able than the kW 750. The kW Phono, though expensive, was very enjoyable and delightfully adaptable as I found it agreeably accommodating to some completely different cartridges and when used with other amplifiers. For discrete, elegant beauty look elsewhere - but if you like big, dramatic and bold visual impact then the Musical Fidelity kW series is for you.

## SOUND QUALITY

The Musical Fidelity kW combination of kW Phono, kW Pre and kW Power had

# Walrus



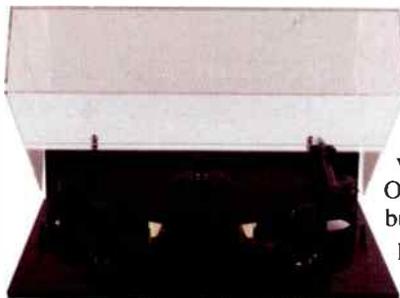
11 New Quebec St, London W1

Some Digital and some Analogue news. And, don't forget the upcoming Heathrow Show ..!

Just because we are predominantly an analogue, vinyl based, retailer doesn't mean we don't care about digital. We realise that our customers, much as they love their vinyl collections, still need to play digital media occasionally! It's a pity that SACD never achieved the prominence it ought to have. But then, the choice of music is still very limited. Or, perhaps it's the other way round. Anyhow, when you get a good recording, SACD can be stunning. You guessed this was leading somewhere, and it is! Musical Fidelity have at last released their new kW Series SACD player. It features MF's trademark sophisticated choke regulated power supplies, and, unusually, the SACD and CD circuits and their power supplies inside the player are completely separate. Too often, when you buy a really good SACD player you still need to retain your existing expensive CD player to get the best out of the respective media. The MF player gets the absolute best out of both media, it really is one of the only genuine dual purpose machines on the market. Other details include technical specs (signal to noise ratio and jitter) which challenge the resolution of measuring instruments, and the ability to switch between two very high quality output stages, valve and transistor, to keep both camps happy! This is their best digital player yet, and one which it will be very hard to surpass (despite what MF say in their regular newsletters - existing owners know what we mean!) - if you are interested, don't delay in hearing it as I think the limited production run will soon all be allocated. Oh, nearly forgot, the price is a whisker under £4000 - very good value indeed when you see (and hear) what you get for the money.



Staying with digital, we've just taken delivery of the new "entry-level" Shanling CD player - the CD-T80 at £650 - and what a brilliant player it is. How they manage to make this superbly built unit for the price they do is quite scary. The fit and finish is absolutely top class, what you might expect if you pay double or treble the price, and the sound quality is on a par or better than just about anything else up to a thousand pounds. I'm told the importer is having a problem keeping up with the demand! If Shanling continue on present form, they will be (rightfully) dominating quite a few sectors of the enthusiast hi-fi market. We refer, of course, to their two existing models, the mid-range CD-T100 (£1650) which has been around for ages now but is still very competitive and looks as stunning as ever, and the relatively new limited edition CD-T300 Omega Drive player, featured in our last ad, for £3999. This new, very modern and attractive player is attracting huge interest. Like the Musical Fidelity it is also a limited edition model. If you fancy owning a top class CD player which will have lasting value, superb sound, and totally original appearance, come and demo it before it's sold out.



Our main business, in case you were wondering, is definitely still analogue! And, we have some exciting news on the turntable front. First, the affordable: Michell Engineering have released a limited edition (it's all limited editions this month!) turntable, loosely based on the famous Gyrodec. However, the Odyssey looks completely different, with a jet black acrylic base, black chassis, clear lid, and a special black version of the acclaimed Tecnoarm A, finished off with a black version of the HR power supply. It also has nickel silver weights, and a clear acrylic spyder like the Orbe. This special model, which only needs a cartridge to complete it, is not only stunning looking but very competitively priced at £2150. But, the most interesting thing is the exclusivity - only 100 pieces are being made. They will almost certainly become collectable. And, sadly, due to copy dates, by the time you read this we suspect there may not be many left, so please phone for current availability.

The other exciting news is the arrival at our shop of the brand new flagship turntable from Nottingham Analogue, the Deco. This model is about as exclusive as it gets, the price alone will assure that! Mass is very high, and the platter features a unique contoured design to aid energy dissipation. If you want to know more (and hear it) you'll have to pay us a visit.

Also new to Walrus is the Stirling Broadcast LS3/5a loudspeaker. Stirling is only one of two current licensees for this superb, classic speaker design. It might be an old design, but it still beats most other compact speakers, especially since Stirling made some small but important tweaks! Price is a very reasonable £890 to £973 dependent on finish. On demo now, please try to hear before you consider purchasing any other compact speaker.

On to this month's Featured Accessory, the Shure SFG-2 Stylus Force Gauge. This is a very simple well made balance which sells for £28, and will last you a lifetime. It measures tracking weight between 0.5g and 3g. For anyone who regularly changes their pickup this is an absolute must, unless you're rich enough to afford one of the swish electronic gauges such as the Martin Bastin gauge. Even if you have an arm which already has tracking force calibration, the Shure will be a lot more accurate.

Lastly, don't forget the Hi-fi and Home Entertainment Show at Heathrow, from the 23rd to 25th of September. I know it's a long way off, but put it in your diary now! We'll be there with lots of our favourite stuff in room Syndicate 16, feel free to turn up with your favourite LP or CD for a quick demo. See ya there!

air tangent amazon amplifon apollo furniture argento audible illusions audio aero audio physic audiovalve black rhodium breuer dynamic brinkmann cartridge man cawsey clearaudio consonance decca london duevel dynavector ear yoshino final lab goldring graham (tonearms) graham slee hadcock heart hyperion (loudspeakers) incognito isolda jadis kr electronics klimo koetsu lavardin lyra magneplanar michell engineering morch musical fidelity nordost nottingham analogue opus 3 origin live ortofon pro-ject rega (turntables) revolver ringmat roksan shun mook shahinian shanling shelter slinkylinks sme something solid sonneteer spendor stax stirling broadcast sugden sumiko tannoy tci cables tom evans townshend audio transfiguration trichord trigon van den hul voodoo wireworld xlo

**kW PHONO**

The kW Phono is a solid state switchable MM/MC phono-stage with selectable RIAA or IEC settings. In their inimitable style Musical Fidelity describe the kW Phono as having overload margins of more than 40dB. The equalisation (both RIAA and IEC) is incredibly accurate up to about 40kHz (normal reference point for this is 20kHz). And it is accurate to within 1dB up to about 150kHz. Internally the kW Phono features Musical Fidelity's favoured choke regulated separated power supply (for more details on chokes see p64 of the October 2005 issue).

Additionally the power supply has a small toroidal transformer and separated power supply PCB. For the phono sections there is a nice set of separated dual mono circuit boards. There is also a set of high-quality braced phono sockets for stereo output and multiple selector loadings for MM and 10ohm/100ohm for MC per channel. Accompanying a turntable ground connector is an IEC mains input. It measures 483x167x486mm and weighs 18.15kg and therefore has to be one of the biggest phono stages ever produced!

Considering the excellent bass extension and dexterity through the kW Phono, it was very close to the transcendent combination of Linn's Akiva MC and Linto phono stage - which remains the best I have yet heard in this regard. However with other frequency ranges on both vocal and instrumentation, in some key areas the kW Phono/Akiva combination bettered the Linto/Akiva with deeper timbral resolution which is understandable as the £2,499 kW Phono costs almost two and a half times the price of the £995 Linto phono stage.

However the Linto was still better at the musical timing where the kW was slightly behind. Against a £2,060 Chord Electronics Symphonic phono stage, on the Pet Shop Boys' 'This Must Be The Place I Waited Years To Leave' the Chord Symphonic had a more sophisticated treble quality in relation to the higher frequency demands of the instrumentation and vocals. The kW Phono had superior bass dexterity as the Chord was a little diffuse in this aspect. This also had an impact on the musical timing, where the Chord was slower than the kW Phono.

The kW Phono's wonderful spatiality, resolution and dynamic swings were missing on the Chord and this also relates back to the kW Phono's superior bass dexterity. On the Damned's 'Street Of Dreams', the Chord's superb high frequency abilities were present with a wonderful sense of control and lack of immediacy (which requires a little patience). The Spanish style guitars in the middle had excellent timbre, but on the kW Phono its superiority was in a higher resolution, energised and enjoyable sound quality. So the kW Phono was superior overall to the lower cost Chord when both were connected into the kW Pre and Power combination, but so it should be at £439 extra!



**VERDICT** ●●●●●

**MUSICAL FIDELITY**

**KW 750 POWER** £5,999

Disarming power and punch allied to tremendous musicality make this many people's ultimate amplifier.

**VERDICT** ●●●●●

**MUSICAL FIDELITY KW**

**PHONOSTAGE** £2,499

Brilliant versatility allied to a class leading sound; one of the best.

**VERDICT** ●●●●●

**MUSICAL FIDELITY KW**

**PREAMPLIFIER** £2,999

Extremely smooth, svelte and insightful sound from an excellent high end preamplifier.

Musical Fidelity

☎ +44 (0)208 900 2866

www.musicalfidelity.com

**FOR**

- dramatic design
- brilliant musical subtleties
- stunningly powerful kW 750

**AGAINST**

- sheer physical bulk!

**REFERENCE SYSTEM**

Origin Live Resolution Turntable/Ultra Speed Control, P/S & Encounter 2 Arm (£3,740), Linn Akiva MC cartridge (£1,800 approx), Linn Linto phono stage (£995 approx), Chord Electronics Symphonic phono stage (£2,060)

**MUSIC**

- Elgar/Barbirolli 'The Dream Of Gerontius' 1965
- Pet Shop Boys 'Behaviour' 1990
- The Damned 'Phantasmagoria' (1985)

**MEASURED PERFORMANCE**

Rated at 750W by Musical Fidelity, hence the kW750 moniker, under test this balanced-bridge amplifier produced 770W into 8ohms and no less than 1170W into 4ohms! The figures in themselves are fairly awesome by domestic standards but, like earlier monsters from Musical Fidelity, this one was more impressive for the alacrity with which it coped with both power and distortion tests. Large power amps can break into a sweat when pushed hard, transformer laminations humming, output devices whistling and heat building rapidly. By way of contrast the kW750 made no noise when pushed to full output or when held there for distortion tests.

Also impressive was an almost total absence of distortion when delivering full output. In the midband, levels as low as 0.0003% were maintained up to high output, with 0.005% an maximum near clip, into 4ohms. These are very low values and they stayed low as the device junctions heated rapidly.

At 10kHz distortion rose little, measuring 0.0007% at low output, rising to 0.01% at full

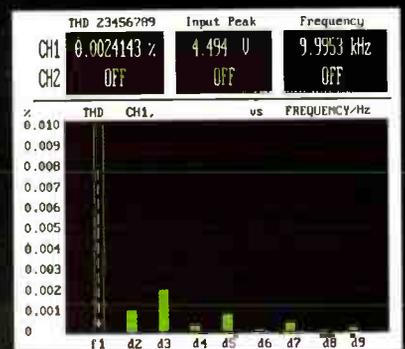
output, again impressively low amounts. Our analysis shows third harmonic is dominant.

The kW750 delivers power with the greatest of ease, producing negligible amounts of distortion right across the audio band whilst doing so.

For full output this power amp needs no less than 2.5V in, a high figure. A preamp with a gain of around x10 is needed if old tuners or cassette decks, typically of 0.3V output, are to be used, but the kW preamp has only x4 gain, giving a low sensitivity of 0.6V. Modern sources give 0.5V or more, meaning a gain of x5 or thereabouts is still needed. The preamp is wideband (-1dB at 63kHz) and low noise. It also swings huge output - I measured 40V out, and there was more to come. Frequency response extended from 3Hz to 70kHz. This is not a direct coupled amp; feeding DC in showed the servos worked to cancel output offset.

The kW750 is very well engineered for its task. Few hi-fi power amps are as polished in their abilities. The preamp will not suit old, low output sources. NK

Power	770watts
CD/tuner/aux.	
Frequency response	3Hz-70kHz
Separation	95dB
Noise	-118dB
Distortion	0.0006%
Sensitivity	2.5V
dc offset	4/3mV



# Esoteric:

serious hi-fi for the initiated

Born of an obsession with perfect reproduction of the finest detail, these components are precision instruments, finely engineered and beautifully designed.

This range of components is, quite simply, peerless. Listen once and you'll remember it for ever.

# ESOTERIC



For further information contact Symmetry on 01727 865488 or [info@symmetry-systems.co.uk](mailto:info@symmetry-systems.co.uk)

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

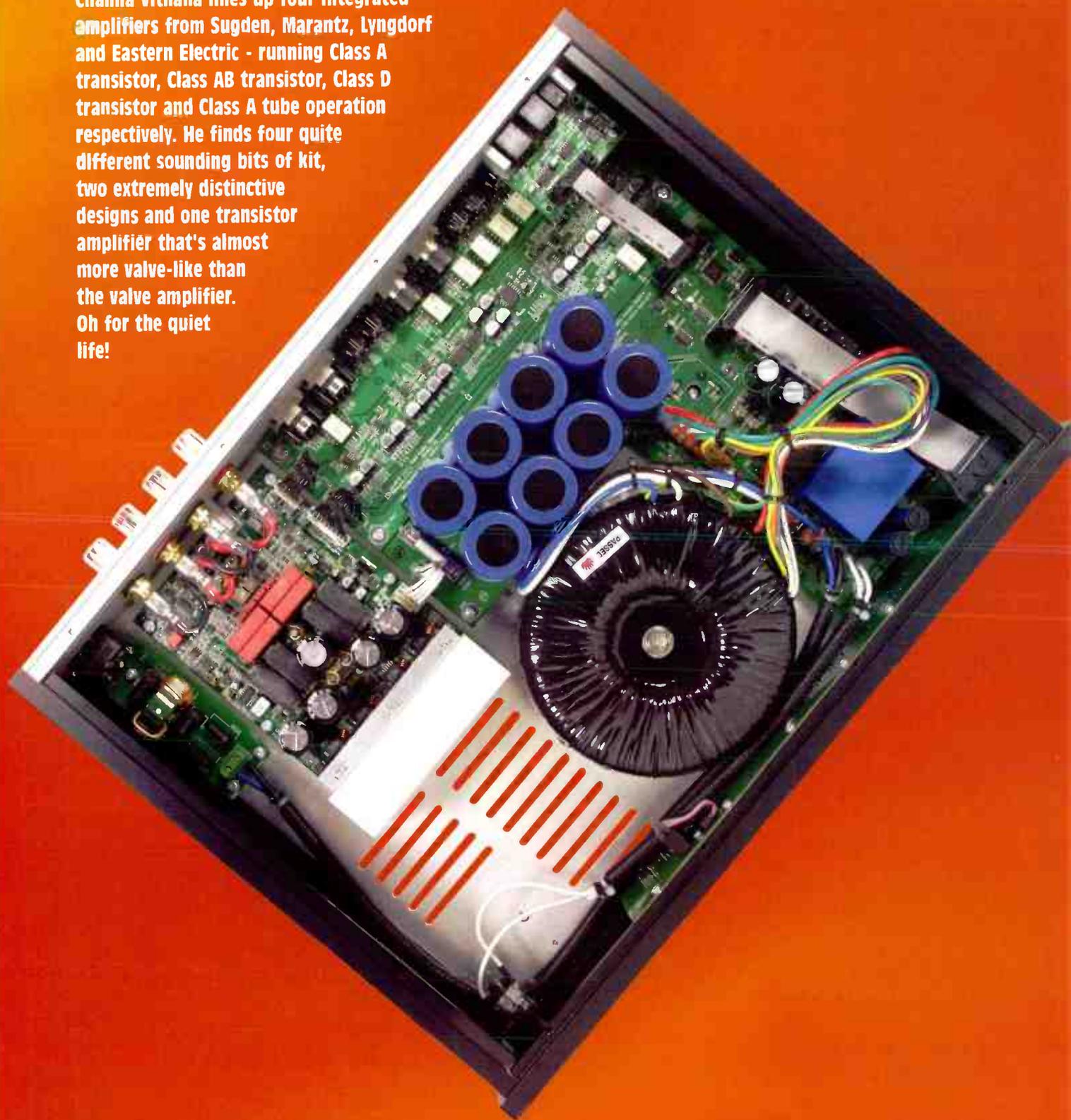
TEAC's unique VRDS-NEO clamping mechanism, precision machined from ultra-dense materials



by **TEAC**

# Firepower!

Channa Vithana lines up four integrated amplifiers from Sugden, Marantz, Lyngdorf and Eastern Electric - running Class A transistor, Class AB transistor, Class D transistor and Class A tube operation respectively. He finds four quite different sounding bits of kit, two extremely distinctive designs and one transistor amplifier that's almost more valve-like than the valve amplifier. Oh for the quiet life!



## CLASS A TRANSISTOR: SUGDEN A21a £949

The Sugden A21a integrated is one of the longest running hi-fi products ever. Sugden Audio states that the original A21 was first introduced in late 1967. It followed what Sugden claim is the first commercially available Class A transistor amplifier in the UK; which was their A41 power amplifier. The A21 was originally a 10W per channel integrated. It went through changes to become the A21 mkII in 1973 as a high bias class AB amplifier and ceased production in 1976. In 1987, the electrical engineer and designer Jan de Jong (who is fanatical about Class A) teamed up with Sugden's Tony Miller and designed a new A21a. They decided on 25W per channel which was, "sufficient to project a large enough soundstage to fill a reasonable living room, but not a level (of W/Channel) to take us too far up the exponential curve of cost/heat problems".

Sugden says it prefers Class A design because, with Class B, "there is a complicated pattern

of distortion which even though it may measure much better than Class

A makes the sound thinner and slightly brighter. The even harmonic distortions developed by a Class A amp are more musical and less intrusive to the musical performance. Class A offers the opportunity of the least complicated circuit designs and we believe simplicity in circuit path is rewarded by pure musicality". The newer A21a was released in 1989 and featured dual mono power amps "operating from separate windings of a single transformer". The output devices were the "latest multi-emitter bipolar devices with low internal resistance, high gain and speed characteristics". The gain stages from line input to the input of the power amplifiers "were changed to cascade configuration employing high speed transistors". This was to prevent phase shift and to maximise

current feedback and increased the bandwidth performance. Sugden stated that the changes made to the new A21a "demonstrated the potential of the original circuit".

Now in the summer of 2005, we have the latest version of the A21a which features a different, higher-quality power transformer. The previous 1989 A21a had a quoted power output of 25W/8ohms but only 10W/4ohms. Sugden says that they have "reduced the voltage slightly and increased the current available. This has been carried out on the same transformer core and the windings have been increased in gauge and wound with closer tolerance. The overall effect has been to reduce the rail voltage but increase the constant mean current. A slight

reduction in output power into eight Ohms has been compensated for by an increase in power into lower impedances. This has had the effect of stiffening the power availability and improved the amplifiers performance into lower impedance loads".

As such, the latest A21a features a quoted power output of 20W/8ohms and 20W/4ohm [see MEASURED PERFORMANCE] which should suit a wider variety of the more modern 4ohm speakers. Otherwise the A21a remains the same and is a compact and extremely well-made amplifier. The volume control is said to be a 'standard' Alps Japan type and there are two 10000 micro-Farad capacitors to the low impedance power supply and one output capacitor of the same value for the single voltage rail.

There are four line inputs, one optional phono (£100 extra) plus turntable ground, one tape, one pre out and speaker binding posts. The Sugden features a steel base plate, aluminium top, extra thick aluminium faceplate in either gunmetal silver or black and aluminium heat sinks. Build quality is excellent being

extremely solid. The front controls work with well-oiled precision and while no classical beauty, just like the Lyngdorf SDA1 1275, the Sugden with its attractive heatsinks has a sober business-like look that exudes fine craftsmanship the more one looks at it. The only thing I would change is the rather prosaic lettering style and have the Sugden logo deeply engraved instead of printed on the front panel! The A21a measures 80x430x350mm and weighs 8.1kg.

### SOUND QUALITY

For practical purposes, I had

the Sugden on for about an hour to get properly 'warmed' up and then switched it off after the listening sessions as it gets very hot in use. Playing the very quiet but high-quality recording of 'Trio For Violin, Horn And Piano' by Ligeti, the Sugden was intriguing. The sound was neutral yet very high resolution also. The horn playing of Marie-Luise Neunecker was nimble and had no distorted flaring-out quality whatsoever. Plucking of the strings was handled with an enjoyably elastic delicacy. The violins were beautifully reproduced just like the Minimax – where they had excellent timbre going from their lower treble to delicate near silent ultra high treble. The piano was also tonally convincing with good impact as the keys were struck embodying tension and timbre.

Fleetwood Mac's 'Dreams' had a deeper more widescreen musical whole. It was well balanced and had superb musical timing. The vocals were stunning - well-rounded texturally and expressive. On 'Never Going Back Again' the acoustic guitar playing was wonderful with tangible plucking and strumming – it was elastically enjoyable. Lindsey Buckingham's vocals were very good but the Minimax had slightly better overall sophistication with a deeper more complicated texture. Still the Sugden was always in control, never once hinting at stridency. It also had





"it has a radiant sound which is dripping with resolution..."

wonderful rhythmical thrust to 'Don't Stop' with excellent musical timing. Instrumental timbre was especially good – where the rolling piano melody was most enjoyable as was the guitar solo, which was animated. Vocals once again were slightly bettered by the Minimax where the Sugden had a small but discernibly lighter presentation in comparison regarding the different vocal styles.

On Steve Stevens' 'Flamenco A Go Go', the Sugden revelled in the complex acoustic guitar stew. The sound was lustrous and radiantly engaging. The Sugden's strengths were in instrumental timbre and rhythmical drive which came through magnificently, expressing beautiful tonality to the flamenco guitars and energetic bass lines. Bass extension was not as deep as the Minimax but more importantly (for me at least) the more complex nature of bass dexterity (tunefulness) over mere extension was truly excellent with the Sugden. On the atmospheric 'Our Man In Istanbul' the Sugden was able to utilise its excellent bass dexterity and midband to provide stunning thrust and drive.

The eastern flavoured guitars were really enjoyable as Steve Stevens went from lower to higher frequencies. Iranian born Azam Ali's gorgeously sexy melodic vocals were spatially well spread out and agreeable, however they were minutely diffuse in comparison which was surprising considering the superlative instrumental timbre and as such these vocals were not quite as sophisticated as with the Minimax nor quite as super-enunciated as on the Lyngdorf. The difference in vocal quality on 'Our Main In Istanbul' was

not huge and in isolation this is not a major issue with the Sugden, as it isn't noticeable.

### CONCLUSION

Tony Miller said that some reviewers of Sugdens commented on their warmth and valve like sound. He doesn't agree, with the use of the term "warmth". And as such I wholeheartedly concur, as the latest Sugden A21a is a superb amplifier and especially good in its driving and musical timing abilities where it excelled in this group. Instrumental timbre was also first-rate as the Sugden exhumed vast amounts of feel, texture and sophisticated musical notes from the instruments in all the recordings used, without exception. It has a radiant sound which is dripping with resolution.

The Sugden didn't quite match some of the other amplifiers on vocal ability but this wasn't particularly noticeable in isolation as the sound quality as a whole was well balanced, nimble and highly enjoyable without any discernible subjectively coloured tonal frequencies. The build quality of the A21a is excellent, as the casework is well screwed together in a

compact solidly made professional manner. The control and volume knobs move with a solid assurance and if it matters to you, the Sugden does not come with a remote control. Another consideration is finding a suitably sensitive speaker for really high volumes in a very large listening room. All this aside, this is a truly special amplifier – one of the greatest music makers at any price – and a seminal audiophile bargain.

### MEASURED PERFORMANCE

The A21a clearly illustrates the drawbacks of running a solid-state amplifier in pure Class A. The heatsinks get very hot and the case runs warm, yet it produces just 15W, into 8ohms or 4ohms. This sort of power level is acceptable with large, efficient floorstanding loudspeakers of 90dB/W, but far less so with any form of compact design. Loudspeaker matching becomes a crucial issue.

It may be worth the hassle though as here is another amplifier with totally stable distortion characteristics, and the distortion it produces is innocuous second harmonic, as our analysis shows. This holds at all power levels and frequencies, a good sign suggesting a totally clean, easy sound. The overload characteristics suggest feedback is not high.

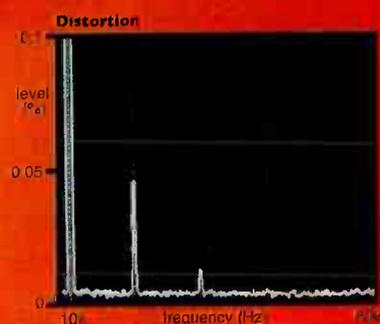
Unlike most of today's amps, this one has enormous input sensitivity, so it can be partnered with just about anything. Input noise seems high, but this is because there's so much gain.

A phono stage caters for MM cartridges, offering a useful 2.5mV sensitivity, sufficient for good quality types. Overload was high, and equivalent input noise low at 0.47uV (IEC A wtd.), which is at the low end of the usual range, so the working range of this input is good. Sugden fit a warp filter that cuts bass below 30Hz, introducing -17dB attenuation at 5Hz. This is a good design compromise that maintains subjective bass depth whilst at the

same time eliminating loudspeaker cone flap.

The A21a is a very tidy design in every respect, perfectly meeting its design aim without hemish. Loudspeaker choice is crucial to appreciating its qualities. NK

Power	15watts
CD/tuner/aux.	
Frequency response	6Hz-35kHz
Separation	88dB
Noise	-80dB
Distortion	0.04%
Sensitivity	130mV
dc offset	2/1mV
Disc MM	
Frequency response	30Hz-50kHz
Separation	84dB
Noise	75dB
Distortion	0.05%
Sensitivity	2.5mV
Overload	110mV



**VERDICT** Differently musical and natural sound with quality but suggest, but reasonably tricky to partner

**SUGDEN A21A** £949  
Sugden Audio  
+44 (0)1924 404 088  
www.sugdenaudio.com

**FOR**  
- radiant high-resolution sound  
- stunning instrumental timbre  
- superb build quality

**AGAINST**  
- requires sensitive speakers  
- hot hot hot!

REFERENCE SERIES

AUDIO  
PERFECTION



Every loudspeaker manufacturer has its flagship range, but not many have achieved the levels of acclaim reserved for Acoustic Energy's Reference Series, long-since regarded as one of the best high-end loudspeaker ranges available today. To find out why, contact us.

**WHAT HI-FI?**  
SOUND AND VISION  
**AWARDS 2004**  
BEST STEREO SPEAKERS  
OVER £2000  
Acoustic Energy AE1 MkII

email: [info@acoustic-energy.co.uk](mailto:info@acoustic-energy.co.uk) tel: 01285 654432

[www.acoustic-energy.co.uk](http://www.acoustic-energy.co.uk)

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

## CLASS AB TRANSISTOR: MARANTZ PM-1551 £1,100

**T**he new Marantz PM-1551 is a lower-cost development of the high-end, £2,500 PM-1151, and a replacement to the beautifully finished and designed PM17 series (visually my favourite Marantz design). The PM-1551 does have some of the technology used in the PM-1151 such as new HDAM-SA2s and very similar styling — which means superbly done casework, flawless design detailing and excellent build quality in the (modestly priced) Marantz milieu. It has a quoted power output (rating of 90W/8ohms and 100W/4ohms) it measures 140x21x144mm and weighs 1.8kg (pretty heavy for a £1,100 amplifier).

Internally the PM-1551 features a newly developed transformer for the power supply. The toroidal power transformer is claimed to produce less vibration and magnetic leak than ordinary laminated design transformers. Vibration reduction is achieved by using ring shaped core materials. There is also an LC Ripple Filter in the pre-amplifier power circuit presenting "clean power" which is achieved by cutting out rectifier noise generated by the rectifier circuit, as well

— for which Marantz claimed a cost of £1,000 as a standalone unit. (Maybe a slight exaggeration but this phono stage does sound extremely good indeed — Ed.)

Externally the Marantz uses an LC multi-function display for volume, speaker on/off or headphones and input source. The display is centrally located and is switchable from a display button on the front panel which also operates the blue illumination. Then there are a series of similarly small buttons which are located either side of the central display — for on/off, speakers (on/off for headphone), ATT (to attenuate the volume and mute) etc. and phono MM of MC. Below the central display are a headphone jack, a red window, power on/off and bass/treble knobs. The front panel has two chunky and solid curved satin matt silver cheeks which are very attractive, and they locate the input selector on the left and volume controller on

the right. The piece was also slightly slower than the other amplifiers which went hand in hand with the overall smoother presentation. The piano had really good bass extension and weight, but it was interestingly a little diffuse in comparison with the Minimax for instance, which also had solid bass extension. Still the Marantz was most able with a convincing weight behind instrumental notes and crescendos in particular.

The Marantz' smooth quality was also evident on 'Dreams' by Patience O'Neil at the higher end of the single track's spectrum to make the Marantz noticeably slower in its physical timing abilities. However the Marantz exhibited talent when expressing the higher

frequency percussion with real verve, while the mid and low frequency percussion were also handled with great control and finesse — if not as timbrally enticing as the Minimax, Lyngdorf or Sugden. Instead the Marantz followed its own musical path with a slight sweetness to the higher frequencies.

On 'Never Going Back Again' the sound filled out with a full-bodied presentation. Lindsey Buckingham's vocals were interesting, as they were more three-dimensional than the Minimax, Lyngdorf or Sugden. On 'Don't Stop' the Marantz had its full-bodied sound with the bass lines in particular being elastic and multilayered. The different vocal styles were handled with a smooth, lush and enveloping manner, though the Marantz was less keen to portray the very different vocal identities as say the Minimax which was excellent in this regard.

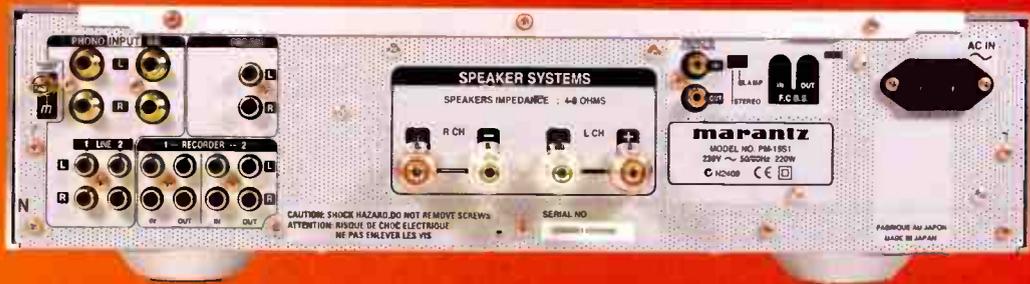
With Steve Steven's 'Flamenco A Go Go' the Marantz showcased its hidden talent and depths for

the right. The rear panel has a small switch to change mode from stereo to bi-amp (when connecting another PM-1551), high quality speaker binding posts, pre out, phono inputs (including higher quality sockets for phono and CD), turntable ground connection and mains in.

### SOUND QUALITY

The Marantz had a noticeably smoother overall musical stance compared to the other amplifiers on test. This smoothness proffered a delicate yet full-bodied acoustic to 'Trio For Violin, Horn And Piano' by Ligeti. The horn playing in isolation was full-bodied and lush. The violins had a slight amount of sweetness as they were expressed within the musical structure. The musical timing

as external high-frequency noise. The Marantz uses current feedback in its design, saying this "allows the amp to reach a much higher frequency range (up to 100kHz). Operating in a range from 0dB to 100dB, the PM-1551 uses a speed sensitive electronic linear volume control, model - WM8816 from Wolfson which allows adjustment in steps of 0.5db (and) both channels are absolutely parallel. An MM/MC phono stage is employed which "inherits" the Current Feedback Phono Equaliser used in the PM-1151



**CONNECTIVITY**

This new PM-15S1 is adaptable and upgradeable, with five different connection options. Option one is to use the PM-15S1 as standard on its own in normal two channel mode. Option two, is the ability to link three PM-15S1s together using the FCBS (Floating Control Bus System) in/out socket at the rear panel. This enables full 5.1 multichannel capability from a SACD/DVD player - where one PM-15S1 powers the front speakers, the next does the signal to active subwoofer and centre channel speaker while the third handles the rear surround speakers. Option three, entails two PM-15S1s that can operate in bi-amp mode providing separate amplified channels to a bi-wire/bi-amp capable speaker. Option four entails four PM-15S1s... The FCBS works by designating an ID to each PM-15S1 used and thus ID1 would be the master which controls the input source, volume, ATT (attenuation), display and tone on/off for up to three slave PM-15S1s designated ID2, ID3 and ID4. Option five is similar to option two for 5.1 multichannel audio except you can designate the high-end £2,500 PM-11S1 as the master for improved front channel performance and the two slave PM-15S1s can be switched off to provide the superior stereo performance of the PM-11S1 when no multichannel is required!

powerful dynamism that can suddenly take hold and grip the musical structure during musical crescendos or peaks such as when Steve Stevens goes for one of his beautifully phrased solos – the whole of the music was raised with more headroom. The Marantz's full-bodied nature was also present giving 'Flamenco A Go Go' a deep and enveloping quality.

The Marantz's hidden dynamic strengths came to the fore when it expressed Steve Stevens' rolling guitar melodies in the later stages of the song. On 'Our Man In Istanbul' the richly smooth Marantz sounded superb and the sexy atmospheric vocals of Azam Alij were soulful, deep and compelling if not the ultimate in clarity. The eastern flavoured guitars were well-rounded but not quite as convincing as the Sugden for instance. The whole of 'Our Man In Istanbul' was suitably atmospheric as its cinematic structure demands. The bass was deep but not especially defined, yet the Marantz's dynamic ability gave it a superb flavourful edge with the complete low to high frequency range – where it was never out of control.

"the Marantz followed its own musical path with a slight sweetness to the higher frequencies..."

**CONCLUSION**

The best all rounder in the group, the Marantz PM-15S1 touches all the bases for those looking for a top quality, do-it-all high end integrated. It's a superbly crafted slice of high-end for a midrange asking price, beautifully made with a super-slick assembly and functionality. The controls work with peerless precision and are laid out elegantly. The aluminium fronted remote control

is also exquisite. Electronically it has also been thoughtfully and laterally designed – where it can form a number of different combinations with one or more extra PM-15S1s (and even the high-end £2,500 PM-11S1) for bi-amping or multichannel audio – which is a clever upgrade path. It sounds consistently smooth, with a flavourful overall tonality and prodigious dynamic ability; a great combination.

**MEASURED PERFORMANCE**

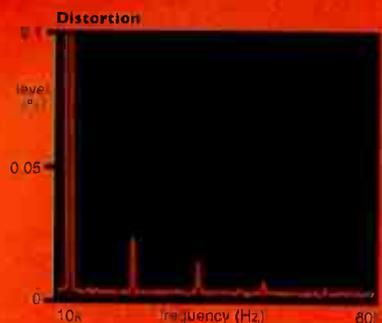
A subtle but interesting feature of this amplifier was a higher than usual low frequency response limit of 10Hz, with a small amount of lift (+0.5dB) extending up to 100Hz. Whether this is caused by a low frequency filter alone or to behaviour of DC servo-circuits I cannot tell, but it does suggest Marantz have carefully but deliberately tailored the PM-15S1 to sound fast but at the same time weighty in its bass delivery. It's likely to sound less dry and a bit more forthcoming than competitors in its bass as a result - not a bad thing.

Plenty of power is available, measurement recording 112W into 8ohms and 182W into 4ohms, enough for most purposes. Although distortion levels were low at 0.004% in the midband, rising to 0.026% at 10kHz, they are by no means definitively low. However, this may well be down to other factors, such as limited use of feedback. The harmonic spectrum is unusual in possessing a smooth decay, with second harmonic dominant. Most of today's amps produce 3rd order.

Both MM and MC disc stages have extended low frequency gain, response reaching down to 12Hz (-1dB). The upper limits varied, but were satisfactory. Noise was low in the MM stage, but not MC, which is best restricted to high output types.

The PM-15S1 is subtly different to others. It will have some distinctive sonic properties. NK

Power	112watts
CD/tuner/aux.	
Frequency response	10Hz-150kHz
Separation	95dB
Noise	-93dB
Distortion	0.01%
Sensitivity	280mV
dc offset	10/8mV
Disc MM	
Frequency response	12Hz-23kHz
Separation	82dB
Noise	-84dB
Distortion	0.006%
Sensitivity	3.6mV
Overload	160mV
Disc MC	
Frequency response	12Hz-120kHz
Separation	74dB
Noise	-70dB
Distortion	0.006%
Sensitivity	0.37mV
Overload	15mV



**VERDICT**

Disappointing at first, but with plenty of skill, superb connectivity and an extremely smooth, strong and powerful sound.

**MARANTZ PM-15S1 £1,100**

Marantz UK  
+44 (0)1753 680 868  
www.marantz.com

**FOR**  
- design and build  
- smooth and full-bodied  
- dynamically powerful

**AGAINST**  
- instrumental timbre

## SWITCH-MODE SEMI-DIGITAL: LYNGDORF AUDIO SDAI 1275 £1,095

**F**ormerly TacT, Danish brand Lyngdorf Audio's SDAI 1275 is a fully balanced, remote controlled, switch-mode integrated amplifier which has no relays or fuses in its signal path. It measures 450x361x100.6mm and weighs 15.5kg. SDA is an abbreviation for Semi Digital Amplifier which designates it separately from Lyngdorf Audio's higher-cost True Digital Amplifiers (TDA). Lyngdorf say that "the SDAI 1275 is a less complex design (than TDA) which relies on analogue inputs to generate the digital switching at the output. The output stage operates by pulse-width-modulation (PWM) at a very high switching rate and constant voltage. This is similar to the operating principle of the (high-end) TacT Millennium (TDA), but while the Millennium converts the digital information directly from the digital source, the SDAI 1275 utilizes analogue inputs to generate PWM switching at the output".

Lyngdorf use PWM because they claim that the "SDA 1275 generates 75% less heat than a Class AB amplifier of similar power. Heat is the

The Lyngdorf can also adjust the attenuation to each input by 6dB to optimize signal to noise ratio. The seven inputs (one is XLR balanced) can be individually adjusted in 0.1 dB steps, while the display is programmable to name the input. The transformer is a 650VA Toroid-Holmgren design for which Lyngdorf state that it "is particularly resistant to mechanical hum". Internally it uses capacitors for its power supply regulation rated at over 40,000 micro-Farads and a separate board for the IEC mains input with mains filtering. Further SDAI 1275 features include, two preamp outputs (one balanced), individual balance adjustment for each input with 0.1 dB steps, channel balance + - 0.05 dB "at any level down to -80 dB", 3.5mm jack connector trigger output for control over additional SDA 2175 power amplifiers and RS 232 connections for software modifications.

Build quality

at reducing magnetic Interference which can detrimentally affect sound quality. Overall the visual design of the Lyngdorf is unpretentious yet discerning and discretely attractive, which is what I prefer as it gives long term owner satisfaction.

### SOUND QUALITY

On Ligeti's 'Trio For Violin, Horn And Piano' the Lyngdorf was fascinating, as it was able to illuminate deep into the rather quiet but dynamically superb recorded musical structure with an uncommon ability compared to the other amplifiers on test. The whole of the Ligeti piece was opened out with great insight and with stunning musical



greatest contributor to component ageing. Capacitors in particular are prone to heat damage over time". The quoted specification for the SDAI 1275 is impressive - when compared with those from similarly priced hi-fi integrated amplifiers - with a power output of 220W/8ohms and 375W/4ohms. The company says that the SDAI 1275 uses a digitally controlled analogue attenuator, and the volume is controlled with 0.1 dB steps (over a 100dB range). Instrument grade dual gold relays are used for input switching that Lyngdorf claims are normally only used in expensive measurement equipment "for high linearity and low losses".

on the Lyngdorf is exceptional for the asking price with a super-slick level of finish and attention to design detail that is usually seen in much more expensive products. For instance the thick faceplate has a beautifully machined chamfered opening which frames the display and control buttons, while the power on/off button has its own recessed machined opening. The heatsinks on either side are also nicely machined types which are smooth to the touch instead of razor-sharp.

The SDAI 1275 casework utilises CNC machined aluminium including its chassis which is differentiated from the typical steel chassis, and occasional aluminium outer panels of the norm. The visible fixings on the top panel are recessed hex-head types which are preferable to the typical cross-head screws. Additionally the base plate uses 4mm thick aluminium sheet, once again instead of steel which is better

timing, again the best of the group, outdoing the superb Sugden. The musical separation was just effortless for an amplifier of this price and the tonally was excellent with an extremely accomplished timbre - where it was also completely in time with the rest of the musical structure. The violins had a very pleasing timbre with wonderful extension and expression. The violin phrasing was particularly good. The Lyngdorf handled the first crescendo very well with an unnerving sense of control.

The Lyngdorf had a completely neutral presentation in comparison with the other amplifiers on test when listening to 'Dreams' by Fleetwood Mac. The musical timing - considering the gelling together of the different vocal and instrumental strands as a cohesive musical structure, to form a well-balanced and more natural pace and tunefulness - was simply first-rate. The Lyngdorf displayed excellent bass dexterity and was very good with the vocals, where there was no sense of discernible strain or high frequency stridency in the female vocals. On 'Never Going Back Again' the Lyngdorf was able to reproduce

# audiolab

Have you been  
missing something?



## audiolab 8000 series

The original 8000 series from Audiolab started something of a revolution in value and performance. When they disappeared from the market, the hi-fi world lost a well-loved and reliable friend.

Now, the new 8000 series marks a strong return to the original brand values and philosophy. These famous products have been re-engineered to create a complete two channel range, including the famous 8000S, 8000Q, 8000M and 8000P models as well as an all new CD player.

7.1 channel pre and power amplifiers have been added to create a series of building blocks capable of meeting your system needs now and for the future.

The new 8000 series offers a definitive and genuine hi-fidelity performance from a no-nonsense approach to engineering

Audition them now and find out  
just what you've been missing.

audiolab

Sovereign Court, Ermine Business Park,  
Huntingdon, Cambs, PE29 6XU

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

Tel: +44 (0)1480 447700

Fax: +44 (0)1480 431767



"like the Sugden, it's a genuinely special sounding amplifier, although for quite different reasons!"

a wonderful vocal from Lindsey Buckingham. There was a really nice delicacy and multilayered sophistication, and it seemed eerily in the room.

Guitar timbre and expression, while not as three dimensional as the Sugden, was still extremely precise in its ability to slice through the air. This reproduction of the guitar and vocals also reinforced the Lyngdorf's excellent musical timing ability as it was inherently cohesive to the songs structure. On 'Don't Stop' the whole musical structure was beautifully revealed and had the Lyngdorf's exacting musical timing intact where every vocal, element, strand and instrumental intonation was superbly executed and free flowing. Individual aspects such as vocals were excellent, while the instrumental timbre had good definition. Bass was dextrous and also well defined while the treble was able to open out the music into a widescreen dimension.

Steve Steven's 'Flamenco A Go Go' was thrilling; all the elements gelled to produce stunning musical timing. Bass was again excellent, which gave a lift to the lower mid while not being unnaturally extended as to dislocate itself from the rest of the music. This upper bass/lower midrange frequency quality helped to provide rhythmic thrust and enjoyment through Steve Steven's rocket-ship rush of acoustic guitar melodies. On 'Our Man In Istanbul' there was the recurring talent of the Lyngdorf in enabling stunning instrumental and vocal separation. The gorgeously sexy vocal from Azam Ali was especially good with the Lyngdorf's separation ability as there was a sense of openness not available on the other amplifiers, where her

voice was deliciously free-flowing and super-clear without a single hint of high-frequency glare or harshness. The Lyngdorf's musical timing abilities also took the complexities of 'Our Man In Istanbul' in its stride – making for a neutral yet thrilling ride.

## CONCLUSION

Like the Sugden, this is a genuinely unusual and special sounding amplifier, although for quite different reasons! It is initially underwhelming, but due to its massive power output it was able to provide an excellent grip and drive to the differing demands of all the music used. It has an eerie sense of control and superlative musical timing that never stifled its tonal resolving ability. As such it was very special with completeness in the most important aspects of the musical structure – such as outstanding instrumental and vocal separation which was surgically unravelled but never clinical. The Lyngdorf is not a sugary sounding device (unlike the Marantz, for example), although it remained resolutely musical in a neutral,

unflappable and dynamic manner. Build quality is equally brilliant for the asking price while the visual design is my favourite of the group as it expresses a heightened-down discretion that can only come from first-class craftsmanship. In some respects, this product sounds like 'superfl'; its refinement, subtlety, unflappability and sheer control are remarkable, and many will instantly

## VERDICT

Remarkably sophisticated and powerful amplifier that's subtle but effectively musical too.

### LYNGDORF AUDIO

SDAI 1275 £1,095

Lyngdorf Audio

+44 (0)709 100 100

www.lyngdorfaudio.co.uk

## FOR

- design and build
- neutral yet engaging
- stunning musical timing
- massive power

## AGAINST

- takes time to appreciate

## MEASURED PERFORMANCE

The distortion behaviour of this amp is influenced by its tightly limited bandwidth. Harmonics of higher frequencies are curtailed, meaning past 6kHz or so distortion starts to go down, not up. At 6kHz though, where second and third harmonics fall within the bandwidth of the output filters, distortion at low levels of a few watts measured just 0.003% into 8ohms, rising to 0.007% into 4ohms, third harmonic predominating in bridge conditions, as second cancels. Near full output (30V) the worst case result was 0.02%, second and third harmonic, into 4ohms, a low value. In the midhand, distortion levels were much the same, so this amplifier is consistent in its behaviour, which means the distortion spectrum is not constantly changing, always a good sign. The SDAI 21/5 interestingly possesses a better distortion performance than conventional amplifiers.

This is a bridge amplifier, like most 'digital' switching amps. It has no problem swinging massive output, no less than 220W into 8ohms and 324W into 4ohms, whilst barely getting warm, due to high efficiency. There's 35V d.c. on both output lines, but protection circuits guard against damage from shorts to ground or any differential output offset that would threaten the loudspeaker. It is not d.c. coupled throughout though; tests showed input d.c. did not affect output conditions.

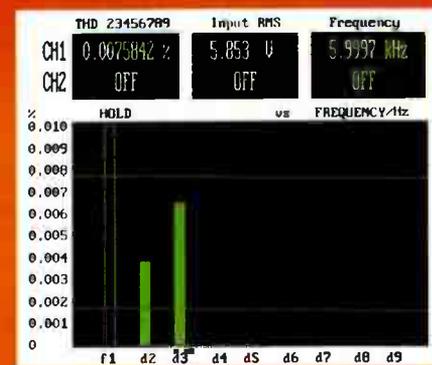
Frequency response of digital amps like this is, in theory, load dependent, because of the output

filters. However, the SDAI 2175 varied little between 4ohms and 8ohms, looking flattest on the lower value. The upper -1dB bandwidth limit is 27kHz; the lower limit is 1Hz.

Sensitivity is very low at 1V maximum. I don't understand this, as most sources give 0.5V or thereabouts, so it's far too low; only CD gives more. External phono stages, tuners and such like must give 1V to match this amp – and few do.

This is a heavily engineered amplifier in all senses, more so than usual. It measures extremely well, except for low sensitivity which will make matching difficult. NK

Power	220watts
CD/tuner/aux.	
Frequency response	1Hz= 27kHz
Separation	88dB
Noise (IEC A)	107dB
Distortion	0.003%
Sensitivity	1Vdc offset
8/21mV	



## CLASS A TUBE: EASTERN ELECTRIC M520 INTEGRATED £1,539

**E**astern Electric is a joint venture between the Hong Kong based designer Alex Yeung and American Bill O'Connell of Morning Star Audio. The Minimax M520 integrated has taken its nomenclature from what Eastern Electric describes as being "inspired by the most famous Mullard 520 circuit". It is rather nicely specified, designed and built - and considering that the M520 is a new remote controlled valve integrated amplifier, it is very good value at £1,539.

The Minimax has three line inputs, one preamplifier input (disabling volume control and enabling upgrade ability for the M520 to become a

recommend that the setting for the NFB be the same for both channels. The Minimax has a quoted power output of 24W/8ohms in Pentode and 18W/8ohms using Ultra Linear. The Minimax can switch between the Ultra Linear or Pentode settings at the front panel or using the remote control. The Minimax powers on with Pentode by default which indicates, yellow, while the Ultra Linear is lighted in red at the shared PE/UL LED.

The all aluminium remote is a stylish affair, being

relatively inexpensive to try different vintages. The Ef86 (at the front) was chosen for the 1st driver stage, as this tube is not equalled by any for its sheer smooth warm tonal characteristic. (The Ef86 supplied with the remote unit were Sovtek and not Eastern Electric branded like the others). The 5AR4 rectifier (at the rear) for

each channel brings only what tube rectification can achieve and clearly surpasses any hybrid/solid-state rectifier. The GZ34/5AR4 is the finest rectifier ever made and many current production tubes sound so wonderful that not to use this glorious rectifier is almost a sin. When it comes to members of the 6L6 tube family, there has been none better in tonal qualities (than) the EL34 (two per channel, third from front). Almost every electric guitar amp ever built uses this tube and the reasons are plenty. Tone, Tone, Tone. They just convey the music, punchy yet warm with second order harmonics that the brain relates to as music".

The Minimax uses two sets of speaker binding posts at the rear, and recommend the 16ohm setting for speakers rated at 8ohms and above while the 8ohm is more suitable for 4ohm speakers. The Minimax can also be individually special-ordered with a 4ohm output. Measuring 412x185x415mm the Minimax is superbly constructed in aluminium and stainless steel with

solidly hewn and simple to use. It can additionally control inputs direct (without having to scroll), volume up or down is controlled by a motor drive Alps Japan unit and mute (indicated by the flashing of the green LED on the volume knob). The Minimax uses a 110mm transformer which is said to use cores of "top quality imported sheet". The capacitors used are "MIT foil caps... chosen because they sound real great in our designs"! Point-to-point wiring is used in the audio section for best sounding result, as for the remote control section, circuit board is used.

Eastern Electric describes the valve arrangement (duplicated for each channel) as follows: "The 12au7 (second from front) used as the phase splitter was an obvious choice as there are just too many vintages of this tube that excels in tone and are

power amp) and one tape in/output. The front panel has power on/off, remote control sensor, volume knob and scrolling input and Pentode/Ultra Linear selectors with corresponding LEDs. At the top panel there are a set of switches to adjust negative feedback (NFB) for each channel, which can be set at 'Min', 'O' or 'Max'. Eastern Electric say that the adjustable levels of NFB will have a different damping control on your speakers, and that this can determine which level (of NFB) serves your speakers best and will give the best sound and tone. Minimax



a very nice finish overall. There are two large banded cylindrical bars on either side which look like handles but considering the 22.5kg weight, they look more suitable as barriers minimising the chance of being burnt on the hot tubes when in use.

## SOUND QUALITY

Violins had an authoritative timbre through the occasionally stark but emotionally engrossing 'Trio For Violin, Horn And Piano' by Ligeti. The horn radiated nicely into the room with very good musical timing, where no split-second mishaps such as when the lower frequency sound of a horn can sometimes be dislocated. And as such this was a pleasant surprise from a valve amplifier. The piano had wonderful tonality which was nicely deep and resonant when the appropriate keys were struck. I preferred the Minimax in Ultra Linear mode for the Ligeti piece because the horn especially in the more powerful Pentode mode was a little strained in comparison where it was flaring out with a small but discernible subjective distortion. The violins did not have a metallic edge and neither did they portray a softly diffused sweet or lush tonality either. Rather the violins were enjoyably, convincingly good with a level of neutrality that gave a balanced emotionally engrossing appeal. The languid tempo of Fleetwood Mac's 'Dreams' from the 'Rumours' DVD-A was superb on the Minimax, with a stunningly clear treble emanating from the cymbals which illuminated a wonderful spatial quality to the rest of the musical structure. The tonality to the midrange frequencies for the drums was also really enjoyable – expressing convincing timbre that spread out across and out into the listening room. Bass lines were deep and dextrous while the melodic rhythm guitar parts had crispness adding their contribution noticeably to the musical structure. Stevie Nicks' vocals were brilliant, far reaching and did not have any added or artificial sweetness – rather they were just right, never reaching any stridency within this somewhat treble extended DVD-Audio of 'Rumours'. Lindsey Buckingham's powerful but emotionally vulnerable vocals, like Stevie Nicks before were far reaching and sophisticated in tonal shading and as such were a thing of beauty through the Minimax where they reached delicacy and dynamism on 'Never Going Back Again'. The acoustic guitar was convincingly portrayed with perfectly reproduced phrasing, musical timing

and therefore balance.

On the more complex 'Don't Stop', there was a nicely balanced rhythmic thrust with the melodic piano parts being a particular delight. The different multilayered vocals were well portrayed with a seamless progression enabling me to enjoy their different textures and frequency ranges. The guitar melody in the last section was well handled by the Minimax without either stridency or lacklustre balance. For the Fleetwood Mac sessions I preferred the Minimax in the lower powered Ultra Linear mode as using Pentode it had a more upfront presentation, even with the volume lowered to compensate and thus while the Pentode was a little more exciting – ultimately it produced some subjective strain on Lindsey Buckingham and Stevie Nicks' vocals as well as on the guitar parts on 'Dreams' and 'Never Going Back Again'.

On the complex and exhilarating acoustic guitar fireworks from 'Flamenco A Go Go' by Steve Stevens, I preferred the Minimax in Pentode mode where I was enthralled by Steve Stevens' awesome acoustic guitar pyrotechnics as his phrasing, tonality and sheer brio was simply intoxicating. The Minimax coped well with the multilayered composition producing an enveloping musical scope. The midrange frequencies of the guitars was excellent, producing a fatigue-free session where I was allowed to follow precisely Steve Stevens' frenzied yet very tunefully melodic playing. The eastern flavoured 'Our Man In Istanbul' was another delight with some brilliantly sexy layered vocals from the Iranian born Azam Ali. Her vocals were spread across the speakers and into the room convincingly. The different guitars used were also a delight as they expanded the harmonic structure of 'Our Man In Istanbul' brilliantly evoking the cinematic feel of the song. h

## CONCLUSION

I really enjoyed Eastern Electric's Minimax M520. It did not produce



"it did not produce a rose-tinted 'warm', 'liquid' or 'lush' sound yet it was not clinical either..."

a rose-tinted 'warm', 'liquid' or 'lush' sound yet it was not clinical either. Rather as standard it was a generally well-balanced amplifier. The remote-controllable Pentode/ Ultra Linear mode is especially useful as I used it as a tone control for the different recordings used. The Minimax was also especially good at all the differing vocals it encountered in the listening sessions, where it reproduced multilayered, texturally sophisticated singing parts which were excellent. Build quality was excellent, as was the design (two different things) and as a whole with its future valve upgradeability for the eternal tweaker, I believe the Minimax as standard is excellent value for an integrated valve amplifier of its construction and abilities.

## VERDICT

An extremely even and engaging sounding valve integrated, offering fine build and redoubtable valve harmony.

**EASTERN ELECTRIC MINIMAX M520** £1,539

Eastern Electric  
+44 (0)1592 744 779  
www.easternelectric.co.uk

## FOR

- beautiful casework design
- upgradeable valves, remote control
- vocals a speciality

## AGAINST

- requires sensitive speakers

## MEASURED PERFORMANCE

In the M520 EL34s are conservatively driven, for longer life, to give 24W, but only into 8ohms unfortunately. There's no 4ohm option, so the M520 needs 8ohm speakers only.

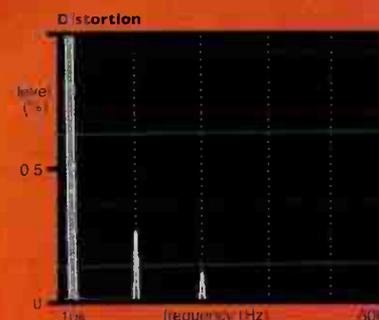
Distortion behaviour depends upon the level of user adjustable bias - high, low or zero - and which mode of operation - pentode or ultra-linear - is chosen, giving six permutations. Normal pentode working gave second harmonic only and a low 0.1% (max feedback) in the midband and 0.25% at 10kHz. With no feedback these figures became 0.25% and 0.4% respectively, still of acceptable second harmonic.

Frequency response was a wide 3Hz-45kHz without feedback, a very good result.

The M520 at a basic level measures well. It is what I'd call "a nice, clean valve amp", with no major weaknesses to add sonic stain. It does however

need high impedance loudspeakers, a limiting factor. NK

Power	24watts
CD/tuner/aux.	
Frequency response	3Hz-70kHz
Separation	95dB
Noise	-118dB
Distortion	0.1%
Sensitivity	2.5V
dc offset	4/3mV



# marantz® PREMIUM SERIES



*As the EISA jury explained: "The New PM-15SI proves Marantz is still a serious force in audiophile two-channel music equipment. Luxury touches include a shimmering solid-aluminium fascia. Advanced technology includes an accurate electronic volume control. And thanks to a unique four-way stacking option, with central channel steering, the PM-15SI is ready and willing to lend its natural, powerful sound to movies as well as music. It completely justifies its membership of the high class Premium component range."*

The Premium Series is exclusively available through the following authorised dealers:

Cambridgeshire  
Audiovision, St Neots: 01480 471202  
Cheshire  
Sound of Music, Crewe: 01270 214143  
Cumbria  
Peter Tyson, Carlisle: 01228 546756  
Derbyshire  
Superfi, Derby: 01332 360303  
East Sussex  
Adams & Jarrett, St. Leonards-on-Sea: 01424 437165  
Guernsey  
Teleskill AV Ltd: 01481 722323  
Hampshire  
Sevenoaks Sound & Vision, Southampton: 02380 337770  
Humberside  
Manders Hi-Fi, Grimsby: 01472 351391  
Sevenoaks Sound & Vision, Hull: 01482 587171  
Kent  
Canterbury Hi-Fi, Canterbury: 01227 765315

Leicestershire  
Leicester Hi-Fi, Leicester: 0116 253 9753  
London  
Sevenoaks Sound & Vision, Holborn: 020 7837 7540  
Manchester  
Practical Hi-Fi, Manchester: 0161 839 8869  
Middlesex  
Harrow Audio, Harrow: 020 8930 9933  
Northamptonshire  
AV Land, Wellingborough: 01933 442222  
Classic Hi-Fi, Kettering: 01536 310855  
Scotland  
Sevenoaks Sound & Vision, Glasgow: 0141 332 9655  
Surrey  
Sevenoaks Sound & Vision, Epsom: 01372 720720  
Uniler Sound & Vision, New Malden: 020 8942 9567  
Tyne-and-Wear  
Global Hi-Fi, Newcastle: 0191 230 3600  
Yorkshire  
Vickers Hi-Fi, York: 01904 629659

www.marantz.com | Marantz 01753 680868

# Conclusion

**T**hese four amplifiers were all different, yet all are very capable performers and as such this should be celebrated. Both the lower powered Sugden and Minimax designs had no trouble driving the ribbon tweetered Aurum Cantus Leisure 3SE speakers to what I consider very loud levels in my 6.5x4.5m listening room. When Noel Keywood measured them he said, "sensitivity was low at 82dB but this wasn't surprising as the 'speakers' impedance is very high, measuring 12ohms overall. It (the Aurum Cantus) is a very light load, even for a valve amp. But does need 'power' (volts) to go loud".

When correctly load matched, the Class A transistor Sugden A21a had useful power and ably gripped the speakers to produce the best instrumental timbre of the whole group. Additionally it had excellent resolution which was interesting, allied to a generally neutral but engaging sound quality that I really enjoyed. The Sugden's sound quality can be described as very linear, rightly organised yet soulful which makes it a bit of a chimera of an amplifier! It does run hot though, and thus I would treat it as a valve amplifier allowing between thirty to sixty minutes 'warm' up before use and then switching off afterwards. The Sugden did not have the best bass extension, but the more complex and important bass dexterity was nicely aligned to the rest of the higher frequencies to produce its linear but tuneful sound. It didn't always have the best vocal timbre but because it was so well balanced and musically well-timed, in isolation this is not noticeable. The Sugden is especially well-built but not flashy in appearance and though it didn't have a remote control, this was not an issue for me. I loved it because it's such a simple, unreconstructed, unalloyed music maker.

The switch-mode Semi Digital Lyngdorf SDA 1275 was also really accomplished, and pure joy to use and listen to. It has an unflappably neutral sound quality that was always in control of the demanding

frequency extremes from the different music used. This neutrality also meant that the Lyngdorf is not smooth, lush or sweet and that is a good thing as this ability is important for preserving the individuality of the music used. And for listeners who enjoy a wide, dynamic and manifold selection of music this will be a prescient quality. The Lyngdorf's

"like the difference between the Beatles and Beethoven, that's what happens when you go from Class A to D..."

neutrality does not mean it sounds cold, clinical or even grey as some perceptions and realities of digital amplifiers have been in the past – far from it! Additionally the Lyngdorf had a very cohesive sound with superlative musical timing which was a real pleasure to listen to as I could concentrate through particularly dense recordings such as Steve Stevens' 'Flamenco A Go Go' where the Lyngdorf had a real flair for both vocal and instrumental separation. It is beautifully constructed in a high-end high-quality manner and visually, for me at least, offered a discrete self-confident visage. This for me is the second star of the group, self-effacingly musical, subtle yet exhaustively thorough in the way it conveys what's going on in a performance, with an amazing sense of imperturbability.

The Class A valve Minimax M520 excelled in all the vocal timbres experienced through the different recordings used in the test. It has a good ability with instrumental timbre also and I was surprised at its musical timing ability which was rather good. The build quality and design were excellent and commendable for the asking price without even a hint of hair shirt or 'rugged/agricultural' construction. The Minimax has a superbly crafted remote and remotely-controlled tonal flexibility with its Pentode or Ultra Linear modes which were very useful – as they were not superfluous gimmickry

because of the demands of the different music used necessitated adjustment.

The Marantz was a surprise as a Class AB amplifier; it was the most tonally characterful amplifier in the group! It was intriguing because it has a wonderful full-bodied nature to the recordings used and some very nice vocal timbre was also revealed.

It initially sounded more diffuse than the others and a little underwhelming but given some patience the Marantz rewarded the listener with some stunningly powerful dynamic swings that could really grip a crescendo or tempo swing. The Marantz was never flustered though and always remained in control. The Marantz is super-slick in construction with remote control and an excellent lateral-thinking upgrade path using more PM-1551s (or even a high-end PM11-S1) enabling it to be bi-amped or go into 5.1 multichannel if desired! For these reasons, it's by far the best all rounder in the group, with a uniformly high standard in every department from phono stage to remote – but it's less focused on sonics.

Overall then – as you've probably surmised – standards were extremely high, but we'd give the gongs to the Sugden and Lyngdorf for being brilliant music makers. The amazing thing is that they sound so different – like the difference between the Beatles and Beethoven. That's what happens when you go from Class A to D!

#### REFERENCE SYSTEM:

Onkyo DV-SP1000E Universal Player (£2,800)  
Aurum Cantus Leisure 3SE Speakers (£1,250)

#### MUSIC:

György Ligeti (Edition 7) 'Chamber Music' (1998) CD  
Fleetwood Mac 'Rumours' (1977/2001) DVD-Audio  
Steve Stevens 'Flamenco A Go Go' (2001) DVD-Audio

# SEVENOAKS

## SOUND & VISION

With over 30 years experience, **SEVENOAKS SOUND & VISION** is one of the largest and most respected Audio/Visual retailers in the country.

Each Sevenoaks Sound & Vision store stocks a wide range of quality products, covering all categories of specialist home entertainment, from Hi-Fi separates and systems to DVD recorders, widescreen plasma televisions and projection systems.

Our fully trained installation experts can neatly and seamlessly integrate a home cinema or hi-fi system into your home. All electronics can be hidden away, speakers discreetly mounted either in the wall or ceiling and the complete system operated via remote control.

Whatever your requirements, Sevenoaks Sound & Vision has a diverse range of products and the expertise to advise, demonstrate and guide you through the home entertainment jungle.



## Specialist hi-fi & home cinema

**Contemporary hi-fi** is constantly setting new standards in sound reproduction and design. Whatever you listen to, Sevenoaks can recommend separate components that will bring your music collection to life and complement your home. We're enthusiasts and experts, passionate about helping you build (or upgrade) a system that will delight for years to come.

**The recent growth of DVD** has led to a huge rise in demand for home cinema equipment - DVD players, AV receivers, projectors and plasma screens but, with so many options, it's not easy to know which ones will suit your needs. Indeed, in the face of this quickly evolving and often bemusing array of products, we aim to assist you in assembling a home cinema system to be proud of - one that achieves outstanding picture and sound quality.

## NEWS

### NEW STORES

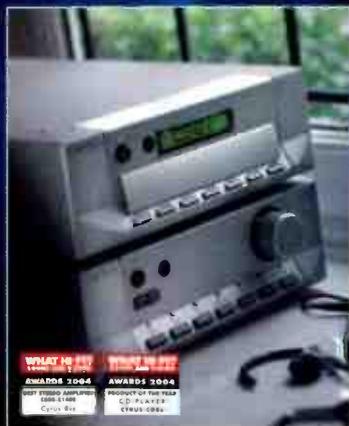
We are pleased to announce that new stores will be opening shortly in the following locations - SUBJECT TO LEGAL COMPLETION.

- YEovil
- LOUGHTON

### HOMEBUILDING & RENOVATING SHOW

ExCeL London • Smart Home Zone  
30th September - 2nd October 2005

Sevenoaks Sound & Vision will be exhibiting together with Living Control in the **Smart Home Zone** at the Homebuilding and Renovating Show at London's ExCeL. There are 200 exhibitors from around the UK including, experts from the Homebuilding & Renovating Magazine and a free seminar programme, which covers many areas of self-build and renovation.



WHAT IF IT  
WAS A  
AWARDS 2004  
BEST PRIZE AWARDED  
CD PLAYER  
Cyrus 084

WHAT IF IT  
WAS A  
AWARDS 2004  
PRODUCT OF THE YEAR  
CD PLAYER  
Cyrus 084

## Cyrus

If you've enjoyed listening to music before, try listening to it through a Cyrus system. With every product tuned by ear, Cyrus represents a quality of sound, which is rare at any price. Invest in a Cyrus system and you'll be rewarded with a wealth of sound you wouldn't have thought possible.



**RA-03 AMPLIFIER** "If you're after an amp, you must hear it."

## Rote

The **02 Series** is Rote's entry-level range. The RCD-02 CD player combined with either an RA-01, RA-02 or RA-03 integrated amplifier represents true audiophile performance at an affordable price. For increased high-end performance, the RC-03/RB-3 pre/power amplifiers are available. The RT-02 tuner completes the range.



**2 XPERIENCE TURNTABLE**

## Roksan

Roksan designs and manufactures some of the most acclaimed hi-fi equipment currently available. All Roksan products are carefully evaluated by experienced engineers at every stage of the design process with the emphasis on performance and build quality.

## Audiolab NEW 8000 Series

Audiolab's new 8000 series offers a definitive and genuine hi-fidelity performance from a no-nonsense approach to engineering. These famous products have all been re-engineered to create a complete two channel range, including the 8000S, 8000Q, 8000M and 8000P models plus a all new CD player. A 7.1 channel pre and power amplifier completes the range.



## Project

Project is currently one of the world's leading suppliers of turntables, with a range of models designed to satisfy all levels of expectation and budget. The range is simple to use, maintenance free and will function for a lifetime.



## B&W

The focus of Bowers and Wilkins Loudspeakers has always been to offer the best possible musical experience. With a combination of the latest R&D techniques and a passion for music, B&W produces a diverse range of products befitting the largest audio manufacturer in the UK.

### B&W MINI THEATRE MT-20

"Looks and sounds fantastic - a sensational package."





## Quad

Founded in 1938, Quad's history is one of audio excellence. Today's range includes both electronics and speaker systems.



## Monitor Audio

Since 1972 Monitor Audio has been developing and perfecting the implementation of metal drivers, innovative crossovers, and exemplary speaker cabinet construction and finish to further the ideal of achieving sound which is to the original "as close as it gets". The range includes - **GOLD, SILVER RS, BRONZE** and **RADIUS** speakers, plus the exciting new **i-Deck** docking station, an excellent any-room companion for your iPod.



Pure DRX702ES

Harman Kardon TU970

## Digital Radio

With Digital Audio Broadcasting (DAB) capability, these high-quality tuners deliver more stations and offers pure, distortion-free, CD-like sound, while providing useful radio and data services.



## Musical Fidelity

Musical Fidelity's New A3.5 Series amplifier, using circuitry closely related to A5's, and upsampling CD player combine high end performance, visuals and finish at a competitive price.

NEW A3.5 SERIES

## KEF

Replacing the highly successful Q Series, KEF's New iQ line-up comprises eight models from the entry-level iQ1 bookshelf to the impressive iQ9 floorstander. All models incorporate KEF's Uni-Q driver technology and are available in a variety of finishes.



Other KEF ranges include XO, KHT and the Award winning KIT100 Home Cinema system.

**KEF KIT100** "Creating a virtual surround sound experience has never been simpler or more effective, thanks to this two speakers plus subwoofer concoction from KEF."

## Acoustic Energy

Established in 1987, Acoustic Energy is one of Britain's premier loudspeaker manufacturers offering one of the most targeted range of hi-fi and home cinema loudspeaker systems on the market today.

"The legendary **AE1** lives on in this groundbreaking new version... it sets a new standard for small speakers."



**NEW** to the DiVA series is the **AVP700** processor and the **P1000** seven channel power amplifier.

## Arcam

Arcam has spent more than a generation building some of the finest high-fidelity products the world has ever seen. Whether you're interested in two-channel or a complete multi-channel AV system, the Arcam DiVA series offers the music and movie lover the most complete range of high-performance home entertainment solutions from any specialist manufacturer.



**Arcam Solo Music System** "Excellent all-round sound combined with the convenience of a one-box product."



## Essential Accessories

The right accessories can make or break your system. Our carefully selected range, including **QED, SOUNDSTYLE** and **GRADO**, will ensure you get the very best performance from your system.

## Marantz

Marantz is introducing a host of new products ranging from high-end hi-fi to HD-ready DVD players and AV receivers. The two main products groups are the 'premium' and 'range' series.

The **SR9600THX Ultra2** AV receiver offers seven channels, each 140w, and features HDMI inputs. The groundbreaking **DV9600** is one of the first DVD players capable of upscaling images to 1080p and is fully prepared for the high-definition future.



NEW MARANTZ DV9600 DVD PLAYER

## Teac

TEAC's all-new Reference Series offers innovation in audio-visual technology. The **CR-250 DAB CD Receiver** is a superb one-box unit which, when linked to a pair of speakers, makes for a cracking music system. While the Reference **300 Series T-H300DAB Mk II DAB/AM/FM tuner**, when matched with the new **300 Series Mk II amplifier and CD player**, forms another outstanding system.

Also available, the beautifully styled, award-winning Legacy systems, offering DVD with satellite speaker home cinema excellence.



**PLEASE NOTE** Some products/brands are not available at all stores. Please call to confirm or visit our website before travelling.  
\*Added Value Offers - From range available in-store. Not in conjunction with any other offer. ADVERT VALID UNTIL AT LEAST 20/10/2005, E&OE.

## Denon

Denon, Japan's oldest audio company, has established an enviable reputation for the performance of both its hi-fi and home cinema products, winning numerous awards and accolades over the years. Its stylish systems have succeeded in becoming the benchmark by which all other are judged.



**DHT-S00SD** "Great performance, build and looks; well equipped, and offers 6.1 upgrade path." 

**DVD-A1XV** "The most obvious winner of any category this year has to be Denon's evolutionary step in DVD deck design, the landmark DVD-A1XV.. An astonishing piece of kit that has no equals." **AVC-A1XV** "It's not often we can't find fault with a product, but as we said in our review, "It not only expands the home cinema envelope, it shreds it and then nukes it for good measure." **HOME CINEMA CHOICE • AWARDS 2005**



## Yamaha

Yamaha is recognised as a world leader in the fields of musical instruments and audio equipment, and in more recent years, home cinema. New models for 2005 include upgraded AV receivers, amplifiers, and DVD players plus the innovative YSP-1 virtual surround speaker.



**NEW RXV-657 AV RECEIVER**

## Pioneer

Pioneer has introduced three new DVD players. The super-slim (49.5mm high) DV-285U, DV-380 and DV-585A. All models are DivX compatible and deliver exceptionally high-quality pictures using a 108 MHz/12-bit Video D/A Converter. The **DV-585A** (Below) is a universal player, compatible with both DVD-Audio and SACD music discs.



## REL

In a market packed with subwoofers claiming to deliver the ultimate bass experience, only one brand of sub-bass system can prove its supremacy. With a record of review success stretching back over a decade, REL is acknowledged as the leading provider of deep, clean bass frequencies.

**M&K RS** "Wonderful surround sound performance, agile and deep subwoofer."

## M&K

Enjoy cinema as the director intended with a speaker system that is genuinely designed for surround sound. Every Miller & Kreisel surround sound system is designed around the highest quality centre speaker available, as this critical speaker will reproduce more than 70% of a film soundtrack.



Partnered with two identical main speakers, this produces seamless panning across the front soundstage, combined with the remarkable clarity and effortless dynamics that has made M&K the first choice in recording studios worldwide.

## Onkyo

In the home cinema industry, a tremendous gap exists between entry-level receivers and seriously high-end home cinema. The 7.1-channel **TX-SR603E** receiver bridges that divide with capabilities like component video upconversion with a time base corrector to deliver pristine images through one cable. And with consistent power and a superior signal, expect no compromise in sound quality. When matched with the right DVD player (such as Onkyo's **DV-SP503**) and speaker system, the TX-SR603E is definitely in a better league of home cinema.



## DVD Recorders

Although making digital recordings of TV broadcasts isn't new, the choice, versatility and quality of recorders keep getting better. Our product selection includes both DVD only, hybrid DVD/hard-disk and multi-format models.



## Mordaunt Short Genie

"Ever since Mr Mordaunt met Mr Short and the conversation turned to hi-fi, the company has churned out world class loudspeakers. But the latest creation is unlike anything that has gone before. The Genie system is a remarkable blend of style, innovation and application... The most accomplished small sub/satellite in its class." **HOME CINEMA CHOICE • AWARDS 2005**



### ESSENTIAL ACCESSORIES

The right accessories can make or break your system. Our carefully selected range, including QED, Soundstyle and Grado, will ensure you get the very best performance from your system.

### FLEXIBLE FINANCE OPTIONS\*

**Spread the cost of buying.** Flexible finance options\* are available on the majority of products we stock.

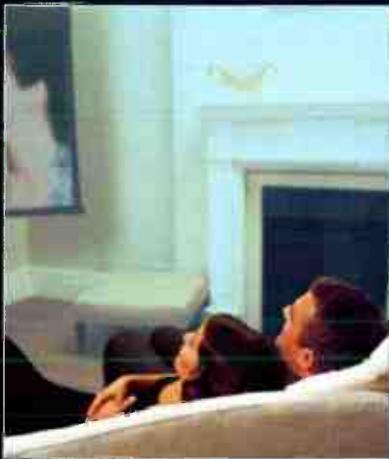
\*Written details on request. Licensed credit brokers. Minimum balance £400. Subject to status.

### £ PRICING POLICY

We always try to ensure our prices are highly competitive. In the event you can find the same products and excellent service at a lower price, please bring it to our store managers' attention.

### PLEASE NOTE

Some products/brands are not available at all stores. Please call to confirm or visit our website before travelling. \*Not in conjunction with any other offer. Approx. 200 units in stock 2010-2005, E&OE.



## Specialist home cinema

At the heart of any home cinema is its screen: Sevenoaks Sound & Vision can put you in the picture with a selection of flat-panel displays and projection systems. LCD and plasma screens are just a few centimetres thick and come in sizes from a 13inch portable to over 60inches.



## Sharp Aquos

Only Sharp Aquos LCD TV offers so much perfection. With supreme styling, the appeal of the Aquos range is obvious. The Titanium Series combines Sharp's sixth-generation LCD panel with stunning, angular-styling, titanium colour-finish and superb build quality to produce a premium class of LCD idTVs

### TITANIUM SERIES LC-45GD1E LCD TV with integrated FREEVIEW

"Sharp's mammoth 45in LCD TV is a testament to the growing viability and performance of large-scale LCD. Its 1,920 x1,080 resolution panel allows high-definition pictures to be viewed without compromise and when exploited to its full potential, the results could see this screen hung in a gallery. Images are so crisp and sharp, it almost makes reality look dull. We think it's inspirational. Go pay homage." HOME CINEMA CHOICE • AWARDS 2005

FREEVIEW channel and service subject to coverage. Aerial upgrade may be required.

# SEVENOAKS

SOUND & VISION

## Panasonic Viera

There seems little doubt that the future of television is flat, and the future of flat is the award-winning VIERA range from the world leaders in screen technology, Panasonic. The VIERA range consists of both LCD and Plasma televisions. New additions to the range include 37, 42 & 50in PV500 models with support for both high-definition and MPEG-4 recording.



### TH42PV500 PLASMA TV

"All told, Panasonics new TH42PV500 is a stunning set that's clearly the new class leader."

## Pioneer

Following its highly successful '5' series, Pioneer has unveiled its sixth generation of plasma TVs. The 43" PDP-436XDE and 50" PDP-506XDE models include built-in digital tuners plus dual HDMI inputs. The PDP-436FDE and PDP-506FDE come without a digital tuner and only one HDMI input. All models are HD-ready.



## Fujitsu

### P50XHA40 50" Plasma Screen

"For those investing in a screen to take them into the high-definition future, it boils down to a choice between sets with either an HDMI or a DVI connection - but this new monster from Fujitsu is one of the very few plasmas equipped with both. The company's reputation for producing high-end screens means that it is yet to make its mark on the mass market, but that could be about to change..."

Images are solid and coherent and noiseless. This is plasma at it's best."

WHAT PLASMA • ISSUE 12



## Toshiba Stasia

### 37WL56 37" LCD TV

Boasting HDMI connectivity, this new model also features Toshiba's impressive Active Vision LCD picture processing technology, whereby detail is improved by increasing the pixel count of the screen by three times that of a conventional LCD TV.



"Fine picture with both DVD and High-Def imagery; good with off-air TV, too... A very solid LCD buy - and fine value."



## Hitachi

### PLATARA 42PD7200 42" PLASMA TV

"Alright, we admit it, we rather like this screen. In fact, it's very difficult to find a reason why anyone hankering for a 42in plasma shouldn't go out and buy one. Five stars for Hitachi and a new standard for affordable excellence for everyone else." WHAT VIDEO • ISSUE 294





## Projection

If you'd prefer to measure your screen-size in feet, how about one of the new generation of projectors? The latest designs are delivering superb results at increasingly affordable prices - and they're more home friendly than previous projectors, too.

## ScreenPlay

From the worldwide leader in digital projection technology and solutions, InFocus® ScreenPlay™ DLP™ projectors are changing the face of home cinema offering market-beating performance, specification and value at every price point.



**SP7210**

"The new projector's picture is just phenomenal... Looks like ScreenPlay's success story is set to continue."



**SP4805**

"Another stunning success from ScreenPlay - there's never been a better time to take the big-screen plunge."

## Sim2

Sim2 Multimedia is a world-leading manufacturer at the forefront of home cinema technology and a name synonymous with high-end home cinema projection.



**HT300E** "Spectacular, in a word... Another terrific projector from Italy's finest."

WHAT VIDEO • ISSUE 292

## Thamescene

Since its launch, the multi-award winning ThemeScene™ brand has rapidly established a five-star reputation for uncompromised image quality.



**H30A** "There are so many good points it's hard to know where to start... Just how much better can budget DLP projectors get?!"

WHAT VIDEO • ISSUE 292

## £ PRICING POLICY

We always try to ensure our prices are highly competitive. In the event you can find the same products and excellent service at a lower price, please bring it to our store managers' attention.

## FLEXIBLE FINANCE OPTIONS\*

Spread the cost of buying. Flexible finance options\* are available on the majority of products we stock. \*Written details on request. Licensed credit brokers. Minimum balance £400. Subject to status.

## PLEASE NOTE

Some products/brands are not available at all stores. Please call to confirm or visit our website before travelling.  
\* Advert Value Offers - From range available in-store. Not in conjunction with any other offer.  
ADVERT VALID UNTIL AT LEAST 20/10/2005, E&OE.

## Product Selection

Listed below is a small selection of our extensive product range. Please note: Some products/brands are not available at all stores. Please call to confirm or see the brand locator at [www.ssav.com](http://www.ssav.com) before travelling.

### TURNTABLES

Goldring GR1	£ CALL	£ CALL
Linn RANGE	£ CALL	£ CALL
Michell RANGE	£ CALL	£ CALL
Project RANGE	£ CALL	£ CALL
Roksan Radius 5	£ CALL	£ CALL

### TUNERS

Arcam RANGE	£ CALL	£ CALL
Cyrus FM X	£ CALL	£ CALL
Denon TU260L MKII	£99.95	£ CALL
Harman Kardon RANGE	£ CALL	£ CALL
Linn RANGE	£ CALL	£ CALL
Marantz ST4000	£99.95	£ CALL
Pure DRX-701ES DAB	£179.95	£ CALL
Pure DRX-702ES DAB/FM	£229.95	£ CALL
Rotel RANGE	£ CALL	£ CALL

### CD PLAYERS

Arcam RANGE	£ CALL	£ CALL
Audiolab RANGE	£ CALL	£ CALL
Cyrus RANGE	£ CALL	£ CALL
Denon DCD485	£119.95	£ CALL
Linn RANGE	£ CALL	£ CALL
Marantz CDS4000	£119.95	£ CALL
Meridian RANGE	£ CALL	£ CALL
Musical Fidelity RANGE	£ CALL	£ CALL
NAD RANGE	£ CALL	£ CALL
Quad RANGE	£ CALL	£ CALL
Roksan RANGE	£ CALL	£ CALL
Rotel RANGE	£ CALL	£ CALL

### CD RECORDERS

Yamaha CDR-HD1500	£469.95	£ CALL
-------------------	---------	--------

### AMPLIFIERS

Arcam RANGE	£ CALL	£ CALL
Audiolab RANGE	£ CALL	£ CALL
Cyrus RANGE	£ CALL	£ CALL
Denon PMA355	£159.95	£ CALL
Linn RANGE	£ CALL	£ CALL
Marantz PM4400	£139.95	£ CALL
Marantz PM7200	£239.95	£ CALL
Meridian RANGE	£ CALL	£ CALL
Musical Fidelity RANGE	£ CALL	£ CALL
NAD RANGE	£ CALL	£ CALL
Quad RANGE	£ CALL	£ CALL
Roksan RANGE	£ CALL	£ CALL
Rotel RANGE	£ CALL	£ CALL
Yamaha AX396	£169.95	£ CALL

### HI-FI SPEAKERS

Acoustic Energy Aegis Evo One	£119.95	£ CALL
Acoustic Energy Aegis Evo Three	£229.95	£ CALL
Acoustic Energy Aelite RANGE	£ CALL	£ CALL
Acoustic Energy AE1 MKIII	£ CALL	£ CALL
AVI Neutron IV	£ CALL	£ CALL
B&W RANGE	£ CALL	£ CALL
KEF RANGE	£ CALL	£ CALL
Linn RANGE	£ CALL	£ CALL
Meridian RANGE	£ CALL	£ CALL
Mission RANGE	£ CALL	£ CALL
Monitor Audio RANGE	£ CALL	£ CALL
Quad RANGE	£ CALL	£ CALL
Ruark RANGE	£ CALL	£ CALL
Wharfedale RANGE	£ CALL	£ CALL

### HI-FI SYSTEMS

Arcam Solo Ex Speakers	£ CALL	£ CALL
Denon RANGE	£ CALL	£ CALL
Denon D-M33 Ex Spks	£189.95	£ CALL
Denon D-M35DAB Ex Spks	£249.95	£ CALL
Linn Klassik Music Ex Spks	£ CALL	£ CALL
Monitor Audio i-Deck	£249.95	£ CALL
Onkyo CR505DAB Ex Spks	£ CALL	£ CALL
Teac RANGE	£ CALL	£ CALL
Yamaha CRX-M170 Ex Spks	£ CALL	£ CALL

### DVD SYSTEMS

Denon DHT-5005D Inc 5.1 Spks	£429.95	£ CALL
Denon DHT-5505D Inc 5.1 Spks	£599.95	£ CALL
KEF KIT100 Inc Speakers	£ CALL	£ CALL
Teac RANGE	£ CALL	£ CALL

### MULTI-ROOM AUDIO

Cyrus Link RANGE	£ CALL	£ CALL
Living Control RANGE	£ CALL	£ CALL
Yamaha MusicCast RANGE	£ CALL	£ CALL

### DVD PLAYERS

MAKE & MODEL	REGION 2	MULTI REGION
Arcam RANGE	£ CALL	£ CALL
Cyrus RANGE	£ CALL	£ CALL

Denon RANGE	£ CALL	£ CALL
Denon DVD-A1XV	£ CALL	£ CALL
Harman Kardon RANGE	£ CALL	£ CALL
Marantz RANGE	£ CALL	£ CALL
Meridian RANGE	£ CALL	£ CALL
Panasonic RANGE	£ CALL	£ CALL
Pioneer RANGE	£ CALL	£ CALL
Samsung DVD-HD945	£129.95	£129.95
Toshiba SD350	£79.95	£89.95
Yamaha RANGE	£ CALL	£ CALL

### DVD RECORDERS

MAKE & MODEL	REGION 2	MULTI REGION
Panasonic RANGE	£ CALL	£ CALL
Pioneer RANGE	£ CALL	£ CALL

### AV AMPLIFIERS & RECEIVERS

Arcam RANGE	£ CALL	£ CALL
Audiolab RANGE	£ CALL	£ CALL
Cyrus RANGE	£ CALL	£ CALL
Denon AVC-A1XV AV Amplifier	£ CALL	£ CALL
Denon RANGE	£ CALL	£ CALL
Harman Kardon RANGE	£ CALL	£ CALL
Lexicon RANGE	£ CALL	£ CALL
Marantz RANGE	£ CALL	£ CALL
Onkyo RANGE	£ CALL	£ CALL
Pioneer VSX-1014s AV Receiver	£399.95	£ CALL
Pioneer VSX-2014i AV Receiver	£499.95	£ CALL
Pioneer VSX-AX5Ai AV Receiver	£749.95	£ CALL
Pioneer VSA-AX10Ai AV Amplifier	£1799.95	£ CALL
Rotel RANGE	£ CALL	£ CALL
Yamaha DSP-AX757SE AV Amplifier	£399.95	£ CALL
Yamaha RX-V357 AV Receiver	£149.95	£ CALL
Yamaha RX-V557 AV Receiver	£299.95	£ CALL

### AV SPEAKERS & PACKAGES

Acoustic Energy Evo 3B	£679.95	£ CALL
Artcoustic RANGE	£ CALL	£ CALL
Audica RANGE	£ CALL	£ CALL
B&W RANGE	£ CALL	£ CALL
B&W Mini Theatre RANGE	£ CALL	£ CALL
KEF KHT1005	£299.95	£ CALL
KEF KHT2005.2	£599.95	£ CALL
KEF Q7 AV	£ CALL	£ CALL
M&K RANGE	£ CALL	£ CALL
Mission M Cube	£ CALL	£ CALL
Mission Elegante RANGE	£ CALL	£ CALL
Monitor Audio RANGE	£ CALL	£ CALL
Mordaunt Short Genie	£649.95	£ CALL
Quad L-Series	£ CALL	£ CALL
REL RANGE	£ CALL	£ CALL
Wharfedale Diamond 9 HCP	£ CALL	£ CALL
Yamaha YSP RANGE	£ CALL	£ CALL

### SUBWOOFERS

B&W RANGE	£ CALL	£ CALL
M&K RANGE	£ CALL	£ CALL
M&K Acoustics RANGE	£ CALL	£ CALL
Monitor Audio RANGE	£ CALL	£ CALL
Quad L Series	£ CALL	£ CALL
REL RANGE	£ CALL	£ CALL
Wharfedale Diamond SW150	£ CALL	£ CALL

### PLASMA

Fujitsu RANGE	£ CALL	£ CALL
Hitachi RANGE	£ CALL	£ CALL
LG RANGE	£ CALL	£ CALL
Loewe RANGE	£ CALL	£ CALL
Panasonic RANGE	£ CALL	£ CALL
Pioneer PDP435XDE 43" Ex Display	£1999.95	£ CALL
Pioneer PDP505XDE 50" Last Few	£2999.95	£ CALL
Pioneer PDP436XDE 43"	£ CALL	£ CALL
Pioneer PDP506XDE 50"	£ CALL	£ CALL

### LCD TV

Hitachi RANGE	£ CALL	£ CALL
LG RANGE	£ CALL	£ CALL
Loewe RANGE	£ CALL	£ CALL
Panasonic RANGE	£ CALL	£ CALL
Sharp Aquos RANGE	£ CALL	£ CALL
Toshiba RANGE	£ CALL	£ CALL

### PROJECTORS

Optoma RANGE	£ CALL	£ CALL
Screenplay RANGE	£ CALL	£ CALL
ScreenPlay SP5700 (Factory Refurbished)	£1499.95	£ CALL
Sharp RANGE	£ CALL	£ CALL
Sim 2 RANGE	£ CALL	£ CALL
Sim 2 C3X	£ CALL	£ CALL
ThemeScene RANGE	£ CALL	£ CALL

### ACCESSORIES

We have a wide range of Accessories from QED, Soundstyle, Grado, Goldring and more...

# Who are Sevenoaks?

Established as Sevenoaks Hi-Fi in 1972, we have grown steadily onto one of the leading independent home entertainment specialists in the UK, earning a reputation for outstanding service, choice and value for money. In 1995, reflecting our commitment to the emergent new technologies in home cinema, our name was changed to Sevenoaks Sound & Vision. We now have 50 stores across the land stocking a broad range of exceptional equipment and accessories.

## How to shop at Sevenoaks

When it comes to making big decisions about what to buy, there's no substitute for actually road-testing your prospective purchases - seeing, hearing and experiencing the products in action, with the benefit of our expert knowledge and guidance to help you choose. To get the most from your Sevenoaks Sound & Vision experience, simply follow this checklist:

- **ESTABLISH YOUR AIMS** - Are you tweaking an existing system to improve sound or picture quality, or are you looking for a more fundamental and comprehensive upgrade?
- **BRING YOUR FAVOURITE DISCS WITH YOU** - To ensure you get the most from the music and movies in your collection, it pays to test equipment using those very same discs or records, that way you can readily compare levels of performance. However, if you prefer, we can supply a selection of demo discs - current mainstream entertainment that serves to highlight the capabilities of the equipment.
- **JUST ASK** - If you are unsure of any aspect of the products or technologies available, or would like more information about installation options, simply let us know and our staff will be happy to help you out.
- **TAKE YOUR TIME** - We want you to be as happy as possible with your choices, so please take as much time as you need to determine which products are right for you.

**WITH OUR CUSTOM DESIGNED INSTALLATIONS**, your home entertainment choices become as convenient as they are clever. We can help transform every room and every home, whatever your requirements and budget.

Our installation experts are trained to the highest standards in all areas and provide a prompt, reliable and totally professional service. Rest assured also that our commitment to service doesn't end once your equipment is in place. Sevenoaks staff will continue to support you and your kit long after your initial visit to one of our stores.



Custom Installation

## Sevenoaks Website

The Sevenoaks Sound & Vision website has news and information on the Sevenoaks group and detailed pages to help you locate your nearest store. In addition, there are hundreds of **SPECIAL OFFERS** and **STOCK CLEARANCE** items available from our stores nationwide - many with savings of up to 50%. To view our regularly updated product lists, visit [www.ssav.com](http://www.ssav.com) and click on **special offers**.



### Hi-Fi & Home Cinema Guide 2005 EDITION

Pick-up a copy of our **72 Page Guide** at your nearest Sevenoaks Sound & Vision store or order a copy via our Website. The brochure will be posted to you (UK mainland addresses only) **FREE OF CHARGE**.

# SEVENOAKS

SOUND & VISION

## NATIONWIDE STORE GUIDE

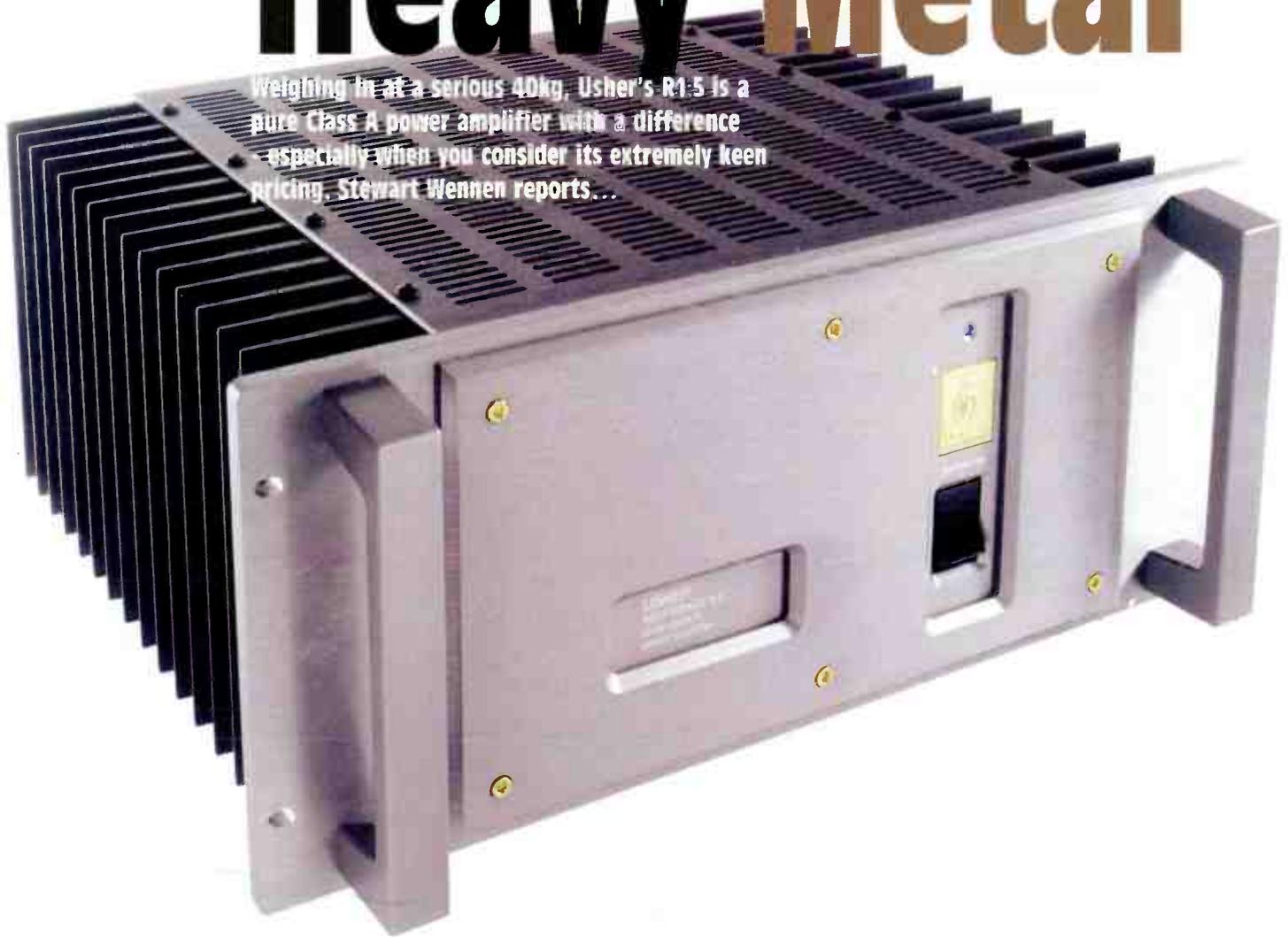
- ABERDEEN** 01224 252797  
● 57 CROWN STREET *OPEN SUNDAY*
- BEDFORD** 01234 272779  
● 29-31 ST PETERS STREET
- BIRMINGHAM** 0121 233 2977  
● ARCH 12, LIVERY STREET
- BRIGHTON** 01273 733338  
● 57 WESTERN ROAD, HOVE
- BRISTOL** 0117 974 3727  
● 92B WHITELADIES ROAD, CLIFTON
- BROMLEY** 020 8290 1988  
● 39A EAST STREET
- CAMBRIDGE** 01223 304770  
● 17 BURLEIGH STREET
- CARDIFF** 029 2047 2899  
● 104-106 ALBANY ROAD
- CHELSEA** 020 7352 9466  
● 403 KINGS ROAD
- CHELTHAM** 01242 241171  
● 14 PITTVILLE STREET
- CRAWLEY** 01293 510777  
● 32 THE BOULEVARD
- CROYDON** 020 8665 1203  
● 369-373 LONDON ROAD
- EALING** 020 8579 8777  
● 24 THE GREEN *OPEN SUNDAY*
- EDINBURGH** 0131 229 7267  
● 5 THE GRASSMARKET
- EPSOM** 01372 720720  
● 12 UPPER HIGH STREET *OPEN SUNDAY*
- EXETER** 01392 218895  
● 28 COWICK STREET
- GLASGOW** 0141 332 9655  
● 88 GREAT WESTERN ROAD
- GUILDFORD** 01483 536666  
● 73B NORTH STREET
- HOLBORN** 020 7837 7540  
● 144-148 GRAYS INN ROAD
- HULL** 01482 587171  
● 1 SAVILE ROW, SAVILE STREET *OPEN SUNDAY*
- IPSWICH** 01473 286977  
● 12-14 DOGS HEAD STREET
- KINGSTON** 020 8547 0717  
● 43 FIFE ROAD *OPEN SUNDAY*
- LEEDS** 0113 245 2775  
● 62 NORTH STREET *OPEN SUNDAY*
- LEICESTER** 0116 253 6567  
● 10 LOSEBY LANE
- LINCOLN** 01522 527397  
● 20-22 CORPORATION STREET *(OFF HIGH STREET)*
- MAIDSTONE** 01622 686366  
● 96 WEEK STREET
- MANCHESTER** 0161 831 7969  
● 69 HIGH ST, CITY CENTRE
- NEWCASTLE** 0191 221 2320  
● 19 NEWGATE STREET
- NORWICH** 01603 767605  
● 29-29A ST GILES STREET
- NOTTINGHAM** 0115 911 2121  
● 597-599 MANSFIELD ROAD
- OXFORD** 01865 241773  
● 41 ST CLEMENTS STREET
- PETERBOROUGH** 01733 897697  
● 36-38 PARK ROAD
- PLYMOUTH** 01752 226011  
● 107 CORNWALL STREET
- POOLE** 01202 671677  
● LATIMER HOUSE, 44-46 HIGH STREET
- PRESTON** 01772 825777  
● 40-41 LUNE STREET *OPEN SUNDAY*
- READING** 0118 959 7768  
● 3-4 KINGS WALK SHOPPING CENTRE
- SEVENOAKS** 01732 459555  
● 109-113 LONDON ROAD
- SHEFFIELD** 0114 255 5861  
● 635 QUEENS ROAD, HEELEY *OPEN SUNDAY*
- SOLIHULL** 0121 733 3727  
● 149-151 STRATFORD ROAD
- SOUTHAMPTON** 023 8033 7770  
● 33 LONDON ROAD
- SOUTHGATE** 020 8886 2777  
● 79-81 CHASE SIDE
- STAINES** 01784 460777  
● 4 THAMES STREET *OPEN SUNDAY*
- SWINDON** 01793 610992  
● 8-9 COMMERCIAL ROAD
- SWISS COTTAGE** 020 7722 9777  
● 21 NORTHWAYS PDE, FINCHLEY RD *OPEN SUNDAY*
- TUNBRIDGE WELLS** 01892 531543  
● 78-80 ST JOHNS ROAD
- WATFORD** 01923 213533  
● 478 ST ALBANS ROAD
- WEYBRIDGE** 01932 828525  
● 43 CHURCH STREET, THE QUADRANT
- WITHAM (ESSEX)** 01376 501733  
● 1 THE GROVE CENTRE
- WOLVERHAMPTON** 01902 312225  
● 29-30 CLEVELAND STREET
- YEovil** 01935 700078 \*OPENING SOON  
● 14 SILVER STREET \*SUBJECT TO LEGAL COMPLETION

**OPENING HOURS:** PLEASE TELEPHONE OR VISIT OUR WEBSITE  
**E-MAIL:** [insert store location]@ssav.com



# Heavy Metal

Weighing in at a serious 40kg, Usher's R1.5 is a pure Class A power amplifier with a difference especially when you consider its extremely keen pricing. Stewart Wennen reports...



**T**his magazine makes no secret of its love for pure Class A operation; there's no doubt it brings something to the party that conventional Class AB amplifiers cannot. The lack of switching distortion makes for an unusually clean and open sound - or to be more precise, the switching distortion of Class AB biased designs pollutes and sullies the original sound (which is, of course, naturally clean and open).

Trouble is, the trade-off with Class A is that power output comes right down - and to get it up to Class AB levels the amplifier needs to be seriously beefed up to dissipate the tremendous heat generated by those output transistors running at full tilt. Of course, this makes things very expensive, with the result that almost all Class A amplifiers command a price premium. Those that don't, such as the lovely Sugden A21a (see p16), simply don't have much power.

Well, Usher seems to be trying

to square the circle, so to speak, with its Chinese built high end stereo power amplifier, offering a claimed 125W RMS per channel (and 40kg's worth of heatsinking to cope with it all) for a more £1,500. Too good to be true?

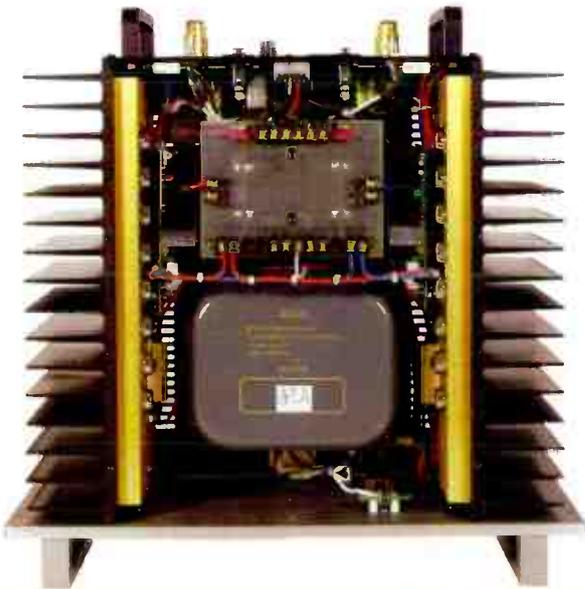
It's an understatement to say this is a visually imposing product, the 480x480x225mm R1.5 being instantly recognisable due to its vast, chunky brushed aluminium fascia panel, with its huge contoured grab handles and large rocker switch with power indication via a blue light emitting diode. Truly massive heatsinks stretch down both sides of the unit. Inside, the power supply smoothing capacitors are configured as two pairs of 10,000-microfarad units. The output stage uses multiple pairs of Motorola MJ15024/025 heavy-duty output transistors. With a massive thermal capacity, this unit utilises a thermal trip which switches the amplifier off in case of a fault condition. The amplifier also has a soft start circuit to allow the current surge to be better regulated on

power up. Surprisingly perhaps, there is no loudspeaker protection on this model.

Fit and finish, as with all Usher products, is rather good. At the rear, there are two pairs of the best binding posts I have ever seen. They allow for the use of 4mm loudspeaker terminations whilst at the same time the use of heavy spade terminals. These binding posts lock the 4mm plugs into the post thus negating the possibility of accidentally pulling the cables out of the sockets. Signal input termination is taken care of with a pair of high quality phono sockets and also a pair of XLR balanced inputs, although balanced operation is a £100 option. Mains electrical power is supplied via an IEC socket.

## SOUND QUALITY

The Usher R1.5 got off to a promising start with BBC Radio Four on FM, where voices sounded unusually delicate yet weighty. Indeed, its midband instantly impressed with a full, rich tone. Moving to vinyl, and



Led Zep for many years and have seen them quite a few times in their heyday, but I have never heard them come with so much verve and drive before in my own front room. The space around the musicians was 'inky black'. Some classic reggae from UB40 ('Present Arms') once again came over with a vast soundstage, the musicians seemingly laid out in an arc. Background noise so low that there was an almost ethereal feel. With lightning transients, the

**DP SAYS:**

This was an interesting one. Costing £500 more than Sugden's A21a but offering some 105W RMS per side extra, plus amazing (perceived) build and Krell-like styling, the Usher R1.5 would seem to be too good to be true, so I'd expected to be disappointed upon audition. Well, I don't think it's as good as the A21a in some respects; it lacks the Sugden's liquid, effortless, flowing musicality. This isn't in itself a criticism, as so does virtually every other amplifier I've heard too. However, the other side of the coin is that it boasts massive reserves of power (by Class A standards), real depth and space and a sense of tidiness and proportion that the Sugden lacks. This makes for a brilliant package; no matter what you play through the Usher, it comes out in a tremendously authoritative way, with superb fine detail, excellent texturality and an excellent resolution of the recorded acoustic. Even if it came packaged in a biscuit tin, to do this for £1,500 would be major feat – so it's outstanding considering how well the amplifier is built. In absolute terms, the R1.5 lacks the liquid musicality of some rival amps (Musical Fidelity's A5cr is a case in point), or the finesse or Lyngdorf's SDA21/5 (another outstanding product, and this at under £800), but it's still right up there in value for money terms. For many, myself included I dare say, the fact that it looks like an £8,000 Krell might just seal the deal.

**REFERENCE SYSTEM:**

Origin Live Aurora Gold/ Conqueror/ Sumiko Blackbird  
Acoustic Solid Small Royal/ Hadcock GH242 cryo/ Music Maker Three  
Graham Slee Jazz Club phonostage  
Custom built passive preamplifier  
ATC SC35M loudspeakers

James Brown presented a beautifully wide and deep stereo image, with stage depth to die for and correct placement of the musicians. Again, the bass proved satisfyingly vivid.

Usher proved a joy to listen to.

A change of pace was due, so the next disc on the turntable was from Beethoven. As the string section murmured the introduction to his

"this is affordable Class A without tears..."

An early 1960s John Williams mono flamenco guitar recording done at Abbey Road, with its legendary warm sound, didn't disappoint either. The Usher successfully captured the warm rich sound of the instruments and correctly transcribed the decay of the notes in the studio. All these audio clues issued forth in abundance, to make the listening experience all the more profound.

Moving to some old school rock and roll in the shape of Led Zeppelin ('2'), and the hard driving rhythm machine filled my listening room with huge bass transients, the kick drum accenting the structure of the music. The Usher certainly takes no prisoners; I have been listening to

Piano Symphony No. 3, I was able to fully appreciate the delicacy and sheer power of the music played by a great orchestra. This Deutsche Gramophone recording has been lauded as possibly the finest transcription ever made of this piece, and I could see why. Likewise, solo female vocals from Carol Kidd (Linn Records) sounded almost magical, the Usher's ability to transport the listener to the room where the performance is taking place proving uncanny.

**VERDICT** ●●●●●£

Excellent sonics allied to serious power output makes this an outstanding mid-price product.

**USHER R1.5** £1,500  
HiAudio  
(C)+44 (0)1443 231458/9  
www.hiadio.co.uk

**MEASURED PERFORMANCE**

The Usher has vast thermal capacity, with huge heatsinks and a massive thermal sink under the multiple output devices. It produces 150W into 8ohms and 200W into 4ohms – not enormous by today's standards – so the amp is sized to run flat out for long periods I presume, without thermal protection kicking in.

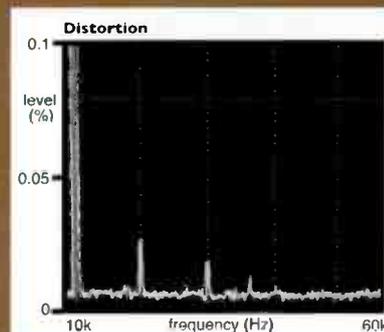
Distortion levels were low into an 8ohm load, just 0.003% second harmonic showing in the midband. However, at higher frequencies this rose to 0.02%. Into 4ohms however, there was quite a marked increase in distortion, second and third harmonics appearing in equal quantity. Level measured around 0.03%, rising to 0.1% toward full output at high frequencies. This is still a good performance, but the substantial change in distortion pattern at higher currents is a concern.

Input sensitivity was low at 1.5V; the Usher needs a preamp with x5 gain or more if it is to match old 300mV tuners, cassette decks and such like.

Frequency response was normal enough at 4Hz-42kHz (-1dB).

The Usher Reference 1.5 is rather large for domestic use, considering its power output. It looks better suited to arduous professional use. Measured performance was good, if not exceptional. NK

Power	150watts
Frequency response	4Hz-42kHz
Separation	88dB
Noise (IEC A)	-116dB
Distortion	0.02%
Sensitivity	1.5V



# New Money

Not since the long lost C200/P200 combo of 1981 has Arcam charged so much for separates hi-fi. Dominic Todd tries out its new C31/P1 high end preamplifier/power amplifier combination with three different popular modern loudspeakers...

**A**rcam has been toughing it out in the volume sector for too long. Any latecomer to the audio market may well think of it as purveyor of excellent budget separates hi-fi, but the truth is that it was originally a bastion of mid priced, and even occasionally high end, products. To wit, we had the A60 which, for example, retailed for £253 in 1980 – putting its cheapest product well into the thousand pound plus sector in real terms now. Then there was the C200/P200 pre-power, which sold for well over twice that – which in today's money isn't far off the princely sum of £3,400 for which a C31/2xP1 combo will set you back...

What we have here is not only their first monobloc amps for twenty-something years, but also their ultimate expression of stereo amplification. Certainly there's plenty of excitement at the Arcam camp about this trio, and when you take a careful look at the C31/P1s you can see that a lot of care and attention has gone into the design.

Like most Arcam amps' these days, the heart of the C31 preamp features a 'digital engine'. This allows for a myriad of features without cluttering up the fascia and, more importantly, supposedly having minimal effect upon sound quality. A menu system allows access to be able to control individual input levels and tone settings. Furthermore there are three levels of volume sensitivity and a variable level processor to increase flexibility when used as part of a multi-channel system.

It's nice to see a well engineered MM/MC phono stage as standard, although this can be switched to line level for those who don't need it. Internally the finish is every bit as good as you'd expect from Arcam – four-layer printed circuit board and all – but there are some further tweaks to show Arcam have made even more of an effort than usual. At the top of critical capacitors I noticed Sorbothane damping panels, whilst the generously sized toroidal

power supply and heatsink appeared suitably over spec'd.

Like the C30 preamp' that preceded it, the C31 features XLR balanced inputs as well as the more traditional RCA phono sockets. Normally, I'm not terribly fond of XLRs, but in combination with the P1 power amps' they make great sense. A key feature of monoblocs is the ability to place them as close to the 'speakers as possible, thus reducing 'speaker cable length. Obviously longer interconnects are needed instead, but if you use a balanced XLR connection then this shouldn't matter as much as with conventional, non-balanced, cables.

Apart from the XLR connects, the P1 amps' feature RCA in/outs and two sets of speaker sockets per amp'. Internally, the hefty toroidal transformer, large heatsinks and heavy gauge PCB all suggest that the claimed power output of 180 watts is entirely believable. As with the C31 preamp, there's also much use of Sorbothane damping, right down to the feet, of which there are six on each P1!

## THE TEST [1] B&W 602S3 STANDMOUNTER (£300)

Beginning with Tennant/Lowe's 'To the Battleship', with the Dresdner Sinfoniker orchestra, it soon became clear that the Arcam amps really made the B&W's sing. Given that the DM602S3's are a modest load and of a budget price, this is perhaps of little surprise. However, the easy power on offer from the Arcams means that they projected and imaged the sound exceptionally well. In true Arcam fashion, the strings came across as refined and measured, although there was more bite available than some previous Arcam offerings. Bass, which can be a little plummy with these 'speakers, was well controlled and had decent depth. There did, however, seem to be a slight loss

of focus in the treble and the solo violin sounded a tad recessed and, surprisingly, lacking some expression.

The slightly reedy nature to the upper midrange appeared again with Jennifer Warnes's 'Big Noise New York'. Here it was the saxophone that lacked body. Separation, however, remained excellent and there was good timing, if not quite in the Naim league. On the plus side the sense of articulation and precision was first rate, especially when it came to expressing and projecting Warnes' vocals. The downside to this very

transparent presentation was a slightly mechanical presentation that reminded me of the old Audiolab pre/power amps'. Articulate and expressive vocals were a key quality with the Crash Test Dummies, 'Afternoons & Coffeespoons'. The fine detail retrieval meant that subtle guitar chords could clearly be heard and individual instruments were all given plenty of space with

which to "breathe". Whilst bass wasn't quite as deep as this sort of power betokens, it was exceptionally taut and well controlled. The balance between excitement and refinement I felt Arcam had judged well, although the fact that it became just a little relentless at higher volumes would suggest that brighter 'speakers may well not suit the Arcams quite so well. It came as little surprise to find the Arcam most at home with Classical music – Arcams often are. With Emmanuel Chabrier's 'España', rimbomb from both brass and strings was

advantages and disadvantages. It was with these transducers that the Arcams seemed happiest. Putting the Espana straight back on after having listened to it on the DM602s provided the greatest ear opener. The e82s have always impressed with their transparency and detail resolution, but it was with the Arcams that they really

came to life. Compared to the DM602s there was a

effect the 'speakers can have upon the overall sound. Whereas, before, the balance had almost been overbearing, this time I would have liked to have heard more attack from the percussion. Overall though, in terms of longer term listening satisfaction, I'd be happier with the balance created by the e82s. This is especially so when the Arcam also managed to finely control the tuneful upper bass response. Timing thus improved to the point of being able to earn the title 'snappy' (if still not quite so 'whip crack' sharp as Naim). Most disappointing, relatively 'speaking, was the performance with the 'Battleship Potemkin' soundtrack (Tennant/Lowe, etc.) Here the violin still sounded rather flat, although the treble appeared to sound a good deal more focused. The larger 'speakers also did a good job of filling out the substantial, electronic bass notes. Also as expected, the e82s pulled even more information from the sound track with subtle percussion more apparent. Technically, then, with the exception of the solo violin, this was an excellent performance.

**[3] ACOUSTIC ENERGY AE1 MKIII MINIATURE (£2,000)**

The analytical character heard in 'To The Battleship' was carried through using these famous reference monitors too, yet the C31/P1s did a great job in powering the tricky AE1s. Bass was deep, with fine extension, if not quite as hard hitting as something like the more powerful CAV-A10. The spacious staging and sweeping strings showed the positive benefits to be had from good monobloc amplification, with very good projection to match. And you couldn't argue with the Arcam's sense of balance and technical ability, even if the AE1s weren't quite providing the best evidence for this. Turning to the Crash Test Dummies, I found the initial brightness return – indeed the AE1 MK IIIs can sound a little bright – a side effect of their explicit detail – but I hadn't expected an Arcam, of all brands, to excite this! Match the cables and room carefully and this shouldn't be a problem, but it's clear that those expecting the usual Arcam silky smooth treble, albeit at the expense of detail, could be surprised by the C31/P1s more explicit nature. The upside was excellent resolution from the stringed instruments and a very well integrated vocal performance with fine tonal colour – impressive stuff.

greater sense of tension, an enhanced dynamic scale and a more powerful bass presence. Interestingly, when I originally tested these 'speakers I found them a little bass light. The Arcams proved that, given enough welly, there is bottom end to be had - it just needs an amp that can extract it. Jennifer's vocals weren't conveyed as well with the AE1 MK IIIs – there was a little too much sheen here. Likewise the e82s made the more broad, three dimensional staging of 'Crash' still sounded a little restrained, though the overall results were more mechanical than they had been on the DM602s. Nevertheless, it isn't one of those amps that's a Class-A fluidity.

Switching to the Crash Test Coffeespoons, I found that once again, just what I needed

exceptionally well resolved. The spacious staging and width came as little surprise. What did, certainly compared to Arcams of past, was the dynamic range of the piece. As well as controlling the dynamic scale, the Arcam also went a little beyond what you'd expect. This is one Arcam that can get you to the seat with musical force.

**[2] MISSION e82 FLOORSTANDER (£7,000)**

Whilst all three 'speakers



# Worth The Wait...

The long-awaited versatile CD-1 transport/player is coming...

User-selectable upsampling (48khz, 96khz, 192khz - 24 bits).  
Reclocking on output stage, minimizing jitter and improving detail, timing, dynamics, imaging and soundstage.  
Optimized musical Philips transport mechanism.  
High quality DAC can be switched off to maximize performance when used as dedicated transport.  
Linear power supply - with low noise local regulators on critical circuits and optimized regarding EMC/EMI performance.  
Matches rest of Lyngdorf Audio range.



This new CD player extends the Lyngdorf Audio range of products that offer high performance, value and versatility.



At £2150, the TDA 2200 True Digital Amplifier offers:

The functionality of a DAC, pre and power amplifier. Simply connect a CD transport to obtain pure music. Optional analogue inputs available. Parametric and voicing equalizers, subwoofer DSP crossovers. Ready to accept the new room correction module. 200W/8 ohms, 375W/4 ohms.



At £775, the SDA 2175 Power Amplifier offers:

Balanced and single-ended analogue inputs. Treble is sweet and accurate. Bass is tight and controlled. Complete lack of noise. Advanced protection circuits. 200W/8 ohms, 375W/4 ohms. Vice-like control of speaker cones.



At £1095, the SDAi 2175 Integrated Amplifier shares the same impressive power engine as its brother and includes the following main features:

6 RCA inputs + 1 XLR balanced input. Tape Out. Pre-amp output balanced and single-ended. Programmable attenuation, level and balance for each input. IR remote control. RS 232 connection for software upgrades.



Millennium True Digital Amplifier:

Our statement amplifier. The world's first true digital amplifier, now in its 3rd generation.

"Supremely smooth and well balanced in every respect, this amplifier starkly shows what other solid-state does wrong. Brilliantly engineered, it's nothing less than an epoch-making product.

VERDICT – Outstanding."

SDA review, Hi-Fi World, June 2005





**THE RIVALS**

The Arcam's most direct rival has to be the Roksan Caspian pre and monobloc power amps. Not only is this combo similar in configuration to the Arcam trio it also, give or take a few quid, costs the same. Although a good deal less powerful – we measured it at 84 watts per amp – the Roksan has startling dynamic scale and control combined with very good transparency. Rather like the Arcam combo, however, this isn't the first amp you'd turn to be beguiled by music. Although not a monobloc combo, the Arcam will inevitably be compared to the likes of Naim. At this price it's right in Naim territory and, although £400 more expensive, the NAC202/NAP250 pre-power combination is a formidable one. To my eyes the Naim gets off to a great start by visually representing everything that's great about hi-fi separates – understated, clean-cut and unashamedly electrical looking! In terms of rhythm, drive and control it is still very much the benchmark by which others are judged. It's also surprisingly musical, with only a slightly restrictive tonal palette letting it down.

The vocal rendition of Jennifer Warnes was similarly impressive being articulate and fuzz-free in a manner that had eluded the other two speakers – a rare occasion in which the AE1 MK IIIs significantly improved upon the e82s. Again, the sax' could have used a little more sparkle, but the whole performance came across as polished and well presented. Whether it was truly involving, though, I was less sure. Although other amps may be technically more adept, I feel sure they could convey the spirit of and the emotion behind, the music more effectively. Once again it came down to the Chabrier to restore my faith in the C31/P1s music making abilities. Here the meaty P1s extracted a powerful and dynamic performance

"the Arcams proved there is bottom end oomph to be had from even tricky loudspeakers - you just need an amp' that can extract it..."

from the Acoustic Energy's', with a full bodied brass section and smooth strings offering a balance that would be hard to beat.

should go for smooth, medium to high sensitivity designs like Mission e82, which proved a dynamic combination.

**CONCLUSION**

Without doubt one of the finest products Arcam has ever developed and engineered, the C31/P1 combo shows exceptional attention to detail in design, excellent build and true engineering integrity. Whatever the 'speaker, the Arcam trio offers a spacious sound stage and separation that you only get with the finest pre/power combos, with real untrammeled power to drive almost any loudspeaker courageously. But don't think of it as traditional Arcam fare, in both the good and bad senses: it's incisive and analytical, and can even sound bright with certain 'speakers. The Mission e82's mostly disguised this, but with the other two there were times when the sound became edgy. As always, the sound you get is a function of the amplifier-speaker matching, and so Arcam C31/P1 buyers

**VERDICT**

Exceedingly balanced, spacious and powerful sounding combination, superb ergonomics, facilities and build.

**ARCAM C31/P1** £3,400

Arcam  
☎ +44 (0) 1223 203200  
www.arcam.co.uk

**FOR**

- useful preamp features
- broad, deep staging
- articulation, detail

**AGAINST**

- clinical at times
- needs careful matching

**MEASURED PERFORMANCE**

The P1 mono power amplifier uses Sanken power devices bolted to a chunky internal heatsink and fed by a large toroidal mains transformer. This combo delivered exactly 200W into an 8ohm load, our measurements showed. This rose to 340W into 4ohms and as most bass units are, these days, of 4ohm impedance this is roughly what is available in practice.

The P1 overloaded cleanly but suddenly, suggesting a lot of feedback is being used. Distortion should be low as a result and this is how it turned out. In the midband total harmonic distortion measured 0.003% from low to full output. At 10kHz this increased slightly to a very acceptable 0.005%, climbing to 0.01% at full output into 4ohms - a gruelling test. Our analysis shows just a trace of third harmonic was responsible.

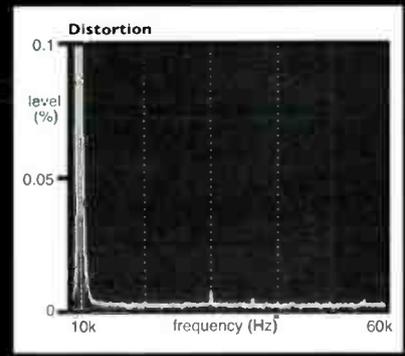
Frequency response of the C31 and P1 together was wide, stretching from 0Hz up to 117kHz. Arcam say the system is DC coupled with no safety blocking caps., relying on the DC protection circuits to prevent loudspeaker damage. I recorded no less than 4V out before the relays triggered - far too high - but a slow DC servo acts to keep DC drift in check.

Power amp sensitivity was normal

enough, 1V delivering full output (40V). Our C31 preamp's gain wasn't set properly, but Arcam told us the quoted maximum is 280mV with the input preset at maximum (8), meaning a gain of x3.5 is available, useful enough.

The P1 will work in most situations, but some DC input conditions will cause problems. Otherwise it measures well. NK

Power	200watts
CD/tuner/aux.	
Frequency response	3Hz-117kHz
Separation	88dB
Noise	108dB
Distortion	0.006%
Sensitivity	280mV
dc offset	10/8mV



# Powered Up!

Noel Keywood opines on power and people...

**H**ow much power do you need? A few simple calculations give useful 'ball park' figures. Small loudspeakers commonly provide 86dB SPL (Sound Pressure Level), at a distance of one metre from one watt of input, our measurements show. That means they sound comfortably loud if you sit one metre in front, from a mere watt. This gives the impression that sixty of them will blow your brains out.

It isn't quite so. Sound pressure drops roughly 6dB with every doubling of distance, so 12ft away (i.e. 4m), a normal enough listening distance, there's no less than 12dB loss, so we're down to 74dB - and that's roughly equivalent to hushed conversation. You'll hear it, but it won't sound loud. We have two channels working, doubling power, which adds 3dB, so with stereo we can enjoy 77dB SPL from one watt per channel.

Let's go loud, to 100dB at the listening position. That requires a 23dB increase in sound pressure level, which calculates out to a huge x200 power jump, to no less than 200W total, provided by a 100W per channel amplifier. Power levels jump up rapidly thereafter, as for an extra 3dB SPL you need to double power again. As Concorde was clocked at 120dB an aircraft enthusiast would need 1300W or more to reproduce this in his home.

This sketches out the various factors affecting power, loudness and their interrelationship. If you juggle these figures, or simply use a handy internet calculator such as that at <http://www.myhometheater.homestead.com/splcalculator.html> to do the work for you, then you'll soon get the hang of this power issue.

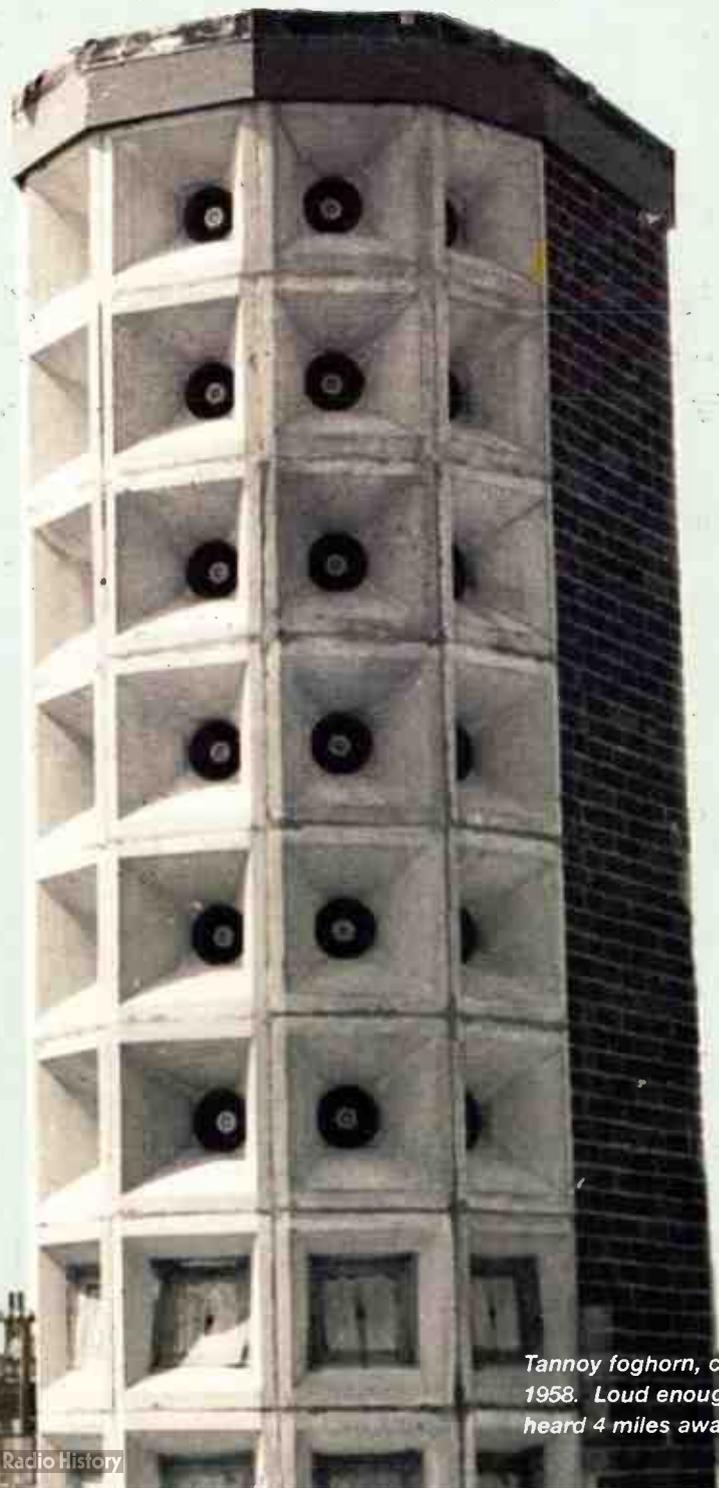
Musical Fidelity use calculations like this to justify their high power amplifiers. In their view, for adequate headroom in a domestic hi-fi system you need to comfortably exceed the 100W per channel norm. This is a common enough view, that I wouldn't dispute, but there are quality concerns,

most of which thankfully make the situation a little less desperate.

If you sit closer or play loud, to 95dB say, but not extremely loud, your power requirements fall considerably. Also, when sitting in a closed room you are, acoustically, sitting inside a box which constrains much of the sound energy, so it doesn't

die away at exactly 6dB for every doubling of distance.

Neighbours and eardrums militate against high volumes, as do ASBOs these days. I've been known to go for the odd 110dB peak here and there and haven't picked up an ASBO yet, probably because I'm wary of hearing damage and tinnitus.



*Tannoy foghorn, circa 1958. Loud enough to be heard 4 miles away.*

Too many older males, mostly in the music business (I live near Abbey Road), have spent their life listening at high volumes and you don't get much sense out of them in the pub unless you shout, I find. So if you don't want to go there, best to keep it down a little...

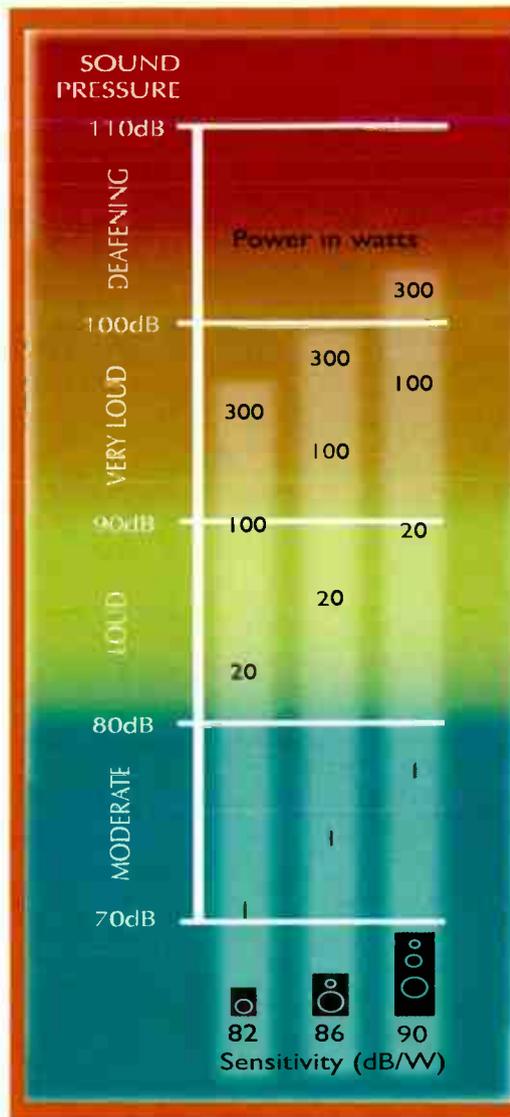
I get by with a 28W per channel amplifier and play quite loud at times. But then I use a pair of 90dB sensitive floorstanders, and increased loudspeaker sensitivity makes a big difference.

If you really feel you need high power, say for the banqueting hall in your country mansion, bear in mind that another danger arises: low flying cones. Put too much power into a loudspeaker and it may well fly apart. Alternatively, it will burn out. It is very difficult to generate high acoustic powers, especially at high frequencies. Take a look at Foghorns or P.A. loudspeakers to see how this difficulty is tackled. High pressure, horn loaded tweeters are common, accompanied by huge bass units able to shift mountains of air. I'm reminded about all this yearly when the Notting Hill Carnival starts. Only recently, at 10am sharp on a Saturday morning, my bedroom windows started to shake in response to a battery of 18in bass units mounted on a float; this is acoustic power for you.



Top of Tannoy's Prestige range lies the giant Westminster Royal HE, a compound horn. Standing 55in high and weighing 300lbs, it delivers 99dB sound pressure from one watt. Tannoy say it can produce 126dB peaks!

I'm sure most *Hi-Fi World* readers realise that fidelity takes a back seat when power gets in up front. So big P.A. speakers are no solution to filling a banqueting hall, and neither is a Foghorn. Luckily, in spite of appearances, big, floorstanding hi-fi loudspeakers are by their nature relatively sensitive, giving 90dB or so from one watt, at one metre. This alone limits the need for a powerful amplifier and a special loudspeaker



POWER AND LOUDNESS

Our coloured chart relates dB Sound Pressure Level (SPL) commonly used in loudspeaker ratings, to perceived loudness and also shows how much power you'll need to produce it. We've used -12dB correction to make the SPL value that at the ear when sitting 4metres (12ft) from the loudspeaker. For example, the 82dB mini loudspeaker gives this SPL at 1m, so at the listening position it gives approximately 70dB.

Deafening levels are typically produced by road drills, Concorde and such like. As NEF say their Reference 3 produces 113dB SPL maximum, this means in our notional room it produces 101dB SPL at the ear, just into the realms of deafening. This would be the short term musical peak level though, not a steady level. It gives some idea of what a hi-fi loudspeaker can achieve.

Very loud levels are a busy street subjected to the roar of modern diesel buses.

Loud is what you want in the home and our chart shows 20W into a good floostander will achieve this, whilst a miniature demands 100W. Note how the need for power jumps rapidly past 100W, as each doubling of power produces just 3dB increase in sound pressure level.

DECIBELS	WATTS
30	1000
29	794
28	631
27	501
26	398
25	316
24	251
23	200
22	158
21	126
20	100
19	79
18	63
17	50
16	40
15	31
14	25
13	20
12	16
11	13
10	10
0	1

This chart shows the relationship between power in dB against power in watts relative to 1W. If a loudspeaker, say, is rated at 110dB SPL maximum output and its sensitivity is 90dB from 1W, then that 20dB difference means 100W will produce that 100dB.

Clearly, when running at high powers, huge increases in power are needed for small increases in sound pressure (i.e. volume).

able to handle its output. One of the world's biggest hi-fi loudspeakers, the Tannoy Westminster, generates a breathtaking 99dB from one watt.

Power absorption is improved by using multiple bass drivers. Providing both the tweeter and crossover are robust, a big, floorstanding loudspeaker can usually deliver pretty big sonic levels. Because SPL falls away so fast with distance though, especially with lots of people sitting around feasting on boar washed down by mead, serfs in the far reaches won't get to hear much. These days they're best served by surround-sound, as is any large room. This way, large amounts of power - 1000W or more - is distributed through five, six or even seven hi-fi loudspeakers, giving a smooth, even spread of sound for the enjoyment of king and serf alike. That's socialism for you.

Small, insensitive loudspeakers are a bigger problem. Producing just 80dB-83dB or so from one watt these need lots of power to go loud but, being limited in thermal capacity and hampered by inefficiency, will be quick to overheat and overload if pushed too hard. There isn't so much you can do about this, although using

a subwoofer will help somewhat. It's best to avoid really small loudspeakers if you want to go loud, as their sensitivity is usually abysmal - around 81dB or so. As this jumps usefully to 86dB or thereabouts for large bookshelf / small standmount types, squeezing in a loudspeaker of this size will go a long way to keeping your power needs in check. Deeper and cleaner bass is another benefit, so it pays to use sensitive loudspeakers, usually meaning large-ish ones. Dinky loudspeakers may look neat, but they're got real limitations.



# 3 STEPS TO PURE LISTENING ENJOYMENT

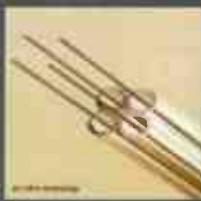
AUDIO  
42

Silver and Air and the steps to a perfect cable:

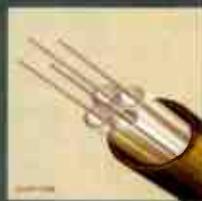
Step 1



Step 2



Step 3



Step 1 – Use Silver Wire, it is more conductive than copper and so delivers a much more realistic musical performance. Step 2 - The Unique Air Cables reduce dielectric effects by encasing the Silver Wire in air, giving better transients and imaging. Step 3 – Plastic Cables, Slinkylinks does away with cumbersome metal components that further degrade sound by using Eichmann Bullet RCA Interconnects and light weight banana plugs on Speaker cables. 3 steps that allow Slinkylinks to deliver amazing clarity and detail against an all black background (well they do come from New Zealand!)

*Slinkylinks*

Slinkylinks TM are manufactured in New Zealand

For more information [www.slinkylinks.net](http://www.slinkylinks.net)

Just a click away at [www.audio42.com](http://www.audio42.com)

World Radio History

### POWER VERSUS QUALITY

Top hi-fi amps - well, some of them at least - produce just 3W. Other top hi-fi amps produce 300W plus. Are there any great truths behind all this?

Truly esoteric amplifiers, such as Single-Ended Triodes, or SETs, generally come in below 10W, to keep heat production and size in check. They are pure Class A by nature, with no crossover distortion and often little feedback. Minimalist by nature, they do often possess a smoothness of sound that can't be matched by today's transistor jobbies. To use amplifiers like this though I suggest a really good pair of sensitive floorstanding loudspeakers are used. Anything below 20W will soon run out of steam as you push volume up past moderate to loud.

Conventional solid-state amplifiers through the 60W-200W region nowadays. Whether they use conventional transistors or FETs really isn't too consequential - and FETs certainly don't sound like valves. They do, however, have extended high frequency gain, which in turn allows more feedback to be used, lessening high frequency distortion. That fact alone doesn't guarantee good sound quality though. Most 60W-200W amps are, in their topologies, much alike, which is why they usually sound very much alike. Well tried and tested design solutions, bolstered by computer design programmes such as the University of Berkley's Spice and all its variants, help ensure this. Conservatism, as well as belt and braces protection circuitry, also helps ensure that today's hi-fi amplifier won't blow up your loudspeakers, should it fail. This was a serious concern with early designs during the 1960s and 70s.

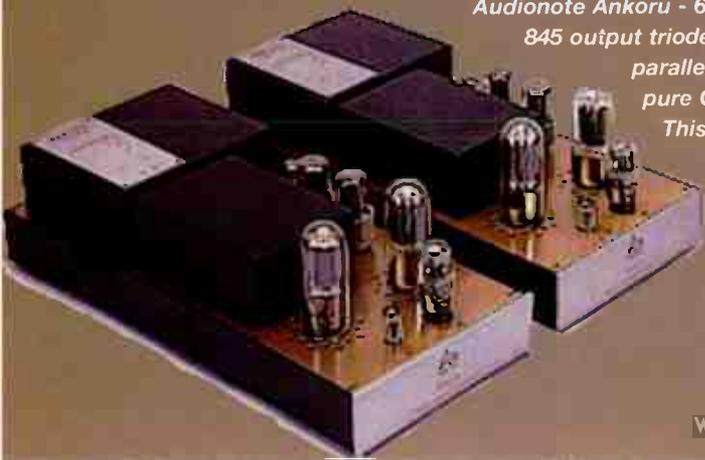
For higher powers solid-state devices must be paralleled up to handle the extra current. Surprisingly, this helps reduce distortion by averaging out their parameter spreads. All other things being equal, really high power amps can sound quite smooth as a result. However, don't rely on it. There are plenty of big amps around that have plenty of wallop, accompanied by a treble that's fizzy and crude.

Not so common in the U.K. are esoteric, high power U.S. amps., such as Krells and Levinsons. U.S. homes are a good size up on those in the UK and need higher powers, coupled with good quality. Amplifiers like this look a little over inflated for the U.K. but they often use original components and circuitry. If you have a wallet that needs lightening, it may be worth listening to a few. Krells, for example, have been a popular choice for loudspeaker demo rooms.

Finally, a whole new breed of 'digital' amplifier is starting to appear now. Good designs, such as the Lyngdorf featured this month, are very good. I have measured some desperately bad digital amps in the past, however, one coming from Sharp. Not all digital amplifiers are alike; the output filters and feedback systems used are crucial to success and vary widely in sophistication. So called digital amps (they're really analogue PWM amps) have traditionally suffered severe distortion, noise and load sensitivity. So listen with care and at length for a harsh, brittle sound, preferably with more than one set of loudspeakers. Having said that, the TacT/Lyngdorf design comes across as silky smooth. This may change in future as bandwidths increase, as today's digital amps are bandwidth limited. They are not power limited though. If you want high power without fans and heatsinks, this is the place to look, as efficiencies are high, up to 85% or better.

In a nutshell then, quality isn't strictly related to power. Having said that, the widest variations in sound quality exists in esoteric low power designs, especially SETs from companys such as AudioNote. If you want to hear how fluid, sweet, natural and relaxing music can sound - some may say somnambulant - head in this direction. I can think of little like it at high powers, although EAR offer various sonic solutions that differ from the norm, using both solid-state devices and valves.

*Audionote Ankoru - 60W from twin 845 output triodes, working in parallel, single-ended, pure Class A mode. This is power coupled with quality.*



*KEF Reference 203, capable of 113dB sound pressure level at one metre, KEF say in their specs.*

### LOUDSPEAKER POWER RATINGS

Power is commonly confused with loudness in hi-fi, especially with loudspeaker power handling, but whilst related, these factors aren't at all the same. Let's look at the misunderstanding with loudspeakers.

The main factors limiting a loudspeaker's output are thermal and mechanical, or put more graphically, the point at which it either burns out or blows up. There are no end of standardised tests to assess this, from the Audio Engineering Society, International Electrotechnical Commission (Europe), Electrical Industries Association (USA) and others. Whilst these give reasonably useful power handling figures they still don't say how loud the speaker is, in terms of acoustic output, at this limit. You can estimate it though. If sensitivity is 86dB from one watt and the power limit 200W, then you have a power increase of x200, or 23dB. Add this to 86dB and you get 109dB, at one metre from the speaker. Seated 4metres away you can subtract 12dB to come up with 97dB SPL at your ear, which our chart shows is very loud. In practice a reverberant room will bring this up to 99dB, but over optimistic loudspeaker sensitivity figures knocks this back a dB or two, making the original 97dB figure about right!

The best way to specify loudness is simply as a dB SPL figure out at one metre - and KEF do this. A loudspeaker like their Reference 203 is quoted as reaching 113dB, so you should get an easy 100dB SPL from it 4metres away. KEF quote 89dB sensitivity from one watt, a 24dB power increase, given by a 250W per channel amplifier. KEF recommend amplifiers of 200W maximum, giving 1dB of leeway to the 'speaker. Note that maximum power handling is not quoted here, but is in excess of 250W. As KEF view it, people don't operate their speakers up to the point of destruction, as specified by the power rating, because distortion levels are intolerable. Bear this in mind when looking at the peak power ratings for a loudspeaker.

# Cool Ruler

Is it possible to synthesise style and sonics? Danish high end specialist Densen thinks so, with its B-250/B-330 power amplifier combo. Channa Vithana tries it with three modern loudspeaker systems...

It is not just the wonderful aesthetics, but the sound quality, build and the holistic creative attitude typically found in an individualistic and independent company that drew me to Densen (literally translated as 'son of Denmark'). I first came across the marque through their fantastic Beat B-100 integrated (£895) in the mid nineties, which had two cylindrical knobs and not much else. It was a rhythmically musical amplifier, and this high end £6,000 combo before you now continues the theme...

## B-250 PREAMPLIFIER

The £3,000 B-250 is Densen's reference preamplifier, completed in their outstanding extruded aluminium casework with the main fascia formed from a continuous L-section. Densen say they use aluminium throughout the whole cabinet to reduce magnetic induced distortion to a minimum. Using extruded profiles in aluminium has several benefits; the cabinet is much more rigid, thereby improving the circuits resistance to vibrations and thereby improving the sound, and by using extrusions the labour cost of the cabinet is lowered, and thereby it is possible to get a higher quality for the same amount as a traditional sheet metal cabinet. The casework also neatly avoids any top-mounted screw fixings leaving them located away from normal viewing conditions.

The B-250 uses four buttons either side of the red LED display for standby, mute, volume up, volume down, input left, input right, proc (surround processor volume control) and status to scroll designated functions. Options include plug-in phono boards - either the £150 DP-03 MM or £225 DP-06 MM/MC. These phono boards are rather special in that they use solar driven power supplies with attractive blue LEDs for the sunlight! For multichannel audio an SB-1 board at £250 or SB-2 having "extremely high

quality preamp stages" for £750 can be plugged in. Thus adding an £1,800 Densen B-340 four-channel power amplifier for instance and a DVD/SACD player, the B-250 (with B-330) can switch/operate from high-quality two-channel or multichannel without the typically compromised performance from a generic AV receiver.

The B-250 features a turntable ground connection, four line and two tape connections and four pre outputs for Densen's SAXO active system

(see the B-330) and/or bi/triamping. There are two EPS sockets that accept two (forthcoming) DNRG external upgrade power supplies. A switchable mains input and Den Link multi-room connection complete the adaptable and flexible functionality. The B-250 uses a superb two-hundred step volume control operated by "laser trimmed Vishay metal film (resistors) with a precision of 0.1%" and Vishay relays which bestow exceptionally fine volume adjustment (the inputs are also relay switched). Internally it features three 20VA sealed transformers for the power supply and 100,000 micro-Farads of storage capacity. The

transformers are custom made for Densen by a Danish manufacturer. They are wound in a special way, that makes them work as isolation transformers and encapsulated in a plastic moulding, to avoid vibrations reaching the delicate circuitry. The optional £150 Gizmo remote is



gorgeously aluminium crafted, operating at almost any angle. The B-250 has a 6watt class A zero feedback output, measures 444x310x64mm and weighs 8kg.

## B-330 POWER AMPLIFIER

The £3,000 B-330 is Densen's top stereo power amplifier, and sports beautifully engineered aerofoil-

# "the Densen B-330 power amp is the audio equivalent of a Danish built AK47!"

like heatsinks at either side. These are necessary for the maximum heat dissipation required by their conservatively rated (quoted) power delivery of 120W/8ohms that doubles into 240W/4ohms; the aerofoils facilitate continuous openings through the casing. Consequently a stunning functional aesthetic is revealed, declaring an enduring, discrete yet modernist feel making this the most attractive design so far from Densen. The aerofoils are finalised at the top of the casing as a series of precisely cut lozenge

perforations. There is a single red LED in the front and the flush visage is left unspoilt by buttons or garish nameplate. This makes for best looking power amplifier I personally have yet seen.

The B-330 can be upgraded internally with a plug-in £400 configurable SAXO active crossover for active operation to your

price – Ed.]. Accordingly for the £3,000 B-330 this would allow a later purchase of the £3,000 B-250 preamplifier when funds permit. The B-330 measures 444x310x64mm and weighs 15kg.

## THE TEST [1] MONITOR AUDIO RADIUS 90 MINIATURE (£250)

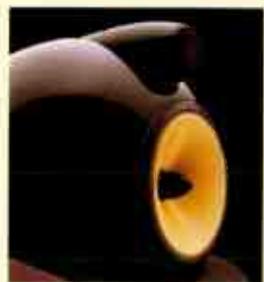
Noel Keywood's measurements for the £250 MAs state 8ohm impedance with a low 84dB sensitivity, so they could be a somewhat awkward load. With Elgar's 'The Dream Of Gerontius', the Monitor Audios worked superbly with the Densens meshing with the little speaker's innate musical timing beautifully. There was a free flowing and dynamic presentation. The orchestration swelled and was propulsive, powerful and expressive. Driven by the Densens the multiple vocals took advantage of the Monitor Audio's widescreen ability by being temporarily extended. The Pet Shop Boys' 'Behaviour' LP in collaboration with Harold Faltermeyer was almost entirely constructed from scratch with minimal sample use. Thus with gorgeously lush synthesiser swathes, 'This Must Be The Place I Waited Years To Leave' features guitarist Johnny Marr and orchestration by Angelo Badalamenti and is musically quite a sophisticated piece. The Densens unravelled a dynamic acoustic out of the little Monitor Audios with both control and verve. The resolution from these £250 speakers through the Densens leaned towards the high-end with both vocals and instruments - without sacrificing one iota of rhythmic thrust. The spatiality capably emphasised a cinematic feel. The

speaker and for this it has a special pre input at the rear. There is also a set of 'normal' sockets, Den Link, speaker binding posts, switched mains input and a switchable gain selector for normal or high. This last function is truly excellent for owners of Densen's B-100 integrated (or a passive pre-amp/CD player with volume control), as I have had excellent results using its last iteration in passive mode providing excellent volume control and sound quality through Densen's range-topping £5,200 B-350 monoblocs [...and so you should at that



- Amphion • Arcam • ART • Audiolab • AVID • Ayre • B&W •
- Classé • Focal.JM Lab • Linn Products • MJ Acoustics • Monitor Audio •
- Naim Audio • Nautilus • Primare • Quadraspire • Rega • REL • Rotel •
- Shahinian • Spendor • Sugden • Thiel • Wadia •

**B&W Nautilus 800 launch event**  
Thursday 27 October 2005. Chester shop – call for details



Acoustica  
17 Hoole Road  
CHESTER CH2 3NH  
**01244 344227**  
[www.acoustica.co.uk](http://www.acoustica.co.uk)

Acoustica  
114 Wolverhampton Road  
STAFFORD ST17 4AH  
**01785 258216**  
[www.acoustica.co.uk](http://www.acoustica.co.uk)

Griffin Audio  
3 Gibb Terrace, Gibb St  
BIRMINGHAM B9 4AA  
**0121 224 7300**  
[www.griffinaudio.co.uk](http://www.griffinaudio.co.uk)

# neat acoustics

We're about  
to reveal  
our Motives

**neat**  
[www.neat.co.uk](http://www.neat.co.uk)  
01833 631021





Damned's 'Street Of Dreams' was animated, textural and dynamic. David Vanian's sanguinary-vampire vocals were superbly 'reanimated'. The saxophone also had in-room presence with excellent timbre. The sixties style guitars melded wonderfully with the bass and drums. The end saxophone coda was handled well, the Densens clearly revelling in their musical grip over the tiny Monitor Audios.

## [2] REFERENCE 3A DULCET STANDMOUNT (£1,695)

When he measured the £1695 Reference 3A Dulcet standmount speakers, Noel Keywood said they were "...very insensitive, providing just 81dB SPL from one nominal watt (2.8V) of input. (And further that) A powerful amplifier will be needed. The reason for this is a high overall impedance of 8ohms, largely resistive, right across the audio band, except at bass resonance." Accordingly the Densens handled their more awkward load with graceful ease! They simply powered them to much louder than normal listening volumes and extracted a commensurately higher resolution sound with Elgar's 'The Dream Of Gerontius'. With 'This Must Be...' by the Pet Shop Boys there was a deep throbbing bass line which was nicely aligned to the rest of the music structure and Neil Tennant's vocals. The cinematically echoed guitar melodies were suitably atmospheric, timbral and enticing. There was propulsion, depth and resolution, just what this complex piece deserves. The bass line from 'Street Of Dreams' by the Damned was voluble in its presence due to the Dulcet's larger (non-crossover) bass driver. The groove, resolution and subtleties were excellent on this song as the Densens did not struggle and gave the Dulcets a hearty current supply preventing them from sounding strained, dull or shut in. There was more musical information such as the echo/reverb used on the main vocals and when the saxophone coda arrived the room was filled with a suitably thrilling timbre ending the song like a dramatic curtain call to a movie.

## [3] WATERFALL VICTORIA FLOORSTANDER (£2,000)

With a manufacturer's quoted specification of 90dB sensitivity and 4ohm impedance, they never posed a problem with the Densens as they were the easiest to drive of the three speakers used (utilising the B-330's quoted 240W into 4ohm rating). On Elgar's 'The Dream Of Gerontius' there was vivid dynamism to the orchestration as the crescendos arrived and departed. Also - finer resolution and weight due to the larger speaker cabinet/amplifier power. The music was more revealing deliciously unravelling extra depth and decay to both vocals and instruments. The orchestra and vocal crescendos were handled with consummate ease and had no subjective distortions, colorations or dynamic resistance. The Densens feeding the Waterfalls also revealed first-rate acoustical textures and timbre with 'The Dream Of Gerontius'. The Pet Shop Boys' 'This Must Be...' obviously had a much more grandiose scale with the larger speakers but there was also resultant finer resolution and timing. The ebb and flow was wonderful where the bass lines were fluid yet deep and communicative. Johnny Marr's beautiful guitar melodies were now awesome, resonating beautifully through the musical structure and the vast but underlying orchestrated score was given balance to form emotionally convincing music that was allowed to express the dystopian meaning of the lyrics. 'Street Of Dreams' from the Damned was nimble, musically highly resolved and energised. The music was faithfully

reproduced because there was no hint of added character, grain or time smearing through the Waterfall's drive units. The instrumental timbre was stunningly in-room and emotionally engrossing. The saxophone end coda was so good going from crescendo then fading with such precision, phrasing and timbre that I had barley recovered when the next song 'Shadow Of Love' started.

## CONCLUSION

The B-250 is a rare example of a preamplifier that doesn't asphyxiate the musical signal, while the B-330 power amplifier is the audio equivalent of a Danish built AK47! Together they get the 'job done' reliably, unflinchingly, every single time with different, tricky speaker loads - yet also with exceptional finesse and compelling acoustical timbre, doing so in a beautifully compact and timeless enclosure.

## ENGINEERING

Densen uses silver solder and surface mounting with a precision of 0.02mm, in an artificial nitrogen atmosphere for durability. The printed circuit boards are made of Teflon for longevity and are double-sided, which, "have the signal on one side, and the ground-plane on the other, thereby optimizing interference free signal transfer". Densen also use Dense Mass Current Distribution (DMCD). They say when "using the DMCD circuit, the current is at all times present at the output terminal. The result of this is extremely low output impedance for a non-feedback amplifier. This makes the amplifier extremely fast and precise, while retaining unlimited control with the speakers". Ever since the DM-10 all Densen output stages have been engineered without global or local feedback. For more details on zero feedback see our September 2005 issue p25, or visit [www.densen.com](http://www.densen.com).

## MEASURED PERFORMANCE

I guessed the B-330 was an amplifier in the zero-feedback mould preferred by Densen, since it not only produces obvious distortion in times when this is unnecessary, but the distortion it produces importantly remains stable in level, pattern and spectral make up; in other words the amp's transfer function alters little. It's an unusual but important feature. Into an 8ohm load the B-330 power amp consistently produced 0.05% distortion, comprising equal levels of second and third harmonic, right across the audio band and at any power level. Unlike most amplifiers, level did not rise toward high frequencies. This increased to 0.15% into 4ohms, again under all conditions. Obviously, these levels are higher than usual, but they are still acceptable, especially if as Densen claim they are achieved without the feedback normally applied to correct innate non-linearity.

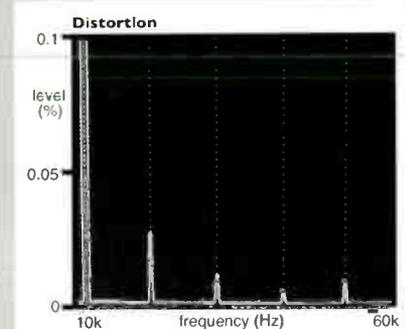
Bandwidth was wide, stretching from 12Hz (+1dB) up to 90kHz. A peculiar peak at 2Hz was likely caused by servo-circuits or related filtering, an odd effect and not much wanted either.

Producing 136W into 8ohms and

240W into 4ohms the Densen B-330 has plenty of power.

The B-250 preamp and B-330 power amp measure well. This is a system that will likely deliver a smooth, stable and dimensional sound. NK

Power	136watts
CD/tuner/aux.	
Frequency response	12Hz- 90kHz
Separation	91dB
Noise	-92dB
Distortion	0.05%
Sensitivity	460mV
dc offset	15/17mV



## VERDICT

Don't let the sleek styling fool you: the Densens offer tremendous power, great sound and great value for money.

**DENSEN B-250**  
**PREAMPLIFIER** £3,000  
**DENSEN B-330 POWER**  
**AMPLIFIER** £3,000  
 Densen  
 ☎ +45 75 18 12 14  
[www.densen.com](http://www.densen.com)

## FOR

- B-330; compact powerhouse
- B-250; sophisticated and transparent
- eye-catching aesthetics

## AGAINST

- price

# JET Stream

**Bristling with trick technology, Elac's FS607 X-JET is an extremely interesting floorstanding loudspeaker, but does it fly? David Price stands by...**

**F**orgive me this gripe, but the trouble with most high end loudspeakers is that, aside from swisher cabinetry and better build, they bring precisely nothing new to the party.

In the same way that a BMW 7 Series automobile is essentially a 3 on steroids (i.e. bigger with more gadgets), so your average £4,000 hi-fi box will have little or no true technological innovation over something at one tenth (or less) of the price.

Specifically, whereas a £400 floorstander may have a vinyl wrap box (if you're unlucky), a cloth dome tweeter, an off the shelf mid/bass and cheap passive componentry in the crossover, a £4,000 design will have a nice real wood veneered box, a cloth dome tweeter, a slightly better off the shelf mid/bass and, ermm, only slightly less cheap passive components in the crossover. Oh, and if you're lucky it might be 'two and a half way' instead of two – whoopee do!

Of course, the purveyors of these pinnacles of audiophile perfection would argue that the price premium reflects the time spent listening to the speaker; which is all well and good, but it isn't the number of 'man hours' that justifies the price tag, it's the sound – and very often this is such that those myriad 'man hours' seem grossly misspent...

If I were spending several thousand pounds on such a thing, I would expect – nee insist – that it either rewrote the rule book, or at least remade it an altogether more rarefied form, yet there are surprisingly few products which do. Wilson Benesch's use of carbon fibre is genuinely innovative, Quad's electrostatics employ 'polarised cling film' instead of the conventional 'magnetised coil plus plastic megaphone' arrangement, and Martin Logans mix the best of both worlds with reasonable success - and that's it...

Indeed, these aside I can't

think of any other designs which are of any particular note. Rather, it's all just fiddling with boxes and bits of wire, with varying degrees of success. I'm not denying that some conventional speakers aren't truly superb sounding (Mission's e82 and Mordaunt Short's Performance 6 being two examples of brilliantly finessed conventional designs) but they're the exception rather than the rule.

Well now there's Elac's FS607 X-JET to join the select few technologically interesting transducers. This isn't radically different in the way that Quad's ESL-988 or TDK's S-80 are, but it's still innovative enough to make it a genuinely significant design. As any speaker designer would remark here though, whether or not this translates to a special sound or not is another question altogether!

## THE TECHNOLOGY

Elac is a particular favourite of this magazine, thanks to its propensity for ribbon tweeter technology. Ribbon tweeters are still surprisingly rare considering the obvious benefits they bring in terms of treble quality, but maybe this isn't so unexpected when you remember that conventional dome tweeters are ten a penny and ribbons are not. Essentially, their light weight makes for a fast, finessed sound that's far less likely to 'beam'. This means a more 'phase coherent' speaker, better integration between treble and mid/bass drivers and a sweeter and more delicate sound.

Elac has been using ribbons for a good long time now, and speakers such as the £900 FS207.7 use it to great effect, making for a warm yet subtle sound that's quite different to all its other price rivals. The FS607 X-JET you see here is more than 'just' a 207 with go-faster stripes however...

First, it's a three way (or a 'three and a half' to be strictly true), which means it runs a separate woofer, midrange driver and tweeter in each

speaker box. This, whenever properly implemented yields substantially superior results to a two way, not least better linearity, superior power handling, and a wider and more even frequency response. Of course, three ways are harder to do properly, which is why the practice is rarely as good as the theory. The 607 is obviously very well implemented however, not least because it introduces a new 'coaxial' tweeter and midrange unit, which uses – yes, you've guessed it – ultra lightweight honeycomb diaphragm ribbons! Personally speaking, I've never seen such a thing, and it promises dramatic benefits. First, its dispersion should be far better than two separate domes (or ribbons for that matter) because the amplitude and phase of the sound waves run linear and frequency-independent over 180 degrees from the front baffle. Effectively it's a point source, like Tannoy's Dual Concentric. Elac call it the X-JET, and it's what makes the speaker truly exotic. The lightweight 50mm and 105mm diaphragms are driven by a 78mm moving coil, using coppered aluminium flat wire,

edgewise-wound, on a ventilated caption bobbin. The result is an extremely delicate drive unit with a claimed cut-off point of 50kHz. The FS607 X-JET runs two 180mm woofers, which are aluminium sandwich designs, each with a double rubber surround. The 37mm moving coil is wound on a caption bobbin by means of heat-resistant wire. A homogeneous magnet field is created by magnets with ferrite rings that meet tight tolerances, and they're done in-house. All this results in very dry bass, says Elac, optimum large signal behaviour and increased bass levels of up to 10%, providing a precise cut-off frequency of 28Hz.

In my view, second to the X-JET coaxial tweeter/mid-range unit in significance is the elaborate metal cabinet. So many rivals use variations on the MDF theme, which isn't ideal and needs serious amounts of damping to tame, whereas this speaker boasts an elaborate extruded aluminium affair, with aluminium casting and MDF with

horizontal and vertical internal tension rods. Despite being quite tall at 1180x290x282mm, it's very dead when struck with the knuckles and is exquisitely well finished to boot, giving the FS607 a truly esoteric appearance. It's heavy too, at 35kg apiece.

The crossover network of this loudspeaker is built with high quality components and Van den Hul internal wiring – crossover frequencies come in at 150, 410 and 2,350 Hz. The terminals, with gold-plated WBT connectors, are easy to access and allow larger cable diameters (16 mm<sup>2</sup>), as well as high-quality spade connectors. The terminals provide high-quality biwiring cable suspension bridges (Van den Hul wiring) with gold-plated banana plugs. Elac claims a power handling of 250W RMS, and a lowish minimum impedance of 3ohms [see MEASURED PERFORMANCE], and this is an important point, because – as you'll read next – it wasn't the easiest speaker to drive.

### SOUND QUALITY

We first began the listening with T&A's V10 tube amplifier [see p52], whereupon – despite this amplifier's decent power output – the Elacs started making nasty noises. The sound was harsh and shrill; obviously less than the sum of the parts. A World Audio Design 300B power amplifier, famously no shrinking violet, also produced a less than impressive sound.

With this in mind, we had no choice but to go to serious solid-state, and a fresh, latest spec Naim NAC282/ NAP200 was enlisted. The result was dramatically different, and proved an extremely synergistic pairing, as the latest Naims are almost velvety in their sonic character (yes really!) yet have the same sheer motive power and load driving ability they always did. Suffice to say, the dynamic

Salisbury duo grabbed the Elacs by the electro-mechanical equivalent of their 'short and curlies',

and from then on, not a word of complaint was heard again.

The Elac FS607 X-JET is certainly an interesting listen: we ran the gamut of classic and modern recordings, via digital and analogue sources, and found them never less than extremely revealing – in

"few loudspeakers take into the studio and show you all four walls..."

some respects. You'll certainly not get away with a bad front end, and (it also counts) that the Elacs need concerted tuning in and meticulous positioning and cable matching in order for them to produce an even half-decent sound; they're certainly not something you can 'fit and forget'. They also work best when they've had a serious lashing with solid-state power, giving those metal drive units proper time to warm up.

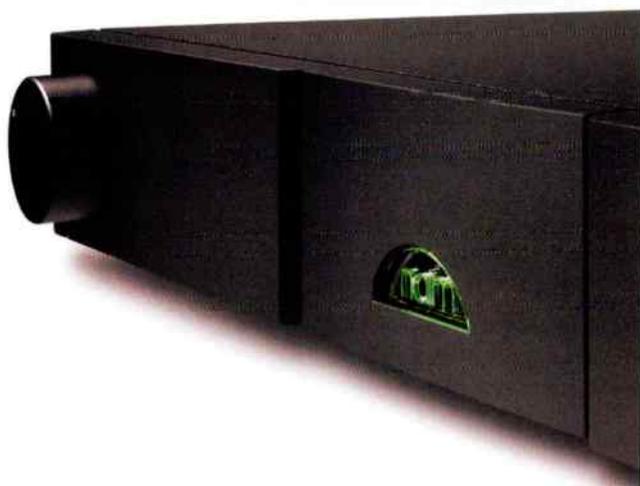
Yet despite publisher Noel Keywood and I using all the oldest tricks in the book, we couldn't quite get the Elacs to sound as we'd hoped. On every song and with every singer, they sounded beautifully finessed, very delicate and (apparently) detailed, extremely composed and ordered. Image placement was superb, as was reproduction of the recorded acoustic. In a way, there sound was extremely electro-static-like, being so tidy and clean. But there was one thing that the Elacs never did during the entire auditioning period – boogie.

This isn't a cardinal sin; it's just that the Elacs are not natural rock loudspeakers, in the same way that the original Quad ESL-57s aren't. Still, there are myriad aspects of the FS607's sound which make them genuinely rewarding to listen to with a whole range of programme material. For example, Gabrielle's 'There She Goes' was a joy; the superb midband/tweeter integration makes them brilliant on female vocals, which is – of course – one of the hardest feats for any loudspeaker. Gabrielle's vocals were deliciously husky yet smooth and velvety with it; the Elac's conveyed the 'grain' of her voice brilliantly, showing its innate 'roughness' yet never becoming harsh.

This famous treble/



Naim audio designed to thrill and built to last.  
Hear music it sing at..



THE SOUND GALLERY

01494 531682

65 Castle Street, High Wycombe Bucks  
email: home@soundgallery.co.uk  
www.soundgallery.co.uk

## definitive audio

Definitive Audio creates a quality of musical experience that is peerless. Our service is bespoke, our philosophy is unique and our results are celebrated the world over. We use a selection of the most artful and ingenious creations, including the emotionally persuasive and sublimely beautiful KSL Kondo amplifiers and Living Voice loudspeakers.

New Western Electric 300B valves available from stock.

Sale of part exchanged and ex-dem items	Sale	New
Naim CDS - 2003 - mint - manual - boxed	£795	
Naim NAC 112 - 2003 - mint - manual - boxed	£385	
Naim NAP 150 - 2003 - mint - manual - boxed	£445	
Naim Flatcap - 2003 - mint - manual - boxed	£345	
Border Patrol Control Unit - line pre-amp	£1000	£1700
Audio Note Japan M7 pre-amp - line only	£3000	
Musical Fidelity A2 Integrated - very nice	£250	£500
Art Audio PX25 - 5watts - Single ended flea power for the sensitive type	£3000	£4000
Krell KAV-300iL	£1900	£3000
AudioNote (UK) Ltd P.Zero pre + monos - perfect condition	£400	
Sugden Masterclass integrated - nearly new	£2500	£3300
Helios Model 1 CD player	£700	£1300
Benz Micro LP phono cartridge - 5 minutes use - perfect	£1400	£1900
AVI S.2000 M1 integrated amp	£400	£1000
Border Patrol P21 - mahogany - integrated - 11 months	£3800	£4800
Audio Mecca Mephisto CD transport	£1200	£2500
Canary 608 (blue) line integrated - great sound for low dough	£1900	£3000
Canary 303 [110v] - new - filet mignon	£3800	£7200
Canary 309 - very nearly new - beef wellington	£4800	£10000
Canary 801 [110v] line pre-amp - lemon torte	£2500	£4500
Cyrus CD8 CD Player - 2 years old	£800	£1000
Aloia pre-amp - very new - very good condition - beautifully made - OK	£900	£2800
Thomas Sheu turntables (80mm platter with 12" arm)		ring for details
Thomas Sheu turntables (50mm platter with 9" arm)		ring for details
Sugden A21a - titanium - classic integrated	£600	£1050
Vitavox RH330 Mid range horn - pair	£400	
Revolver 45 loudspeaker - cherry - unused	£500	£1200
Revolver 45 loudspeaker - grey + maple	£400	£900
Kimber Select inter-connect - 0.75m - new - in elaborate plastic box	£250	£500

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



MICHELL ENGINEERING

### The Michell Odyssey 2004 Limited Edition Turntable

Based on the classic Gyrodec, the Limited Edition Michell Odyssey 2004 will be produced in a numbered series of just 100 pieces supplied in an all black finish, with a black acrylic base, added clear acrylic spyder to give a second level of isolation. The signature weights are in a nickel silver finish. The turntable comes complete with record clamp, black TecnoArm "A", and matching black HR Power Supply. With its striking finish, attention to detail and outstanding sound quality it will only be a short period of time before the 100 units are snapped up.

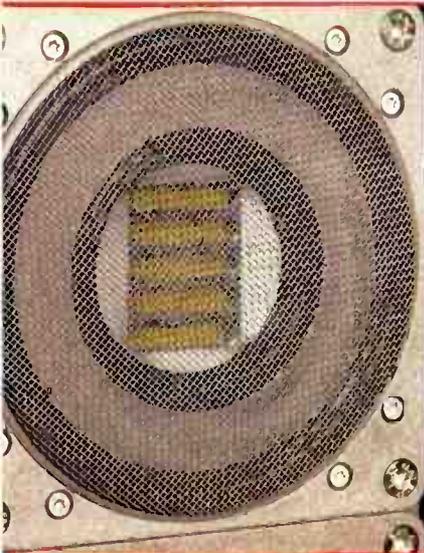


MICHELL ENGINEERING

J A Michell Engineering Ltd  
2 Theobald Street, Borehamwood,  
Hertfordshire, England, WD6 4SE

Telephone: 020-8953 0771  
Fax: 020-8207 4688  
www.michell-engineering.co.uk





midband pairing paid dividends time after time. Steve Earle's 'Emeralds Hollywood' yielded a brilliant sense of the recorded acoustic; few loudspeakers take you into the studio and show you all four walls so well. There was a superb sense of the recorded acoustic with all instruments in the mix located with riflebolt precision. The Elacs conveyed the speedy transients of the strummed steel string guitars brilliantly, sounding upfront yet never once veering into harshness.

These first two discs came courtesy of Denon DCD-2900 DVD player – a fine high end design of several years back – but NK and I couldn't help thinking there was something missing. The Elac's aren't the most emotive performers at best, and digital's tendency to sound mechanical and matter of fact didn't help, so we broke out the Garrard 401/SME 3012/Ortofon Kontrapunkt B turntable and things suddenly got dramatically better.

Once again, the Elacs went straight for Gerry Rafferty's wonderfully deep, sonorous and silky vocals on an original vinyl pressing of 'Night Owl', showing the superb quality of this twenty eight year old recording. The speakers also began to make a decent stab at playing rhythms too, sounding much more animated than through the Denon digital disc spinner. Again, they weren't exactly dancing, but they'd definitely come out of their shell, and – in addition to all those superb technical qualities – were showing they had a human sound too.

Robin Trower's 'About to Begin' (from 'Bridge of Sighs') was enchantingly atmospheric, the Elacs once again showing an almost electrostatic-like image precision, even if the physical size of the soundstage was obviously smaller than the likes of Quad's ESL-988 or even Mordaunt Short's conventionally aspirated Performance 6. They had superb 'textural' too, lending superb finesse to James Dewar's

vocals. Once again, these speakers offered up details of finger detail and bristled with tiny micro-dynamic information across the midband.

Treble was subtle and delicate, but listening suggested this level is down a little, leading to a slightly atmospheric sound that gives the perceived effect of the tweeter being rolled off. It's soft, sweet and subtle like no conventional dome can be, and projects out into the room brilliantly, but there's definitely a drop to my ears.

Grace Jones' 'Private Life', once again on LP proved a stiff test. We hit the loud pedal on the NAC282 and sat back to be enthralled by this stunning recording, with that redoubtable rhythm section of Sly Dunbar and Robbie Shakespeare in their very best form. Once again, the studio sound was superbly carried, the Elacs offering a wide open window into the famous acoustics of Compass Point, Nassau. Yet, the high levels began to throw up some issues with the 607s...

It all begins with the bass. Despite their very tidy, neutral, almost clinical midband, the lack of colouration does not extend to the two woofers. At a mere 180mm in diameter each, these are small and they simply can't offer seriously high levels of sound that a single 300mm or 350mm item would give. And you can hear it when a Naim NAP200 dumps current down them, when (at high levels) they start to sit softly on transients and compress dynamics. Even at low levels, the woofers are a little warmer than I'd have liked, and the meandering basslines of Sly Dunbar show a certain lack of tunefulness. (Switching over to sub-£1,000 Revolver R45s proved superior in this respect).

Although the Elacs are reasonably rhythmically engaging, they certainly never distinguish themselves in this area, which why rock aficionados should avoid them. However, classical fans will love this tidiness and textural, and although the physical size of the soundstage isn't as large as we'd hoped, the image placement

within it is exemplary; better, I'd say, than Quad 988. A 1972 Decca recording of Bachmann's Piano Concerto No.1 (Vladimir Ashkenazy, LSD/Andre Preiner), retained on Decca CD, sounded superb. Violins were eerily smooth, piano had deliciously sparkling harmonics and brass and wonderful rasping (yet never rough) texture to it. Once again, the individual elements of the orchestra were located with pin-point precision, and there was a tremendous 'rightness' about orchestral music.

## CONCLUSION

If you are a Motorhead or Massive Attack fan, these are not the speakers for you. They don't exactly enjoy hitching up their skirts and dancing, and you'll not be bowled over by massive visceral thump or expansive soundstaging either. However, lovers of simple acoustic playing female vocals and indeed classical music will appreciate their stunning imaging, excellent treble-midrange integration, smoothness and evenness right across the frequency band, plus the superb finesse that only ribbons done properly can give. So the advice is, as always, try before you buy!

## VERDICT

Technically impressive loudspeakers with a superbly delicate and seamless sound, but heavily music dependent so careful auditioning essential.

**ELAC FS 607 X-JET** £5,000

Elac

+44 (0)800 652 5002

www.elac.com

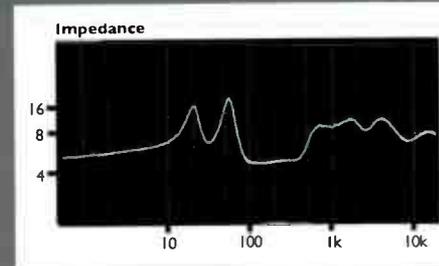
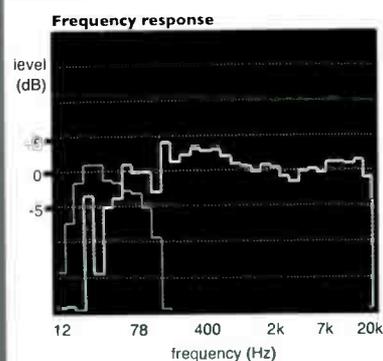
## MEASURED PERFORMANCE

Elac's X-Jet ribbon drive unit, a souped up version of the standard Jet which has always worked well, provides this big floorstander with a smooth response right across the middle and high frequency regions, from 630Hz up. This gives it a fair amount of work to do, but it also makes the crossover point less of a problem in phase behaviour. The slight upward trend in output toward 16kHz may make itself known with bright CDs, but over the ear's most sensitive regions the speaker actually slopes down a little and may sound warm in balance.

There's a marked increase in output below 500Hz, corresponding with a related step down in impedance, as expected, our impedance trace shows. This will push the lower midrange region forward a little, adding warmth and some body to the sound.

The FS607 maintains output down to 31Hz, lower than most rivals. Its true low bass performance depends upon room positioning. Listening showed the FS607 had slightly soft bass, with plenty of deep heft. Not surprisingly, with this much bass sensitivity was high at 91dB, impedance measuring 5ohms. The bass driver is a 4ohm unit.

The twin bass units of the FS607 work hard to produce a lot of low frequency output. The ribbon is a slightly awkward partner in some respects, a little recessed. Overall though, the FS607 X-Jet measures well enough, offering plentiful deep bass and a smooth, extended midrange. NK



# V10 Power

There's nothing anaemic about T+A's V10 integrated amplifier, says Noel Keywood...

**T**he common perception is that valve amplifiers are funny, archaic things. They could be likened to the Orangutan, an endangered species kept visible by a few people harbouring an interest others don't share. That's how my non hi-fi friends seem to see it, at least. To me the valve is no archaic device, so much as a good, clean way of amplifying an audio signal. T+A, you might think, also see it this way. Better, they have set out to prove it in the V10 amplifier by cossetting a set of valves in a web of solid-state support circuitry, all set in boutique chassis work, to produce a fairly astonishing modern valve amplifier. Heavens, it even has a microprocessor on board - this is no Orangutan...

The V10 looks to be a potent package. It delivers a healthy 80W per channel, T+A claim, "without connecting output valves in parallel", so the handbook's introduction tells us. Sure enough, the compact chassis, just 44cms wide, has just four output valves, each marked JJ EL509 clearly in large red letters. This means there are two push-pull pairs, one pair per channel. It's a compact arrangement and, when it comes to replacement time, a cheap one too. I spoke to Edicron about this unusual valve and, apart from receiving a long dissertation on the history and politics of manufacturing in East Europe - something you just don't get with transistors! - I learnt that a pair costs just £54.85 inclusive of VAT from them. Not bad, considering the amplifier will set you back a cool £4,599.99. Or, perhaps you might say, disproportionately cheap, considering they are the centre piece of the show. It's a point I'll come back to.

The T+A is solidly built and beautifully finished by a company

based in Herford, Germany. They're proud it won a European 2004-2005 High-End Award, and just looking at it you can see why. The design borders on ornate, with individual

perforated valve covers that offer protection against burns, a tinted acrylic cosmetic cover, spun transformer cases possessing a superbly smooth matt aluminium finish and a natty front display that lights up with fluorescent red letters. The fit of the rotary controls in their recesses is near perfect - not something most manufacturers would be prepared to spend money on, as this degree of precision is costly.

Being large, heavy things by necessity, valve amp chassis tend to be expensive in any case. The T+A chassis really is very complex, especially so as it has various anti-vibration devices, including an

internal subchassis and sprung feet. Much like

my own 300B valve amp, this one is massively heavy, most of the weight being in the main transformer, hiding beneath the big central can, and the two output transformers in the smaller cans either side. Behind sit smoothing capacitors. Unlike my amplifier and many higher end valve amps though, T+A have not used



choke smoothing. By eliminating high frequency power supply noise, choke smoothing helps give the darker sound across the midband that valve amps so commonly display, but it also worsens regulation a little, softening bass. I expected the V10 to possess a more

of these controls I would guess they are rotary encoders, rather than motor driven mechanisms. All the same, with two ECL82s and a pair of ECC99s there's enough onboard for all gain to be supplied by valves, rather than transistors. T+A do say no 'amplification' comes from transistors.

**UP IN SMOKE?**

T+A fit a slew of start up options, most of which in my experience are not strictly necessary. Whilst all the talk about protecting the valves is laudable, it isn't necessarily realistic or effective and to be frank

like the EL509, originally designed as a television line driver valve, can withstand full power testing with alacrity, as can most output valves, certainly for the fifteen seconds or so it takes to get a reliable averaged reading from a spectrum analyser. So what happened?

Valves are difficult to manufacture with consistency and batches tend to go wrong. It was valve failure that precipitated larger circuit failure in my first two V10s. That valves fail is a fact of life that any amp designer must cope with, but in the V10 this did not work. A common failure mode is for the electrodes to heat, warp, touch and short; internal clearances are miniscule. When electrodes touch it's easy to introduce transistors to the delights of 450V or so and they react much like you or I - expire! That this is likely to happen is fairly well known. Solid-state and valves can be mixed I'm sure, as nowadays high voltage protection of delicate transistors is both needed and well understood, but my first two V10s weren't very successful in this respect...

T+A state the V10 "incorporates completely newly developed valves in the form of the EL509/II" that are "the key to the V10's substantial output power of 80W". A statement like this is enough to raise my eyebrows and I'm sure it would generate some steam at EAR where the PL509 has been used for many years, followed by successor KT90 which is similar in type - a high power pentode. The EL509II, a unique variant of the PL509, is produced by JJ of Slovakia, valve suppliers Edicron told me. They also confirmed that, yes, it was a batch of KT88s that were once rejected for World Audio Design amplifiers because of their failure rate. All the same, Edicron said, JJ valves are generally considered reliable. My third set has held up well under weeks of continuous running of the V10. The UK distributor for T+A was fairly candid about this, admitting that early V10s did have problems, but they had been cured and T+A were now happy about the amplifier's reliability.

To get 80W from a single pair of compact power pentodes is good going, demanding the use of high voltages, and what is termed 'fixed bias' which, contrary to what you might expect, means it must be

this debased the many claims made by T+A for this product. As lovely as the V10 is, much of what T+A have to say about it borders on fantasy, in my experience.

Let's take the one about solid-state monitoring circuits making for extreme reliability. We've all lain in bed thinking "hmm, why don't I design a valve amp where all control is handled by solid-state" because this is easy to do and it works - sort of. For a few seconds at least, or perhaps longer, but how much longer is negotiable with the man in charge of serendipity. There's a bang, a puff of smoke and you wake up. Extreme reliability is a dream that doesn't survive daytime reality.

In my case, it was two puffs of smoke. But I guarantee I was awake at the time, in this case conducting full power tests. The first two V10s sent to me expired pretty fast when cranked up to full output. In both cases the output valves gave up, taking much internal circuitry with them. I was told by the repair engineer: That would be the 'protection circuits' then - hah! High dissipation output pentodes

forward regulation as a result, with well defined tone. All other things being equal, there are so many variables to consider in any amplifier, but especially a valve amp, this has to be a generalisation of course.

Not unlike American Audio Research amplifiers, with which it shares similarities, the V10 uses solid-state circuits for remote control of volume and input switching. T+A also make much of the fact that much of the internal circuitry is under solid-state control, with bias voltages and loudspeaker protection amongst them. Certainly, as I pressed the Loudspeaker muting button on the remote, a light clicking sound could be heard from an internal relay. The rotary input selector moved with ghostly precision in response to remote commands, as did the volume control, from the light, springy action



## "The best tonearm I've heard"

HI FI WORLD

Winner of Stereo Times magazine Most wanted component of 2004 award



"A new benchmark for musical communication" STEREO TIMES

"One of the truly special products I've reviewed in the past 18 years" STEREOPHILE



The new generation of tonearms from Origin Live have won admiration and rave reviews across the world for good reason - these arms better the best by a significant margin. Whatever your current arm, you can at last treat yourself to a serious upgrade. Why not arrange for a demonstration now.

### Tonearm Models

Conqueror - £2500  
Illustrious - £1570  
Encounter - £970  
Silver - £599  
OL1 from - £124



*Demonstrably better*



## Ultimate performance for your system

"The best musical results of any turntable I've ever heard, regardless of price."

Since I've been listening to turntables professionally for 32 years and am aware of the pitfalls of ultimate proclamations, I hesitate somewhat to make this statement. Nevertheless, it is true. The level of musical communication available from the Illustrious/Aurora Gold is in a class by itself. It sets a new reference."

STEREO TIMES on the Aurora gold turntable & illustrious tonearm

ORIGIN LIVE  
Tel/Fax: +44 02380 578877  
E-mail: [info@originlive.com](mailto:info@originlive.com)

Full information on web site

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



living with  
integrated technology

CYRUS

[www.cyruslink.co.uk](http://www.cyruslink.co.uk) | [www.cyrusaudio.com](http://www.cyrusaudio.com)

adjusted! My handbook said much about assessing bias level using the red display panel, but nothing about how to adjust it, which was curious. I was missing a separate sheet the distributor told me. There are two small adjusters on the underside of the amplifier. Because it is so heavy these aren't easy to use. It's more common to make the adjustment pots easily accessible on fixed bias amps., even though bias adjustment is an occasional requirement, rather than a regular one.

The V10 integrates into a modern hi-fi system easily enough. It has an 8ohm / 4ohm switch at rear for matching to loudspeakers, these days best set to 4 ohms initially. There's no phono stage but there is an input marked phono, to which an external phono stage can be connected. This is in effect a normal line input, of which there are four in total, plus a set of tape in / outs. Sensitivity is high at 250mV, enough for old cassette decks and tuners to be used. The loudspeaker posts accept 4mm plugs axially, or bare wires.

The remote control switches the V10 on quietly. Everything about it is smooth and slick, where my own 300B is, for example, the opposite, it's big, industrial duty switches and components being clunky. Funny how the V10 seems less intimidating as a result; it has a certain apparent ease about it that's relaxing and will be appreciated by its intended audience I suspect.

## SONIC BOOM

Measurement had shown the V10 meets T+A's performance claims. It truly does have wide bandwidth and low distortion - and that means right across the audio band. This guarantees a clean, precise sound, and that was very apparent when using this amplifier. It has a richly detailed and forward presentation, with strong presence between the loudspeakers. The stage is firmly established and painted on a generous canvas in best valve amplifier tradition. Most importantly though, there was that strong sense of dimensionality to images that makes the valve sound seem alive and real - and very engaging too. Not for the V10 the flat and boring presentation of a high feedback, solid-state design stuffed with cheap components. It also has an engaging sense of dynamic that is really enjoyable. Again the amplifier capitalises upon the strengths of valves in this respect. Put all this together and you have an amplifier that's immediately engaging and

very 'obvious' in what it achieves. The V10's sound is no wilting rose. Much like its styling, what you get sonically is a strong statement that's going to impress you, your friends and family which, quite frankly, is likely to be important after spending £4.5k.

Valve amplifiers don't commonly present like this; the common perception is that they are soft and warm of course, but this is due mainly to technical limitations the V10 overcomes. This amplifier is forward, forceful, immediate and dynamic, hardly surprising I feel that it should capture



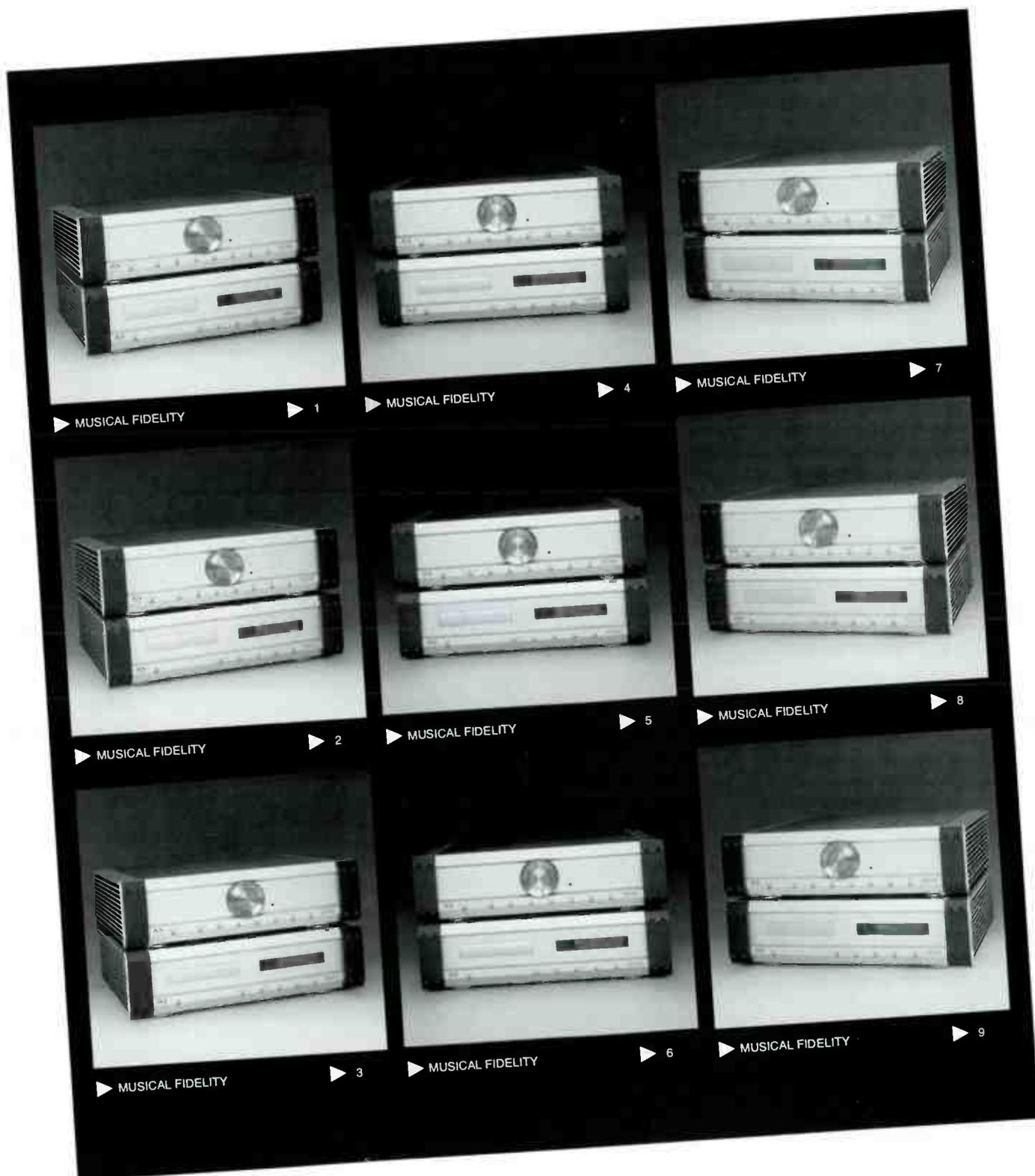
"It is real audio dynamite, because it makes music so engaging..."

### THE ELSONI ENIGMA

"The V10 incorporates completely newly developed valves in the form of the EL509II", T+A claim. I'm not familiar with this valve but internet speculation was interesting enough to make me curious... The PL509 was used in televisions to drive the spot across the screen; it was a 'line driver'. As a post war design it was modern, robust and inexpensive. Although usable as an audio valve this wasn't its intended purpose and, like the 6C33C Russian 'trawler triode', some purists scorn it. The EL509 is a version of the PL509 with a standard 6.3V heater. Both these valves have top caps handling hundreds of volts - a precarious way of doing things, not ideal in the home. The V10 doesn't use this valve, nor can it, as the base is different and, as you can see in the pictures, the EL509IIs have no top cap.

There is a lot of demand for compact, high power audio output valves with more wallop than the last of the line before transistors appeared, like the KT88 for example. A pair of KT88s, or America's similar 6550, can reliably deliver around 40W per channel in push-pull, using auto-bias. That was fine in the Fifties, but more is wanted these days, as power sells. The common perception is that a good 60W-100W is required to drive modern loudspeakers. The El factory in Yugoslavia, the part that's now in Serbia, came up with the KT90 as an upgraded audio power valve. This is meant to be a modern update of old Kinkless Tetrodes like the KT88, developed back in the 1950s. In response, it appears, the old Tesla plant - now JJ - in Slovakia decided to rearrange the EL509 to adapt it to the modern world. The top cap anode connection was moved to a base pin and an International Octal (10) socket used instead of a B9D. JJ call this the EL509II, not the best choice of name. As Edicron point out, by normal naming conventions it should have been an EL309 and, although you might think a normal EL509 would substitute, it would not. It isn't to be confused with anything that has gone before, like the PL509, PL519 or EL509; they are not interchangeable with it. This is the "completely newly developed" valve T+A have chosen for the V10.

a High-End prize as its strengths are obvious, as well as great. I was very impressed by its delivery of Christina Aguilera's 'Can't Hold Us Down'. With vividly fast transients off percussion and quite fantastic resolution of individual instruments that served to make for a wonderfully clear and clean palette, it was a performance to take your breath away, that's for sure. There was body aplenty in Aquiera's vocals, with a great resolution of both her timing and inflection. Bass lines were seemingly tight, even if there was a little less damping at loudspeaker resonance than I am used to, a surprising feature. It meant that the large, floor-standing Revolver R45s I use for this sort of amplifier (and my



NEW FROM MUSICAL FIDELITY.

A5 SERIES.

X SERIES ACCESSORIES. X SERIES COMPONENTS.

KW INTEGRATED, PREAMP AND POWER AMP.

M1 TURNTABLE.

HEARING IS BELIEVING.

FOR DETAILS OF YOUR NEAREST STOCKIST, RING 020 8900 2866 OR VISIT [MUSICALFIDELITY.COM](http://MUSICALFIDELITY.COM)



own) would boom a little on some deeper bass notes. Otherwise bass from this amplifier is both tight yet beautifully dynamic, as it should be from any good valve amp. Soft bass is usually attributable to poor output transformers.

I encountered much the same sort of delivery with Jackie Leven's 'Desolation Blues', his rich resonant tones projected into the room with a cleanly defined presence that was breathtaking. No doubt here then about what you are getting for £4,500 - it's sheer visceral drama. Funnily, it fully justifies my belief in the technical rightness of valves as audio amplifying devices, yet in a way quite dramatically different to the norm; few valve amplifiers sound like this, that's for sure.

There is a reason why - a few of them actually. I became steadily more aware of the particular character of this amplifier as time and exposure to different recordings averaged it's character out of the mix. One reason the V10 sounds so fast and well defined is that it has the slightly hard emphasis to transient information common to lower cost power valves, like the EL509, working hard. It's very akin to the metal cone loudspeaker, but more subtle. For example, whilst Gerry Rafferty's 'Shipyard Town' fairly sped along with a lovely sense of pace, underlining the enthusiasm of this ballad, the phrase "silver moon shining" - a nasty alignment of fricatives - did just that: it shone. I'm used to a darker, more polished delivery. More expensive power valves like the 300B, 211 and 245 have larger, stronger anodes, lower current density and deliver a darker, more neutral sound. All the same, the V10 really dug into vocals like this and was unarguably an emotional amplifier to listen to. I'm not sure I've heard Rafferty sounding so engagingly full and clear, nor his complex

mixes so well sorted out. These old recordings commonly sound jumbled through lesser amps., but not the V10. By delving right into vocals so strongly, the V10 manages to be as good as it gets in terms of teasing the emotion out of music. This is no boring listen, nor a soulless one. It's an amplifier that caught my senses and I really enjoyed it.

Using low cost valves in an expensive amplifier raises obvious questions, as I mentioned earlier. As the valves are central to signal processing, real fidelity demands the best, and the best don't come for £54.85 per a matched pair. More like £500 for a matched pair of 300Bs from Western Electric. Personally, I prefer higher cost valves in lower cost casework, but then high fidelity at this end of the market really starts to become a matter of taste, rather than an absolute. Notions of rightness get specious. The V10 measures so well, after all, that T+A can claim with justification that it is every bit as accurate and pure in its sound as any rival, even those using far more expensive valves. The sheer purity of its sound will convince you about this, if you can get to hear it. And low valve cost means low running costs, as power valves are good for 3,000 hours or so, before replacement is necessary.

On reliability, I still have reservations. My third sample worked fine but squeezing 80W from one pair of power valves

really is pushing your luck. I know from my own experience that if you run a valve at its rated maximums, failure rate moves off the scale. Only the best samples will survive. Audio Research weed out weak valves by burning them in, to avoid this early failure mode, and I know that top UK designers insist on more conservative running than that used in the V10. EAR use two KT90s - a similar power pentode - for 70W, for example. All the same, valve failure is a fact of life so an amp must fail safe and not destroy itself. T+A's importer told me early unreliability problems have been overcome though. I have no experience of the JJ EL509II so perhaps it can be worked so hard. Best to look at the Warranty being offered to cover failure.

I'm sure there are a lot of people out there who'd really appreciate the sound of this amplifier, together with its ease of use and sassy styling. Personally, I thought it was real audio dynamite, mainly because it makes music so engaging. At the end of the day this still isn't a property in consummate abundance within hi-fi. So this is a true hi-fi amplifier, worth listening to and worth the asking price. As such, it's no monkey, but a product that'll bring real enjoyment. So long as it keeps working...

**VERDICT** 

Brilliantly accomplished, uniquely designed modern valve amplifier with sonics and style to match.

**T+A V10** £4,599.99

Transparent Distribution  
 ☎ +44 (0) 1623 517000  
[www.taelektroakustik.de/](http://www.taelektroakustik.de/)

## MEASURED PERFORMANCE

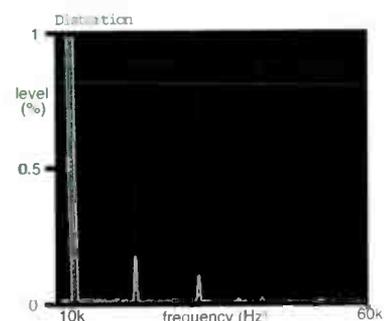
The first two samples of this amplifier expired on the test bench; output valve failure, T+A said, which caused control circuits to collapse, often the case when solid-state control is used with valves. This isn't one the world's brightest ideas. The third amplifier, sporting a set of run in and tested JJ EL509 IIs, withstood routine tests that valve amps usually shrug off. It produced 80W per channel from 4ohm and 8ohm settings, although slightly more power - around 90W - was available from 8ohms feeding a 4ohm load, so load matching was a little awry. The output clipped asymmetrically too, due to unbalanced output stage conditions, not a good sign. All the same, distortion levels were reasonably low and certainly very consistent across the audio band. However, a properly designed valve amp with good E/I transformers can manage less than 0.1% at 1W quite easily; after all the Leak 0.1 managed it in 1947. The V10 was hovering around 0.15%, but with High Bias selected this was predominantly innocuous sounding second harmonic.

Bandwidth was a nicely tailored 12Hz-48kHz (-1dB), with no peaking at high frequencies. Noise levels were very low and hum well suppressed;

T+A have obviously put effort into this, likely using all d.c. heaters. High sensitivity means the V10 will match most sources.

This is a high power, fixed bias amp with solid-state power supply and control circuits. I'd expect a clean, dynamic sound with good bass quality, but warmth and liquidity may be scarce, considering the valves used and circuit topology. NK

Power	80watts
Frequency response	12Hz-48kHz
Separation	73dB
Noise (IEC A)	93dB
Distortion	0.15%
Sensitivity	200mV



# *The colouration's in the finish*



# *Not in the music*



**Pro-Ject**  
AUDIO SYSTEMS

World Radio History

Distributed by: Henley Designs

01235 511166

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

[info@henleydesigns.co.uk](mailto:info@henleydesigns.co.uk)

# Interfaces

Just like the song says, "it ain't what you do, but the way that you do it, that's what gets results". Peter J Comeau explains the art of matching amplifiers to the outside world...

If hi-fi magazines have one major flaw, it is that they conventionally review items of equipment singly, rather than in a system. Despite protestations by reviewers that they routinely mention partnering equipment used in reviews, the reader is usually lured into the view that the 'goodness' (or otherwise) of an amplifier or loudspeaker is absolute. You'd think, wouldn't you, that taking a selection of '5 star' rated equipment and putting them together would make an unbeatable system? Yet things often go wrong with this approach - as readers' letters often testify - and the results can be truly awful. Why this should be - and where the secret lies - is all down to the 'interface'...

As any good hi-fi dealer will tell you, there are synergies between pieces of equipment, and cables, that seem almost magical in the way they allow the performance to blossom beyond the capabilities of the individual items. Similarly well known and liked favourite brands sometimes just don't seem to like one another. Actually there's no magic in hi-fi. There are rational explanations for everything we hear, even if it is sometimes beyond our complete understanding.

## DIGITAL DEFICIENCIES

We tend to think of the line input stage of an amplifier as a straightforward 'piece of wire with gain', with only the bandwidth and distortion associated with the gain defining its performance. This view is typical of the simplistic attitude to much hi-fi analysis. Let's see, for example, what happens when we plug a CD player into the line input of your average amplifier. You might think that the output from a CD player is fairly benign, but far from it. Although the brick wall filtering curs analogue audio output at 20kHz (which is where it is generally agreed that human hearing tails off), the effects

of filter ringing, aliasing and quantisation 'noise' can extend far up in the ultrasonic region. This noise may actually get worse with some types of noise shaping or the use of 1 bit DACs - there's no clear cut method of telling, it's all down to the capabilities of the design and the understanding of the designer(s).

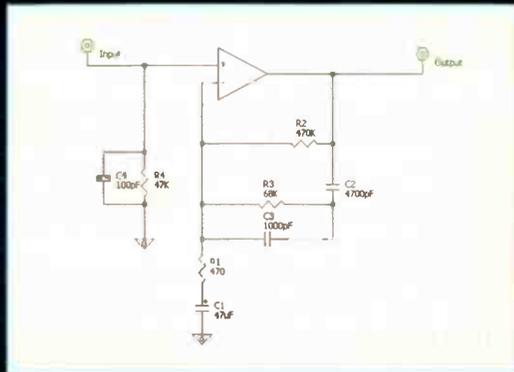
But why should this be a problem? Well, if all amplifiers were carefully filtered only to allow ingress and amplify within the audible frequency range then it wouldn't be of any significance. At least one well known and highly regarded range of amplifiers follows this dictum, can you guess who? The problem is amplified (pardon the pun) by the insistence by many designers that their amplifiers should be excessively wideband, probably because of the concerns over the audibility of some types of filtering. The blame can also be laid at the

"you'd think that '5 star' rated equipment would make an unbeatable system... yet the results can be truly awful, and it's all down to the 'interface'..."

ridiculous marketing of SACD, where buyers seem convinced that an extended response to 100kHz for all pieces of the hi-fi chain is absolutely necessary!

In order to support an extended response, an amplifier stage should have an open loop gain that can encompass such performance without audible distortion, in other

words its slew rate should be well in excess of that required to accurately amplify the desired frequency range before feedback is applied. As we shall see later, feedback is usually applied to correct amplifier faults and actually causes more problems than it solves. When the amplifier stage is slew rate limited and uses feedback to reduce measured distortion, a burst of ultrasonic noise can send the amplifier into oscillation. By itself this might not be audible, but its effects are. The amplifier may momentarily be driven into clipping, sending ripples of distortion



Typical disc input circuit showing RIAA equalisation through the use of frequency selective negative feedback.

## Soundcare® Super-Spikes

Prices start from as little as £23.95 per set

### What are Soundcare® SuperSpikes?

The Soundcare® SuperSpike is an all new design, an all in one spike foot. This unique construction eliminates the most common problem experienced when using a conventional spike: damaged surfaces. The construction is based on a high quality spike fitted with a custom designed base plate, all integrated in a plastic housing. This allows the user to move the equipment without making scratches and scars to the surface.

### Why use Soundcare® SuperSpikes?

When the weight of your Hi-Fi equipment is concentrated onto a small area, the weight per square unit area increases enormously, providing better contact with the surface on which the unit stands. This results in an overall improved sound stage and increased control in the lower frequency register.

Soundcare® SuperSpikes reduce disturbing vibrations and prevent low frequency noise from transmitting to other rooms.

A Soundcare® SuperSpike loaded with a weight of 12.5 kg produces a pressure of more than 6,200 kg pr. sq. cm!

### Quotes from HiFi magazines:

"... Marvellous... The Soundcare products are just about the only worthwhile and affordable game in town." - Pete Christie - HiFi+ Magazine

"... Definitely recommended" - HiFi Choice

"Conclusions: ...I can't help but say these are, in my humble opinion, the best spikes around, bar none." - Lucio Cadeddu - <http://www.int-audio.com>

The ideal upgrade for Hi-Fi and AV equipment. Suitable for use on Amplifiers, CD & DVD players. Also, ideal for loudspeakers and subwoofers, will fit REL, MJ Acoustics and Ruark. And of course they fit the

BK XLS200 and Monolith. For more details please view our website at - [www.bkelec.com/superspikes](http://www.bkelec.com/superspikes)

**Distributors Required**



BK Electronics, Unit 1, Comet Way, Southend-On-Sea, Essex. SS2 6TR  
Tel :- 01702-527572 Fax :- 01702-420243 email :- [sales@bkelec.com](mailto:sales@bkelec.com)

## NOTEWORTHY AUDIO

*hi-fi by enthusiasts*

BELOW IS A SMALL SELECTION FROM OUR RANGE OF CAREFULLY CHOSEN EQUIPMENT

**Denon DL-103 MC cartridge.** The 103 has been in production since 1963, and for good reason - its performance is legendary throughout the world. Probably the best value cartridge available today at just £100.



**Clearaudio Emotion** The Clearaudio Emotion turntable package includes the Satisfy tonearm and the Classic cartridge for just £655 and offers astonishing value for money.

The **Something Solid XR** has become our reference equipment support, its novel use of balsa end grain shelves and tensioned shelf suspension give it a neutral presentation that lets equipment perform without added artifice. 4 tier version available from £600. (Stop press: new 'Economy' version now available from just £300).



**Note products cables** Exciting new range of high quality cables which starts with the £350 InterNote (pictured left) and extends to the PurerNote at £750. These cables use only the finest materials including pure silver conductors and natural cotton insulation.

**Audion Silver Note One** This is a specially commissioned amplifier exclusive to Noteworthy Audio. It uses a single 2A3 directly heated triode per channel in an ultra purist single ended zero feedback design. It produces 4 of the finest watts available, if you have high efficiency speakers you need to hear this amplifier remarkable amplifier. £2,500.



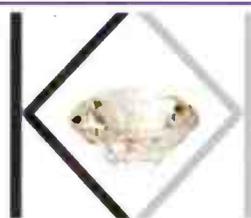
**Music first Audio TVC pre amplifier** Instead of using resistors to control the volume the TVC uses stepped transformers. Incredible transparency without any of the dynamic compression found in conventional passive preamplifiers. Copper wired version: £1,500. All silver wired: £2,750.

**Audio Note lo 1 MC cartridge.** Surely one of the best cartridges in existence, the lo uses Alnico magnets and pure silver coils to extract everything from your LP's in the most musical way possible: £1,595.



### Noteworthy Audio

36 Buckingham Street, Aylesbury, Bucks, HP20 2LH. Tel: 01296 422224  
[www.noteworthyaudio.co.uk](http://www.noteworthyaudio.co.uk)



## KRYSTAL KABLES

PURE SOUND ...

**STRATOS solid silver power cord 1m £145.00**



**TITAN high power entry level cord. 1 metre - £72.00**

**JUPITER solid silver power cord 1m £385.00**



**Full no quibble money back guarantee**

**POWER CORDS • MAINS BLOCKS • INTERCONNECTS  
SPEAKER CABLES • MAINS FILTERS • ACCESSORIES**

Hi-Fi World & Hi-Fi Choice reviewed power cords

[WWW.KRYSTAL-KABLES.COM](http://WWW.KRYSTAL-KABLES.COM)

Tel: 01579 362189

## HI FIDELITY AUDIO

WE DARE TO BE DIFFERENT.

Superb products from around the World  
Quality and Value !

Eastern Electric 520



Edge Amplifiers

Micromega



JAS Audio



Green Mountain Audio



Elac

- AUDIOLOGIC
- AUDIENCE
- AUDIO ANALOGUE
- AUDIO VALVE
- BLUE CIRCLE
- DH LABS
- EDGE
- ELAC
- GAMUT
- GREEN MOUNTAIN AUDIO
- INCA DESIGN
- JAS AUDIO
- JEAN MARIE REYNAUD
- LOUDSPEAKER - DIAPASON
- MICROMEGA
- MJ ACOUSTICS
- OPERA
- PATHOS
- ROGUE AUDIO
- UNISON RESEARCH
- VOODOO ISOLATION SYSTEMS

6 Grosvenor Gardens, St. Neots, Cambs, PE19 1DL

Paul Letteri - Proprietor

located in Cambridgeshire

Telephone: 01480 216 039

Web: [www.hifidelityaudio.co.uk](http://www.hifidelityaudio.co.uk)

# D-lite!

**Sonic Impact's diminutive 'T-amp' has been causing a real stir amongst audiophiles the world over. Indeed, many proclaim it nothing less than the start of an audio revolution: true high quality sound at a giveaway price. Yet it can be easily tweaked to better exploit the true potential, says John May.**

**T**o my mind, the Sonic Impact 'Portable T-amp' is the greatest piece of budget gear ever. Whilst the mainstream magazines have been slow to sing its praises, it is already considered something of a cult item on the Internet DIY groups. For £20-£30, and a few days worth of running in, you are rewarded with a sound that some have – rightly – likened to amplifiers costing upwards of £1,000! Certainly I've been absolutely over the moon with mine, and it still has the ability to stop you dead in your tracks and have you re-evaluating a piece of music you thought you knew well.

The thriving DIY community on the Internet is a godsend to a 'financially challenged' audiophile such as myself! Over the last few months I've been keeping tabs on the DIY scene on various websites, most notably the rather fantastic [www.diyaudio.com](http://www.diyaudio.com). From the 'Class D' section I learnt about a few little tricks which – while not breaking the bank by any means – would provide a far greater level of performance than the stock unit was capable of.

One of the biggest gripes about the T-amp (forgivable given its giveaway price) is the spring-clips for the speaker cable, and the small headphone jack for audio-in. A new case means higher quality connectors may be used to better suit the speaker cables and interconnects which are most likely to be found in an audiophile's system. There are enthusiasts out there who are already offering fantastic enclosures, every bit the equal of commercial offerings, and I have included one such enclosure kit in the links section. In order to keep this to a strict budget however I decided

upon an extruded aluminium enclosure from Maplins (see parts list). The front/rear panels are available as either plastic items, or plastic with an aluminium plate. I choose the former, as it was easier to machine with the limited tools at my disposal.

## D-SIGN MATTERS

The first step in modding the T-amp is removing the tiny circuit board from its plastic enclosure. The four rubber feet must first be removed, revealing four Philips-head screws underneath. Next stage is to open up the battery compartment. Towards the rear of the compartment are two small Philips-head screws, which must also be removed. Once done the two halves of the enclosure must gently be prised apart. Next step is to cut all connections to the volume pot, speaker connectors, and DC-in (I find a pair of toenail clippers are indispensable for cutting thinner wires and also component leads).

The circuitboard is held in place via two melted pieces of plastic from the case that protrude through the circuit board and are located next to the chip. Gently using a scalpel and chipping away at this gently will free the board. There may also be some hot-melt glue you will need to carefully remove. Golden rule here is to take your time...

To be frank, I think people go a little over the top with connectors on their projects. Those huge gold or silver-plated speaker binding posts and phono-sockets may look very impressive, but they represent

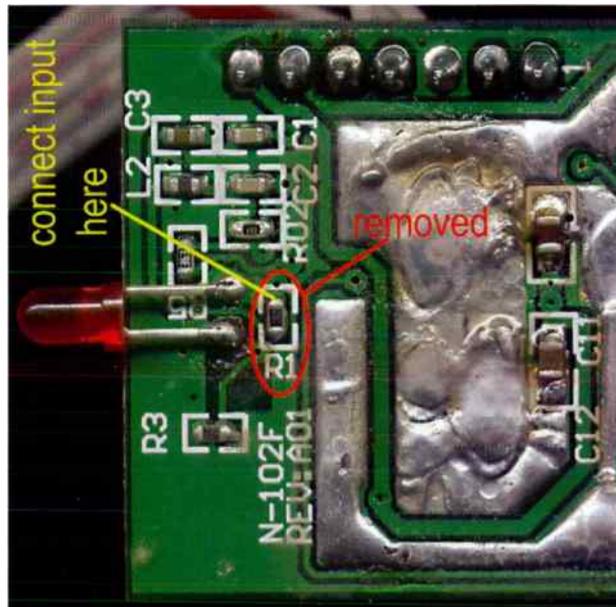


Figure 1

yet another barrier through which that delicate signal must travel. Like DNM, I tend to favour a 'less metal is better' approach to connectors. With this in mind I was going to choose some simple 4mm sockets (the kind you get on some lab equipment and available for a few pence from RS and Maplins). However in the end I decided to go for some slightly more robust 4mm binding posts in case I ever wanted to use thicker cables minus a banana plug. Phono sockets used were the now standard gold-plated with Teflon insulation variety from Maplins. DC-in socket was also from Maplins for a few pence, as was the on/off toggle switch for power. Next on the list was a better quality volume pot. Again not wishing to push the boat out too much I settled upon the ubiquitous ALPS Blue pot, value 50k.

The most complicated part of this rebuild – and one, which should be tackled before the board is mounted in its new casing – is modifying the input section. As it stands the bass response on the stock T-amp is rolled off, undoubtedly reflecting the budget sources and speakers the amp was intended for. Replacing this input section extends the bass response to achieve a more

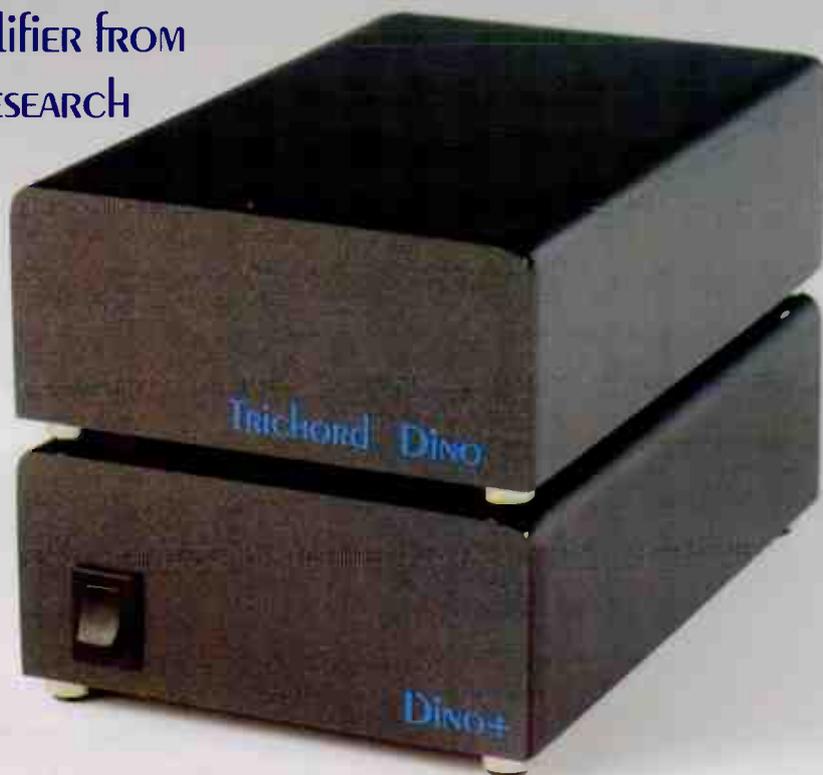
....experience the music



[www.whestaudio.co.uk](http://www.whestaudio.co.uk)  
T: 020 8965 4535

## Affordable High Performance PHONO AMPLIFIER FROM TRICHORD RESEARCH

# DINO



Moving Coil  
Moving Magnet  
Switchable Gain  
Switchable Loading  
Super Regulators  
Discrete Output Stage  
Upgradeable Power Supply

'NEVER CONNECTED'  
power supply now  
available for the DINO.

If you already own  
the DINO+ power  
supply you can have  
it brought up to date  
with this unique noise  
reduction technology.

PLEASE CONTACT US OR  
YOUR DEALER FOR MORE  
INFORMATION.

Tel: +44 (0)1684 311600  
[www.trichordresearch.com](http://www.trichordresearch.com)

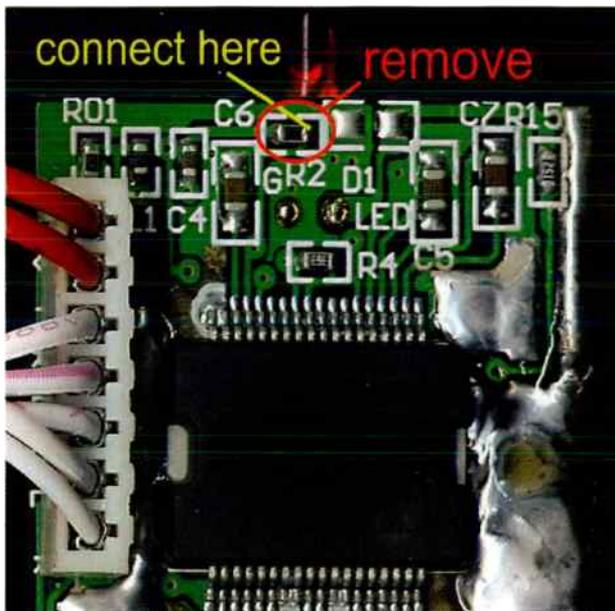


Figure 2

full-range presentation. Michael Mardis's website proved a godsend in achieving this. A seasoned builder of quality hi-fi, and a regular on the DIY forums, his instructions are straightforward and just about foolproof to follow. They consist of removing two surface-mount resistors (R1 and R2) using a soldering iron to heat the components and then gently flicking them away from the board. This is a lot easier than it sounds by the way.

Next, these must be replaced with two 22k resistors (0.5 watt metal film types from Maplins are perfectly adequate). This involves some very fine soldering. I found it easier to manage by first gluing the resistors to the edge of the circuit board using Super Glue, making sure the tips of both touch the appropriate solder-pads on the circuit board (Fig. 1 & Fig. 2). Once the glue is dry, apply a little bit of solder to the resistor ends taking care not to get solder on the wrong pads. A magnifying glass might well be useful here, as will a low wattage soldering iron and the finest solder-tip you can find. Once done, I trimmed the remaining ends of the resistors ready to be connected up to the new input capacitors.

Next stage is to improve the quality of the PSU capacitor on the board. I replaced the 330uF type with a 470uF 35v Panasonic FC capacitor – the extra ratings allowing a little more power to be squeezed out of the T-amp. Some fit 1000uF and above capacitors here, but – as with the Gainclone amplifiers – I think smaller can sometimes be better, and according to the Tripath data sheet the 2024 chip doesn't need a lot of capacitance anyway.

In the stock T-amp there are four

black 'towers' surrounding the PSU cap. Word is they are responsible for a slight graininess to the presentation, a slight reigning-in of the sound. I'd heard great things about the replacement air-cored inductors from [www.autocostruire.com](http://www.autocostruire.com) and decided to push the boat out and order these as well. Replacement is straightforward and simply consists of replacing old with new – they are the pink components visible in Fig. 4.

One criticism sometimes levelled at the T-amp is a brightly lit presentation of music, and a little bit of upper-midband glare. With this in mind I decided against using silver-plated, or solid-silver wiring for fear of highlighting this trait. I decided instead to go with solid-core copper wire for the signal and DC-power connections. Existing wires may be removed using a fine iron tip and some de-soldering braid. Take care to note where the wires go before removing them, although there are legends printed onto the circuit board as to what goes where. As can be seen from the photos the two red leads nearest the chip are connected to the new on/off switch at the front of the casing. The remainder of the wires on this white plastic connector

are trimmed off. The remaining wires on the circuit board are connected up as shown in Fig. 3. Please remember to triple-check all wiring before soldering. The DC leads were covered with Teflon insulation, while the signal connections used waxed-cotton covering – some believe this results in a more mellow presentation. I must admit I remain highly sceptical, but I had some to hand and thought it can't hurt!

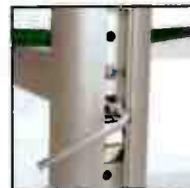
The circuit board itself I attached to the casing with two nylon stand-offs I had kicking around. Again these are readily available at Maplins or RS. As you can see in the picture I added a heatsink to the chip as it does get rather warm, especially if you're using a 13.8v DC PSU as I do, and which comes highly recommended as an instant 'fit & forget' upgrade. One can also add an optional 33k-50k resistor at the inputs that lowers the input impedance slightly. The stock T-amp was really intended to be run from the headphone jacks of iPods and so-forth, not stand-alone hi-fi separates, so this may be of benefit with some gear. I found this was not necessary in my case though, using the Pioneer DV-575A as source. The case may also be grounded using the – return on the DC input. I left my case floating however.

As can be seen in Fig. 4, the signal runs directly from the input sockets to the Alps Blue pot. As always, signal runs should be kept as short as possible, but not short enough that you cannot slide the front and/or rear panels slightly off to refit the enclosure lid! I used some metallised polypropylene-film capacitors from AmpOhm for the new input capacitors. At the other end of the scale users have reported fantastic results with paper-in-oil capacitors from Jensen, or Auricap (available from our very own [www.worldaudiodesign.com](http://www.worldaudiodesign.com) shop). The capacitors may be held in place by some hot-melt glue, which is also very effective at damping vibrations. The leads on my caps were a little too thick to work with comfortably, so I cut the leads off and used

#### PARTS LIST

Hammond Enclosure – Maplin Part No. N77AL - £8.99  
 ALPS Blue Pot 50k – RS. Part No. 236-9604 - £13.58  
 Binding Posts – RS Part Nos. 404-834 & 404840 - £1.30 each  
 2.2uF AmpOhm Capacitor – RS Part No. 365-7479 - £3.61 each  
 Replacement Inductors – [www.autocostruire.com](http://www.autocostruire.com) - 20 Euro  
 Phono Sockets – Maplin Part No. JZ05F & JZ06G - £1.99 each  
 Wire – Up to constructor – Try [www.wires.co.uk](http://www.wires.co.uk)  
 DC sockets and toggle switches – Maplins or RS  
 Tripath Chip heatsink – Run search on Ebay for: ATI Radeon Ramsink  
 13.8v 3-amp Regulated PSU – Maplin Part No. XM20W - £14.99

When detail matters.....



The new MR5 equipment support from Henley Designs, serious about sound!

**H** Henley Designs 01235 511166  
[www.henleydesigns.co.uk](http://www.henleydesigns.co.uk)



*Johann Sebastian would have been very proud.*

The Kontrapunkt series from Ortofon. Named as a sign of respect for possibly the greatest, and the last, of Johan Sebastian Bach's works - The XIXth Contrapunctus. From around £400 and available from most quality Hi-Fi stores.

Distributed by Henley Designs, 01235 511166, [www.henleydesigns.co.uk](http://www.henleydesigns.co.uk)



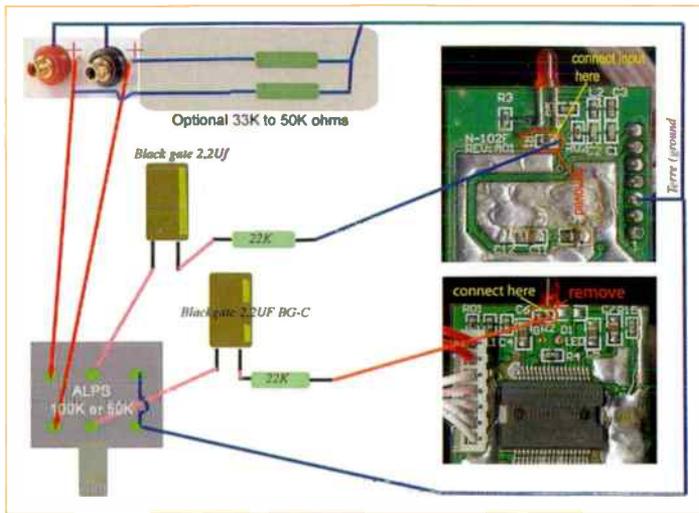


Figure 3

some more of my 0.6mm solid-core copper wire. The new 2.2uF input capacitors are connected to each end of the 22k resistors (yellow wires connected to the caps in the photos). The other end of the caps are connected up to the middle solder-lugs on the ALPS volume pot.

**SOUNDING OUT**

The modified T-amp takes about a week to really come on song, but when it does I think you'll be pleasantly surprised at the improvement wrought. This amp majors on detail and atmosphere and really cuts to the heart of all music. I was amused by all the coughs and page-turnings I heard in

the Kirill Kondrashin conducted rendition of Alexander Borodin's Symphony No.2 in B minor on a Philips CD. I'd never heard these so clearly highlighted before using my modified Quad 303. Likewise the tone and individual character of all the instruments was spot on. Smooth, organic, unforced but with the ability to go from quiet to loud at the drop of a hat. Massed instruments presented no problems either – it was hard to believe this little beastie only puts out around 5-6 watts as I was achieving ear-bleeding volume levels without any hint of strain at all which wasn't the case with the stock unit.

Supernature from the wonderful Goldfrapp showed this amp could also boogie with the best of them. Bass was now a lot fuller than before, and the midrange less congested. I was particularly taken with the almost valve-like ease with which it dealt with vocals (not a hint of grain here), but with a solid-state 'drive' to the music. I thought my Quad 303 particularly good in the vocals area, but the modified T-amp easily bested it. Kate Bush again showed this to impressive effect on her 'Kick Inside' CD which I ended up listening to twice I was so entranced.

Please do not make the mistake of using the T-amp with cheap sounding budget sources as it has a habit of 'telling it like it

**CONTACTS**

[www.media-zone.co.uk](http://www.media-zone.co.uk)

- purchase T-amps here

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

- Class D modders haven!

<http://www.michael.mardis.com/sonic/news.htm>

- guide for modding the input section of the T-amp – indispensable!

<http://www.41hz.com/>

- audiophile Class-D amp kits using Tripath chips & SMT parts

<http://www.autocostruire.com/>

- high quality Class-D amp kits using through-hole components for easier assembly than SMT kits

<http://www.profusionplc.com/profusion-frame.htm>

- Tripath evaluation boards available here.

<http://www.redwineaudio.com/>

- Esoteric Class D amps available here – highly regarded.

<http://mywebpages.comcast.net/ampbox/page2.html>

- Lovely looking enclosure for the T-amp

[www.maplin.co.uk](http://www.maplin.co.uk) / [www.rswwww.com](http://www.rswwww.com)

- Source for cases, connectors, wire and so forth.

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

- Source of 2.2uF Auricaps

is'. It will not give of its best until partnered with more esoteric fare. It easily differentiated between the sound of my modded Pioneer DV-575A from the more analogue-like sounding Mission PCMII (with Net Audio non-OS mod) using the classic TDA1541A multi-bit converter. Certainly there are tales a plenty of satisfied enthusiasts using modded T-amps with CD players from Krell, Wadia and so forth with high-end Lowther drivers!

Whilst the level of performance afforded by these mods is indeed considerable, this is just the tip of the iceberg. Paper in Oil or Film & Foil caps maybe used for the input caps (Auricaps from our own World Audio Design shop would be ideal), higher quality wire sourced, power supply caps from Black Gate substituted, stepped attenuators used and so forth – as with anything DIY the only limit is your imagination and your wallet! This is without doubt my favourite amp of the moment. I look forward to trying out some of the other Class-D kits next and seeing if they can improve upon the T-amp. As far as budget gear is concerned we've certainly never had it so good!

**Special thanks to Michael Mardis for the use of his pictures in this article!**



Figure 4

The best of

# ROKSAN

Technology



**NEW Maths !!!**  
**£650 + £650 = £1000**

**Maths - Illogical**

**Saving - Colossal!**

**Experience - Emotional**



### AWARDS



**CD player      INTEGRATED amp**

**Kandy MkIII integrated amplifier**

WHAT HI-FI? SOUND AND VISION Winner 2004 Awards

**Kandy MkIII CD**

HI-FI CHOICE Bronze award 2004 Awards

**Kandy MkIII integrated amplifier**

WHAT HI-FI? SOUND AND VISION Winner 2003 Awards

**Kandy MkIII integrated amplifier**

WHAT HI-FI? SOUND AND VISION Winner 2002 Awards

**Kandy MKIII integrated amplifier**

Five Stars

WHAT HI-FI? SOUND AND VISION October 2003

**Kandy CD**

Five Stars

WHAT HI-FI? SOUND AND VISION First test July 2003

**Kandy MKIII integrated amplifier**

Five Stars

2003 SUPERTEST WINNER (5 Star Gold)

WHAT HI-FI? SOUND AND VISION May 2003

**Kandy Integrated amplifier**

Five Stars

2002 SUPERTEST WINNER (5 Star Gold)

WHAT HI-FI? SOUND AND VISION Feb 2002

**Kandy CD player, Amplifier & Speakers**

Five Stars

WHAT HI-FI? SOUND AND VISION January 2001

**Kandy Integrated amplifier**

Five Stars

WHAT HI-FI? SOUND AND VISION April 2000

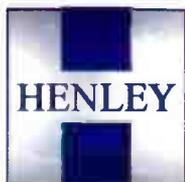
**Kandy CD**

Five Stars

WHAT HI-FI? SOUND AND VISION March 2000

TWIN PACK  
TWIN PACK  
TWIN PACK  
TWIN PACK  
TWIN PACK

**CD player**  
**INTEGRATED amp**



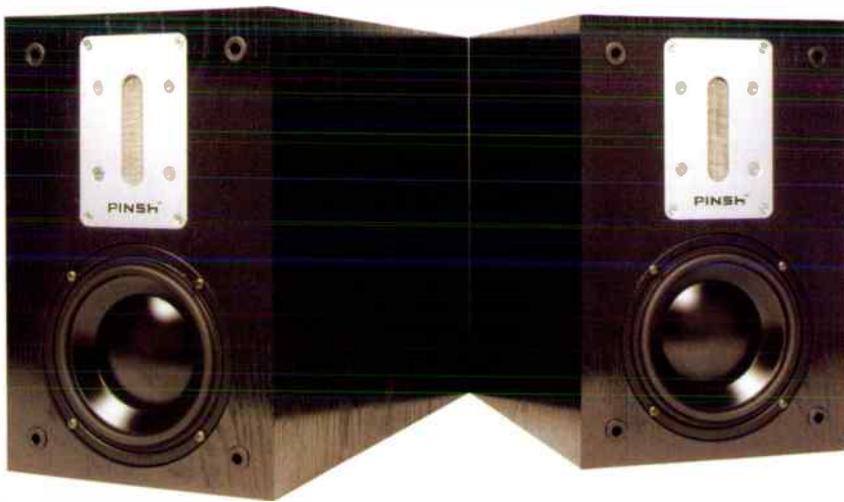
**HENLEY DESIGNS**  
Tel: 01235 511 166  
[www.henleydesigns.co.uk](http://www.henleydesigns.co.uk)

# KANDY

For everyone



© 2005 Roksan Audio Limited



**WIN A PAIR OF  
SUPERB PINSH ONE  
LOUDSPEAKERS  
WORTH £1,200 IN  
THIS MONTH'S GREAT  
COMPETITION!**

**H**ere's your chance to win a truly special pair of standmounting speakers in the shape of the Pinsh One! In October's supertest, the little Ones came out head and shoulders above the others. Here's what Channa Vithana had to say:

"The Pinsh is an attractive and attractively proportioned little speaker measuring 200x300x360mm. Thus the cabinet is deep, with a 12 litre internal volume and is made from MDF. It comes in Black Ash, Cherry, Oak, Maple and Walnut finishes. Pinsh is uncommon because it manufactures its own ribbon tweeters, and moreover does so in the UK. The Pinsh ribbon has a claimed frequency response from 4000Hz to 40kHz, and though the material composition remains confidential, its mass is just 7mg. Rare Earth metal magnets are used in this design. Accordingly, Pinsh say that there are no additional moving parts like spiders, domes and voice coils and formers including adhesives, all of which have thermal limit. Pinsh says its zero store ribbon has no damping, neither is it enclosed in a sealed chamber. It claims that distortion is exceptionally low, and frequency response is linear, with the upper limits at 100kHz. Pinsh also design and manufacture the crossover in house using what

they call "the absolute minimum of components", while the 5inch (127mm approx) mid/bass driver is made for Pinsh by Morel. Pinsh describe it as having a frequency response from 40Hz. to 4000Hz. It has a 75 mm aluminium voice coil, aluminium wire wound with no air gaps, and a claimed impulse response "fast enough to follow our PINSH ribbon" The Pinsh 1 is rear ported with quoted sensitivity of 88dB and impedance at 8ohms.

The low frequencies from the Pinsh 1s were beautifully rendered via the 'Allegro' from the 'Elgar Violin Concerto'. There was not only depth and extension, but a good slice of bass dexterity as well which was most welcome. The violin solo was authoritative through the Pinsh 1, sounding less coloured than the other speakers in this test... The low-frequency excellence continued with - and was beneficial to - 'Super Overdrive' as there was a superb

dynamic thrust to the music. The music additionally hung together cohesively very well and had great emotional resonance with both guitars and vocals... The vocals were sublime, generating a multilayered unravelling to reveal greater tonal shading... Overall then, a deeply impressive loudspeaker... Brilliantly even right across the frequency band, it showcases the benefits of ribbon tweeter technology... Superbly natural and seamless sound with excellent musical articulation makes this one of the very best sub £1,500 mini-monitors on sale."

If you'd like to win this superb speaker, then all you have to do is answer the following four easy questions. Send your entries by 31st October 2005 on a postcard to: **November Competition, Hi-Fi World magazine, Unit G4, Argo House, The Park Business Centre, Kilburn Park Road, London NW6 5LF.**

**RULES AND CONDITIONS OF ENTRY**

- ONLY ONE ENTRY PER HOUSEHOLD
- MULTIPLE ENTRIES WILL BE AUTOMATICALLY DISQUALIFIED
- PURCHASE OF THE MAGAZINE IS NOT A PRE-CONDITION OF ENTRY
- NO CORRESPONDENCE WILL BE ENTERED IN TO
- THE EDITOR'S DECISION IS FINAL
- NO EMPLOYEES OF AUDIO PUBLISHING LIMITED, OR OF ANY COMPANIES ASSOCIATED WITH THE PRODUCTION OR DISTRIBUTION OF THE PRIZES, MAY ENTER

**QUESTIONS**

- [1] Pinsh manufacturers its own what?  
[a] wine  
[b] ribbon tweeters  
[c] fuel oil  
[d] wool
  - [2] The crossover uses the absolute minimum of what?  
[a] screws  
[b] components  
[c] grommets  
[d] widgets
  - [3] Who makes the mid/bass driver for Pinsh?  
[a] KEF  
[b] Morel  
[c] Audax  
[d] Elac
  - [4] The Pinsh One is one of the very <sup>small</sup> sub-£1,500 mini monitors on sale?  
[a] worst  
[b] best  
[c] smallest  
[d] biggest
- November Competition  
Hi-Fi World Magazine  
Unit G4 Argo House  
The Park Business Centre  
Kilburn Park Rd.  
London NW6 5LF

**entries will be accepted on a postcard only**

**AUGUST 2005 ARCAM DT91 DIGITAL TUNER:  
Dave Penney of Eastleigh**

# icon Audio

## New Models!

### Stereo 60

KT88 Integrated 2x 65w rms  
ALL TRIODE Push-pull driver  
Stage. Triode mode 2x 30 w  
Choke regulated PSU.  
Remote control. Four Inputs  
plus tape loop. Power amp  
option. Stunning looks. 35kg.  
From £1299 without upgrades



icon Audio Stereo 60

### Stereo 300

Integrated 300B amplifier  
full 2x 30w rms. Remote  
control. ALL TRIODE driver  
stage. Choke regulated  
PSU. Four Inputs plus tape  
loop. Power amp option  
Stunning looks. 39kg  
From £1599 without upgrades



icon Audio Stereo 300

**6 other amps  
in our range**

### LA4 Line pre-amp

Valve rectification.  
Twin choke smoothing.  
ALL TRIODE DESIGN.  
Remote control.  
Four Inputs plus tape loop  
DC heaters.  
High and low level, low  
Imp. output.  
Stunning looks.  
From £649.95 without upgrades



icon Audio LA4 Line Pre-amplifier

### PS 1 Phono Stage

High output, with level control.  
Will drive most power amps!  
All valve, ALL TRIODE, passive RIAA  
no feedback.  
Custom moving coil TX option.  
Choke regulated smoothing.  
Separate power supply. 9kg  
From only £399.95 without upgrades



We get phone calls daily from people who are frustrated with the fatiguing, harsh sound of solid state amplifiers. 100's of our customers enjoy the warmer, more subtle tones of valve amplification.

- Designed by Icon Audio in Leicester UK
- Wide choice of valves: Inc, Mullard, JJ, EH, Svetlana, Sovtek
- Each amp carefully commissioned & tested in Leicester
- All supplied with beautiful valve covers
- Part Exchange facility for your old equipment, ask us!

Features: Hand built 'Point to Point' wiring. No printed circuit board, ALPS Volume control, Gold plated terminals. Audiophile components by Solen, Rubycon, Silver audio cable. Steel & alloy plate construction. Soft start. Unique T delay. Comprehensive manual supplied. DIY valve change info.

Buy with confidence. Well established. Proven reliability. Unbeatable advice & back up service. Try for 30 days, refund if not delighted\*

More information on our website at [www.iconaudio.co.uk](http://www.iconaudio.co.uk)  
Or ring for an Illustrated Leaflet Auditions by appointment.

Phone 07787 158791 Email [sales@iconaudio.co.uk](mailto:sales@iconaudio.co.uk)

**icon Audio** 351 Aylestone Road Leicester LE2 8TA

\*Conditions apply

Visa and MasterCard accepted

CE marked



Townshend

Since 1973 Townshend Audio has been producing world class high fidelity components, the latest being the TA565CD silver disk player. CD sound is simply outstanding: smooth, lively, fast and completely un-fatiguing. Employing Enhanced Deep Cryogenically Treated™ copper wire-wound coupling transformers in the output circuit together with damped spring isolation, the specification and the sound quality exceeds anything currently available.

And by the way, it plays DVD-Video, SACD and DVD-Audio in stereo and multichannel!



Also new is the Versatile Seismic Sink Stand (VSSS). Employing polymer suspension elements, the VSSS isolates ground-borne vibration from 2Hz upwards.

Available in all standard widths and with up to 8 shelves, the stand can take 70kg (total) on infinitely adjustable shelves.

Finally, the Hi Fi World Accessory of the Year 2004, the Maximum Super Tweeter sits on top of your existing speakers or on special brackets for Quad 57 and round/sloping topped speakers.

"The difference was staggering" - Hi Fi World, Jan 04.

For a demonstration of the above on the full Townshend Audio stereo or surround sound cinema system in Hampton Court, Surrey, or for your nearest dealer information,



call **Townshend Audio**

+44(0)20 8979 2155

or see [www.townshendaudio.com](http://www.townshendaudio.com)



audiolab



[WWW.STEREO.CO.UK](http://WWW.STEREO.CO.UK)

As the area's leading Hi-Fi Specialist, we invite you to our superb demonstration suite to audition the fantastic new range of hifi separates from Audiolab.

Free Parking. Finance Available (subject to status)  
Romers Hi-Fi, 11 Lomax Street, Great Harwood,  
Blackburn, Lancs. BB6 7DJ

9am > 5pm Mon - Sat

01254 880220

**ROMERS**  
the home entertainment specialists



# Probably the Best DIY Kits in the World



www.worldaudiodesign.com  
Tel 0845 2575600



## Single ended purity

Our Parallel Single Ended (PSE) power amplifiers offer the ultimate in sound quality. Each monobloc has two highly acclaimed 300B triodes delivering 20 watts into an 8 ohm load.

The front end consists of a 6AU6 pentode feeding an ECC82 driver.

The ultra-quiet power supply uses a 5U4 rectifier combined with a custom 10H choke. Both mains and output transformer are purpose-built complex layer devices that are so linear that feedback (a normally unavoidable compromise to reign in and control most amps) can be completely switched out.

This facility, operating in pure Class A is available only on a few world-class machines and produces a sound so open and dynamic that has to be heard to be believed.

## Push Pull Power

Sharing the same chassis and look as the PSE the push pull (PP) version is designed for people who prefer a little more power. Producing 26 watts it can handle most modern loudspeakers with ease. Again without feedback this version uses a 6AU6 pentode for input but a 5687 as a phase splitter. WAD. We're proud of our Sound

300B PSE or 300B PP without valves ..... £ 895.00 per pair (inc VAT)  
300B PSE or 300B PP with valves ..... £1197.00 per pair (inc VAT)  
(Supplied valves are the superb Tesla 300B's, Russian 5U4's and European front enders)

Dimensions for either monobloc with valves: 23kg/50lb - H: 22cm W:25cm D:38cm

**300B PSE MONOBLOC KIT \_\_\_\_\_ £ 895.00 per pair    300B PP MONOBLOC KIT \_\_\_\_\_ £1197.00 per pair**

## The Purist's Dream

Our newest amplifiers in the WAD fold are the KiT and KaT300. A stereo single ended 300B amplifier available in two configurations - the power amplifier: KaT300 and the integrated version: KiT300 with line level inputs and tape loop circuit.

KiT300 has volume and input selector knobs controlling a high quality ALPS Blue pot and a long life rotary wafer switch respectively.

The front panel is our usual 6mm anodised aluminium panel punched to suit either the KiT or KaT variant. The chassis is manufactured from 2mm thick aluminium with our black powder coat finish. Extra space has been allowed at the front to enable upgraded pots to be fitted if required.

A minimalistic circuit capable of delivering 9 watts per channel consists of 5U4 rectification, input into the designer's choice, the dual triode 6SN7GT driving the classic 300B.

The signal path, short and clean greatly simplifies construction without compromise as our philosophy of using high quality custom transformers and large choke still ensures that the sought after and much imitated WAD sound quality survives.

Dimensions: 18Kg, 390mm wide, 330mm deep and 200mm high (with valves).  
Available to pre order now, full details in next months DIY Supplement.  
WAD. We're proud of our Sound



**KaT300 VALVE AMPLIFIER KIT \_\_\_\_\_ £720.00    KiT300 VALVE INTEGRATED AMPLIFIER KIT \_\_\_\_\_ £765.00**



The **PRE-II** is a high quality valve pre-amplifier that will drive any power amplifier. It has a gain of x5 which, with CD, enables it to deliver a large 10V output swing

To keep the amount of active amplification low, this pre-amp uniquely uses a line drive transformer to deliver a pure signal to the power amplifier. There are six inputs, a tape monitor and two sets of output sockets. It is powered by the external PSU-II power supply.

The volume control uses high quality Alps Blue potentiometer which, with our solid, turned brass, chromed knob, gives a quality feel rarely encountered these days.

**PHONO-II** is a dedicated valve phono stage for MM cartridges, with MC input transformers an option.

By using all-d.c. supplies from PSU-II and a case in which there is no power supply, PHONO II is hum free, something that is difficult to achieve with valves. With accurate RIAA equalisation right down to 10Hz (-3dB) PHONO II gives a wonderfully pure, dimensional sound from LP, possessing a sense of life and dynamism quite different to solid-state preamps.

Finally, PSU-II is a power supply unit that feeds both the PRE-II and PHONO-II. Keeping the power supply separate removes hum, often the bane of valves.

Power Supply Unit (PSU-II) ..... £ 185.00  
Pre-amplifier (PRE-II) ..... £ 215.00  
Phono Stage (PHONO-II) ..... £ 130.00  
Moving coil step-up transformer ..... £ 80.00

**SERIES II MODULAR PRE-AMP KIT**

# Probably the Best DIY Kits in the World



www.worldaudiodesign.com  
Tel 0845 2575600



KEL84 is an affordable amplifier for those who want to enjoy the valve sound, but from a simple, easy to build kit.

It uses inexpensive EL84 output valves, known for their sweet sound, in conventional push-pull arrangement to provide 15 watts into an 8 ohm load. The transformers are our own high quality Ultra Linear design made in the UK. Up front, the circuit employs an ECF80 input / phase splitter valve which contributes to the KEL84's extremely smooth sound.

For simplicity the KEL84 is built on a printed circuit board. A strong steel chassis is then fronted by a 3mm thick anodised aluminium front panel and brushed aluminium knobs.

There are two versions available, a single input version with volume control and an integrated version with five line level inputs and tape loop. The integrated version also features an ALPS blue volume control and chrome plated transformer covers as standard.

The KEL84 will highlight all the intricacies and depth of detail in your favourite recordings whilst retaining a warmth and fullness that is almost exclusive to valve amps and is rare at this price point.

KEL84 weighs 10Kg. External dimensions with valves are 300mm(w)x270mm(d)x150mm(h)

Single Input version £285

Integrated version £335

**KEL84 VALVE INTEGRATED AMPLIFIER KIT ..... £ 335.00**

Our 6550 series amplifiers are built around the rugged 6550 beam tetrode that's popular in America.

This valve is widely available and at a good price. This enables us to provide a high quality amplifier kit at realistic price. Producing no less than 40 watts our 6550 is a power house.

The difference between our 6550 and most others is that we use valve rectification (5U4) and a choke pi filter, for a power supply that is quiet and free from solid-state hardness. This is a true high-end design from Andy Grove. With its custom designed and made transformers it is a cut above many 6550s, with enough power to drive most loudspeakers including insensitive electrostatics for example.



The 6550 is available in two versions, the integrated Kit6550 with ALPS volume control five line level inputs and a tape monitor circuit or the KaT6550 power amplifier for use with a separate pre-amp.

The amplifier weighs 19Kg. Dimensions are 390mm(w)x330mm(d)x220mm(h)

Prices shown include valves. Also available without valves on request.

Kit6550 £615

KaT6550 £580

**KIT6550 VALVE INTEGRATED AMPLIFIER KIT £615.00**

**KAT6550 VALVE POWER AMPLIFIER KIT £580.00**

The Headphone II amplifier is a beautifully simple design using Mullard ECL83 valves, a triode and power pentode in the same envelope.

It works from any line level source i.e. an amplifier's tape or pre amp out sockets. The circuit uses high specification Eii output transformers that can drive any headphone load from 16 ohms to over 300 ohms depending on how the secondaries are wired.

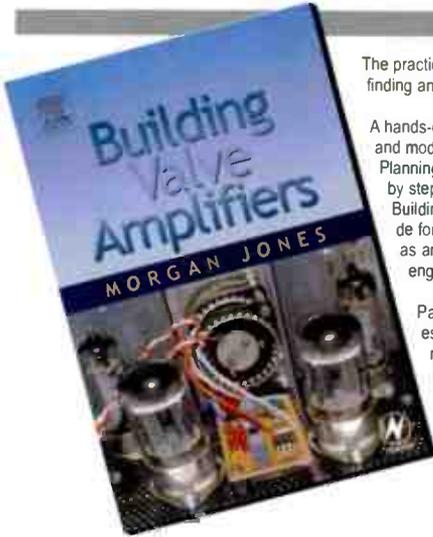
The Headphone II is a pure Class A single ended design with the power pentode connected in triode configuration for sonic purity and is as quiet as a mouse. Treble has the crispness of the best solid state but with the tonal resolution and delicacy associated with valves. Bass is punchy and controlled without becoming artificial.

Dimensions are 270mm(w)x275mm(d)x85mm(h)



**HEADPHONE II KIT ..... £285.00**

Reference Books



The practical guide to building, modifying, fault finding and repairing valve amplifiers.

A hands-on approach to valve electronics, classic and modern - with a minimum of theory. Planning, fault finding and testing illustrated by step by step examples. Building Valve Amplifiers is a unique hands-on guide for anyone working with tube audio equipment as an electronics experimenter, audiophile or audio engineer.

Particular attention has been paid to answering questions commonly asked by newcomers to the world of vacuum tubes, whether audio enthusiasts tackling their first build, or more experienced amplifier designers seeking to learn the ropes of working with valves.

The practical side of this book is reinforced by numerous clear illustrations throughout.

Price £20 plus £2 p&p

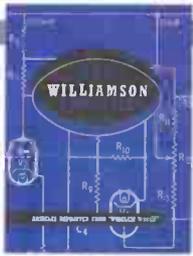


Morgan Jones's Valve Amplifiers has been widely recognised as the most complete guide to valve amplifier design, modification, analysis, construction and maintenance written for over 30 years.

The author's straightforward approach, using as little maths as possible, makes this book ideal for those with limited knowledge of the field as well as being the standard reference text for experts in valve audio and a wider audience of audio engineers facing design challenges involving valves.

Price £30 plus £2 p&p

Many more titles available, please check [www.worldaudiodesign.com](http://www.worldaudiodesign.com) for more details

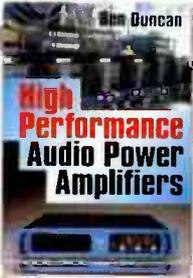


The Williamson Amplifier by D.T.N. Williamson.

Offers practical advice on how to build and set up the amplifier for best results.

40pp Paper back

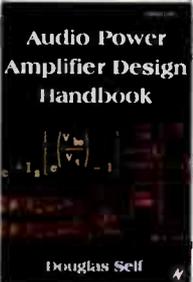
£9.95 + £1.50 P&P



By Ben Duncan - International authority in audio quality and electronics.

A comprehensive handbook on power amplifiers covering introductory material; an overview of global requirements; interfacing and processing; classes, and modes; features of the power stage; the power supply; specifications and testing; the rationale and procedures of real-world testing; choice, application installation, set-up and maintenance.

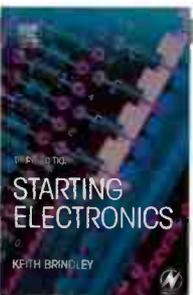
£46.99 + £2.00 P+P



Douglas Self has dedicated himself to demystifying amplifier design and establishing empirical design techniques based on electronic design principles and experimental data.

Ideal read for professional audio designers and electronic engineers; advanced amateur audiophiles and electronic designers; audio engineers involved in using and maintaining high-end domestic and professional audio systems.

£26.99 + £2.00 P+P

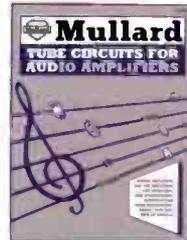


Starting Electronics is unrivalled as a highly practical introduction for hobbyists, students and technicians.

Keith Brindley introduces readers to the functions of the main component types, their uses, and the basic principles of building and designing electronic circuits.

Breadboard layouts make this very much a ready-to-run book for the experimenter, and the use of multimeter, but not oscilloscopes, puts this practical exploration of electronics within reach of every home enthusiast's pocket.

£9.99 + £2.00 P&P



Includes full designs for eleven power and control amps, including 5-20, using valves.

Begins with a four chapter tutorial on getting the best sound from valve amplifiers.

£13.95 + £2.00 P&P



This book takes a comprehensive look at tube audio design. It explains how vacuum tubes work and how to design with them. Rozenblit covers stabilisation and testing, a description of 13 famous and classic amps and preamps and how to work effectively as a designer.

A hands-on guide to construction techniques, tools and choosing components and tubes is provided. 1997

£15.50 + £2.50 P&P

How to order...

There are various ways you can order and make payment for your purchases:

Visit us at [www.worldaudiodesign.com](http://www.worldaudiodesign.com)

Secure payment option. World Audio Design Ltd. accept all major credit cards through HSBC's online system which encrypts order details before transmitting them, thereby protecting your card and personal information when in transit. We believe this system to be the most convenient and reliable method to ensure that your card details are treated in a responsible and reliable way.



tel: 0845 2575600 fax: 0845 2575623

We do accept the fact, that many people prefer doing business talking to a real human being. Call us in office hours and we'll do our best to find the right kit for your ability and budget.

Please make cheques payable to World Audio Design Ltd, and send them together with list of your chosen items to FREEPOST WORLD AUDIO DESIGN

Many more titles available, please check [www.worldaudiodesign.com](http://www.worldaudiodesign.com) for more details

AMPLIFIER DESCRIPTION	PRICE (inc vat)	PARTS DESCRIPTION	PRICE (inc vat)	PARTS DESCRIPTION	PRICE (inc vat)
KaT6550 with valves	£ 580.00	KaT300 with valves	£720.00	300B PSE output transformer (each)	£110.00
KaT6550 without valves	£ 450.00	KaT300 without valves	£550.00	300B PP output transformer (each)	£110.00
KIT6550 with valves	£ 615.00	KIT300 with valves	£765.00	Kel84 PCB	£ 30.00
KIT6550 without valves	£ 485.00	KIT300 without valves	£600.00	Kel34 PCB	£ 12.00
Kel84 integrated (with valves)	£ 335.00	6550 mains transformer	£120.00	Kel80 PCB (pair)	£ 52.00
Kel84 single input (with valves)	£ 285.00	Kel84 mains transformer	£ 60.00	KECL82 PCB	£ 25.00
PSU-II	£ 185.00	PSU-II mains transformer	£ 40.00	Headphone II PCB	£ 20.00
PRE-II	£ 215.00	300B mains transformer 300B	£115.00	PSU-II PCB	£ 20.00
PAS-II	£ 165.00	6550 choke	£ 40.00	PRE-II PCB	£ 20.00
PHONO-II	£ 130.00	Kel84 choke	£ 20.00	PHONO-II PCB	£ 20.00
Headphone II	£ 285.00	300B choke	£ 40.00	Tag board	£ 4.00
300B PSE with valves	£1197.00 per pair	PSU-II choke	£ 20.00	ALPS 50K dual potentiometer	£ 14.00
300B PSE without valves	£ 895.00 per pair	6550 output transformer (pair)	£130.00	ALPS 50K motorised pot	£ 26.00
300B PP with valves	£1197.00 per pair	Kel84 output transformer (pair)	£ 90.00		
300B PP without valves	£ 895.00 per pair	PRE-II driver transformer (pair)	£ 80.00		

**Jensen Capacitors (630v)**

PIO signal 0.01uF Aluminium Foil	£10.13
PIO signal 0.01uF Copper Foil	£15.29
PIO signal 0.1uF Aluminium Foil	£12.50
PIO signal 0.1uF Copper Foil	£18.27
PIO signal 0.22uF Aluminium Foil	£14.51
PIO signal 0.22uF Copper Foil	£22.02
PIO signal 0.47uF Aluminium Foil	£16.61
PIO signal 0.47uF Copper Foil	£28.94
PIO signal 1uF Aluminium Foil	£19.99
PIO signal 1uF Copper Foil	£41.23

Other values and versions available - Please Call.

**Jupiter Beeswax Signal Capacitors**

0.01uF / 600V	£10.40
0.022uF / 600V	£10.40
0.047uF / 600V	£10.40
0.1uF / 600V	£10.40
0.22uF / 600V	£11.15
0.47uF / 600V	£13.50
1uF / 600V	£17.00

**Auricaps**

Auricap 0.1uF / 400V	£ 6.11
Auricap 0.22uF / 600V	£10.93
Auricap 0.47uF / 600V	£12.45
Auricap 1uF / 400V	£ 7.76
Auricap 2.2uF / 400V	£14.10

Other values / voltages available to order - please call



**Eichmann™ - Bullet Plugs®**

Bullet plug - 4 pack	£ 24.00
Silver Bullet Plug - 2 pack	£ 32.00 / 4 pack £ 60.00

0.6mm Pure Silver Wire (10M)	£23.50
Silver Plated Phono Socket	£ 2.65
Silver Plated Speaker Post (pair)	£ 7.30
UX4 Ceramic Valve Base	£ 2.50
B9A Ceramic Chassis Base (4)	£ 4.00
Octal Ceramic Chassis Base (4)	£ 4.00
B9A PCB Ceramic Valve Base (4)	£ 4.00
Switchcraft Gold Phono Plug	£ 2.44
Switchcraft Silver Plated Phono Plug	£ 4.00

More components now available at

www.worldaudiodesign.com

**Lead Free Soldering**

Antex CSL 18 watt soldering iron	£16.85
Antex XSL 25 watt soldering iron	£16.85
Replacement tips for CSL iron	£ 3.00
Replacement tips for XSL iron	£ 3.00
Lead free solder (2.5% silver), 0.8mm wire	
2M tube	£ 1.53
4M tube	£ 2.02
100g reel	£ 4.50

**Help and advice...**

Personal callers are welcome to collect their purchases in person or visit our Demo Room but please phone ahead especially if making a long journey as we can't always be there to greet you.



As all the kits are capable of producing high voltages they require diligence and extreme care to build safely. Read the safety instructions thoroughly before construction. You must be able to solder to a reasonable standard and be able to read a circuit diagram. The KEL84 and Series II kits are generally the most straightforward to construct as they utilise PCBs. None of the kits are suitable for children to build without total supervision.

If you are in any doubt about your ability to build one of our kits, give us a call! We'll give you straightforward, honest advice to enable you to pick a kit to suit your pocket and ability. We hail from an electronics background and have test-built every kit we sell. If you need help during assembly or just want to check something give us a call.

Telephone 0845 2575600 (local rate). During evenings and weekends you will automatically be transferred to a technical support number at the same local call rate. International customers please call 44 1245 450651.

If you need further help we have a collect and repair service at reasonable rates based on workshop time. We can also arrange for kits to be built to order and your specification.

**Telephone 0845 2575600**  
**Post orders to FREEPOST WORLD AUDIO DESIGN (no stamp needed)**  
**All parts prices shown include VAT**

"these days, aiming down a little can take you up.  
High power is unnecessary."



## noel keyword

I can remember a time when I linked power to performance - and the more the merrier. Performance was a catch-all notion I hadn't much considered, embracing everything. In retrospect it seems pretty naive, but then a lot has changed. These days power comes cheap and often wears a tacky face, in the form of budget surround-sound systems especially. Tesco will do you a complete Sony surround-sound system producing 720W, for £169.99 - and that includes six loudspeakers! This sort of thing has unlinked power from quality. Perhaps the Sony system is a triumph of quality and I am being overly critical here, but somehow I doubt it...

Few of us think that power in itself means much anymore, or so I might think, but perhaps not. In this issue T+A make much of the power they have squeezed from valves in the V10, Musical Fidelity are resolute in the need for high power in the home and the power chart in our feature clearly shows that past 100W it takes hundreds more to make much difference to the loudness we perceive. Power is still very much an issue in truth, especially when you have a large home.

As a friend who lives in America is fond of pointing out, "Noel, my walk-in wardrobe is bigger than many UK bedrooms". Britons are short of space and pay heavily for it, which influences the national picture a little. Impossibly small homes - er, "bijou residences" - in Chelsea cost astronomical amounts. In homes like this power isn't an issue - it's a liability. Britain's densely packed towns and cities have little need for serious power, although I'm sure I heard it said recently on the radio that U.K. homes are too small and that average size needs to increase to accommodate modern living.

When and if they do - a distant prospect I suspect - then our need for power will rise accordingly. As sound pressure level drops a large 6dB for every doubling of distance, but rises only 3dB for every doubling of power, the power hikes needed to cope with large rooms are enormous. Hi-fi equipment needs to be designed and built on quite a different scale to that which we are used to, in fact, and this is partly what makes the U.S. market so different to our own. Their problem is one of moving enough air. You need big drive units or plenty of them in a loudspeaker, often both, to energise a big room. An alternative is to spread loudspeakers around the room, home cinema style. Home cinema makes much more sense for Americans with both the space and the need than it does for the average Briton. Conversely, a small stereo system is ideal for us.

Either way Americans, it would seem, have a need for large, space-consuming products that devour power. As glitzy as a lot of American power amps appear, they are largely overkill for our homes. It's a pity, as this is where some seriously interesting ideas surface. Much the same comments can be applied to large, high power loudspeakers. Many American designs are technically interesting, but are not suited to the average British home. In most cases they over-drive the basic modal resonances of a small room, making it boom badly. Placed in a larger room, however, such 'speakers can sound impressively even and well controlled, as well as prodigious in bass output.

I've spoken to many American audio manufacturers that would dearly like to access the UK market but find their products just don't travel well, partly for these reasons. We've little experience of really high power systems here and can't

accommodate them even if we wanted to.

It's easier for Americans to accept Britain's relatively modest audio products and one U.S. reviewer recently said "the country specialises in great budget products". Er, yes! That's the view from the other side. They're budget for various reasons, depending upon who you talk to. Some say because that's all the Brits can afford which, looking at the value of their homes and size of their loans, I can't agree. Some say because we have a tradition of producing great, low cost items. The Japanese may not think so. Or that we just don't need oodles of power, because of our homes, which I think is closer to the mark...

Whilst the use of low power hasn't become a belief system with me, it does carry with it certain attractive connotations, such as high efficiency and low waste, which in turn usually arise from good engineering. I was uncomfortable with the drive toward high power as an end in itself, a trend of the late 1970s as I remember it, when solid-state amplifiers could be designed to deliver 1000W, so they were. Then came loudspeakers that could absorb this power, with big, lossy plastic cones that quacked more than a pondful of ducks at feeding time and crossovers that turned so much music energy into heat they burst into flame - or at least at the parties I held at the time.

Today we seem to have settled into a middle field, where loudspeakers of 86dB-90dB sensitivity need no more than 100W or so to shake the average British home. Now that higher power costs less money at Tesco my once simple assumption that power equals quality has been turned on its head. These days, aiming down a little can take you up. High power is unnecessary. ●

"satellite is the way to go for quality on digital radio..."



## steven green

**A**RD, the closest thing Germany has to the BBC, recently launched all of its radio stations on digital satellite using bitrates that make those used by the BBC look pathetically low. To coincide with the IFA consumer electronics show in Berlin in early September, ARD launched fifty-four stereo radio stations using 320 kbps (kilo-bits per second), five mono stations using 128 kbps, and three radio stations in surround sound using the Dolby AC3 codec at 448 kbps. The launch of these radio stations even made it onto German TV news, where they were described as being "for the more discerning listener!"

In contrast, the BBC's stereo stations on satellite only use 192 kbps for Radios 1, 2, 3, and 4; 160 kbps for 6 Music, BBC7 and 1Xtra; and a pitiful 128 kbps for the Asian Network (32% of its content is music) and their national stations (e.g. Radio Scotland). All stereo and mono stations on satellite use the same MP2 audio codec, which means quite simply that the ARD radio stations have significantly better audio quality than all of the BBC's stations.

To put these bitrates into context, it is widely thought that a well-engineered radio station using a bitrate of 256 kbps MP2 (the audio codec used on digital satellite, cable, Freeview and DAB) will sound better than a well-engineered station on FM that is received with a high signal strength.

A huge number of unencrypted TV and radio stations are available on satellite. There are 95 UK-based and several hundred European radio stations – including the ARD radio stations discussed above – all of which are 'free-to-air' (FTA). So

you can listen to them without any subscription charge, indefinitely.

All the BBC's national DAB stations are available, as are all of the bigger commercial DAB radio stations. Local radio stations aren't available on satellite, however, apart from some London local stations.

Although none use the very high bit rates that the ARD stations use, the audio quality of the UK stations on satellite is usually better than on DAB. All the BBC's radio stations except Radio 3 use significantly higher bit rates on satellite, and even Radio 3 frequently has its bit rate reduced on DAB. Amazingly, even the commercial radio broadcasters deign to use higher bit rates for most of their radio stations on satellite.

Classical music fans are well catered for on the European satellites. By general consensus the best of the bunch is the ARD station Bayern 4 Klassik. Another ARD station is WRD3, and classical music stations from other countries include France Musique, Radio Classique (both of which use 256 kbps), Concertzender, Swiss Classique and the strangely named Hector. The latter two stations are on the Hotbird satellites, while all the other European classical stations mentioned are on the Astra 1 satellites. I'll return to the issue of the different satellites shortly.

Some highlights for fans of other music genres include the jazz stations TSF, Frequence Jazz and Jazz Radio 101.9 on Astra 1, and Radio Swiss Jazz on Hotbird. For those with an eclectic taste there's French stations Radio Nova and Fip, both on Astra 1.

To receive radio via satellite you'll need to have a line-of-sight view to the satellites, a suitable dish with an LNB (Low Noise Block – the thing

at the front of the dish) and a digital satellite receiver. There are three different satellite 'constellations': all the UK-based channels are on Astra 2 at 28.2° east (east of due south), and the European-based channels are on Astra 1 at 19.2° east and Hotbird at 13° east. However, you only need one fixed dish to receive signals from all three satellite constellations because you can add an extra LNB for each additional satellite constellation required. To switch between the different satellites you'll also need a DiSEqC switch as well.

Satellite equipment is also surprisingly cheap. If you only want to receive the UK-based stations on Astra 2, you can buy a full system from as little as £75, which includes a dish with LNB and a digital satellite receiver. If you want to receive the European radio stations as well, then you will need a slightly larger diameter dish than for the UK-based stations alone, as well as the additional LNBs and DiSEqC switch. If you buy equipment off the Internet and pay for installation, the cost will match an average DAB tuner.

For a good website for general satellite and installation information try [www.satcure.co.uk](http://www.satcure.co.uk); for equipment try [www.sateuropa.co.uk](http://www.sateuropa.co.uk), [www.hisat.com](http://www.hisat.com) and [www.wizardsatellite.com](http://www.wizardsatellite.com), and for installers try the Satellite TV & Equipment section in the Yellow Pages.

For up to date lists of channels available on the satellites see [www.lyngsat.com/astra19.html](http://www.lyngsat.com/astra19.html), [www.lyngsat.com/28east.html](http://www.lyngsat.com/28east.html) and [www.lyngsat.com/hotbird.html](http://www.lyngsat.com/hotbird.html).

Satellite is the way to go for quality on digital radio. Let's hope the BBC follow ARD's lead and use bitrates on satellite that show how good digital radio really can sound. ●

# LJK SETRIGHT: 1931-2005

## Linn's Ivor Tiefenbrun reflects upon the life of a very special person:

### LEONARD JK SETRIGHT



**B**orn 10th August 1931 of Australian parents in London, Leonard grew up with machines and engineering in his blood. Leonard's father was an

innovative engineer and entrepreneur who designed and manufactured machinery powered by internal combustion engines.

Although Leonard was a qualified lawyer, he had no high regard for his profession. He preferred journalism and pursued a very wide variety of interests that lay elsewhere.

A modest, unassuming and very private individual, Leonard was at the same time no shrinking violet. He was a dapper dresser and always stood out in a crowd. Quietly spoken and forthright, Leonard was adored by his friends and revered

by his readers. A long stint at *Car* magazine made a unique contribution to the success of that publication and he was widely respected by his editors for his sublime insight, the perfection of his prose and the accuracy and precise presentation of his contributions.

Leonard loved his food, his wine, his black Russian Sobranie cigarettes and life in general. He was the Head of the Turin Design Awards for many years and his eclectic interests ranged from Talmudic studies and history through music, literature, languages and the arts in general, together with engineering and shooting and much else. Leonard was a very keen motorcyclist and is reputed to have once averaged 150mph across France on a BMW. Only injuries sustained in a high speed motorcycling accident when he was approaching 70 finally curtailed his enthusiasm for high performance motorcycling.

He was an excellent shot, although he never shot at a living creature. He loved the precision engineered accuracy of his guns, especially his superb Tikka rifle, in the same way that he cherished his Bristol and Honda cars, his beloved clarinet and his very well used Linn hi-fi.

Leonard loved, sensed and understood the spirit of machinery. He could perceive, appreciate, and describe beautifully, the soul of a

...he was a striking man in every sense"

machine, or a manufacturing organisation.

Leonard died peacefully, surrounded by his close friends and family, after succumbing to cancer of the pancreas. He died without pain, at peace with the world, ready to meet his maker and completely prepared - as always - for a comprehensive and lively discussion. His first

#### SECOND THOUGHTS

I first met Leonard in 2003 at a restaurant in London's Maida Vale, where I planned to ask him to write for *Hi-Fi World*. I'd read his words on motorcycles and cars for many years during the Halcyon days of *Bike* and *Car* (mid-seventies to mid-nineties). I'd cheekily obtained his phone number from his publicist, using my *Sunday Times* connections, and at first he wasn't sure about my proposal. We had a fascinating conversation, during which he regaled me with tales of his sabbatical in Texas, his passion for things as diverse as Latin, shooting and Honda petrol engines, and his distaste for - variously - political correctness, speed cameras and smoking bans. He came over as a brilliant yet modest, acerbic yet gentle man; one whose erudition was surpassed only by that wonderfully free thinking mind. He was a passionate musician and music lover, and hi-fi was but a tool for its enjoyment; he wasn't interested in the hardware for its own sake, and expressed disdain for most hi-fi separates, which he (rightly, in my opinion) regarded as overpriced, over-hyped and under engineered. He loved his Linn hi-fi, and refused every opportunity to try new products - with the notable exception of a Creek tuner. Leonard drove me back to my office in his Honda Prelude, showing me his classic Pioneer stereo radio/cassette and declaring it the best he'd yet heard (he taped LPs direct from his LP12 via a Sony Walkman Pro to play in the car). I didn't get the chance to hear it very much though, because almost as soon as he'd donned his leather driving gloves we'd reached our destination... I'm happy to say that Leonard agreed to write for *Hi-Fi World* until his poor health prevented it. All of us here on the HFW team very much enjoyed his contributions, and we will miss him dearly.

DAVID PRICE

wife Chris passed away in 1980. LJKS passed away 7th September 2005 and is survived by his daughters, Anthea and Hilary, and his second wife, Helen.

**Ivor Tiefenbrun MBE**  
15 September 2005  
Glasgow

"that portable MP3 players are referred to as iPods suggests market dominance not seen since the Hoover..."



## dominic todd

**A**s I sit at my desk listening to the radio, yet another mention is made of the iPod. It's not the first today and it's even in danger of being plugged more than DAB radio that, as regular radio listeners will attest to, is quite something! Whilst in the hi-fi trade we've been aware of the rise of MP3 players for some time now, it's now caught the public's attention on a scale not far short of DVD a few years ago. With newspaper columns regularly featuring articles such as, "what I'm playing on my iPod" the technology has perhaps even transcended DVD – at least in terms of publicity. In short, it has now become a mass-market product. Unlike DVD players, and latterly recorders, however, the retail implications are very different.

With DVD there hasn't been one dominant manufacturer. There never even was, or is, several dominant manufacturers. All the dominant Japanese, most of the Chinese and even a few of the Brits got a slice of the pie. With portable MP3 players it's a very different story. The very fact that portable MP3 players are referred to, so commonly, as iPods rather than MP3 players or, more correctly, portable jukeboxes, suggests a mass-market dominance not seen since the Hoover vacuum cleaner.

The implication of this is that it puts retailers in a severely restricted position. Yes, there are perfectly good MP3s from the likes of iRiver, Rio, Sony, Toshiba and a handful of others, but to have a truly competitive range most retailers would, if they're being honest, say that an Apple account is crucial. Now, whilst this wouldn't necessarily be a problem in other

sectors, the fact that Apple is a computer and not an electronics company counts for a great deal. The computer industry, you see, generally works on far lower retail margins than the domestic electronics one. Rather than making a profit on the hardware, computer retailers build up their bank balances on the basis of software, accessories and, of course, warranties. Whilst money can be made by traditional hi-fi retailers on MP3 accessories, the other options are somewhat limited, leaving the product category as a less than desirable one in terms of profit.

For this reason the presence of MP3 players within the hi-fi retail sector is smaller than one might have expected. Computer retailers of course, stock the product – especially Apple ones. It also has a high presence amongst the large electrical retail chains. Economies of scale and huge buying power means that the Dixons, Currys and Comets of this world can afford to sell MP3 players and still make money. Take a look at the next sector down, though – the hi-fi chains with around 50 stores – and you'll see a near total absence of the players.

It's often not through trying, but as one such chain reported to me, when the weekly profits across 50 stores for the category was often between £50-£200 per week before distribution or store costs, it clearly isn't a feasible product line to run. Instead, what this type of chain has turned to and, in general, is doing very well with, is the likes of plasma and LCD TV in conjunction with home cinema. They haven't, by any means, abandoned stereo hi-fi altogether, but take a look at the stores and you can't help but notice a smaller section of the floor space now taken up by,

for want of a better term, traditional hi-fi separates.

The question, therefore, has to be asked where does this leave the independents? Well, in actual fact, it leaves them in a pretty strong position. Hi-fi separates were abandoned by most of the large electrical retailers some years ago. Try and find separates at your local John Lewis, Dixons, Currys or Comet and you'll often look in vain. Where they do exist it's often in numbers so small you could count them on one hand. Furthermore, the products are often out of date or 'exclusive lines' that are merely average designs sporting a premium badge.

Moving down to the next sector and, like I said, there is now less prominence given to hi-fi stereo. With larger displays of TVs and home cinema equipment, the choice of hi-fi stereo is inevitably squeezed. With such changes from above, this gives the independent hi-fi retailer great opportunities. Although it's well documented that the hi-fi stereo business is a mature one and one that, at least has been, in decline, there are more enlightened independents that haven't suffered. The market as a whole may be smaller, but larger stakes of it are up for grabs than ever before. Retailers who can offer a strong range, good customer service and advice, are in a very strong position indeed.

There are some excellent products out there right now and despite MP3 there is still a strong demand for quality hi-fi at home. Perhaps now is the time, Mrs Worthington, when it may not be such a bad time to put your daughter (or son) on the stage of independent hi-fi retailing. Happy shopping! ●

# Eastern Electric M520

designer Alex Yeung is known in Hong Kong as the 'Golden Ear'

"Yet another example of a true value product that's intelligently packaged with just the right - and some unexpected - features. My hat's off to the golden ears in Hong Kong."

If you are using a solid-state amp now and wonder why your music experience doesn't draw you in or doesn't have the tone characteristic of a live concert, what you're likely missing is the pleasurable warmth that only tubes provide.

Engineered for years of satisfaction with meticulous attention to detail, Alex Yeung has selected the highest quality parts and transformers made especially for his statement design: the Eastern Electric M520 integrated amp (£1539).

With the design of the M520, Eastern Electric have left nothing to chance in their pursuit to produce one of the finest Valve Integrated Amplifiers available.

For more information or to arrange an audition of the M520 call Shadow Audio.

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



Minimax Valve Pre-amp (£769)



Minimax Valve Phono Pre (£1099)



Minimax Valve Power amp (£989)



Minimax Valve CD Player (£879)

See Page 24 of Hi-Fi World (this issue) for a full review on the M520

**BUY THE EASTERN ELECTRIC M520 WITH OUR NO RISK 30-DAY MONEY BACK OPTION\*** (CONDITIONS APPLY)

## Best Part-Exchange Prices

For full details of our extremely comprehensive range of products, our extensive used listing, links to reviews, technical information and much more, visit [www.shadowaudio.co.uk](http://www.shadowaudio.co.uk)



### Digital

Audio Synthesis Transcend ASL model transport	£2495
Audio Synthesis DAX Discrete in Black (£4000)	£2195
Meridian G08 CD player, one owner, boxed as	£1495
Accuphase DP67 CD player (£4500)	£2995
EAD DSP 9000 Pro S3 DAC pre	£1495
Wadia 302 CD player (£4000)	£2995
Musical Fidelity Nu-Vista CD Player	£1695
DCS Verdi latest spec	£3495
DCS Verdi La Scala Transport (£9499)	£6895
Shanling CDT-100 (3D acoustics UK model)	£990
Audio Analogue Paganini (£950)	£795
Musical Fidelity A308CD player	£995
Roksan Kandy MKIII silver/black ex-dem	£450

### Amplifiers

McIntosh MA2275 valve integrated (£5773)	£POA
Theta Dreadnaught mk1 (£5500)	£1995
Jeff Rowland Concentra mkII (£10000)	£3495
Musical Fidelity Tri-Vista 300 amplifier (£4000)	£1995
AVI Lab Series Integrated amplifier (£1500)	£949
Conrad Johnson PV14L pre, 2yrs old (£2300)	£1250
Unison Research SR-1 integrated (£1325)	£699
BAT VK 250 BAT PAK power amplifier (£4995)	£2495
BAT VK-200 power amplifier	£995
Parasound Halo JC-1 mono blocks (£5600)	£2995
AVI S2000M mono blocks (£2000)	£595
Boulder 1012 DAC pre (£12950)	£6595
Musical Fidelity A3 CR pre-amp (£1000)	£395
ART Diavolo Power Amplifier (£5402)	£1795
Pathos Classic One mkII (£1400)	£950
Moon i5 integrated amplifier (£2695)	£1695
Classe CP 47.5 reference pre amp	£1295
ES Lab DXS4 digital amplifier	£1295

Croft TS1 with Epoch Pre (£3000)	£1795
ART Conductor Pre-amp	£895
Conrad Johnson 16LS pre-amp (£8000)	£3450
Musical Fidelity A3cr pre amp	£395
Sugden Masterclass Mono blocks (£6600)	£3895
Audio Note Soro SE + built in phono stage	£995
Graaf GM50, award winning KT88 valve ampli-	£2995
Musical Fidelity X-150 v3 (£799)	£650
Hovland HP100 pre+built in phstage (£5350)	£3595
Hovland Radia Power amplifier (£7995)	£4995
Hovland HP200 + phono stage (£7325)	£4995
Audio Analogue New Maestro (£1750)	£1255
Audio Analogue Primo Setanta	£395
Unison Research SR 1	£895
Roksan Kandy MKIII (silver or black)	£450

### Loudspeakers

Wilson Benesch Curve speakers (£5000)	£3495
Triangle Titus ES stand mount (£370)	£269
Thiel CS6 boxed in superb condition, Morado	£3995
Quad 989 ESL, boxed as new (£5000)	£2895
Proac Response 2 speakers, rosewood (£1695)	£695
Dali Helicon 400 (£3300)	£1995
Audio Note AN-ED speakers	£695
Mission 780 SE, boxed	£185
Living Voice Avatar II, finished in cherry (£2700)	£1595
Nola (Alon) Elite Signature speakers (£8000)	£3595
Living Voice Auditorium mkII speakers (£1900)	£795
Diapason Karis III speakers + matching stands	£995
Ref 3a Dacapo I, maple (£2700)	£1650
JM Lab Cobalt 816s (£999)	£595
Triangle Helicide, Champagne finish (£595)	£395
ATC SCM-50ASL, Yew (£7947)	£4995
Wilson Benesch ARCs with stands (£2500)	£1699
Triangle Australe in cherry (£3300)	£1995
Living Voice Avarar OBX-R in Cherry	£2695

Wilson Benesch Discovery (£5700)	£3895
Quad 989 ESL Vintage, new £5000	£3600
Quad 988 ESL in Nouveau, cost new £3750	£2999
Audio Physic Spark3, Cherry or light maple	£1250
Audio Physic Tempo 3i, Cherry or light maple	£1395
Audio Physic Tempo3i SE, Cherry/light maple	£1799
Audio Physic Virgo III, Cherry	£2895
Wilson Benesch ACT 1, Cherry	£3595

### Analogue

EAR 834P deluxe, boxed, mint, one owner. (£895)	£495
Audio Synthesis Passion Phono stage, boxed	£695
Michell Gyrodec Bronze edition, absolutely mint condition with full Origin, Live Modified RB300	£995
Orion Jubilee, very low hours, boxed as new, be quick!	£595
SME 10, boxed AS NEW (£2800)	£1895
Audio Synthesis Passion Phono stage MM/MC	£795
SME 20/2a + SME V tonearm (£5695)	£3695
Wilson Benesch Full Circle+Ply Cart (£2100)	£1495
Musical Fidelity M1 turntable, boxed as new	£1990
Michell Orbe SE boxed as new	£1595
SME 10A, boxed	£2495
Nottingham Analogue Spacedec	£695
EAR 834P de-luxe phono stage	£250
Trichord Dino - silver front	£199

### Miscellaneous

Nordost Vishnu 2m mains lead (£450)	£249
Nordost Shiva 2m mains lead (£220)	£139
PS Audio P600 power plant (£2895)	£1595
Townshend Super Tweeters in Titanium matt	£650

List is updated on a daily basis via website

# world classics

In this heavily revised section, you'll find the great and the good from audio's glorious past. Most are seminal designs which have earned their place in hi-fi history, but you'll also see some oddities which aren't classic as such, but are great used buys. The year of introduction is given, alongside the original UK launch price. Think we've overlooked something? Then write in and let us know!

## DIGITAL

**CAMBRIDGE AUDIO CD11** 1986 £1500  
Inspired Stan Curtis redesign of Philips CD104, complete with switchable digital filter. Lean but tight and musical performer.

**CAMBRIDGE AUDIO CD4SE** 1998 £200  
A touch soft in the treble and tonally light, but outstanding in every other respect.

**LINN KARIK III** 1995 £1775  
The final Karik was a gem. Superb transport gives a brilliantly tight, grippy dynamic sound, albeit tonally dry.

**MARANTZ CD73** 1983 £700  
A riot of gold brushed aluminium and LEDs, this distinctive machine squeezed every last ounce from its 14x4 DAC -super musical



**MARANTZ SA-1** 2000 £5,000  
The greatest argument for SACD. This sublime Ken Ishiwata design is utterly musically convincing with both CD and SACD, beating most audiophile CD spinners hands down.



**MERIDIAN 207** 1988 £995  
Beautifully-built two-box with pre-amp stage. Very musical although not as refined as modern Bitstream gear. No digital output.

**MUSICAL FIDELITY TRIVISTA** 2002 £4000  
When playing SACDs, the sweetest, most lucid and lyrical digital disc spinner we've heard. Old school stereo, pure DSD design. CD sound is up in the £1000 class, too! Future classic.

**MERIDIAN MCD** 1984 £600  
The first British 'audiophile' machine was a sweeter, more detailed Philips CD100. 14x4 never sounded so good, until the MCD Pro arrived a year later.



**NAIM CDS** 1990 £ N/A  
Classic Philips 16x4 chipset with serious attention to power supplies equals grin-inducing sonics.



**SONY CDP-101** 1982 £800  
The first Japanese CD spinner was powerful and involving. Brilliant transport more than compensated for 16x2 DAC, and you even got remote control!

**SONY CDP-R1/DAS-R1** 1987 £3,000  
Sony's first two boxer was right first time. Tonally lean, but probably the most detailed and architectural sounding machine of the eighties.



**SONY CDP-701ES** 1984 £890  
Sony's first ever bespoke high end audiophile machine used a 16x2 DAC to provide a clinically incisive sound; supreme build quality allied to the pure unadulterated luxury of a paperbook-sized remote control.

**YAMAHA CD-X1** 1983 £340  
Nicely built 16x2 machine with a very sharp and detailed sound; sometimes too much so. Excellent ergonomics, unlike almost every other rival of the time.

## COMPACT DISC TRANSPORTS

**TEAC VRDS-T1** 1994 £600  
Warm and expansive sound made this a mid price hit. Well built, with a slick mech.



**ESOTERIC P0** 1997 £8,000  
The best CD drive bar none; TEAC's Tokyo boys pushed the boat out in style. Brilliantly incisive, ridiculously over engineered.

**KENWOOD 9010** 1986 £600  
The first discrete Jap transport was beautifully done and responds well to re-clocking even today.

## DACs

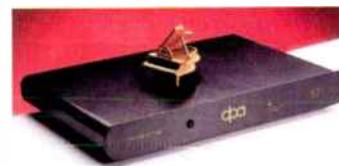
**CAMBRIDGE AUDIO DACMAGIC** 1995 £99  
Good value upgrade for budget CD players with extensive facilities and detailed sonics.



**DCS ELGAR** 1997 £8500  
Extremely open and natural performer, albeit extremely pricey - superb.



**DPA LITTLE BIT 3** 1996 £299  
Rich, clean, rhythmic and punchy sound transforms budget CD players.



**PINK TRIANGLE DACAPO** 1993 £ N/A  
Exquisite; the warmest and most lyrical 16bit digital audio we have ever heard. Clever plug-in digital filter modules really worked!



**QED DIGIT** 1991 £90  
Budget bitstream performer with tweaks aplenty. Positron PSU upgrade makes it smooth, but now past it.

## TURNTABLES

**ARISTON RD11S** 1972 £94  
Modern evolution of Thorens' original belt drive paradigm. Scotland's original super-deck was warm and musical, albeit soft. Still capable of fine results today.

**PIONEER PL12D** 1973 £36  
The beginning of the end for the British turntable industry. When vinyl was the leading source, this brought new standards of noise performance and stability to the class, plus a low friction S-shaped tonearm. Later PL12D was off the pace compared to rivals



**DUAL CS505** 1982 £75  
Simple high quality engineering and a respectable low mass tonearm made for a brilliant budget buy. Polished, smooth and slightly bland sound.

**GOLDRING LENCO 88/89** 1963 £15.65  
Simple, well engineered middleweight with soft, sweet sound and reasonable tonearms. Good spares and servicing support even today from specialists.

**LINN AXIS** 1987 £253  
Simplified cut-price version of the Sondek complete with LVX arm. Elegant and decently performing mid-price package. Later version with Akito tonearm better.

**LINN SONDEK LP12** 1973 £86  
For many, the Brit superdeck; constant mods meant that early ones sound warmer and more lyrical than modern versions. Beguilingly musical but now off the pace.



**TECHNICS SP10** 1973 £400  
Seminal Japanese engineering. Sonics depend on plinths, but a well mounted SP10/III will give any modern a hard time, especially in respect of bass power and midband accuracy.

**MARANTZ TT1000** 1978 £ N/A  
Beautiful seventies high end belt drive with sweet and clean sound. Rare in Europe, but big in Japan.



**MICHELL GYRODEC** 1981 £599  
Thanks to its stunning visuals, this bold design wasn't accorded the respect it deserved until recently. Early examples sound cold and mechanical, but now right on the pace. Clean, solid and architectural sound.

**REGA PLANAR 3** 1978 £79  
Brilliantly simple but clean and musical performer, complete with Acos-derived S-shape tonearm. 1983 saw the arrival of the RB300, which added detail at the expense of warmth. Superb budget buy.

**GARRARD 301/401** 1953 £19  
Heavy metal - tremendously strong and articulate with only a veiled treble to let it down. In many respects, better than the seventies 'superdecks' that succeeded it.



**ROKSAN XERXES** 1984 £550  
Supposedly the first to 'better' the LP12. Super tight and clean sound, with excellent transients. Less musical than the Sondek, but more neutral. Sagging plinth top-plates make them a dubious used buy.

**THORENS TD124** 1959 £ N/A  
The template for virtually every 1970s 'superdeck', this iconic design was the only real competition for Garrard's 301. It was sweeter and more lyrical, yet lighter and less impactful in the bass.



**TOWNSHEND ROCK** 1979 £ N/A  
The product of academic research by the Cranfield Institute, this novel machine has an extremely clean and fluid sound. Substantially modified through the years, and capable of superb results even today.

**TRIO LO-7D** 1978 £600  
The best 'all-in-one' turntable package ever made, Trio/Kenwood threw their 'engineering best practice' book at this one with startling results. Clean, powerful and three-dimensional sound, ultimately limited by the tonearm.

**TONEARMS**

**ACOS LUSTRE GST-1** 1975 £46  
The archetypal S-shaped seventies arm; good, propulsive and involving sound in its day, but ragged and undynamic now.

**AUDIO TECHNICA AT 1120** 1978 £75  
Fine finish can't compensate for this ultra low mass arm's limited sonics - a good starter arm if you've only got a few quid to spend.

**ALPHASON HRI005** 1981 £150  
First class arm, practically up to present-day standards. Buy carefully, though, as there is no service available now. Totally under priced when new, exceptional.



**SME 3009** 1959 £18  
Once state of the art, but long since bettered. Musical enough, but weak at frequency extremes and veiled in the midband. Legendary serviceability has made it a cult, used prices unjustifiably high.

**GRACE G707** 1974 £58  
This early Japanese example of the tonearm art has a smooth, lyrical sound. Imported by Linn, fitted to early LP12s. Sonically way off the pace now, though.

**REGA RB300** 1983 £88  
Inspired budget esoterica. Detailed, tight, neutral sound but tonally grey sounding in absolute terms. Responds well to tweaking, and its cheaper RB250 brother better still.



**SME SERIES III** 1979 £113  
Clever variable mass design complete with Titanium Nitride tube tried to be all things to all men, and failed. Charming nonetheless, with a warm and inoffensive sound.

**HADCOCK GH228** 1976 £46  
Evergreen unipivot with lovely sweet, fluid sound. Excellent service backup.



**LINN ITTOK LVIII** 1978 £253  
Arguably the first 'superarm'; Japanese design to Linn specs made for a muscular, rhythmic sound with real dynamics. Now off the pace, but the final LVIII version worth seeking out.

**NAIM ARO** 1986 £875  
Truly endearing and charismatic performer - wonderfully engaging mid-band makes up for softened frequency extremes.



**TECHNICS EPA-501** 1979 £ N/A  
Popular partner for late seventies Technics motor units. Nice build and Titanium Nitride tube can't compensate for middling sound.

**INTEGRATED AMPLIFIERS/COMBOS**

**DELTEC** 1987 £1900  
Fast, dry and with excellent transients, this first DPA integrated is the real deal for eighties obsessives. Ridiculously punchy 80W per channel from a tiny, half-size box. Radical, cool and more than a little strange.

**ROGERS A75** 1978 £220

The prototypical Audiolab 8000a – lots of sensible facilities, a goodly power output and nice sound in one box. The later A75II and A100 versions offered improved sonics and were seriously sweet and open to listen to.

**EXPOSURE VII/VIII** 1985 £625

Seminal mid-eighties Exposure pre-power, offering most of what rival Naim amps did with just that little bit extra smoothness and sweetness. Still, it's by no means 'sweet' by today's standards, being lean, punchy, musical. It's also possessed of that quintessentially eighties look – frumpy black steel boxes with rough silk screened logos!



**SUGDEN C51/P51** 1976 £130

Soft sounding early Sugden combo with a plethora of facilities and filters, complete with seventies-tastic DIN socketry. A sweet and endearing performer as you'd expect, but lacking in power and poor load driving ability, so partner carefully.

**VTL MINIMAL/50W MONOBLOCK** 1985 £1,300

Vacuum Tube Logic was one of the Europe's biggest tube names in the eighties, and it shows. Rugged, professional build and finish allied to a lively and punchy sound (albeit with limited power) make them an excellent used buy.

**A&R A60** 1977 £115

Sweet and musical feature-packed integrated; the Audiolab 8000A used its blueprint to great effect.



**CREEK CAS4040** 1983 £150

More musical than any budget amp before it; CAS4140 loses tone controls, gains grip.

**AUDIOLAB 8000A** 1985 £495  
Smooth integrated with clean MM/MC phono stage and huge feature count. Extremely reliable, too. Post '93 versions a top used buy.



**MCINTOSH MA6800** 1995 £3735

Effortlessly sweet, strong and powerful with seminal styling to match.

**SUGDEN A21** 1969 £ N/A

Class A transistor integrated with an eminently likeable smoothness and musicality. Limited inputs via DIN sockets.

**MISSION CYRUS 2** 1984 £299

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



**MUSICAL FIDELITY A1** 1985 £350

Beguiling Class A integrated with exquisite styling. Questionable reliability.



**NAIM NAIT** 1984 £350

Superb rhythms and dynamics make it truly musical, but tonally monochromatic. Fine phono stage, very low power.

**NAD 3020** 1979 £69

Brilliantly smooth, sweet and punchy at the price and even has a better phono stage than you'd expect. The archetypal budget super-amp.



**MYST TMA3** 1983 £300

Madcap eighties minimalism, but a strong and tight performer all the same.

**ROGERS CADET III** 1965 £34

Sweet sounding valve integrated, uses ECL86 output valves, even has a half useable phono stage, sweet, warm a good introduction to valves



**ROTEL RA-820BX** 1983 £139

Lively and clean budget integrated that arguably started the move to minimalism.

**PREAMPLIFIERS**

**AUDIOLAB 8000C** 1991 £499

Tonally grey but fine phono input and great facilities make it an excellent general purpose tool.

**AUDIO RESEARCH SP-81** 1982 £1,400

Beautifully designed and built high end tube preamplifier with deliciously sweet and smooth sound. Not the last word in incision or grip, but that didn't matter to those who aspired to it.

**CONRAD JOHNSON**

**MOTIV MC-8** 1986 £2,500

Minimalist FET-based preamplifier from the Yank valve specialists is brilliantly neutral and smooth with a spry, light balance in the mould of Sugden high end stuff. Something of a curio, but worthwhile nonetheless.

**CROFT MICRO** 1986 £150

Budget valve pre-amp with exceptionally transparent performance.

**LEAK POINT ONE STEREO** 1958 £ N/A

Good for their time, but way off the pace these days. Use of EF86 pentode valve for high gain rules out ultra performance. Not the highest-fi!

**LINN LK-1** 1986 £499

A brave attempt by the Glasgow boys to bring remote controlled user-friendliness to hair-shirt audiophile hi-fi. Didn't quite work, but not half bad for under £100.

**NAIM NAC32.5** 1978 £ N/A

The Salisbury company came of age with this, their classic high end pre. Brilliantly fast and incisive sound that's a joy with vinyl but a tad forward for digital.

**LECSON AC-1** 1973 £ N/A

Amazing styling courtesy of Allan Boothroyd can't disguise its rather cloudy sound, but a design classic nonetheless.



**QUAD 22** 1958 £25

The partner to the much vaunted Quad II monoblocs - cloudy and vague sound means it's for anacrophiles only.

**QUAD 33** 1968 £43

Better than the 22, but Quad's first tranny pre isn't outstanding. Responds well to tweaking/ rebuilding though...

**POWER AMPLIFIERS**

**LEAK STEREO 20** 1958 £31

Excellent workaday classic valve amplifier with decent power and drive. Surprisingly modern sounding if rebuilt sympathetically. Irrepressibly musical and fluid.



**LECSON API** 1973 £ N/A

Madcap cylindrical styling alluded to its 'tower of power' pretensions, but it wasn't. Poor build, but decently clean sounding when working.

**MARANTZ MODEL 9** 1997 £8000

Authentic reproduction monoblocs still more than cut the sonic mustard. Highly expensive and highly sought after.

**MICHELL ALECTO** 1997 £1889  
Crisp, clean and beautifully controlled with gorgeous styling. Partnered with the £1650 Orca this sounds delicious!

**LEAK POINT ONE, TL10, TL12.1** 1949 £28  
Early classics that are getting expensive. Overhauling is de rigueur before use, using original parts if possible. Surprisingly crisp and musical sound, that's far more modern than Quad IIs. Deeply impressive when in fine fettle.



**MUSICAL FIDELITY XA200** 1996 £1000PR  
200W of sweet smooth transistor stomp in a grooved tube! Under-rated oddity.



**RADFORD STA25 RENAISSANCE** 1986 £977

At the time, very possibly the least cool amplifier on the planet – and we're not talking heat dissipation here. This reworking of Radford's original late sixties design was possessed of a wonderfully rich, old school valve sound with enough power (25W) and lots of subtlety.



**QUAD II** 1952 £22  
The all-time classic valve amplifier, with a deliciously fluid and lyrical voice. In other respects though, it sounds hopelessly dated. Low power and hard to partner properly.



**QUAD 405** 1978 £115  
The first of the current dumpers is a capable design with smooth, effortless power and a decently musical sound. 606 and 707 continue the theme with greater detail and incision.

**QUAD 303** 1968 £55  
Bullet proof build, but woolly sound. Off the pace, but endearing nonetheless. Some pipe smoking slipper wearers swear by them!

**KRELL KMA100 II** 1987 £5,750  
Ludicrous monoblock version of the giant KSA-100 is one of the seminal eighties transistor power amplifiers. Massive wallop allied to a very clean and open Class A sound makes this one of the best amplifiers of its type, ever.

**PIONEER M-73** 1988 £1,200  
Monster stomp from this seminal Japanese power amplifier, complete with switchable Class A and Class B operation. Clean, open and assured sounding, albeit a tad behind the pace on high speed dance music. Rosewood side cheeks and black brushed aluminium completes the eighties-tastic experience.



**PHONO STAGES**  
**CREEK OBH-8 SE** 1996 £180  
Punchy, rhythmic character with oodles of detail makes this a great budget audiophile classic. Partner with a Goldring G1042 for an unbeatable budget combination.



**LINN LINNK** 1984 £149  
Naim-designed MC phono stage built to partner the original Naim NAIT - yes, really! Fine sound, although off the pace these days.

**MICHELL ISO** 1988 £ N/A  
This Tom Evans-designed black box started the trend for high performance offboard phono stages. Charismatic, musical and punchy - if lacking in finesse.

**TUNERS**  
**MARANTZ ST-8** 1978 £353  
Marantz's finest radio moment. Warm, organic sound plus an oscilloscope for checking the signal strength and multipath.



**CREEK CAS3140** 1985 £199  
Excellent detail, separation and dynamics - brilliantly musical at the price. T40 continued the theme...

**NAD 4040** 1979 £79  
Tremendously smooth and natural sound allied to low prices and good availability make this budget analogue esoterica. Needs a good antenna to work properly, however.

**NAIM NAT03** 1993 £595  
The warm, atmospheric sound is further proof of Naims proficiency with tuners.

**PIONEER TX-9500** 1976 £295  
Another of the serious classic solid-staters. Boasts the usual high end Jap package of fine sound, brilliant sensitivity and superb build.

**LEAK TROUGHLINE** 1956 £25  
Series I an interesting ornament but limited to 88-100MHz only. II and III are arguably the best-sounding tuners ever. Adaptation for stereo easy via phono multiplex socket. Fed by a modern outboard decoder they're deliciously lucid with true dimensionality.



**YAMAHA CT7000** 1977 £444  
Reputedly the best of the classic Jap analogues, this combines sleek ergonomics, high sensitivity and an explicit, detailed sound.

**QUAD FM4** 1983 £240  
Supreme ergonomics and styling allied to a pleasingly lyrical sound with plenty of sweetness and detail made this one of the best tuners around upon its launch.



**REVOX B760** 1975 £520  
More of a semi-pro machine than a domestic bit of kit, the Revox offers superlative measured performance although the sound isn't quite as staggering as the numbers. Fine nonetheless, and surely the most durable tuner here?

**NAD 4140** 1995 £199  
Brilliant affordable digital tuner has a smooth, detailed musical sound plus sensible real-world facilities.

**ROGERS T75** 1977 £125  
Superb mid-price British audiophile design, complete with understated black fascia. Fine sound in the true Rogers mould – smooth and sweet with fine dimensionality.

**SANSUI TU-9900** 1976 £300  
A flagship Japanese tuner designed to steal sales from the likes of Accuphase and Revox, it boasts superlative RF performance and an extremely smooth and lucid sound, along with very fine build and finish.

**SONY ST-5950** 1977 £222  
One of the first Dolby FM-equipped tuners, a format that came to nought. Still, it was Sony's most expensive tuner to date, and boasted a very good sound quality allied to brilliant ergonomics.



**TECHNICS ST-8080** 1976 £180  
National Panasonic's specialist hi-fi brand was a big hitter back then, and this is no exception. Superb FM stage makes for a very clean and smooth listen with lots of detail and depth.

**ANALOGUE RECORDERS**

**YAMAHA TC-800GL 1977 £179**

Early classic with ski-slope styling courtesy of Mario Bellini. Middling sonics by modern standards, but cool nonetheless!



**AIWA XD-009 1989 £600**

Aiwa's Nak beater didn't, but it wasn't half bad nonetheless. Massive spec even included a 16x4 DAC!

**NAKAMICHI CR-7E 1987 £800**

The very best sounding Nakamichi ever - but lacks the visual drama of a Dragon.



**PIONEER CTF-950 1978 £400**

Not up to modern standards sonically, but a great symbol of the cassette deck art nonetheless.



**REVOX A77 1968 £145**

The first domestic open reel that the pros used at home. Superbly made, but sonically off the pace these days. B77 better, but couldn't match the Japanese.



**SONY WM-D6C 1985 £290**

Single capstan transport on a par with a Swiss watch, single rec/replay head better than most Naks. Result: sublime.



**DIGITAL RECORDERS**

**SONY MDS-JE55SES 2000 £900**

The best sounding MD deck ever, thanks to awesome build and heroic ATRAC-DSP Type R coding.



**PIONEER PDR-555RW 1999 £480**

For a moment, this was the CD recorder to have. Clean and detailed.

**MARANTZ DR-17 1999 £1100**

Probably the best sounding CD recorder made; built like a brick outhouse with a true audiophile sound and HDCD compatibility.



**KENWOOD DM-9090 1997 £500**

Serious and sophisticated sound thanks to well implemented ATRAC 4.5; surprisingly musical MD recorder.

**SONY TCD-8 DATMAN 1996 £599**

Super clean sound makes this an amazing portable, but fragile.

**LOUDSPEAKERS**

**ACOUSTIC RESEARCH**

**ARI8S 1978 £125**

Yank designed, British built loudspeaker became a budget staple for many rock fans, thanks to the great speed from the paper drivers, although finesse was most definitely not their forte...

**BBC LS3/5A 1972 £88**

Extremely low colouration design is amazing in some respects - articulation, stage depth, clarity - and useless in others (both frequency extremes). Came in wide variety of guises from various manufacturers building it under licence. Partner with Rogers ABI subwoofers for an extra two octaves of bass!



**LOWTHER PM6A 1957 £18**

**EACH**

This seminal full-range driver is still manufactured. High sensitivity, as fitted to many classic horn designs.

**TANNOY**

**WESTMINSTER 1985 £4500**

Folded horn monsters which certainly sound good if you have the space. Not the last word in tautness but can drive large rooms and image like few others.



**JR 149 1977 £120**

Infamous cylindrical speaker that was ignored for decades but now back in fashion! Based on classic KEF T27 / B110 combo as seen in the BBC LS3/5a. Doesn't play loud, needs a powerful transistor amplifier, but rewards with fine clarity in imaging.



**SPENDOR BCI 1976 £240**

Celestion HF1300 tweeter meets bespoke Spendor Bextrene mid-bass unit - and the result is a beautifully warm yet well focussed sound. A little bass bloom necessitates careful low-stand mounting, but these prove that the seventies did have some fine designs after all!

**QUAD ESL57 1956 £45**

**EACH**

Wonderfully open and neutral sound puts box loudspeakers to shame. Properly serviced they give superb midband performance, although frequency extremes less impressive. Ideally, use in stacked pairs or with subwoofers and supertweeters.



**KEF R105 1977 £785**

Three way Bextrene-based floorstander (complete with castors!) gave a truly wide-band listen and massive (500W) power handling. A very neutral, spacious and polite sounding design, but rhythmically well off the pace. The quintessential nineteen seventies loudspeaker.

**IMF TLS80 1976 £550**

Warm and powerful nineteen seventies behemoth with transmission loading and a mixture of KEF and Celestion drive units. Impressively physical wideband sound but rhythms aren't its forte.

# TUBE SHOP.COM

## WHAT'S HOT AT THE TUBESHOP



They're now considered essential as far as I'm concerned and bring a new meaning to the term "Simply the best!"

Roy Gregory - Hi-Fi+ magazine

Tube Rings  
by Duende Criatura

## WHAT'S COOL AT THE TUBESHOP



Cryogenically treated tubes really make a difference!

Read all about it online:

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



[WWW.TUBE-SHOP.COM](http://WWW.TUBE-SHOP.COM)  
OR CALL US 0870 9220404

THE LARGEST SELECTION OF QUALITY TUBES ONLINE

MANTRA AUDIO

Specialist Suppliers of Audio Accessories  
[www.mantra-audio.co.uk](http://www.mantra-audio.co.uk)

PRICES INCLUDE P & P FOR UK DELIVERY 1 TO 10 DAYS - SEE WEBSITE FOR FULL PRODUCT RANGE AND SHIPPING CHARGES TO EU & WORLDWIDE

CARTRIDGE SELECTION		STYLUS	HEADPHONE SELECTION	
Goldring Elektra	£33	£28	GEX	£24
1006	£76	£62	GEX	£52
1012 GX	£95	£76	GEX	£67
1022 GX	£124	£100	GEX	£86
1042	£143	£114	GEX	£100
Eroica LX/H	£133	£109	GEX	N/A
Elite	£232	£190	GEX	N/A
Audio Technica AT 95 E	£23			£16
AT 110 E	£28			£17
AT OC9 ML II	£330	£295	EX	
Grado				
Prestige Black	£40			£27
Prestige Gold	£110			£73
Shure M 97 XE	£98			£58
V 15 V xMR	£304			£204
Sumiko Blue Point Special	£235	£200	EX	
Blackbird	£585	£500	EX	
<b>HI FI ACCESSORIES</b>				
Goldring PA1 Phono Amplifier				£60
Goldring Super Exstatic Brush				£13
Shure SFG2 Stylus Force Gauge				£24
Milty P1xall II Roller plus Refill				£16
Milty Zerostat Neutralising Gun				£38
Bib Universal Standard Headshell				£15
QED J2P Mini-Phono Interconnect				£22
GRADO Award winning Headphones				
Prestige Series				
	SR-60			£75
	SR-80			£90
	SR-125			£140
	SR-225			£175
	SR-325			£265
Reference Series				
	RS-1			£635
	RS-2			£450
<b>REPLACEMENT STYLI</b>				
Swiss Quality Diamond Styli				
ADC	XLM Mk III			£17
Akai	AN 5, AN 60			£13
	AN2, AN 70			£15
Alwa	AN11			£13
Dual	DN 145 E, DN 165 E			£17
JVC	DT 55, DT 60			£13
National	EPS 24 CS, P 30 D, P 33 D			£13
Ortofon	FF15/VMS20 EII, OM20			£17
Pioneer	PN 210/220/240			£13
Shure	N 75 C, SC 35 C			£13
	N 75 ED T2, N 75 EJ T2			£17
	N 95 ED/EJ, N 75 3 (78)			£17
	VN 35 E			£20
	N 97 HE, VN 35 HE			£27
Sony	ND 142/155 G, CN234			£13
	ND 143/150/200 G			£15
Stanton	D 681 EEC			£21
***Over 500 Styli Types Stocked***				

GEX - Goldring new for old exchange price for any make/type of cartridge  
EX - Exchange price for any moving coil cartridge

Order direct online or Tel/Fax (01757) 288652  
MANTRA AUDIO (HFW), 22 GARTH AVENUE, NORTH DUFFIELD, SELBY, NORTH YORKS YO8 5RP

## The Missing Link



State of The Art Be-Spoke Audio Cables  
Hand Built in Britain



Pure Silver & Cryogenic Treatment Specialists

For Greater Enjoyment of The Recorded Arts  
Contact Mark or Jan

0115 8779089 or 07967 859333

[www.the-missing-link.net](http://www.the-missing-link.net)

**MAGNEPLANAR SMGA198X £800**

Technological loudspeaker with genuinely musical abilities; fast, smooth, open, dry.



**MISSION 770 1980 £375**

Back in its day, it was an innovative product and one of the first of the polypropylene designs. Warm, smooth, clean and powerful sound.



**MISSION 752 1995 £495**

Cracking Henry Azima-designed floorstanders combined HDA drive units and metal dome tweeters with surprisingly warm results. Benign load characteristics makes them great for valves.

**HEYBROOK HBI 1982 £130**

Peter Comeau-designed standmounters with an amazingly lyrical yet decently refined sound. Good enough to partner with very high end ancillaries, yet great with budget kit too. A classic.

**CELESTION SL6 1984 £350**

Smallish two way design complete with aluminium dome tweeter and plastic mid-bass unit set the blueprint for nineteen eighties loudspeakers. Very open and clean sounding, albeit course at high frequencies and limp in the bass. Speakers would never be the same again...



**LEAK SANDWICH 1961 £39 EACH**

Warm sounding infinite baffle that, with a reasonably powerful amplifier can sound quite satisfying.



**QUAD ESL63 1980 £1200**

An update of the ESL57, with stiffer cabinets. Until the 989, the best of the Quad electrostatics.



**YAMAHA NS1000 1977 £532**

High tech Beryllium midband and tweeter domes and brutish 12" woofers in massive sealed mirror image cabs equals stunning transients, speed and wallop allied to superb transparency and ultra low distortion. Partner carefully!



**MISSION X-SPACE 1999 £499**

The first mass production sub and sat system using NXT panels is a sure-fire future classic - not flawless, but a tantalisingly unboxy sound nevertheless!



**Billy Vee**  
SOUND SYSTEMS

**SAVE UP TO 50% ON EX-DISPLAY BARGAINS**  
SOME AS NEW (MARKED\*) 24HR DEL ONLY £5. CHECK STOCK BEFORE ORDER. S/H = Pre-Owned Unit  
CALL SALES:(020) 8318 5755 or 8852 1321 - 248 Lee High Road, London, SE13 5PL

Arcam DV27 DVD Player (6mth G/tee) . . . . .	(1598.00)	£549.00	Niam CD5i CD Player - E/Dem (1Yr G/tee) . . . . .	(825.00)	£599.00
Arcam FMJ CD33 CD Player (2Yr G/tee) . . . . .	(1349.00)	£945.00	Naim Nait 5i Amplifier - E/Dem (1Yr G/tee) . . . . .	(699.00)	£525.00
Arcam FMJ AV8 Preamp THX Ultra (2Yr G/tee) . . . . .	(3149.00)	£2190.00	Naim Ariva Speakers - Maple E/Dem (1Yr G/tee) . . . . .	(1250.00)	£795.00
B&W 703 Speakers - Cherry (2Yr/Gtee) . . . . .	(2000.00)	£1399.00	Naim Flatcap 2 Power Supply - E/Dem (1Yr G/tee) . . . . .	(550.00)	£395.00
B&W Nautilus Sig 805 - Tigers Eye inc Stands (2Yr/Gtee) (2900.00)		£1675.00	Naim NAC 552 Preamp - E/Dem (2Yr G/tee) . . . . .	(12000.00)	£7995.00
Denon AVR 2803 AV Amplifier (1Yr G/tee) . . . . .	(649.00)	£399.00	Naim Nap 500 Power Amp - E/Dem (2Yr G/tee) . . . . .	(11998.00)	£7990.00
Denon DV1400 Multi-format Player E/Dem (1Yr G/tee) . . . . .	(399.00)	£299.00	Naim NAC102 Preamp S/H (1Yr G/tee) . . . . .	(1175.00)	£699.00
Denon DV2900 Multi-format Player E/Dem (1Yr G/tee) . . . . .	(899.00)	£499.00	Naim CDX CD Player S/H (1Yr G/tee) . . . . .	(2470.00)	£1395.00
Linn Majik Phono Amplifier S/H (1Yr G/tee) . . . . .	(945.00)	£625.00	Naim 250 Power Amplifier S/H (1Yr G/tee) . . . . .	(1910.00)	£895.00
Linn Kairn Pro Line Preamp S/H (1Yr G/tee) . . . . .	(1400.00)	£599.00	Naim NBL Speakers - Beech (2Yr G/tee) . . . . .	(7700.00)	£3795.00
Linn 5103 AV Processor - Silver (1Yr G/tee) . . . . .	(4500.00)	£1995.00	ProAc Studio 125 Speakers Maple (2Yr G/tee) . . . . .	(999.00)	£699.00
Linn 5125 Power Amplifier (2Yr G/tee) . . . . .	(1800.00)	£1095.00	REL Q100e Sub Woofer - S/Hand (1Yr G/tee) . . . . .	(559.00)	£219.00
Linn 2250 Power Amplifier (2Yr G/tee) . . . . .	(1995.00)	£1195.00	Sugden Ampmaster Bijou Preamp (1Yr G/tee) . . . . .	(689.00)	£475.00
Linn Trikan Centre Spkr - maple (2Yr G/tee) . . . . .	(549.00)	£299.00	Sugden A21p Power Amplifier (1Yr G/tee) . . . . .	(823.00)	£575.00
Linn Keltik Spkr - Wal inc Aktive Cards (2Yr G/tee) . . . . .	(6000.00)	£1595.00	Vibe Zeta SubWoofer (2Yr G/tee) . . . . .	(600.00)	£379.00



Sovereign Cryo valves have been selected and graded to meet the demanding standards valve amplifiers require today. Sovereign's years of experience testing & listening to a wide variety of valves have revealed that only a very small portion of those tubes commercially available are suitable for the demanding audiophile.

Sovereign sets a standard of performance based on original British military specifications where the type was available or EIA of America specifications for non-British types. All are carefully selected by experts using a combination of proven test technology & experience gained in over 40 years of experience in military & industrial British manufacture & design of thermionic valves. The valves are tested for noise, microphony, grid leakage, symmetry between two halves on double triodes & audio performance. (Analyzing distortion properties in the audio bandwidth.) Anode current (Ia) & transconductance (Gm) are measured at a given audio excitation. All small pin devices B9A etc. are heavily plated in 24 Carat Gold increasing the surface area of conduction.

Once selected the valves are then processed in a Deep Cryogenic chamber, using a special process incorporating liquid nitrogen & other proprietary techniques. The cryogenic super cooling treatment pre-ages the devices. When valves are originally manufactured, the small internal metal parts are riveted and welded together causing stress fractures. Cryogenic treatment removes these metal distortions, increasing audio performance.

Valves have a great effect on the sound of your amplifier, the choice of a premium audio device is paramount, the use of commercial grade devices could impair the stability of sound quality over the operating life of the unit. On average, only a 30% yield of a 100,000 production run of valves is fully suitable for audio use, even for NOS valves (New Old Stock).

Don't waste years listening to those valves you thought were good enough, select Sovereign as your preferred choice of valve & reap the audible benefits these superb devices will bring to your system.

CALL 01269 844771 [www.tubetechnology.co.uk](http://www.tubetechnology.co.uk)

## Listen to the music... NOT the components

If you want the best possible sound from your loudspeakers then look no further than ClarityCap audio grade capacitors.



Handmade in the UK from metallised polypropylene film in axial or new 'disc shaped' formats, these capacitors offer an extremely wide standard range of capacitances and voltages or they can be custom-made to your own specifications.

Already invested in by some of the leading names in the loudspeaker industry, isn't it time you tested them!

To receive your 16-page technical brochure please telephone 01233 731137, email: [enquiries@expotuscomponents.com](mailto:enquiries@expotuscomponents.com) or visit our website: [www.claritycap.co.uk](http://www.claritycap.co.uk)



**ClarityCap**  
AUDIO GRADE CAPACITORS



## The Cartridge Man



The difference is profound  
The new Cartridge Man Cartridge Isolator now available

020 8688 6565

Website: [www.thecartridgeman.com](http://www.thecartridgeman.com)

## Absolute Demos

Audiogram MB2 - Integrated Amplifier	£265.00
Audiogram MB1 - Amplifier	£219.00
Audio research VT100 MKIII - Valve Amplifier	£4650.00
Audio research 150.2 - Class T digital amplifier	£1494.00
Audio research 150.M5 - Class T 5 ch digital amplifier	£4025.00
Copland CSA301 MKI - Valve Preamplifier	£699.00
Copland CSA303 - Hybrid Preamplifier	£650.00
Copland CTA504 - Valve Amplifier	£1099.00
Copland CVA 535- 5 X125W amplifier	£1700.00
Jadis Orchestra - CD Player	£899.00
Krell KAV250P - Preamplifier	£1499.00
Krell KPS 25Sc - Preamplifier/CD player CAST2	£18995.00
Krell KSL - Preamplifier	£800.00
Martin Logan Odyssey - Electrostatic Loudspeakers	£4700.00
Martin Logan Quest - Electrostatic Loudspeakers	£2400.00
Martin Logan Script - Electrostatic Loudspeakers	£1225.00
McIntosh C200 - 2 chassis Preamplifier	£4200.00
McIntosh MC2000 - Ltd. edition Valve Amplifier	£9000.00
McIntosh CR16 - Multizone control system	£2299.00
McIntosh MC58 - Amplifier	£1719.00
McIntosh MC202 - Amplifier	£1999.00
McIntosh MHT100 - Home theatre processor	£3199.00
PS Audio Ultralink II - DAC	£989.00
PS Audio Reference Link - Digital Preamp	£1999.00
Sonus Faber Concertino Home Loudspeakers	£399.00
Theta Digital David II - CD/DVD Drive	£2999.00
Wilson Audio CUB - Loudspeakers Silver	£2900.00
Wilson Audio CUB II w/stands Black	£5499.00
Wilson Audio System 6 - Loudspeakers Cashmere	£12500.00
Wilson Audio Witt II Loudspeakers Black	£5400.00
Z Systems RDQ1 - Transparent Digital Equalizer	£1850.00

**NO GREY IMPORTS - ALL EQUIPMENT COMES WITH 1 YEAR FULL WARRANTY**

# World standards

These are the best products we've heard that are currently on sale in the UK, complete with the date they were originally launched and their current retail prices. Watch out for regular updates...!

## TURNTABLES

**AN TT1/ARM ONE/IQ11998 £725**  
Redesigned Systemdek IIX now off the pace, but the arm and cartridge are both star performers.

**LINN LP12/ LINGO 1973 £2100**  
The quintessential belt drive superdeck offers a beguilingly musical midband at the expense of lumpy bass and nebulous imaging. Latest Lingo brings a new lease of life, with even more punch and polish.

**MICHELL TECNODEC 2003 £575**  
Superb introduction to Michell turntables on a budget. Top quality build and elegant design make it the class of the mid-price field right now.

**MICHELL GYRODEC SE2002 £870**  
Its beauty is more than skin deep - superbly build and finish allied to clever design equals class leading performance. Latest DC motor with 'Never Connected' PSU make it all the more unassailable.

**MICHELL ORBE SE 2002 £1916**  
Cost-no-object evolution of the Gyro adds massy acrylic platter and two-stage isolation. Fantastically capable all rounder with commanding, powerful, detailed sound that gets the best from almost any arm and cartridge



**PRO-JECT DEBUT II PHONO SB 2002 £170**  
Fuss-free all in one starter turntable, complete with built in phono stage. Not a star performer, but a fine midi system upgrade all the same.

**REGA P3 2000 £298**  
Great entry level audiophile deck with fine bundled tonearm. Tweakable, and responds well to careful siting on a Base platform.

**REGA P25 2001 £619**  
Until the TecnoDec, the best mid-price turntable package. Fine build and elegant styling. Clean, open sound but limited at frequency extremes in absolute terms.

**SME MODEL 10A 1995 £3333**  
Exquisitely engineered deck and arm combo, but dry and clinical sounding compared to rivals. Accomplished performer with classical music, nonetheless.

**CLEARAUDIO REFERENCE 1996£4,070**  
Fine bass articulation and power allied a stunningly open and atmospheric midband and beautifully etched treble makes this one of the very best sounding turntables at any price. Michell's Orbe offers marginally more impactful bass, but can't touch that amazing mid. Exquisite.

**ORIGIN LIVE AURORA GOLD 2004 £1,470**  
Seminal 'entry level high end' deck showing Mark Baker's characteristically obsessive attention to detail. The result is an extremely wide open and natural sounding machine that lacks the Michell GyroDec's slightly 'mechanical' nature - along with some of its scale and accuracy. Ideal for those seeking that classically beguiling vinyl sound.



**GOLDRING GR-1 2004 £140**  
Essentially a Rega P2 built down to very low price and bundled with a decent Goldring MM, this is cracking value for money. Head and shoulders above its immediate rivals, it offers a surprisingly musical and detailed sound that will stun those new to vinyl - which is precisely what it was designed to do.

**THORENS TD190 2003 £290**  
Ease of set up and use, allied to fully automatic operation mean that, although hardly the last word in performance, this deck is most certainly a model of convenience.

**ROKSAN RADIUS 5 2003 £750**  
Fantastic value allied to intelligent, interesting and 'out of the box' design makes for a wonderful entry-level superdeck. Open and musical sound is more inviting than Michell TecnoDec rival, and the bundled Nima Unipivot arm is a superstar.



**MICHELL TECNOARM A2003 £399**  
John Michell's brilliant reworking of the Rega RB250 theme, using blasting and drilling techniques usually seen in motorsport! The result is the best sounding arm at £400, and as good as most at four times the price. Runs SMEV very close in all except bass, and betters it for musicality. Stunning.

**ORIGIN LIVE AURORA 2003 £1600**  
Cleaner than a Linn LP12 and warmer and more mellifluous than a Michell GyroDec - but lacks the latter's incision and dimensionality. When fitted with an OLI arm, this package is all many will ever want...

**CLEARAUDIO REFERENCE 2003 4,000**  
The company's best value vinyl spinner; good enough to get the best from almost any tonearm and cartridge combination. Brilliantly open and neutral sound; superlative pitch stability; stunning build and styling - Michell Orbe does most of this at half the price, however.

## TONEARMS

**TECHNICS SL1200/III 1973 £395**  
Slick build makes it a respectable performer, although the cheap arm limits it - fit a Rega RB250 and it's suddenly a serious mid-price machine.



**HADCOCK 242 SE 2000 £649**  
Latest of a long line of unipivots, with added mass, revised geometry and better finish. Musical like few others at or near the price.

**LINN EKOS 1987 £1700**  
Subtle mods over the years, including revised bearings and the recent new wiring has kept it a serious contender in the superarm stakes. Lacks the SME's slam, the OL's clarity or the ARO's emotion, but has a feisty musicality all of its own.

**ORIGIN LIVE ILLUSTRIOUS 2002 £1570**  
A modern superarm with battleship build. Extremely strong, even and open sound in the mould of the late, lamented Zeta, plus fine tonal colouring. Exquisite.



**NAIM ARO 1987 £1425**

Charismatic unipivot is poor at frequency extremes but sublime in the midband; truly emotive and insightful.

**ORIGIN LIVE SILVER 2502001 £625**

This fully developed and expertly fettled Rega boasts a superbly even, transparent and tuneful sound. Gives away only a small degree of finesse and dimensionality to top arms.

**REGA RB250 1984 £112**

Sold through Moth Marketing, this is capable far beyond its price point, with a tight, lean and detailed sound. Responds brilliantly to Origin Live counterweight modification, and well to rewiring.

**SME 309 1989 £767**

Entry level SME complete with cost-cut aluminium armtube and detachable headshell. Tight, neutral sound with good tonality, but lacks the IV's pace and precision.

**SME SERIES IV 1988 £1127**

Offers nine tenths of the SMEV's magic at just over half price. Exquisitely built and finished, and a design classic. Faces stiff competition these days, but lovely nevertheless.

**SME SERIES V 1987 £1614**

The so-called Best Pickup Arm in the World isn't, but comes close. Vice-like bass with incredible weight, ultra clear midband and treble. Does everything except beguile the listener.

**CARTRIDGES****ORTOFON KONTRA' B1999 £720**

Surprisingly articulate performer by Ortofon standards. All the brand's usual polish and detail allied to real vim. Loves making music!

**AUDIO TECHNICA AT-110 1984 £29**

Great starter cartridge that's refined, detailed and musical beyond its price.

**DYNAVECTOR DV10X52003 £250**

A distant descendent of the classic Ultimo 10X, this has warmth and sweetness in spades, allied to a punchy bass. Beats G1042 comfortably.

**GOLDRING G1042 1994 £135**

One of the best MMs going, with sweet and extended treble and punchy, muscular bass.

**LYRIA LYDIAN BETA 1998 £600**

An altogether more beguiling listen than the MC30S, although not quite as incisive. Superb all rounder, nonetheless.

**SUMIKO BPS 1995 £250**

Charismatic performer with rhythm aplenty, but in other respects way off the pace – lacks smoothness and sophistication of the DV10X5.

**LYRA PARNASSUS DCT1997 £1895**

Jonathan Carr's masterpiece is a brilliantly lyrical and fluid performer, with a deliciously sweet tone and immense subtlety and polish.

**ORTOFON MC2SFL 1994 £285**

Strong budget MC with a cleaner and more detailed sound than the Dynavector; more sterile and less emotive, however.

**ORTOFON MC30 SUPR'1995 £550**

Beautifully clean and detailed device with real finesse, albeit a tad mechanical sounding.

**DYNAVECTOR DV20X-H2003 £395**

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.

**MUSIC MAKER 1999 £575**

When mated with a good quality arm, this hand finished high-output pick-up gives an ear-boggling account of itself. Very high compliance ensures maximum information retrieval. An absolute (grain orientated) gem.

**SHURE V15XMR 1994 £350**

The most musical MM yet made – brilliantly dynamic and punchy in the classic Shure mould, yet refined and tidy too.

**KOETSU RED 2004 £1,600**

Although the new Koetsus have lost some of their 'romance', you'll not hear a more lyrical and emotive performer. Startlingly 'analogue' nature makes rival Ortofon and Clearaudios sound frigid.

**ORTOFON KONTRA PUNKT C 2004 £1,000**

The most secure tracking MC we've heard; its super clean, fast, detailed and neutral sonics make it a brilliant partner to warmer sounding turntables.

**DIGITAL DISC PLAYERS****CREEK CD50II 2004 £699**

Extensive revisions make this an altogether more beguiling machine, and one of the best at its price. Extremely musical sound that's surprisingly upfront for a Creek design. Excellent mid-price purchase, with only its Marantz rival to challenge it.

**CYRUS CDB 2003 £1000**

Highly incisive, engaging, grippy and dynamic sound, but needs careful matching to smooth ancillaries. Optional PSX-R adds bass and dimensionality.

**LINN GENKI 1999 £995**

Undeniably fast, lithe, musical and fun - but some won't take to its dry, wry character. Works best in all-Linn systems, where it really rises to the challenge!

**ARCAM FMJ CD33T 2003 £1,300**

Superbly detailed midband allied to excellent bass extension makes this a powerfully musical machine in the best traditions of Arcam CD spinners. Nothing to criticise at the price, everything to recommend it!

**LINN IKEMI 1999 £1950**

Has the brilliant focus and clarity of the previous Karik III with a dose more tonal richness and polish. More grip and poise than most at any price - still superb!

**MARANTZ CD17 II 2002 £800**

Oft-overlooked middleweight boasts a truly beguiling sound with lots of tonal flavour. Sits awkwardly between the £600 and £1000 price points, where some brilliant value buys reside, though.

**NAIM CDX2-XP52 2003 £4950**

A fine high end machine, but add an XPS2 and it becomes one of the most charismatically engaging 16bit machines we've ever heard. Plays music with such passion!

**NAIM CDS3 2003 £7050**

The most polished Naim CD to date; tremendously capable and musical, but lacks the Rotweiler quality of the cheaper CDX2-XPS2.

**PHILIPS DVD9635A 2003 £400**

Creamy CD sound allied to superb SACD and DVD video playback makes this brilliant value for money.

**REGA PLANET 2002 £498**

Rhythmic and beguiling performer, although lacks the warmth of tone needed to better its Marantz rival. Superb ergonomics and design, nonetheless.

**MARANTZ SA-1751 2003 £1400**

Brilliant CD playback comes close to the best at any price, while SACD performance is almost as convincing - superbly warm and three dimensional nature makes listening a joy. However, the lack of DVD-Audio decoding and poor feature count makes it look middling value compared to some of the universal players here.

**REGA JUPITER 2002 £1000**

A Planet on steroids, this machine adds depth and breadth to its baby brothers already impressive sound. Good, but facing stiff competition.

**MUSICAL FIDELITY TRI-VISTA21 DAC 2003 £1,200**

Superbly neutral and expansive sound makes this offboard digital-to-analogue convertor an excellent upgrade to any mid-price CD player – fed by a decent transport, few 16bit players at any price come close.

**CAMBRIDGE AUDIO 640C 2003 £250**

Tremendously well-rounded yet engaging sound makes this the best budget silver disc spinner by far. Build quality is excellent at the price, and the styling bang up to the minute. Blistering value for money.

**CREEK CD50II 2004 £699**

Extensive revisions make this an altogether more beguiling machine, and one of the best at its price. Extremely musical sound that's surprisingly upfront for a Creek design. Excellent mid-price purchase, with only its Marantz rival to challenge it.

**DENON DVD-2200 2003 £499**

Superb do it all mid-price player; fine DVD-A and SACD sound allied to excellent video performance will be all many could ever want. Ultimately it's a little bright and mechanical sounding, but you have to go into high end territory to truly better it. Stunning value.

**PANASONIC DVD-S75 2002 £120**

Real ability and fine measured performance for an unbelievably low price. Impressive in its own way, if not truly audiophile. If you just want a cheap DVD spinner with DVD-Audio as a bolt-on goodie, this is the one.

**PIONEER DV-868AVI 2003 £799**

Pioneer's most accomplished mid-price machine to date, this boasts full DVD-A/SACD playback, a welter of facilities and the all-important HDMI video and i-Link audio digital outputs, making it nigh-on future-proof. Factor in fine – if not outstanding – sound and superb pictures and it's practically impossible to fault.

**SONY SCD-XB790 2003 £250**

Quite unlike any other budget Sony CD spinner we've heard, here's a very 'analogue' sounding machine that's smooth and warm and even. Factor in fine SACD playback and this machine is a brilliant budget buy – unless you want DVD-Audio that is, which it lacks.

**ORELLE CDI00EVO 2003 £1,200**

Extremely engaging and musical sound, but maybe a tad too bracing for some tastes. Superb aesthetics complete an attractive package.

**ARCAM CD73 2004 £400**

The best all rounder at the price; unfailingly smooth and couch sound allied to fine build and attractive styling makes this a worthy upgrade to entry-level designs.

**ARCAM DV78 2004 £800**

We've not found a more capable 'real world' DVD player; peerless picture and CD sound at the price, although lack of universal playback will deter some.

**ARCAM FMJ CD33 2004 £1,300**

Consummate smoothie with an unusually organic and natural sound, but lacks the command of some rivals. Its all round sonic, aesthetic and ergonomic polish will endear it to many.

**CAMBRIDGE AUDIO****AZUR 640C 2004 £250**

The best budget CD spinner we've heard; warm and satisfyingly musical; fine build and aesthetics and that remote control make for unarguable package at the price.

**DENON DVD-A11 2004 £1,600**

Classic Japanese 'battleship' DVD universal machine does practically everything superbly, with no obvious weak points except the undistinguished CD sound. Top value.

**EXPOSURE 3010 2003 £1,200**

One of the most 'analogue' CD players, second only to the Shanling. Wonderfully beguiling balance leaves you looking for the tube output stage.

**LINN CLASSIC MOVIE****SYSTEM DI 2002 £2,500**

Superb ergonomics and performance from this one-box beauty. The best 'home theatre in a box' you can buy.

**LINN UNIDISK 1.1 2004 £6,500**

Surely the ultimate universal DVD player; superb in every department, but its CD playback shines brightest considering it's not a bespoke Red Book machine.

**MARANTZ CD7300 2003 £350**

Superlative build and styling for the money, and the sound is as good as you'll get below £600. Smooth, detailed and engaging beyond its price.

**MUSICAL FIDELITY X-RAY V3 2004 £900**

Striking looking mid-price stunner with very even, accurate and even sonics; perfect for those seeking detail and neutrality over character and/or colour.

**NAIM CDSI 2004 £825**

The most engaging mid-price CD player on the market, but with a surprisingly velvety sound. Delightful build and iconic styling make this one of Salisbury's true classics.

**PIONEER DV-868I 2003 £800**

The best mid-price universal player right now; CD sound is respectable, SACD and DVD-A impressive and the video truly special. Does everything very well for the price.

**SHANLING SCD-T200C 2004 £2,150**

Superb SACD player with tube output stage; arresting looks and truly special sound; be sure to go for 3DAcoustics version for best sound and UK aftersales support.

**SONY SCD-XA3000ES 2003 £600**

Surprising mid-price SACD spinner with multi-channel capability; sweet sound; not the best at the price but certainly the most versatile.

**SONY SCD-XA9000ES 2003 £1,600**

Slick, beautifully built high end SACD player with very transparent, if rather dry, sound. Unexpectedly sweet CD playback but not the most gripping at the price.

**STELLO DP-200 2004 £1,495**

Brilliant do-it-all upsampling DAC preamp with headphone output and phono in. One of the best digital to analogue converters around, allied to mind-boggling flexibility.

**DIGITAL RECORDERS****APPLE IPOD 40GB £399**

Genre-defining best of breed, thanks to supreme ergonomics and build allied to fine sound.

**PIONEER PDR-609 2001 £200**

Brilliant value CD recorder that makes excellent recordings from its digital inputs. Half decent digital converters, too.

**PHILIPS DVDR880 2003 £370**

Poor CD audio playback, but makes great DVD video recordings and boasts fine ergonomics. Top AV value.

**SONY RCD-W3 2002 £250**

Usual superb Sony ergonomics make for nonsense budget buy. Fine direct digital copies, but analogue input poor. Middling sonics, but there's a digital output!

**YAMAHA CDR-HDI300E2002 £600**

HD means MD-style ease of editing, but compromises recording quality ever-so slightly. Add decent CD replay and it's a fine all rounder nonetheless – top value.

**ONKYO MB-S1 2001 £1100**

An interesting machine complete with MP3 functionality, but high price, fussy ergonomics and over-smooth sound make it mediocre value against the Yamaha.

**PHONO STAGES****CREEK OBH-21SE 2003 £250**

Musically enjoyable yet highly refined for the price – a superb buy. Gives the Dino a real hard time.

**EAR 834P 1993 £400**

Classic tube design with a deliciously warm and expansive sound – shame about the loose bass and veiled treble!

**LINN LINTO 2000 £900**

A musical and incisive performer, with more speed than the Delphini at the expense of detail and tonal colour.

**QED DISCSAVER 1995 £35**

Rhythmic, bouncy sound via battery, although it's bright and forward. Great value, but £100 more on the X-LP is well worth it!

**TRICHORD DINO 2002 £299**

Great all rounder with switchable MM/MC. Fast, fluid and smooth like no others at the price.

**TRICHORD DELPHINI 2003 £995**

The very latest 'Never Connected' variant is easily the best, bringing velvety smoothness to an already refined and engaging performer. Neutral to a fault – some will mourn the passing of the charismatic ISO.

**MUSICAL FIDELITY XLPSV3 2003 £249**

Fine all rounder at the price, which a satisfyingly full bodied sound that's smoother than the Creek but a tad less engaging. Only Trichord's Dino, with its easy upgradability for just £50, reflects badly on this fine bit of kit.

**PROJECT PHONOBOX LE2004 £99**

Great little box that improves on most bundled phono stages found in budget integrated amplifiers, adding detail and definition and a measure of smoothness too. If £100 is all you're prepared to spend, then do it happily on this, but you'll get obviously better results from the £250 brigade.

**WHEST AUDIO PS.20 /MSU.20 2004 £1,000**

Disarmingly clean, smooth, open sound makes this the very best phono stage we've auditioned to date, but some will still prefer the gutsier feel of the Trichord Delphini.

**GRAHAM SLEE ERA GOLD V 2004 £460**

Wonderfully warm, open and musical nature makes this an essential audition for those wanting a top value mid-price phono stage.

**AMPLIFIERS****ARCAM DIVA A65 PLUS 2002 £370**

Classic budget Arcam fare – decently sweet and open with sensible facilities and plenty of power.

**ARCAM FMJ A32 2001 £1150**

For those who value serious power and labyrinthine facilities over outright clarity or grip. A very impressive all rounder with an unusually muscular power amp at this price.

**AUDIO NOTE OTO SE 2000 £1199**

This baby tuber is beautifully sweet and creamy, but lacks solid-state's clarity, detail and incision. Low, low power means speaker choice critical.

**AUDIO NOTE SORO SE2000 £1699**

Wonderfully out-of-the-box sounding tube middleweight is all about sweetness and fluidity. Limited power and loose bass, but little the worse for it.

**CYRUS 6 2003 £600**

Cracking do-it-all mid price design, bringing svelte sound, good connectivity and upgrade-ability and stunning style and build.

**CYRUS 8 2003 £800**

Unusually warm and lyrical for a solid-stater, with decent power and punch. PSX-R adds dynamics, detail and dimensionality.

**MERIDIAN 551 1994 £895**

Evergreen middleweight is a serious performer even now. Tonally a tad dry, it's still very smooth and svelte with bags of power, detail and grip. Class act.

**SUGDEN A21A 1993 £1020**

The most musical amplifier at the price, bar none. Delicious Class A sound is smooth, sweet and wonderfully transparent with true tonal colour. Low power, so match carefully.

**AUDIO RESEARCH VS155 2003 £2,895**

The Naim NAP250's tubular alter ego; oodles of power allied to a strong bass and smooth open midband makes this a brilliant all round amplifier. Lacks the subtlety and finesse of the low powered single-ended brigade but makes up for it with sheer brio.

**CREEK A501R 2004 £550**

Consummately smooth yet engaging sound makes it a serious player at the price, but don't expect Creek's traditional sumptuousness. Fine value nonetheless.

**MONRIO MC207 2003 £1,100**

Powerful, muscular sound allied to real finesse makes this unusual integrated an essential audition at the price.

**MARANTZ PM-17MKII KI MODIFIED 2004 £1,500**

Gloriously offbeat do-it-all design with a truly warm, smooth and three dimensional sound. Think of this as a latter-day Audiolab 8000a - with a good deal more colour and finesse - and you'll have its measure. Lowish power output at the price, but fine real world speaker driving ability.

**UNISON RESEARCH S62002 £1,625**

Tremendously musical and lithe sound with real finesse and subtlety too. Very slightly upper mid forward encourages careful partnering with ancillaries (Revolver R45s are ideal), but overall fantastic value for money.

**ORELLE SA100EVO 2003 £1,200**

Fine build, exquisite design and a wonderfully lucid sound make this an essential audition at the price.

**MUSICAL FIDELITY X-150 2004 £800**

Brilliant shoebox-sized powerhouse is sweeter and more mellifluous than Nait Si, but less taut in the bass. Oodles of power, striking aesthetics, sensible facilities and great build make this a rare bargain.

**NAD C352 2004 £300**

Classic NAD mix of smooth, punchy sound with plenty of watts and sensible, real-world facilities; a great introduction to real hi-fi.

**NAIM NAIT 51 2004 £825**

The most musically engaging integrated at or near the price; real sophistication in sound allied to grip and power aplenty. Iconic styling and great build complete a very pretty picture.

**NAIM NAC282/NAP200 2004 £4,000**

Wonderfully taut bass, lightning midband and incisive treble makes for an enthralling listen; this cracking combination looks great and is superb value too.

**PRIMA LUNA PROLOGUE I 2004 £800**

Unlike almost every other budget tube integrated we've tested, it's nicely built, decently powerful and engineered well enough to let the benefits of tubes shine out loud; sweet, open, liquid. Cracking value.

**STELLO S200 2004 £1,495**

Oodles of smooth, clean power with plenty of pace and pleasing subtlety too. Factor in exquisite build and a low price and this is true audiophile bargain.

**AV AMPLIFIERS****DENON AVR-2803 2003 £650**

Superb mid-price 7.1 channel extravaganza with nearly all the decoding power you'll ever need. Powerful, open and clean sound (at the price) makes it capable with music, and superb on movies. Fine ergonomics and great build makes this receiver hard to beat as an all-rounder.

**NAIM AV2/NAP 150/NAPV 175 2002 £4,190**

Brilliant audiophile multichannel pre-power amplifier combo; not as good with music as a two-channel Naim set-up at the same price, obviously, but surprisingly close. Elegant control layout plus a strong, clean and brilliantly engaging sound make this a serious crossover product. Ultimately lacks power compared to similarly priced Arcam gear, but is more musically involving.

**PIONEER VSA-AX51 2004 £1,000**

The ability to hook up to Pioneer's DV-868i via i-Link (see FireWire) means that this multichannel AV amplifier can do all the digital conversion onboard makes the a very special product, which when used with the aforementioned DVD spinner sounds better even than the sum of its parts.

**HEADPHONE AMPLIFIERS****SUGDEN HEADMASTER2003 £600**

Unusual combined preamplifier and headphone amplifier, this boasts a surprisingly smooth and open sound which suffers only when compared to preamps at twice the price.

**MUSICAL FIDELITY****X-CANS V3 2003 £249**

Mr Michaelson's best headphone amplifier to date, with an extremely open and explicitly detailed sound plus serious bass wallop and the ability to drive any phones to very high levels. Errs towards brightness with some headphones, so match carefully and use smooth cables.

**PREAMPLIFIERS****CREEK OBH-12 2000 £220**

Brilliant value budget passive, giving little away in sonics to far more expensive designs. Connectivity and build aren't great, but what do you expect at this price?

**MF AUDIO PASSIVE PRE2003 £1500**

Novel and effective pre with switchable gain via a transformer, and balanced operation. Open and incisive sound, yet makes most active rivals sound edgy by comparison.

**NAIM NAC112 2002 £660**

Affordable admission ticket to the Salisbury high end experience. Detailed and dynamic, it tonally rather lacklustre.

**LINN LK140 2000 £800**

Dry and grey sounding, but decently dynamic and musically engaging all the same. A worthy worker in a budget Linn system.

**MUSICAL FIDELITY****A308 CR 2003 £2400**

Superb transistor behemoth, worth partnering with any high end CD player or preamp. Oodles of grunt served up with poise and purpose.

**MARANTZ SM-17 2001 £700**

Useful budget power amp with plenty of clean transistor power. Not the most transparent, but sweet and clean all the same. Fine build completes a great value package.

**NAIM NAP150 2002 £795**

Driven by a decent source and a NAC112, this gives highly enjoyable results - providing you like the Naim sound! Taut, fast and feisty despite its relative lack of power.

**QUAD 909 2001 £900**

The latest current-dumper has a smooth and expansive character with enough wallop to drive most loads. Not the most musical, but super value all the same. Lovely build, finish and Quad's legendary service are nice.

**CROFT TWIN STAR 2003 £1750**

With a taste of the best of both tube and transistor, this latest update of the Croft classic is a truly endearing experience.



**GRAAF GM20 OTL 2003 £3,300**

Awesome output transformer-less valve power amp gives dazzling speed and incision, with an ethereal soundstaging and delicious filigree detail. Tremendous punch belies its humble 20W power rating. Factor in one of the most exquisite finishes this side of an Aston Martin and it's very hard to say no...

**SUGDEN MUSICMASTER 2003 £1,300**

Quintessential Class A Sugden sound is not warm as many expect, but extremely neutral and open with real tonal colour. By comparison, tubes sound bloated and standard solid-state hazy and brittle. Superb when partnered with efficient loudspeakers like Revolver R45s, but many will find it underpowered.

**LOUDSPEAKERS****B&W CDMI NT 2002 £750**

Fine clarity and imaging allied to pleasing warmth and great rhythmic cohesion make these standmounters an essential audition.

**CASTLE CONWAY 3 2003 £930**

Superbly smooth and crisp performers, with a big hearted musical sound. Ultimately coloured though, with a slow, plummy bass.

**CYRUS CLS70 2001 £800**

Charismatic performer with a fast, tight and open midband, but lacks cohesion and scale..

**KEF Q1 2003 £250**

Highly polished and articulate standmounters at the price, but demand good ancillaries for best results.

**KLIPSCH HERESY II 1997 £1100**

An outstanding high sensitivity loudspeaker with midrange and treble horns coupled with infinite baffle 12" bass driver. Effortless, fast and accurate.

**LINN NINKA 2001 £995**

Major on rhythms and dynamics, making them an involving listen. Reasonably refined, too - but tonally disappointing.

**EPOS ELS-3 2003 £200**

Plenty of brio and a decent degree of refinement makes this budget baby a fine value contender.

**MISSION 782SE 2003 £900**

Bright and tight design capable of brilliant speed and grip, at the expense of warmth. Demands high quality, high powered ancillaries.

**MONITOR AUDIO B4 2003 £350**

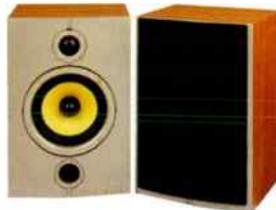
An unusually smooth and lucid performer at the price, and its 3-way design means it drives rooms well. Fine engineering, but build and finish so-so.

**REVOLVER R45 2003 £899**

Wonderfully easy to drive floorstanders that are a dreamboat for tube amplifiers, and great for party-minded transistor users too. Great attack transients, fluid and musical bass and midband and couth treble make them fine all-rounders.

**W'DALE DIAMOND 8.12001 £120**

Still the best baby budget standmounters around. Tight and grippy thanks to Kevlar drivers, but invariably limited in the frequency extremes.

**MORDAUNT SHORT 9142002 £300**

Warm, detailed and articulate performer, but a touch loose in the bass and veiled up top. Fine partner for budget valve amps.

**NAIM ALLAE 2002 £1990**

Taut and grippy like few others, this speaker majors on transient speed. Surprisingly smooth for a Naim box, with nicely etched treble. As always, tonally dry.

**QUAD ESL-988 2001 £3400**

Wonderfully neutral and self-effacing with sublime imaging and projection. Treble lacks extension, bass lacks weight - although the pricier 989 answers the latter resoundingly.

**PERIGEE FK-1L 2002 £5000**

Charismatic Aussie ribbon design with deliciously open mid and treble, allied to fine bass weight. The right room and ancillaries essential. Engaging, musical and powerful sound. Superb.

**TDK S-80 2002 £90**

Ingenious NXT multimedia sub/sat system has a wonderfully even and open sound - like baby electrostatics.

**MARTIN LOGAN CLARITY 2003 £2,895**

Supremely transparent and open with brilliant depth perspective and image projection. The midband is up there with the very best at any price, while the bass and treble integrate well but don't especially shine. Dynamically limited, with middling bass punch, but that's not the point - that deliciously fluid and intricate midband wins great respect.

**TANNOY EYRIS DCI 2003 £699**

The combination of dual concentric treble/midband drivers plus supertweeters make for a very spacious and expansive sounding loudspeaker, albeit one that's a little bright and loose in the bass. An excellent mid-price design well worth auditioning.

**MONITOR AUDIO GR602002 £2,295**

In some ways, these come close to Yamaha's legendary NS1000Ms, thanks to their tremendous clarity, great transients and 'full-fat' wide bandwidth performance. Bright and clean, but never fatiguing or uncouth. A truly accomplished all rounder that gives a real taste of 'super-fi' at a reasonably affordable price.

**TOWNSHEND MAXIMUM 2003 £800**

Another brilliant niche product from Max, these ribbon aspirated supertweeters add space and atmosphere to any good high end loudspeaker, and more surprisingly perhaps make things more fluid and musical too. Superb affordable esoterica.

**KEF Q4 2004 £400**

Hard to argue with the value of this small footprint floorstander; very couth, even, dimensional and detailed sound works well in confined spaces and large rooms alike.

**ELAC FS207.2 2004 £1,000**

Deeply capable mid-price floorstanders, distinguished by superb JET ribbon tweeter which is unmatched by class rivals; engaging, slightly warm nature needs serious transistor power to sing.

**EPOS M22 2004 £950**

Classic Epos blend of speed, attack, power and punch will delight rock and techno fans alike, but classical and jazz buffs will crave more colour and textuality.

**MONITOR AUDIO S8 2003 £800**

Very few can rival this floorstander's all round ability; highly smooth, warm and three dimensional sound allied to an easy load and good sensitivity makes this hard to overlook.

**REVOLVER RW16 2004 £400**

Outstanding standmounter with tonal accuracy and speed that totally belies its price; good sensitivity for a small box makes it great with valve amps too. A budget audiophile classic.

**SPENDOR S3/SE 2004 £950**

A natural successor to the BBC LS3/5a, whose impressive neutrality, imaging and evenhandedness makes this a superior, if less charismatic, loudspeaker.

**TOWNSHEND MAXIMUM 2003 £800**

The best affordable supertweeter we've heard - you'd be amazed at the difference it makes! Classy ribbon design, flexible level settings, cool styling...

**HEADPHONES****JECKLIN FLOAT TWO 1998 £99**

Wonderful panel-like sound from these esoteric-looking headclamps.

**SENNHEISER MX-500 1999 £19**

Our unqualified recommendation for those seeking a serious sounding pair of in-ear phones. Smooth, detailed and musical.

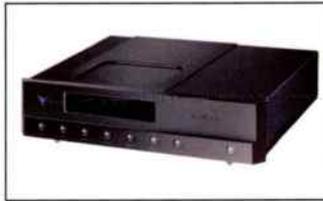
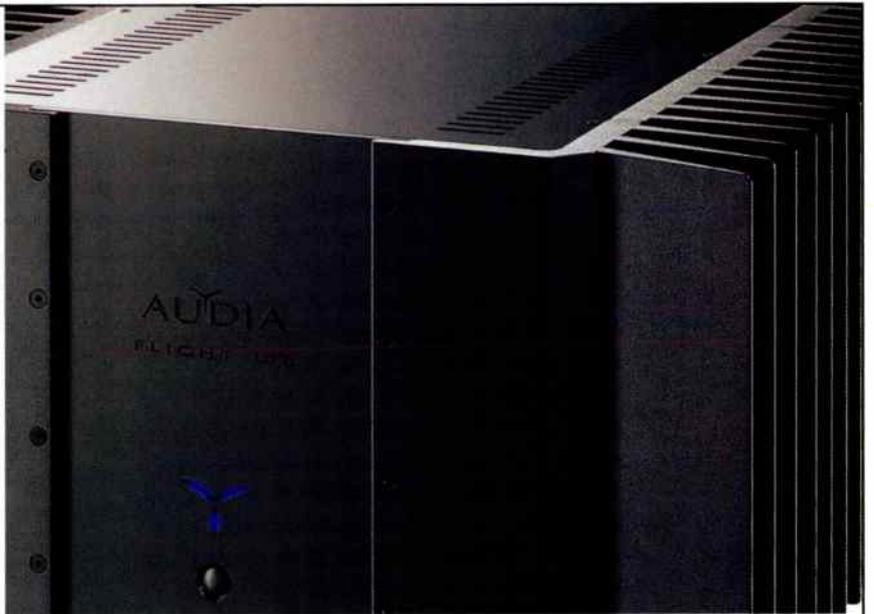
**SENNHEISER PX-100 2002 £29**

Cracking pair of lightweight open back cans ideal for personals, but good enough for real hi-fi use. Superb build allied to a smooth and engaging performance make them the spiritual successor to the HD400s.

**SENNHEISER HD-650 2004 £250**

Not the best headphone in the world, but a superb all round reference all the same. Very crisp, detailed and even sound allied to superlative build and fine comfort makes all most people will ever want. Cable upgrade yields great results.

To hear the fine detail you some times need a little ***muscle***



Distributed in the UK by: Henley Designs Ltd, 01235 511166, [www.henleydesigns.co.uk](http://www.henleydesigns.co.uk), [info@henleydesigns.co.uk](mailto:info@henleydesigns.co.uk)



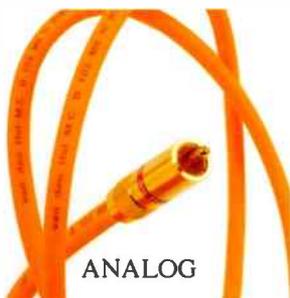
HDMI



SOURCE



SCART



ANALOG



Distributed in the UK by:

Henley Designs, 01235 511166  
[www.henleydesigns.co.uk](http://www.henleydesigns.co.uk)



VIDEO

**SENNHEISER HD-590 1998 £199**

The company's best real-world cans to date. Open and smooth with plenty of detail. Brightly lit midband makes them an ideal partner for a valve headphone amp.

**INTERCONNECTS****WIREWORLD OASIS 5 2003**

£99/M Excellent mid-price design with a very neutral, silky and self-effacing sound. Superb value for money.

**CHORD CO. CHAMELEON 2£90/M**

One of our favourites, these are musical performers with a smooth yet open sound.

**VDH ULTIMATE THE FIRST £260/0.6M**

Carbon interconnects that help you forget the electronics and concentrate on the music. Miraculous transparency. Tight and tuneful bass mixed with air and space results in a crackling cable for the money.

**DNM RESON £40/M**

Neutral and transparent - a steal!

**TCI CONSTRICTOR****13A-6 BLOCK 2003 £120**

Top quality 'affordable' mains outlet block, with fine build and good sonics. Well worth the extra over standard high street specials, which sound coarse and two-dimensional by comparison.

**NORDOST BLUE HEAVEN £150/M**

Some of the fastest and most transparent cable around.

**TUNERS****ARCAM T6 i 2002 £250**

This sleek looking and refined sounding FM/AM tuner isn't the last word in musical involvement, but is fine value, nonetheless.

**ARCAM DT8 i 2003 £650**

A fine radio, hampered only by its seriously compromised DAB medium. Probably the best DAB tuner ever, but one for Digital Radio enthusiasts only...

**CAMBRIDGE AUDIO****DAB300 2003 £150**

Fine ergonomics allied to great ease of use and respectable DAB sound makes this superb value.

**DENON TU-260L MK II 1998 £130**

If you want the best FM sound at the lowest possible price, then this ancient tuner remains peerless after all these years. There are better analogue designs around, but are either near-impossible to find or are now long-deleted.

**CYRUS FM X £500**

Great for Cyrus users, but its dry and precise sound can't match the best of the rest at the price. Worthy, nonetheless.

**MYRYAD MT 100 1999 £600**

One of hi-fi's nice surprises, this is a beautifully designed and built bit of kit with a deliciously sweet and svelte sound which really does justify its high price.

**NAD S400 2003 £600**

Highly accomplished specialist high end analogue tuner with a deliciously open and lucid sound, but it can't quite match the Myryad all the same.

**PRIMARE T2 i 2002 £600**

Seriously accomplished design with mature sonics, great styling and fine build.

**PURE DIGITAL****DRX-702ES 2003 £249**

Great with Digital Radio, but thin a tad sounding on FM at times. It's a top hybrid, nonetheless...

**SYSTEMS****DENON D-M3 i 2003 £250**

Excellent CD receiver package with surprising sonics and a brilliant tuner as a bonus, although its amplifier section doesn't quite match the Onkyo. Optional speakers are mediocre.

**ONKYO CS-210 2003 £300**

Superb value thanks to excellent sound, great build and ease of use, but the bundled 'speakers' rather let the side down.

**LINN CLASSIK 2002 £995**

The best one-box stereo system money can buy; superbly musical sound beats equivalent priced separates. £2,500 Classik Movie Di deserves the same accolade, but adds DVD video playback and surround sound.

**PIONEER NS-DV990 2003 £799.95**

Whiz-bang technology fest with DVD universal playback, discrete display and NXT flat panel speakers. Superb for the spare room or study - truly intelligent and elegant design - but don't expect it to match the sonics of AV separates.

**For all your advertising requirements  
please call 020 7372 6018**

**or email:  
advertising@hi-fiworld.co.uk**

# kit & component suppliers

## COMPONENT SUPPLIERS

### Audio Synthesis

PO Box 50 Nottingham, NG9 1DX.

Tel. 01159 224138 Fax. 01159 229701. Email

salesinfo@audiosynthesis.co.uk Website

www.audiosynthesis.co.uk

VISHAY BULK FOIL RESISTORS - unquestionably the world's finest resistor for audio applications. Thousands of VSRJ 0.3W 300V 5ppm 1% values in stock at the lowest possible prices eg. values up to 20K at £3.50+vat.

HIGH PURITY SILVERWIRE - Teflon insulated >99.99% purity, 0.6mm and 1.0mm diameter.

Ideal for internal wiring, interconnects or speaker cables.

### Audio-Links

7 Fairmont Crescent,

Scunthorpe,

North Lincolnshire, DN16 1EL

Tel: 01724 870432

Fax: 01724 875340

Email: audiolinks@ntlworld.com

Extensive stock of specialist audiophile 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 £3.00 posted.

### Noteworthy Audio Limited,

36 Buckingham Street, Aylesbury,

Buckinghamshire, HP20 2LH

Tel: 01296 422224

email: info@noteworthyaudio.co.uk

web: www.noteworthyaudio.co.uk

Suppliers of a selected range of audiophile valve kits and components. Including the Stoetkit range of valve amplifiers, Audio Note one times oversampling Dac Kit 1.1 and Lowther drive units. Plus a range of components and accessories from Eichmann, Furutech, Wonder Solder, Caig and many more. For a list of the extensive range of manufactured products and the special offers we stock please see our website or call for details. We are open from 9.30 to 5.30 Tuesday to Saturday, with demonstration stock of our kits available - please call in advance to book an audition.

### White Noise

11 Station Road, Bearsden,

Glasgow, G61 4AW

Tel: 0141 942 2460

Fax: 0141 587 7377

Email: david.white38@ntlworld.com

www.wnaudio.com

Supplier of the widest range of standard and audiophile kits for solid state preamplifiers, power amplifiers, headphone amplifiers, power supplies, MM/MC phono stages, active crossovers, balanced i/o modules, and stepped attenuators; more kits in the pipeline. All kits use the highest quality, glass fibre, solder masked, silkscreened, PCBs. We also supply a wide range of active (esp. Japanese transistors and Exicon mosfets) and passive components, gold plated connectors, and silver plated wires. Write, phone or email for a free catalogue. Mail order only.

### Audiocom Int. Ltd

Unit 14 Pier Road, Pembroke Dock,

Pembrokeshire, SA72 6TR

Tel: 01646 685601 Fax: 01646 685602

Web: www.audiocominternational.com

E-mail: info@audiocominternational.com

Extensive range of audio passives and active components including DACT, Black Gate, Sanyo, Elna & Vishay. We are the manufacturer and sole distributor for Superclock 3 master clock & Invisid discrete regulators. Visit our online store for pricing and information. Secure online ordering available.

## LOUDSPEAKER KIT SUPPLIERS

### IPL Acoustics,

Chelsea Villa, Torrs Park,

Ilfracombe, North Devon, EX34 8AY

Tel/Fax: 01271 867439

Please visit website for full catalogue of products:

www.iplacoustics.co.uk

IPL supply a range of 7 high quality transmission line speaker kits, and a full range of Hi Fi and AV speaker kits, including 2 active subwoofers. Drive units are available from Audax, Seas, Morel, Legend (Ribbon Tweeters), and IPL custom built metal coned drivers. IPL also supply; quality capacitors, inductors and cabinet accessories, including Silver Plated PTFE insulated cables.

### WILMSLOW AUDIO

50 Main Street, Broughton

Astley, Leicester, LE9 6RD

Tel: 01455 286603

Fax: 01455 286605

Email: sales@wilmslowaudio.com

Website: www.wilmslowaudio.com

Contact us for a copy of our FREE Full Colour Catalogue or visit our Website with secure online ordering.

The UK's largest supplier of loudspeaker kits, drive units and components.

We also have a range of subwoofer kits and amplifier modules available.

Official UK distributor for ATC, Morel, Peerless, Scan-speak, Seas, Vifa and Volt.

Beware of imitations, we only stock drive units made by the genuine manufacturers. We offer a full repair and upgrade service on most makes of loudspeakers.

## VALVE AND OUTPUT

## TRANSFORMER SUPPLIERS

### Watford Valves

3 Ryall Close, Bricket 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, Sylvania, Telefunken, RCA, MOV and many more. All valves are new boxed and guaranteed. For free price list and specialist advice call or fax Derek Rocco, Watford Valves.

### Chelmer Valve Company Ltd

The Stables, Baddow Park

Great Baddow, Chelmsford, Essex,

CM2 7SY

Tel: 01245 241300

Fax: 01245 241309.

Email: sales@chelmervalue.com

Web Site: www.chelmervalue.com

Premium range of audio valves, tested/selected for low noise, hum, microphony; power valves burnt-in. Huge stock of valves/tubes of all type, audio valves (inc. NOS types), industrial etc. Also large stocks of semiconductor. Many obsolete types.

### Billington Export Ltd

1E Gillmans Trading Estate

Billingshurst, West Sussex RH14 9EZ

Visitors by appointment only

Fax: 01403 783519

E-mail: sales@bel-tubes.co.uk

Web: www.bel-tubes.co.uk

Guaranteed new/old stock CRT's for audio & industrial use Vintage types including Mullard, GEC, Telefunken & RCA. Large stocks of Chinese & Tesla. Major stockists of the Billington Gold brand. Free catalogue on request. Attractive prices on large orders. Minimum orders £100.00

## MODIFICATION SERVICES

### Audiocom Int. Ltd

Unit 14 Pier Road, Pembroke Dock,

Pembrokeshire, SA72 6TR

Tel: 01646 685601 Fax: 01646 685602

Web: www.audiocominternational.com

E-mail: info@audiocominternational.com

Upgrade services available for all CD, SACD & DVD players. With our latest products we are able to advance CD playback way beyond what 'stock' players are capable of resolving. Our extensive knowledge base and upgrade techniques make us world leaders in digital upgrades. Various upgrade solutions are available to suit your budget and desired performance.

## REPAIRS & RESTORATION

The UK's Leading Service & Restoration Specialists. Repairs/Restorations to Modern/Classic/Vintage valve hi-fi, musical and cinema amplifiers, control units etc. We will even build that kit for you or design something special. Please visit our Website at:-

www.audiolabs.co.uk for complete details of our comprehensive services. Alternatively, contact us at:-

Audio Laboratories (Leeds)

3 Kildare Terrace Industrial Estate Leeds

LS12 1DB UK

Tel/Fax +44 (0)113 2440378

### Arkless Electronics.

Tel. 01670 829891

E-mail: arkless.electronics@btinternet.com

Specialist in repairs, restoration and modifications to all amplifiers, valve or solid state, ancient and modern. Design service for companies and hobbyists. Amps, preamps, phono stages, active crossovers, psu's etc custom built to order. Kits built/debugged. Please enquire for any other services. Ex design engineer for well known hi-fi companies.

# mail

Visit our website at [www.hi-fiworld.co.uk](http://www.hi-fiworld.co.uk) or send your emails to [letters@hi-fiworld.co.uk](mailto:letters@hi-fiworld.co.uk). Letter of the month wins a pair of Precious Metals interconnects and one years FREE subscription to HI-FI World.



## Letter of the Month

### THE BIG SOUND

I am the youngest person I know who is into real hi-fi. So I have no one to turn to for advice. I am an avid reader of your magazine, as it seems to review a broad range of products, both new and old. I am having difficulty in finding the correct speakers for my ears. I have been through various amplifier/CD combinations and have now found one that works, or at least I think I have. I cannot be totally sure until I have rested on a pair of speakers that I am happy with.

Speakers I have owned since day one include, Mission 700, 701, 702e, 704, 704as, 753 Freedom, 754 Freedom5s, 782se, B&W DM605 S2 and some old DM model (22?). Cerwin Vega AT100, AI 1000. Kef Q1, Ref 203. I have also listened to PMC FB1, Quad II L and Mission 780. Now I have never been totally satisfied with any of them. I know that one would have to look forever to find a speaker that is totally perfect in every way, but surely there is a speaker that has been made with the detail, vocal expression and out-of-the-box sound from the Kef Reference 203, but with the slam and dynamics of something better than the Cerwin Vega AT100s, with all round speed and a treble that isn't harsh?

At present, I have a Musical Fidelity integrated amplifier with Cambridge Audio Azure 640 CD player and the 754 Freedom 5s mentioned earlier, along with an ISO 18 cleanline mains filter, VDH interconnects and Chord Carnival Silver Plus 'speaker cable. The speakers seem closed in and small sounding up top, with next to no upper bass, but lots of lower bass that seems too gutsy for the driver that lurks beneath. Making for a none too pleasant sound that seems separated along the audio band. I'm thinking of trying the legendary NS 1000M, but am I just pissing in the wind?

Sorry to go on. I like the idea of a big fast driver with top draw, fast mid

and treble units, but if the sound is too harsh I will be back in the same position. I do know I want a big, maybe older speaker, but which one? There aren't enough classic hi-fi reviews! Please help a young person that hopes to keep the hi-fi torch alight. I also want to dabble with vinyl. What turntable/arm/cartridge combo would show me the benefits of the source, on a budget of say £400? Sorry that I have gone on for too long, but I really would appreciate a helping hand.

**G Daykin**

You won't get what you are looking for, because some of the properties you crave, like 'speed', are partly a contrivance that exclude smoothness. Today's metal cone loudspeakers are a fine example.

Seemingly clean, clear and fast you'll notice with many of them that after a while they subtly impose this character upon everything. Warm, fruity woodwinds move into the horn section for example! This homogenising of tonal colour is a warning sign that something is amiss, being just one



**Monitor Audio GR60 - the latter day Yamaha NS1000M. Fast, but good.**

example of false enhancement.

Unfortunately, the corollary to this is that a truly balanced loudspeaker will sound distinctly unimpressive by way of contrast. The best example in my books is the Quad electrostatic, preferably in tuned up (by One Thing) original

ESL57 form. There's nothing to touch this as an ultimate, but don't expect to be impressed until you realise that the loudspeaker really shouldn't by trying to impress you, the music should.

In my books the Yamaha NS1000 did have a good midrange and treble, as well as superb imaging, but its bass quality was always questionable and its sensitivity low. Studios loved the 'speaker, which says a lot, but otherwise I have reservations.

Likewise with other early loudspeakers of repute, such as the big Tannoys. They were incredibly sensitive, but also coloured.

Characterful and interesting for what they did well, many of these old loudspeakers were also quite obviously flawed. If you can accept their strengths whilst ignoring the drawbacks, fair enough, but from what you say, I think you'd just be irritated by yet another set of weaknesses unfamiliar to you in modern loudspeakers.

Missions did move away from easy neutrality and into challenging brightness, a character that today's loudspeaker manufacturers commonly perceive as being competitive in showrooms. This balance only works, I feel, if you use top dollar ribbon drivers, as only they seem able to combine incision with cleanliness. You could try listening to Pinsh, Elac or Arum Cantus brands, all of which use ribbon drivers that allow them to deliver clean, clear highs.

For good bottom end wallop the 'speakers must move volumes of air, so look for big cones or multiple drivers. I suspect the excessive lower bass you are suffering is caused by the room, as a really heavy sound out of all proportion to the driver sounds like a resonant mode 'going off' to me. Large 'speakers will likely make this worse, exciting the mode more readily, so beware. You have contradictory requirements, a desire for heavy bass but a room that will boom if you achieve it. Unfortunately you don't provide room dimensions so I am necessarily speculating here. Keep loudspeakers away from room boundaries (wall, ceiling, floor) to minimise modal drive and if possible use heavy furniture to absorb low frequency energy. Or perhaps use a small loudspeaker that doesn't drive the room's main modes heavily, augmented by a tunable and/or moveable subwoofer.

For £400 or so I suggest you get a Goldring 1006 in a Rega P3 turntable. This will give great basic results. NK

Well, I'm not sure I'd agree with Noel about the NS1000M's sensitivity being appalling; Yamaha quoted 91dB/1W, and listening bares this out (I can get decent listening levels with 20W WAD K5881), although he's certainly right about it being a tricky speaker to drive, as it needs something that's been designed properly or it will tell you about it in no uncertain terms. I also think he's right about speed being a chimera; obviously some speakers sit on transients and sound like they don't want to get out of bed of a morning, but most apparently fast sounding speakers are simply riddled with distortion (i.e. Snell Type Js, et al).

I think what you're looking for is a good old fashioned unreconstructed 'big sound', one that's fast yet neutral, powerful, physical and visceral without straying too close to the pain barrier. Of course, Yamaha's NS1000M fulfils this perfectly, but you'll have to spend a lot of time looking for the right pair (and if you haven't heard a pair working properly, you're buying blind - rather like old Jaguars, they're 'feel' extremely impressive even if they're well past their best) and also a lot of money getting your ancillaries up to the task of driving them. So why not consider Monitor Audio's GR60 (£2,295)? This, as I've said, is something akin to a modern NS1000M. It has a truly big and powerful sound, but is much more forgiving on front ends and amplifiers. It's not ultimately as good as the Yamaha, but in most workaday situations sounds as good or better because it's easier to match and get to give of its best. I love this speaker, and am surprised it's not more hyped!

You'd find the MA GR60 would sound half decent with your magic but modest Cambridge

Audio 640CD and the Musical Fidelity integrated (not sure which one it is you have, but it's bound to be pretty capable). Match the GR60s to Chord Odyssey 4 cable, clean all your contacts and use a very dark, neutral interconnect between the CD and amp (van den Hul's The First, for example) and you'd get great results. You could then upgrade your CD player to something like Quad's CDP-2 (£1,000) when funds allow. Alternatively, if the GR60s are out of your range, next best would be Mission's e82 (£1,640), which is a deeply impressive, fast and physical speaker that is again surprisingly overlooked. In our review a few months back, reviewer Dominic Todd was a little over-critical in my view, but I think it's a star. Finally, as NK points out, if you're seriously tweeky then a pair of Quad ESL-57s rebuilt by One Thing Audio (£1,000) plus a REL Strata 5 subwoofer as and when you can afford it is pretty much peerless for speed; although you won't be pinned to the back of the your room by the Sound Pressure Levels... DP

AH SO!

Thanks for your most interesting all-Japanese issue. My memory was prodded by the Sony TTS-8000 turntable. Back in the early 1980s, we had a pair of these in one of the studios at University Radio Warwick.

やわらかな風情を感じさせる本格マニュアルプレーヤー



DP-1300M

標準小売価格 ¥2,750 (税別 ¥2,500)

- 美しいデザインと高級感、ハイクラスな質感を兼ね備えたハイエンド2速自動式大型ターンテーブル
  - 直径130mmの大径アルミ加工ターンテーブルを採用。直線滑車に1/2インチ滑車を使用した駆動機構により、ターンテーブルの回転速度が安定し、音質の向上を実現しています。
- 高級オーディオ部品を採用したハイエンドオーディオパーツ
  - ターンテーブルに採用した滑車は、音質の向上を実現するための重要なパーツです。また、ハイエンドオーディオパーツを採用した音質向上のための部品も採用しています。
- 高級オーディオ部品を採用した音質向上のためのパーツ
  - 音質の向上を実現するための重要なパーツです。また、音質の向上を実現するための重要なパーツも採用しています。
- 美しいデザインと高級感
  - 美しいデザインと高級感を兼ね備えています。
- 音質の向上を実現するための重要なパーツ
  - 音質の向上を実現するための重要なパーツです。
- 音質の向上を実現するための重要なパーツ
  - 音質の向上を実現するための重要なパーツです。

New HFW campaign - set Denon's DP-1300M free from captivity in its native Japan!

They were only used for occasional production purposes and for pre-recording a couple of programmes a week; we still had rim-drive Gates machines, complete with a gear-lever on the front panel, in the main on-air studio. I've no idea where we got them from, although I have a vague memory of our extremely resourceful chief engineer Stephen Collier, who went on to work for Solid State Logic, striking some very advantageous deals on ex-demo gear at equipment shows. We can't have paid much for them, as we existed on a subsidy from the Students' Union. Still more of a mystery is where they ended up; when I returned for a nostalgic visit a few years later, they'd vanished. Any chance of you getting your hands on that tasty-looking Denon DP-1300M turntable for review?

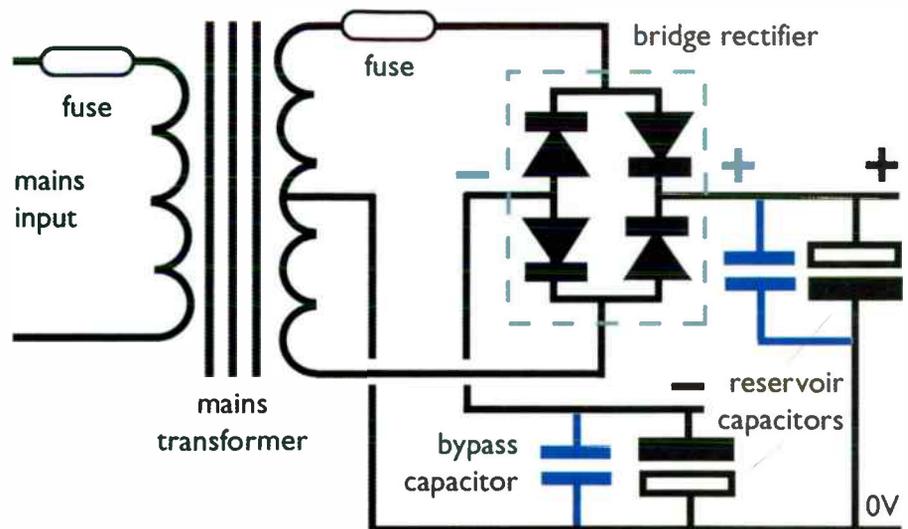
JH

Hi JH – interesting anecdote; so many of the high end Japanese decks ended up doing precisely this sort of thing; broadcast studio work. It's where Technics sold most of its SP10s. As for the Denon DP-1300M, I'd love to review one. I've been lobbying Denon's savvy UK PR supremo heavily Robert Follis on this very subject, but despite being a real vinyl dude in the seventies (he had a Michell Reference Hydraulic Transcription – 'we are not worthy!'), He went digital in the eighties and hasn't looked back (or should that be forward?) since. So, any readers wanting a review of the aforesaid delicious looking Denon direct drive, on sale new in Japan for less than £1,000 now as we speak!), Send an e-mail to editorial@hi-fiworld.co.uk with 'come on Rob, get your finger out' in the subject line and I'll forward them... Well, stranger things have happened! DP

### IF THE CAP FITS

Please could you help me with the following? I am the proud owner of the Cambridge A75 and C75, which was designed by Stan Curtis back in the eighties. I am really fond of the way it looks and the sound it makes. However, being afflicted by the upgrade bug I wonder how much more the sound would be enjoyed if the twenty year old electrolytic capacitors were replaced with modern audio grade equivalents?

Changing the capacitors on the PCB is straightforward as audio grade caps will fit. The problem is that the original large can 6800uF power supply caps have reduced in size, to the extent that Nichicon, Elna and Black Gate equivalents are only available in snap-in form; snap-in varieties would not fit



**This basic power supply circuit is common to many power amps. It is common to bypass the main reservoir electrolytics with high quality audio polypropylenes, or similar.**

into the vibration limiting PSU capacitor housing! This leads me to the following questions:

- Would there be a detrimental effect if the 6800uF PSU smoothing capacitors were swapped with either 10,000uF or 15,000uF capacitors?

- If there was a detrimental effect, could other capacitor values be changed to re-balance the amplifier? If so, please could you let me know what these should be changed to?

- Build a PCB for the snap-in variety of 6800uF audio grade caps?

- Try standard 6800uF caps?

- Do all of the above and leave it to my ears to decide!

I am hoping someone out there can save me from my trials and expense using their greater experience. I do have the circuit diagrams if that helps.

**Darren Haynes**

In theory at least, installing higher value power supply reservoir capacitors reduces hum and noise, and provides greater energy reserves for dealing with low frequency 'transients' (short term events). It will increase the current surge at switch on though, which may blow an internal fuse or possibly the rectifiers. It will also pulse the mains harder during use. None of this is too much to worry about if you're handy with a soldering iron, as the fuse could be made slow-blow or uprated, whilst modern rectifiers absorb tremendous surge currents. So if the old ones blow a new set may well improve things. You really should have some idea of what's going on in a circuit before doing this sort of thing though; I generally measure surge currents to see what area I am working in. All the same, many or most experimenters 'suck it

and see' and this is usually successful enough. Just remember you are working with lethal voltages.

Will sound quality improve? It is difficult to say with any accuracy as there are many other limiting factors. Electrolytics do degrade and modern audio types should offer an appreciable improvement. A common trick though is to strap a low value 'dry' capacitor, such as an audio grade polypropylene of 0.1uF, across the electrolytic to improve its high frequency behaviour.

I would suggest you try a small but useful value increase to 10,000uF or so, and use parallel caps, and see how it all sounds. You will need to use your ears to decide, but people usually report quite big changes when experimenting like this. NK

### BIT BY BIT

I read your excellent August issue about Japanese classic high end models. I look forward to seeing more reviews in the same vein. What impressed me the most, was your review about the Yamaha late 1980s CD player. It is an interesting coincidence that I own two models of the same era, that I presume you would find interesting to include in your future reviews. These are Denon's DAP-5500 DAC/pre and DCD-3560 CD player. The pre uses classic 16 bit, x4 D/A conversion technology, while the CD uses a 20 bit, x8 technology named "Lambda" by the company. Both have bulletproof built quality and were Denon's top line models. The CD weighs an awesome 17kg, while the 5500 has separate chassis for the DAC and preamplifier parts.

Do you think that late multi-bit converters (like the "Lambda" circuit), provide a significant improvement over the classic 16 bit? The latter have sonic



### Sony CDP-X77ES – the company's first Bitstreamer from 1989

*qualities you described in you Yamaha's test, which I found also myself when I'm listening to the pre (and using the CD only as a transport). Would you prefer instead using the multi-bit D/A converters of the CD, especially via balanced XLR sockets?*

**Nick Frydas**

My experience of Denon's Lambda technology, which reduced low level quantisation distortion, was it usefully smoothed the sound of CD to give a relatively mellow delivery. By this I don't mean warm and boring, so much as silky clean at all levels. I rather liked the sound, reminding me of the strengths of HDCD and SACD. However, not everyone sees things like this, the more strident delivery of early 16bit D/As being one example where some listeners preferred what they perceived to be a better focused and timed delivery. I think this comes down to personal taste, although measurement suggests smoothness is a result of lower distortion and is technically more correct.

On the matter of using balanced outputs, here is another upcoming minefield! The internal circuitry of most electronic equipment is unbalanced. To offer a balanced output manufacturers must fit extra circuitry, usually an unbalanced-to-balanced line driver. This is quite a common device nowadays, as working with balanced signals

becomes increasingly popular, so there are many super low noise and distortion audio chips appearing. Traditionally balanced lines have been used to minimise noise and hum, especially in studios. A balanced signal line also does not carry ground currents, definitely a good thing, as hum loops are banished. All the same, adding circuitry isn't the best idea unless it's particularly necessary. If an unbalanced preamp connects to unbalanced power amp through balancing ICs, for example, then two extra ICs will be inserted into the signal line. If the line is long, say more than one metre, there may be benefit. If it is short, all that extra circuitry may well be a drawback, as it has no value. Manufacturers tend to be a bit oblique about this subject as a result. As a general rule, using balanced lines is likely to offer most benefit where signal lines are long. The only glaringly obvious place to use a balanced connection is with pickup cartridges, as they are naturally balanced sources. But of course this is the one place where balancing has not been used. Doh! **NK**

It's an interesting philosophical question, that of multibit vs. Bitstream; I have owned two Sony high end machines, the CDP-557ES and the CDP-X77ES. The former was a 1988 model year machine using Philips TDA1541 multibit chips, the latter a 1989 MY machine

using the then new Bitstream technology, although the transports were virtually the same, as were the analogue output stages. The two couldn't sound more different, and by all criteria, the former was brighter and harsher (and 'harsh' is the right word to use here), the latter more subtle and smooth by a country mile. I suspect the latter measured far better too, but I couldn't help going back to the former – especially when using 'inky black' interconnects (LFD Spirolink 3). Even through my rather 'upfront' Yamaha NS1000Ms, the multibit – properly matched – delivered. I suspect we're going to have flourish of late eighties CD nostalgia, as people realise that Bitstream was a change not an improvement (subjectively at least) and – as usual – the real reason for the switch was that Bitstream chips were... yes, you've guessed it... cheaper! **DP**

### POWER HOUSE

*I am in the lucky position of rewiring my new (two hundred year old) house. I would like to put in a dedicated mains feed for hi-fi but do not know where to go to get further information as to exactly how to do this. Please can you help me find out which cable to use, how to connect to the distribution board etc? and how to get the most out of this opportunity.*

**Richard Williams**

You should wire your home in accordance with the latest regulations, contained in BS7671, especially with regard to the new colours for installation cable: brown for live, blue for neutral and green/yellow for earth. If you don't then you may well not be insured against damage from any problems that could arise and re-sale value may be affected. It's best to get a certificated electrician and a safety certificate upon completion of the rewiring, as it adds to the value of your home and improves future saleability. I doubt whether you could use esoteric mains cabling of

SHUNYATA RESEARCH

ESCALANTE DESIGN

HEGEL MUSIC SYSTEM

ONZOW ZERO DUST

WWW.AUDIOATMOSPHERE.COM

## Harmonised Installation Cable (Page 1 of 2)

**NEW**


From the 1st of April 2004 the cores of single-phase electrical installation cables have followed the harmonised colours used today in flexible cords: brown (phase) and blue (neutral) instead of the existing red (phase) and black (neutral). The cores for three phase electrical cables will be brown (phase 1), black (phase 2) and grey (phase 3) with blue (neutral), replacing the existing red, blue and yellow phase conductors. The green/yellow combination will continue to be used for any earth conductor. This will affect all new installations.

On the 1st of April 2004 an amendment to BS7671 (IEE Wiring Regulations) recognising the new core colour identification was published together with more than 20 amended cable standards incorporating the necessary colour changes.

**The Wiring Regulations will allow an overlap period of two years when existing or harmonised colours can be used, but for installations commencing after 1st of April 2006, only the harmonised colours will be allowed.**

RS offer a portable kit (494-5862) to identify which cable colours have been used assisting in the transition period before legislation becomes compulsory in 2006.

Type	Description	No. Of Cores	Sheath Colour	CSA (mm <sup>2</sup> )	Reel Length (m)	SSM	stock no.	price per reel £		
								1*	5*	10*
1	6242YH Twin & Earth	2 + Earth	Grey	1.0	100	1 reel	468-1899	15.99	15.29	14.71
1	6242YH Twin & Earth	2 + Earth	Grey	1.5	100	1 reel	468-1906	18.71	17.92	17.26
1	6242YH Twin & Earth	2 + Earth	Grey	2.5	100	1 reel	468-1912	25.26	24.22	23.27
1	6242YH Twin & Earth	2 + Earth	Grey	4.0	100	1 reel	468-1928	66.17	63.39	60.92
1	6242YH Twin & Earth	2 + Earth	Grey	6.0	100	1 reel	468-1934	87.99	84.27	80.97
1	6243YH Triple & Earth	3 + Earth	White	1.5	100	1 reel	468-1940	42.15	40.36	38.80
								1*	5*	
1	6242YH Twin & Earth	2 + Earth	Grey	6.0	50	1 reel	493-9766	48.86	45.45	
1	6242YH Twin & Earth	2 + Earth	Grey	4.0	50	1 reel	493-9772	38.13	35.85	
1	6242YH Twin & Earth	2 + Earth	Grey	10.0	50	1 reel	493-9801	73.66	69.99	
1	6242YH Twin & Earth	2 + Earth	Grey	16.0	50	1 reel	493-9817	110.29	104.80	

© RS Components Ltd.

For low cost it's usual to use 2.5mm installation cable in the home. Use a heavier gauge for a better sound. RS stock up to 6mm in the new colours. It should give tighter bass. Courtesy of RS Components.

any sort here and still persuade an electrician to certificate the final installation, and I'm not sure it would be wise in any case. I would suggest you simply ensure quality cable is used. My main listening room has its own ring main - with twin cables per run between sockets, to halve the resistance. That was installed back in the 1980s, where I simply worked with an experienced electrician. A simpler solution is to use normal 6242YH twin and earth installation cable with the highest current rating available, which in my RS catalogue is 6 square mm rated at 41A. This is more than three times as expensive than usual 2.5mm and it won't be as easy to work with. You may want to experiment with different types of Residual Current Circuit breakers if you have them. It's wisest to do the best you can within current regulations.

If your supply from the street is poor then all this may well be a waste of time, but if not it could ensure you have a "stiff" supply that varies little in response to a variable load. If you can, try to ensure your house has a good, modern, well cabled connection to the mains supply. I recently had the good fortune to be told my local link was going to be improved, at which point I dived in with offers to pay for the best cable available and managed to get some very bemused installers to agree to use top dollar cable, for which I paid a mere £80 premium. Every inch needs to be top quality and this is only good practice. So keep your feet on the ground, get the best, but stay within guidelines for your own long term benefit.

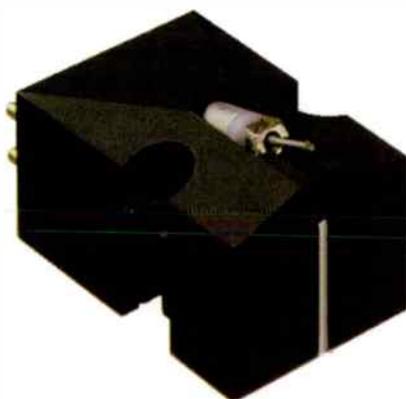
NK

### MISSING CLASSICS

Can I suggest some products that should be on your 'classics' list? If the Audio Technica AT 1120 rates a mention, then surely you must acknowledge the Mayware Formula 4 tonearm? This was that late 1970s rarity, a low mass tonearm that really worked and still sounds respectable - and, to boot, a quirk-free unipivot. The Mayware managed to be both low mass and reasonably rigid. Its damping and variable effective mass feature allowed it to work well with both high compliance moving magnets and low compliance moving coils. I know that the bloke that produced them was a bit difficult to deal with, but credit where it is due: a Mayware Mk III in good condition is still a match for many modern arms (I have tested it against a Rega RB250) and a MkIV or MkV is even better. My MkV managed to sound fine with high compliance cartridges such as the old Goldring G900SE and Mayware's rather good high output moving coil (MC7VIII) but it also sounds absolutely splendid with

my latest acquisition: a Denon DL-103. The best thing about Maywares is that, as jeweled unipivots, there is almost nothing to go wrong with them, so they make an excellent secondhand buy.

Then there's the Rogers HG88 valve amplifier. It is not one of the most fashionable but it is a remarkably good 'real world' device, as it is an integrated and has a good quality phono input. In 1985 I rescued one from a friend's snow covered rubbish heap (literally), dried it out and had a defect on one channel repaired. I then listened with astonishment as it completely outclassed the sound from the latest Best Buy 'budget superamp' I had just bought. It is quiet, untemperamental and produces a strong, clean, stable sound that gets better the longer you listen to it. Somehow its 8 watts per channel manage to do as much useful work as the 30 watts per channel of the modern amplifier it replaced. I know that 'classic' valve gear is supposed to be quirky, difficult and strictly for enthusiasts but I think the Rogers deserves a vote for being none of these



Denon DL103 MC - thousands of years ago, audiophiles were listening to this sort of thing...

things - and still sounding good. (It's a better amp than the Cadet that you list.)

The Walker CJ61 turntable is a different sort of classic: a design which appeared just when CD was knocking the bottom out of the turntable market, so it never sold on the scale it deserved. However it was potentially a very important design, because in it designer Colin Walker produced what is in many ways the definitive low-cost, high quality turntable - an effective, reliable, fuss-free suspended subchassis turntable for around £100. He did this by stripping away all the non essential elements that clutter most turntables and then taking a radical but practical approach to the design of what was left: he (a) reduced the plinth to a non-resonant drum the same diameter as an LP record, (b) made the plinth, subchassis and platter entirely out of non-resonant wood and composite materials and (c) fitted a good quality motor and bearing and a stable three-point suspension.

With a little tweaking, the sound is good and with an outboard power supply it is excellent. Place it amidst any collection of old or new turntables and the classic simplicity and simple 'rightness' of the design of the CJ61 sets it apart from the crowd. Study the details and whereas its competitors have awkward or ineffective suspensions, resonant armboards, clangy metal platters and subchassis etc. etc., the CJ61 has none of these things - there is nothing superfluous and everything is right. I firmly believe that if it had appeared a few years earlier, or if CD had appeared a few years later, the CJ61 would have taken a huge slice of the turntable market and would have been regarded as an obvious 'shoo-in' for your list of 'classic' hi fi designs.

I notice you don't have a section for classic pickups but these are very interesting. I have just bought a Denon DL-103 and once I got it run in and loaded 'just right' (150 ohms) I have been absolutely astonished by the sound - in the Mayware arm and Walker turntable it is amazingly good, far better than CD, better than any other pickup I have owned previously and without any apparent vices. What I am trying now to understand is what on earth all the progress in hi-fi has been about when Denon were making something this good in 1963!

As for other 'classic' pickups, no doubt there will be many views but it could be an interesting section, as the Denon has made me question many of my assumptions about technical progress over the last 40 years or so and led me to wonder how some of the famous names of the past would really

compare on a level playing field. It could make an interesting feature.

I notice that there is a US website which is still selling some old ADC 10E cartridges (legendary 314g tracking devices from the late 1960s) and it would be fascinating to see these rate against some others of the time (Shure V15s or M75EDs) and also the Denon DL-103, the inevitable Deccas and a couple of present day 'contenders'. (FYI, I once had a loan of a Shure M3D which I mounted in a Rega RB250 and sounded very good.) My guess is that some of the top names of the past would sound old hat but others could cause a few surprises. (We already know about the Ortofon SPU.)

#### Alasdair Beal

Having measured and used a lot of this kit in the past I couldn't quite share your enthusiasm for it, but I appreciate that many of the items work well enough to give real musical enjoyment, often in a less challenging manner than many modern products, which have developed a stridency that's wearing at times, and not just to me it seems from many of our letters. However, old pickup cartridges - and especially the Shure M3D - do not raise a shred of interest in Keyword towers I'm afraid to say. That thing was a truck without any method of steering. Cartridges and arms have in particular moved ahead significantly in sound quality, leaving the items you mention far, far behind in my view Alasdair. NK

Hi Alasdair - I'd echo NK's sentiments entirely, and would add that the Denon DL-103 is a right old stinker; I simply don't know why people keep raving about this. I bought one brand new in Japan and spent months trying to get the best (?) out of it, but went back to my plain old Y20,000 (£80) Audio Technica AT-33E which totally trounced it in every respect... I found it hard, mechanical and unsubtle (to put it mildly); not surprising considering it was designed in 1863... DP

#### ANOTHER OLDIE

I would like to echo the points raised by your correspondent Kevin Wood, about the virtues of older speakers. After many years away from hi-fi, I got the bug again and decided to ditch my vinyl

collection for CDs. Quite frankly, I'd had enough of scratched records and finicky styli clogging up with dust, to last a lifetime. It was time to move on into the digital 21st century!

Yes, that rich vinyl sound is unforgettable, even with the geriatric (early 80s) kit I had - a Dias turntable, Syrinx PU2 arm, Ortofon MC20 Super cartridge, Quad 44 with two 405s, and a pair of KEF 105 Series 2 speakers (an upgraded version of your correspondent's KEF 105s).



**Try a Castle Howard, if you want to hear the smooth, uncoloured sound of carbon fibre.**

My new CD-based system, therefore, had to sound at least as good as, if not better than my vinyl set-up, which considering its age, you would think would have been a fairly easy task to do? Well, the answer is partly 'yes' and partly 'no'! It's definitely 'yes' to the Audio Analogue Maestro CD, Quad 991909 amplification, a REL Storm S, and the (mainly) Russ Andrews interconnects, speaker cables, mains cables and filtering, all of which together deliver an impressive, and certainly as close as I'm going to get with my budget, to vinyl sound.

So what about the new speakers that I've not mentioned? Well, that's

where the 'no' comes in. In my quest to upgrade the ageing KEFs, which as your correspondent points out could 'wear out' and pack up at any time point, I have tried in vain to find anything better, certainly without going above £10k, which is well beyond budget. Nothing I've so far tried is capable of the KEFs airy, open and 'you're on the stage', sound delivery. Yes, I'm riveted by the sheer amount of detail that some modern speakers can reveal, but there, I feel, lie their limitations, compared to the KEFs.

By being 'riveted', I mean just that. All the speakers I've tried so far are 'riveted' to delivering a technically perfect midrange, which ends up sounding disarticulated from the bass and treble. At worst, turn up the volume and you get a harsh mid range swamping any gains in the lower and higher registers - CD sound's Achilles Heel. Not so, from my 25 year old KEFs, which will stay until they wear out!

**Richard S Kelly**

Modern loudspeakers do generally have more midrange energy and the stiffer cone materials used nowadays give a livelier sound that delivers detail but can be challenging, as you have found. If you hear harshness as volume is turned up then that is almost certainly due to cone breakup occurring and this is simply a poor loudspeaker. You don't have to spend huge sums of money too avoid the problem, just choose carefully. Try to listen to a Castle Howard S3 if you can. It is by no means a Kef 105, using carbon fibre drivers instead of polypropylene. You will get great sound staging though, an easy sense of clarity and little of the harshness that's so common nowadays. The stand mounting Wilson Benesch Arc also has an easy but clear sound that may appeal to your tastes. **NK**

"Each unto their own..." **DP**

### TOP TIP?

I have gradually built my system up over the past thirty years or so, migrating up the quality chain, with my first real hi-fi kit comprising a Thorens TD160 with Ortofon VMS20E, a Rogers A75 Series 2 amplifier and Acoustic Research AR6 loudspeakers. I still have the A75 and, with my hobby being electronics, would like to rebuild it at some time in the future. My current system owes a lot to reading Hi-Fi World, comprising a Rega P25 with a Goldring 1042, a Unison Research Unico amp, Cambridge C640 Azure CD and PMC DB1 speakers, though bought



### Rega P25 – better than a GyroDec?]

well before they reached the pages of most hi-fi magazines.

I think I probably need a new stylus, which gives me the opportunity to consider a cartridge upgrade. However, I noted in your August letters section a suggestion that a GyroDec/Tecnoarm would be well matched by a 1042, so should I really be looking at putting anything better in my P25 at £600, or just get a new stylus?

I have some of your cartridge reviews from the past and, looking at a price range of between £400-500, was considering a DV20X, what do you think, would it make a difference? The Ortofon Rondo range seems to get some good comments, and the Bronze is similarly priced to the Dynavector, might this suit my system? I like a well balanced sound, neither bright nor boomy, which I think I get from the 1042, so wouldn't want to compromise this by mismatching to the system. Finally, I really like the magazine, one of the few not to be dominated by AV, but was disappointed with the quality of the soldering displayed on page 94 of the last issue. Not a very good example for budding DIY enthusiasts!

**Denis Holliday**

Hi Denis – it's got to be to Ortofon Rondo Blue at £500 for your Rega P25. This is a cracking sounding, brand new, mid-price MC which is neutral, incisive and subtle; and better as an all rounder – in my view – than the sweeter and more romantic Dynavector. The Rega decks are capable of partnering even better cartridges than this (I used an £800 Audio Technica ART-1 in my Planar 3) but in truth you'd be better spending that £800 on a Michell GyroDec SE (and using your existing Rega arm) in this case. The Gyro will bring scale and depth to the sound, along with superior detail and speed stability, but you may well find it not

quite as energetically musical as the P25 – your call. **DP**

### ASHES TO ASHES...

Firstly, I would like to congratulate you on the magazine - it is invariably Hi-Fi World that ends up in my hand after my monthly pilgrimage to my local newsagent! I am particularly grateful for your loyalty to the traditional audiophile by way of featuring the latest in vinyl and valves, as well as a regular selection of reviews of vintage stereo gear. We have our own historians now and I for one am fascinated by the evolution of the hi-fi art, not just by the latest and greatest offerings. Keep up the great work!

Given that most of your readers will be situated in the UK or at least in the larger metropolises around the globe I thought you might be interested in the two vastly different sides of being an audiophile in Australia and specifically in Adelaide South Australia. Despite the negative part of what follows, Adelaide is a great place to live, work and to raise a family and as an expatriate Yorkshireman I can think of no other place I would rather live. But it does have its drawbacks. Read on.

On the positive side there is quite a healthy and mature audio industry in this country and it saddens me greatly that so few of our audio products actually make it to the overseas markets. Loudspeakers in particular are thick on the ground and there are many, many manufacturers who have products on offer that to my ears can rival anything from anywhere in the price/performance stakes, and some can rival the absolute best. Come on you UK and other overseas based distributors - check out this stuff and give your product range a facelift! Do a web search and see what's on offer - you might be surprised.

On the negative side I would like to relate to you some of the trials



**Demolition of the English Cricket Team 2005 - Postponed.**  
Picture courtesy of Channel 4 News.

and tribulations that I have recently suffered in my attempt to select and actually buy a new turntable. By way of background, whenever I am in the market for a new piece of gear my routine goes something like this:

- (1) Source and read as many comparative reviews as I can from magazines and the Internet.
- (2) Peruse the local dealers and try to audition each of the possible contenders in the store.
- (3) Borrow one or two of the shortlisted items and audition them in my home on my system.
- (4) Make the purchase (and try to negotiate a discount if I can). Sounds fine in theory right? Wrong! Especially if the component that you are looking for is an upmarket turntable in Adelaide in the year 2005. It might still work for a home theatre purchase, but old fashioned stereo equipment (and relatively upmarket gear at that)? Forget it. Step one is the easy bit, apart from the fact that by the time the mags hit the shelves over here they are usually a couple of months out of date (too bad if we Aussie audiophiles want to enter any of your competitions, guys). But it stops there.

My shortlist on this occasion included turntables from Origin Live, Michell and Clearaudio. None of these turntables can be auditioned anywhere in my hometown because none of the so called hi-fi stores here actually keep them in stock! Yes they can supply the gear to order and we can actually find the odd base model turntable (and plenty of the latest Technics DJ gear) in Adelaide, but a fully kitted out GyroDec SE or Clearaudio Champion forget it!

So here I am trying to upgrade my deck so that I can do justice to a lifetime of collecting (over 700) LPs, (having finally convinced my long suffering wife that this made some sort of financial sense) and unable to actually audition the proposed

purchase. Never before have I bought a product purely on the strength of its reviews and its looks but in this case I have to go out on a limb and do that because I have simply no choice. Anyway, after a great deal of soul searching I parted with a deposit on the promise that my shiny new turntable would be here inside three weeks. (That's probably about twenty days too long at this particular stage of the process of course, as you would all understand but so be it).

Well that is now over eight weeks ago and I still do not have my turntable. Why? Partly its due to the tenuous supply process the turntables are ordered from the manufacturer and effectively supplied to order because no stocks are maintained anywhere in the supply chain. Partly because it just takes a while for the order to actually get to the manufacturer, and even longer for the finished product to be freighted out here (via Sydney of course). Partly it's due to the manufacturer apparently being busy and their production process working at capacity (which I would reluctantly agree is a good thing). And finally, to add further insult to (already significant psychological) injury the Australian Customs Department in their infinite wisdom decided to impound the shipment for three weeks.

Indeed, I rather suspect that some X-ray machine thought that my turntable was a bomb, or perhaps picked up the fact that the tonearm contained a suspicious looking material. (Too bad for them its only acoustic dampening material and not the equivalent weight of narcotics). Well all is well that ends well I suppose. My turntable is due in Adelaide tomorrow and with any luck I will be listening to it in 24 hours time that's if the customs people haven't snapped the arm in half to check out the inner contents, if there's nothing missing, nothing broken and that I can follow the instructions

and actually put it together. Not to mention successfully navigate my way through the tonearm/cartridge alignment process without snapping off my cantilever.

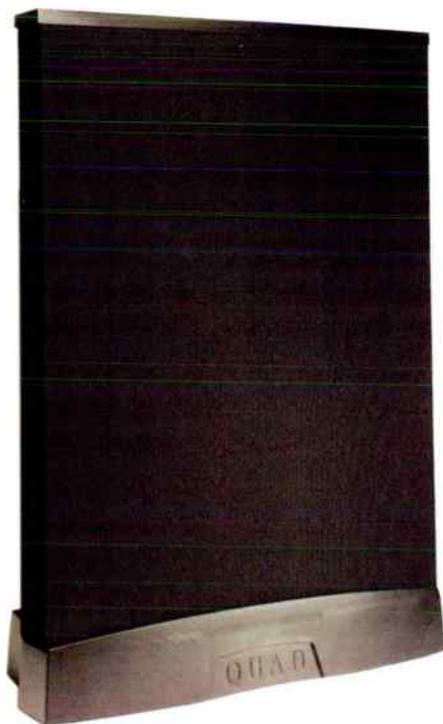
So to all of you lucky English chaps who can enjoy the luxury of any number of well stocked hi-fi outlets within a fifty mile radius, teeming with amicable dealers more than happy to lend you product and with stocks either on the shelf or (at most) a day or so away spare a thought for us long suffering antipodean audiophiles this summer, when you're not ruing the demolition of English cricket again that is..

**Andrew Hoyle**  
**Adelaide**  
**South Australia**

Hi Andrew – yes, you're right, the UK is heaven for serious prospective two-channel and/or vinyl buyers. Why, in my very street, sandwiched between the newsagents and the butchers, are umpteen high end vinyl specialists, all desperate to lend me the latest tasty bits of kit (and set it up for me) for an indefinite period, for free. There's always real coffee, freshly served, and thousands of knowledgeable salesman who know their cartridges from their cantilevers. Oh, to be in England in the summer... Then there's the warm beer and cricket, old maids cycling to country fairs, home made jam from the Women's Institute, and local toffs tooling past in their XKs as local yokels doff their caps to them in respect and appreciation. Oh, and by the way, it no longer rains here either. Ah – life in merry England! DP

**'SMOKIN'**

I would appreciate your advice upon an appropriate pair of speakers to partner the superb Marantz CD63



### Quad 989 – properly set up, they're brilliant with jazz

KI DP modified by Marantz following the article in your June 2004 edition), which I play through a Prima Luna Prologue One, using Chord Odyssey 2 cables. I listen mainly to jazz, leavened with Little Feat/Neil Young/Joni Mitchell now and then. I am tempted by Living Voice's Avatar, but I'm also considering Martin Logan Claritys or Focal JMLab Micro Utopia Bes (or even Divas). My budget is around £5,000. I would also be interested in your views on the best interconnects for the Marantz/Prologues.

**Seth Caine**

Hi Seth – sitting here listening to the KI DP via a World Audio K5881 into Quad ESL-989s, I'd have to say the Quads. The Martin Logans are excellent, but smaller scale in their presentation and have the perennial driver matching problem (electrostatic panel plus moving coil bass driver equals two speakers in one). The 988s (or 989s at £6,000) if you can possibly afford them) are superbly integrated and sing with valves. The Quads really fly with Chord Company Signature cable, although the first thing you'd have to buy is a pair of Townshend Maximum Supertweeters, which address the only merely 'excellent' aspect of their sound – the treble. The Maximums push the 988s top end from about 19kHz to 50kHz, and although the KI DP rolls off about 21kHz, there's a lot of extra air on the upper mid and treble all

the same. We demo'd the 988s in the World Audio Design room at the Bristol Show, with lots of my jazz LPs a few years back, and I have to say – IMHO – it was the best sound of the show... DP

### TRANSPORT PROBLEMS

I recently found myself back in the hunt for hi-fi (much to the wife's despair!) after my ageing Linn Mimik started to give me problems with the odd bit of mistracking. I stumbled upon a Musical Fidelity Tri-Vista 21 DAC at a wonderful dealer in Grantham who was only too pleased to let me take it home and try it out. Well what a revelation! It was simply amazing; huge soundstage, wonderful clarity and the most divine musical sound, what made this even better was the fact that it was all

happening with my old Mimik as a transport- what would it be like with a decent transport?

So the Tri-Vista was purchased and we set about finding a transport to suit. My local dealer offered me an old Kenwood DPX9010 to try and boy did it sound good, it wasn't quite as upfront as the Mimik but somehow just seemed more relaxed and natural sounding and had me thinking I was home and dry! Then it packed up, inspection by the dealer revealed that it was the laser/transport mechanism that had conked out, and the chances of getting the bits to repair it were pretty much zero. So here I am with a superb DAC that is crying out for a transport to let it work its magic. The Mimik is holding the fort at the moment and has seen off a couple of transports that I've tried, namely a TEAC VRDS-10 (too soft and woolly in the bass) and an Audiolab 8000CDM (totally sterile and uninvolved) I really don't know where to turn next.

The second hand market has an abundance of options but obviously it is a minefield. I am currently pondering on an XTC CDT1 SE, Meridian options, Wadia 3200, Arcam Delta 170, Theta stuff and have also seen another Kenwood DPX-9010, but worry about reliability. The rest of my system is NAD pre, 2xNAD powers bridged, happily driving Linn Kabers. Musical taste is varied but mainly based around light rock/pop, Floyd, Zeppelin, and even Celine Dion when the wife insists!

**Dave Mayer**

Well, here's a great chance to get on my soapbox again; Hi-Fi World loves classic kit, but we never, ever, ever, recommend spending silly sums (did anyone mention eBay?) on stuff that is no longer supported by the manufacturer with parts supply. If you do, then you're buying yourself an esoteric ornament; and if you're



Teac VRDS transport – stunning stuff!

into ornaments, why not buy the wife something she likes, as she's probably got better taste than you...

Anyway – and so to transports; TEAC VRDS transports are, by-and-large still supported – as the company takes its digital spinning machines very seriously and doesn't buy a job lot of old CD-ROMs from Philips like most people. So I'd suggest a VRDS-T1 (1995ish); you're right to say it's a bit woolly (that's what we found too), but the magical

sing with the MF DAC, which is, in my opinion, a star. DP

#### AND ANOTHER THING!

Dear Mr. Price,  
It used to be easy to purchase the magazine in Lisbon. On the other hand, its purchase became the most direct way to satisfy my addiction, on a monthly basis. All of a sudden, to find Hi-fi World in Lisbon became a run from newsstand to newsstand until it turned "impossible to be found". I

World's list of classic gear. Is there any particular reason not to mention them? I've always thought they are a must for any audiophile. Back in Portugal the Reference 107/2 are regarded as the twentieth century state of the art, in what loudspeakers is concerned, and it is obviously my opinion too.

**Mrio Kopke Tlio**

Hi – thanks for subscribing. This letter gives me the chance to do a little 'housekeeping', so please skip the next two paragraphs if you're not endlessly fascinated by the politics of hi-fi magazine publishing:

This mag has, according to our distributors, pretty much doubled its circulation in the past two years. The result is that, although most newsagents carry us, their stock tends to sell out within the first few days and – for some reason unknown to us – they often don't restock until the next issue, preferring to carry some mobile phone or 'customise your Vauxhall Nova' type title instead... This has meant that getting the mag can be tricky, unless you reserve a copy from your newsagent or subscribe. So, to all the readers who constantly phone me up and ask if we've gone bankrupt because they can't find HFW on the shelves, there's your answer! To those not into the idea of 'buying a subscription', I will give you this pledge: if you take out a sub, I promise not to turn the mag into a 'surround sound and vision' publication that celebrates only the brand new and ignores everything else for the duration of your sub! There will be more of the same winning formula, not 'arf!

Secondly, re: World Classics/Standards: there will be a major update soon, but as it's me who's doing it, and I'm spending most of my time working on weird and wonderful system features, research into classic kit and tweaking classic kit old and new, there simply aren't enough hours in the day to do everything as quickly as I'd wish. I hope you understand; the main point is that we're an independent magazine, not published by the same company that does mobile phone and lads mags, and we don't have umpteen blokes twiddling their thumbs in front of computers who I can 'assign' to do stuff. Hope y'all understand. Our independence is one of our key strengths as a title, but also explains some occasional weaknesses too. Your enthusiasm for the KEF 107/2 is noted; anyone else agree? I can't say they float my boat, though! DP

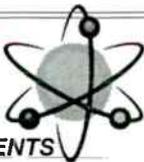


**KEF 107/2 with its coupled cavity bass loading. The midrange and treble units sit in individual chambers.**

addition of a Trichord Clock 4 mod soon turns it into something that's hard to beat at any price. Otherwise, Quad's new CDP-2, complete with its 'fuzzy logic' servo, is very accomplished. Another brilliant CD spinner is Linn's Karik 3, with a stunning transport section. All will

should have subscribed long ago. For no identifiable reason I only did it today. I'll be anxiously waiting my first issue as a result of a yearly subscription. The reason I'm writing you this mail is a totally different one and it has to do with the omission of the KEF reference 107/2 speakers in the Hi-Fi

# RETRO Reproduction



WE ACCEPT PAY PAL PAYMENTS  
MAIL ORDER ANYWHERE IN THE UK!

GENEROUS PART EXCHANGE ON ALL EQUIPMENT NEW OR USED

### Used equipment for sale

<b>Amplifiers</b>	
Audio Research SP9 boxed mint MKII	£995
Audio Research D130 Power Amp	£795
Audio Research SP9 MKII black finish boxed mint	£795
ATC 150 Integrated Amp boxed as new 12mths old	£1395
Consonance Cyber 10 Integrated Amp 6550 valve tubes with superb headphones stage	£499
Conrad Johnson M435 power amp boxed	£295
Cyrus PSX/R PSU units boxed mint	£295
Cyrus II with PSX last version boxed mint	£295
Krell KSA 100 Power Amp 100watt Class A	£1295
Krell KST 100 Power Amp	£395
EAR 834P Valve Phono Amp	£450
Howland L200 valve remote pre amplifier one of the worlds finest 1 month old	£495
Howland Sapphire valve power amp new 7500	POA
Marantz PM7200 Class A integrated amp	£3995
Musical Fidelity Nu-Vista 300 Power Amp boxed new Serial No. 002	£250
Naim NAP90 with 92 Pre Amp	£495
Naim 32.5 MC	£295
Naim 140	£295
Naim 120 with NAC 12N (serviced)	£295
Nytech CTA252KD2 CPA602 ARC101 full active system	£195
Nytech CA202 Integrated Amp	£95
Pioneer A400X	£175
Pioneer A300R	£95
Pioneer A400	£150
Quad 66 Pre with remote	£495
Quad 77 Pre with remote	£395
Quad 303 Power Amp	£195
Quad 405 Power Amp boxed	£295
Quad 405 MKII Power Amp boxed various prices from £250	
Rega Brio silver finish	£275
Rotel RB970 BX Power Amp	£195
Rotel RB970 BX Power Amp	£150
Roksan Caspian power amp	£350
Sugden A21 silver finish	£175
Sugden A48 srange front Integrated Amp	£650
Sumo Anthem MKIII balanced facilities Pre Amp new £900	£250

3mths old cherry finish	£850
Quad 121 rosewood finish speakers	£975
Quad 988 Electrostatics 15mths old powder blue finish new £3900	£2750
RFL Storm 3 oak finish	£495
Ruarik Prelude MKII cherry finish boxed	£495
Tannoy Balmoral 12" drive units	£995

<b>Turntables</b>	
Kuzma Stogi with arm	£995
Linn LP12 Black Valhala basic plus ATF5	£600
Linn LP12 Valhala mint boxed	£495
Linn Itrok MKII boxed	£295
Micell Gyrodec with QC power supply	£895
Nottingham Analogue horizon	£425
Paul Hyman valve phono stage £200	£350
Roksan Radius 5 as new	£595
STD with Mission 774 tonearm	£195
Tom Evans µGroove Phono stage with external PSU	£275

<b>CD Players, DACs</b>	
Arcam Alpha1	£95
Audionics CDT Two with top loading Transport with top of the range Philips mechanism new £2200	£1095
Audio Alchemy DAC in the box	£95
Cyrus DAD7 top loading CD Player boxed as new	£450
Kenwood DP-X 9010 Transport (Hi-Fi World Favourite)	£275
Linn Numeric DAC	£295
Marantz CD17 Ki Signature	£495
Marantz CD6000 OSE	£195
Meridian 508 CD Player	£495
Meridian 206 Delta Storm CD Player mint	£350
Meridian Transport MKII	£495
Meridian 500 series DAC	£350
MicroMega Stage 5 CD Player	£295
Musical Fidelity E600 CD Player Piano black balanced outputs	£350
NAD C541 HDCD	£195
Naim CDX 1999 boxed mint	£1395
Naim CD 18 full range of Naim's finest mint boxed £695	£225
Pioneer Precision PDS505 CD player	£150
Philips CD850 fantastic Transport	£795
Perpetual Technology P1A P3A DAC and 1/8 symplec boxed as new	£195
Quad 66 CD Player	£350
Quad 77 stand alone CD player	£395
Roksan DP1 Transport new £1800	£450
Tesc VRS27	£295

<b>Tuners, Reel to Reel, Cassette Deck, misc</b>	
Arcam Alpha 10 DAB Tuner boxed remote new #800	£395
A&R Tuner	£90
Denon 1U200L	£75
Sugden Tuner	£150
Leak Troughline Tuner 3 various ... from	£150
Quad FM3 Tuner (boxed mint)	£145
Quad FM3 Tuner	£95
Revox A77 Open Reel	£95

<b>Due in</b>	
Exposure 764 Dual	
Michell Transport reference turntable	
Technics LS7 turntable tracking turntable	

Web address : [www.retroreproduction.com](http://www.retroreproduction.com) (UNDER REVISION)  
Email address : [retro.reproduction@virgin.net](mailto:retro.reproduction@virgin.net)  
28a Haddington Place Edinburgh EH7 4AF Phone/Fax 0131 558 9989  
Open 11.00am - 5.30pm - closed Monday & Sunday

## \*NOW DEMONSTRATING\*

NEAT ACOUSTICS MFS ULTIMATUM come in and have a listen  
(SPECIAL offer trade in your existing amplification for full market value against any EAR products).

NOW DEMONSTRATING Cairn CD Player & Amplifier offer fantastic value for money



**Ear 869 single ended triode integrated amplifier**  
Improved version of the classic 859 with revised output transformers modified input stage with the addition of a extra signal valve which has allowed an increase to 15watt of single ended power, also the 869 can be used as a power amp. Don't be fooled by its modest power output this amp drives real world speakers. price £2498 (U)

### Ultimate Ear Phono Stage

This is the ultimate esoteric Phono Stage as used in the world wide acclaimed Ear 312 Control Centre - Pre Amp. This has to be the ultimate Vinyl Replay purchase. price £2095

\*\* FOR A LIMITED PERIOD ONLY \*\*

Full value Trade in on Ear Phono Stages and other selected models.

## \*NOW DEMONSTRATING LEEMA ZEN\*

ONE OF THE FINEST COMPACT SPEAKERS YOU WILL EVER HEAR!!!



There are now four models in the EAR lineup:

The classic 834P uses the same circuit architecture as its more expensive brothers, and shares the same high quality sound through MM type cartridges, it is enclosed in a tough, rigid metal case and is fully "CE" type approved. price £495.00

The signature builds on the Classic 834P specification by adding a superb moving coil (MC) input stage, as well as the no-extra-price option of a high quality volume control. price £590.00

Top to the range, the Deluxe 834P comes in stunning chrome and gold cabinet, and has extra attention and quality control. With different moving coil input options, this unit will fit the most demanding of audiophile systems. For the true vinyl enthusiast. price £895.00

MC3 - The ultimate stage for MC matching with 3 fixed transformer taps to cover all types of moving coil cartridges, and separate left/right grounding. MC3 in used in the new £10,000 312 pre. price £630.00

audio cables & accessories - bigears speaker cable and interconnects - mail order specialists worldwide.

# BIG EARS AUDIO

quality used vintage and modern equipment bought, sold-part-exchange most welcome!!

website: [www.bigearsaudio.org.uk](http://www.bigearsaudio.org.uk) updated daily

UNIQUE BLACKCAT PANTHER INTERCONNECTS, Cryogenically treated, fitted with 'Eichmann Silver Bullet Plugs' £185 per metre pair  
NAIM: FULL RANGE OF PRODUCTS INCLUDING ALL ACCESSORIES AND THEIR SUPERB CD RANGE!!  
AUDIO NOTE AUDIO ANALOGUE: AUDION: BLACK-CAT ELEC-TRONICS: CAR-TRIDGE MAN: CONSONANCE VALVE EQUIPMENT: GOLDRING: GRAAF: GRAHAM SLE: HAD-COCK: HEART: MICHELL: MISSION: ORIGIN LIVE: OPTIMUM: PATHERN: PATHERN ACOUSTICS: PROTECT: SIANGL: THE SINGLE 100 LOUPEAKERS: MONOPULSE LOUPEAKERS, UNION RESEARCH: USHER LOUPEAKERS; MISSION SPEAKERS AND SURROUND SOUND SYSTEMS

<b>VALVE AMPS</b>	
BEARO PPS (UK) 4000 AUDIO EL34 AMP	£615
AUDIOPHILE 114 STEREO POWER AMP	£1195
Black Cat Electronics PFA Valve (MONO) block (Lowers/Tannoy)	£1950
Black Cat Electronics stereo Valve Pre amp Valve Phono stage/boost	£1950
Beautiful Bionics Class A Valve Integrated AMP, uses 5881 valves	£2950
Valveport 6.5 valve mono amp, uses 6X4, 6X5, very well built	£2950
HEATHKIT MA12 VALVE / TUBE AMPLIFIER	£250
Quad II's valve, with original 22 pre-amp in very good original condition £140	£750
Leak 100 valve, near mint, rebuilt, with stereo pre £184	£750
Rega Brio 100 valve, near mint £184	£750
Leak 1100 (rebuild) mint valve, beautifully clean KT61/5P25	£250
Pre Naim 1000 stereo block, valve, plus three valve tuner nice	£425
Superb Croft super Micro tube pre	£275
ANTHONY L21 valve pre-amp - classy sound	£275
ANTHONY L21 4 single ended stereo valve amplifier	£275

CHRIS BIRCHLEY @ BTINTERNET.COM TEL: 01736 740421  
MOBILE: 07947 678256

# Rochester Hi-Fi

30 HIGH STREET, ROCHESTER, KENT, ME1 1LD  
- 01634 880037 - [www.rochesterhi-fi.co.uk](http://www.rochesterhi-fi.co.uk)

- ADVANTAGE
- ARCAM
- ATACAMA
- AUDICA
- AUDION
- AUDIOPHILE BASE
- AVI
- BAT
- BOULDER
- CAIRN
- CLEARAUDIO
- CYMBOL
- DALI
- JMLAB
- GAMUT
- GOLDRING
- GRADIENT
- GRADO
- GRAHAM SLEE
- GRAVES AUDIO
- LOEWE
- LUMLEY
- MERLIN
- MUSIC MAKER
- MUSIC TOOLS
- NAD
- NOTTINGHAM ANALOGUE
- OPTIMUM
- PARTINGTON
- PURE
- QUADRASPIRE
- STELLO
- TIVOLI
- TRANSFIGURATION
- USHER
- VINCENT



CALL NOW TO UPGRADE YOUR SYSTEM

# MIDLAND AUDIO XCHANGE

The Old Chapel  
Forge Lane  
Belbroughton  
Worcestershire  
DY9 9TD

t. 01562 731100  
f. 01562 730228

e-mail. sales@midlandaudiox-change.co.uk  
web . www.midlandaudiox-change.co.uk



## Ex-demo and second hand items

	Was	Now			
<b>Digital</b>			JM lab Alto Utopia x-demo	11995	6999
Accuphase DP77V CD/SACD player x-demo	7600	4999	JM lab Electra 927 be Anniversary last pair! New	2800	2500
Audio Synthesis DAX Decade 22bit Balanced S/H	3700	1899	JM Lab Micro Utopia Anigre with Stands S/H	3999	1699
dCS Verdi Transport latest software S/H	7999	3999	JM Lab Sib XL x5 Grey S/H	1000	650
Mark Levinson No360s DAC S/H	7500	2999	Peak Consult Incognito Rosewood x-demo	7500	5499
Marantz CD63 S/H	N/A	99	Rega ELA Cherry X-demo	749	549
Meridian 206 CD Player S/H	N/A	399	Sonus Faber Concerto Home, Walnut x-demo	999	699
Meridian G08 CD S/H	2250	1899	Sonus faber Concerto Grand Piano Black Gloss X-demo	1699	1199
Primare V10 CD/DVD Player x-demo	795	499	Sonus Faber Ironwood Stands, Walnut, adjustable x-demo	480	339
Sugden CD21 Graphite S/H	1099	649	Sonus Faber Leather Stands, fixed height, x-demo	310	220
Sony SCD XE597 SACD Player S/H	150	99	Tannoy D700 Rosewood S/H	1999	699
TAG McLaren CDT20R Transport S/H	1500	749			
Theta Generation V Balanced S/H	6290	1999	<b>Cables and Accessories</b>		
Theta Pro Basic II DAC with Oscom/Balanced S/H	2990	995	BCD 1000 3 tier table S/H	1295	650
			Cardas Neutral Reference 1m RCA-BNC S/H	550	375
<b>Analogue</b>			Cogan Hall Intermezzo EMD 0.75m RCAs S/H	N/A	199
Dynavector XV1s 200hrs S/H	2900	1499	JPS Superconductor 2m Balanced pair interconnects S/H	1299	649
Audio Research PH3 Phono Stage x-demo	1699	1099	Kimber Select KS1021 0.5m attenuated Interconnects S/H	519	299
EAR The Head MC Transformer S/H	N/A	399	Kudos S50 60cm Stands S/H	199	79
Heed Quazar 2 box MC/MM Phono stage new	550	395	Madrigal MDC1 1m AES/EBU 110ohm Digital Cable new boxed	420	199
Krell KPE Reference+ PSU S/H	2487	1299	Mandrake 1.0m Silver/Gold RCA Interconnect S/H	1250	399
Kuzma Stabi/Stogi S Turntable New & Boxed	N/A	1399	Tara Labs RSC 1800 Prime 2x4m Speaker cable Bi-wired	1500	499
Roksan Xerxes XPS1/Alphason HRS100 S/H	N/A	599	Spectral MH-750 20ft Speaker cable x-demo	2100	1199
SME 20/2A Turntable S/H	5537	3799	Spectral MI-330 15ft Interconnect RCA-RCA x-demo	800	499
Triplanar Series VI Tonearm S/H	3500	1999	Spectral MI-350 15ft Interconnect RCA-RCA x-demo	1400	799
Transfiguration Temper MC 600Hrs S/H	1950	799	Wireworld Equinox 3++ 3m pair speaker cables S/H	1199	399
			<b>Tuners &amp; Tape decks, power supplies</b>		
<b>Preamplifiers</b>			Aiwa F770 3 head cassette deck S/H	N/A	99
Audio Analogue Bellini Remote Preamplifier X-demo	625	499	Magnum Dynalab MD106T 4 months old	3600	2999
Krell KCT Preamplifier S/H	9989	5998	PS Audio Power plant 300 Multiwave x-demo	1600	999
Mark Levinson No380 Preamplifier S/H	4999	2499	Rega radio 3 Silver X-demo	398	279
Primare Pre30 Preamplifier x-demo	1299	799	Tice Solo Powerline Enhancer S/H	N/A	299
Spectral DMC 30s Reference Preamplifier S/H	7600	4999	Tice Solo AV Power Conditioner S/h	N/A	299
Spectral DMC 15 Preamplifier S/H	4800	3250	Sony ST D777ES DAB Tuner S/H	699	299
TAG McLaren AVR30RSL7.1 T2 processor S/H	2300	995			
			<b>Suppliers and installers of High Quality Audio Systems</b>		
<b>Amplifiers</b>			47 Laboratory • J M Labs		
Audio Analogue Donizetti Mono Power Amplifiers X-demo	1050	729	Accuphase • Krell		
Audio Research VT60 Re Valved S/H	1999	995	ATC • Kuzma		
Cyrus 8 Integrated Silver S/H	800	499	Audio Physic • Lavardin		
ECS EA1 Mono Amplifiers (pair)	6500	2999	Audio Research • Martin Logan		
OCM 500 Soloist stereo power amp, awesome S/H	2700	899	Avalon Accoustics • Michell		
Musical fidelity A1000 S/H	1500	849	Avid • Nagra		
Krell FPB750mcx Mono Amplifiers S/H	28900	14999	bel canto • Primare		
Pathos Logos valve Hybrid S/H	2750	1699	Benz Micro • ProAc		
Primare A30.2 Power amplifier x-demo	1299	799	Cardas • Rega		
Red Rose Sprit Integrated x-demo	1000	649	Clearaudio • Siltech		
Rega Maia Power amplifier Black x-demo	548	399	Conrad Johnson • Sonus Faber		
Spectral DMA100s Power Amplifier S/H	4250	1999	dCS • Spectral		
			Densen • Nordost		
<b>Loudspeakers</b>			DNM/Reson • Sugden		
Audio Note AZ 2 efficient, budget floor stander S/H	499	225	Electrocompaniet • Transparent Audio		
Audio Physic Spark 2 American maple x-demo	1299	799	Finite Elemente • Verity Audio		
Audio Physic Yara Monitor Cherry x-demo	549	399	Graaf • Wadia		
Audio Physic Yara Floorstander x-demo	999	749			
Audio Physic Virgo 3 Maple x-demo	4500	2999			
ATC Active 10 SL x-demo	1650	1199			
ATC Active SCM50ASL Maple S/H	7989	3999			
ATC SCM7 Cherry x-demo	499	375			

Midland Audio X-change are looking for Audio Research, Krell, Mark Levinson, Naim Audio, Dcs, Wadia.

# Bosendorfer Loudspeakers,

by the company who make, arguably the best pianos in the world. since 1828

**HiFi News and Record Review** May 2005...*The sound is extraordinary in its overall balance. The VC7's are capable of exceptionally fine detail and dimensionality. In terms of the sensible compromises, the sheer musicality and sense of being there, the VC7 is masterpiece. The Bosendorfer VC7 is for me a dream come true.*

Best Loudspeaker 2004 - Wallpaper Magazine

*See it, hear it, experience it, at*

KJ West One

26 New Cavendish Street

London W1 Tel: 0207 486 8262/3



HiFi Choice April 2005  
Editors Choice Gold Star

**Le Festival Son et Image de Montréal 2004.....** *It was also perfectly obvious that the Bösendorfer loudspeakers had the finest reproduction of piano music that I have ever heard. Seeing the quality of the piano in the same room as the loudspeakers, I was impressed, but not surprised. They obviously knew what they were doing when they built these beauties.....*

*the VC7's performance in the front/rear and left/right dimensions is expansive and three-dimensional. Even subtle details are reproduced in a magnificently rich sound. Flute tones are soft and delicate while cembalo is well defined even in very quiet passages.. Even when the music becomes louder, reaching dynamic peaks, the VC7 retains its effortlessness.*

**Marco Kolks - Horerlebnis**

**also at the Design Centre,  
Chelsea Harbour, Chelsea, London**

# AUDUSA

## AUDUSA EUPEN

The world's only true Ferrite technology cables - a high quality ferrite is extruded over the conductor strands. Power Cords - GNLM 5/2.5 (CSA 2.5) and GNLM 05/04. From £48 for a 1m power cord terminated with an IEC and MK tough plug. Also available are the CMS Analog, Digital and Video Interconnects with RCA, XLR or BNC connectors.

**A must for all digital products - CDP, DAC/Transports, DVD, Sat/Cable receivers, Digital power and pre amp etc. Equally effective on TV's CRT/Plasma/TFT**



## AUDUSA OOM

products include ceramic speaker cable isolators from the USA, MK Tough plugs, IEC's, Wattgate 320L IEC and USA Plugs with silver plated contacts. Locking banana and RCA connectors with silver plated pins. New in stock are 13 amp fuses with silver plated end caps.

## LAT INTERNATIONAL - USA

Power, Analogue, Tonearm, Digital, Video interconnects and single and biwire speaker cable.

Silverfused wire technology.

**NEW FOR 2005**

**IC 300 Analog and DI-30 Digital Interconnects, AC-2 MKII Power cord, SS800 and SS1000 MKII Speaker cables.**



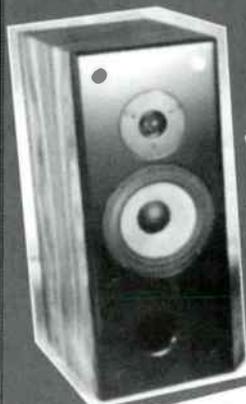
**WWW.AUDUSA.COM**

**T: 020 82419826, 020 8264 0249 F: 020 8241 0999 E: sales@audusa.com**

# Q.T.A. SYSTEMS - KITS

DESIGNS ENGINEERED FOR EXCELLENCE WITH:-

- POLYPROP CAPS
- AIR CORED COILS
- HI-TEC DRIVERS
- TOP GRADE COMPONENTS



• CABINETS INCLUDED WITH OPTIONS ON FINISH

- NOTES AND SPECIFICATIONS
- COMPREHENSIVE INSTRUCTIONS
- AVAILABLE AS COMPLETED UNITS WITH STANDARD OR EXOTIC VENEERS
- DISCRETE COMPONENTS
- CUSTOM MACHINING SMALL PANELS, JOINTS & CUT-OUTS

**Q.T.A. Systems**  
2 Wheatsheaf Way  
Linton - Camba CB1 6XB  
Tel: 01223 891091

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

## WILLIAMS HART ELECTRONICS

HART ELECTRONIC KITS TRADED FOR OVER 30 YEARS



Monafet Monoblock Power Amp Kits  
ONE OF THE BEST AMPLIFIERS YOU WILL HEAR! Regardless of price  
REVIEWED IN HI-FI NEWS AS "...EXCEPTIONAL...  
SELF EVIDENTLY CORRECT"



Single Ended Class A Valve Sound  
15Watt Power Amp modules  
FOR THOSE WHO WANT THAT VALVE  
MIDBAND BUT BASS AND TREBLE TO MATCH



ACTIVE R/Control SUBWOOFER MODULE E177.30



Speakers Designed & Built to Order

Advertise your Hi-Fi on my website (FREE)

Also: Award Winning Phono Stage Kit, Active Crossover Modules, Speaker Drive Units, M Cap Capacitors, Caddock Resistors, Remote Control Volume and much more.

WEB SITE: [www.williamshart.com](http://www.williamshart.com) e-mail: [sales@williamshart.com](mailto:sales@williamshart.com)

Tel: 0034649587248

PLEASE SEE WEBSITE FOR NEW CONTACT DETAILS

PERSONAL VISITORS SHOULD PHONE FIRST TO AVOID DISAPPOINTMENT

Run by former Technical Director of Wiltshire Audio



## listening rooms

### SALE LIST

#### NEW SALE

EMERGE M1000 H/D Sound server	£1500.00	£895.00	D
ARCAM DV88 DVD PLAYER	£1,000.00	£679.00	D+N
AUDIO RESEARCH LS25 MKII (mint very light use)	£5499.00	£2995.00	SH
CELESTION - C2 - Floorstanders	£499.00	£299.00	D
CELESTION C1 - Compact speakers	£199.00	£114.00	D
CYRUS 5 AMPLIFIER	£500.00	£329.00	D+N
CYRUS 7 AMP	£700.00	£479.00	D+N
CYRUS DVD7	£1,000.00	£599.00	D
AVANCE TECHNOLOGIES Active Subwoofer	£1200.00	£695.00	N
MARTIN LOGAN SCENARIO	£2,498.00	£1,629.00	D
MERIDIAN DSP1500 Subwoofer	£1350.00	£895.00	D
MERIDIAN 562v.2 Controller	£1,500.00	£995.00	D
MERIDIAN G51 RECEIVER (AS NEW)	£1995.00	£1395.00	D
MERIDIAN G55 5 CHANNEL POWER AMP (AS NEW)	£2695.00	£1885.00	D
MERIDIAN G56 STEREO POWER AMP (AS NEW)	£1495.00	£1045.00	D
MERIDIAN G01 CONTROL UNIT (AS NEW)	£1450.00	£995.00	D
MARTIN LOGAN CLARITY	£2500.00	£1749.00	D
MISSION 773E SPEAKERS	£399.00	£249.00	D
MISSION 780 - ROSEWOOD	£300.00	£199.00	D
MISSION 783 - BEECH (Good condition)	£1,000.00	£499.00	D
MISSION 782 - BEECH	£700.00	£449.00	D
DENON DVDA11	£1699.00	£1295.00	N
MUSICAL FIDELTY XA100R - INT AMP	£900.00	£499.00	N
PROCEED AVP PROCESSOR.VGC/LIGHT USE	£4,700.00	£1995.00	D
PROCEED PMDT DVD PLAYER.VGC/LIGHT USE	£5,495.00	£2495.00	D
PROAC STUDIO 125	£1,000.00	£599.00	D
REDROSE Valve System (amp & speakers) 1yr old	£10,000.00	£2995.00	SH
SONUS FABER GRAND PIANO BLACK	£1699.00	£995.00	D
SONUS FABER CONCERTO wood	£999.00	£595.00	D
VIENNA MALHER (Beech)	£6000.00	£2999.00	D
VIENNA WALTZ centre Speaker (Beech)	£500.00	£350.00	D
YAMAHA HD1000 Hard Disc Recorder	£699.95	£500.00	D

**Hi-Fi Multiroom and home cinema  
PLEASE SEE OUR WEBSITE  
FOR LATEST OFFERS!**

### THE LISTENING ROOMS LTD

161 OLD BROMPTON ROAD LONDON SW5 0LJ

TEL: 020- 7244 7750/59 FAX: 020 - 7370 0192

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

E-mail: [tlr@btclick.com](mailto:tlr@btclick.com)

Mon-Sat 10-6pm



# Listen Carefully

Good value is alive and well.

Excellent sound at sensible prices can be found.

After much searching I have my first three suppliers. Ayre, Thiel and Esoteric digital. There are others out there no doubt. When I find them, and if the chemistry is right, I'll represent them in my deliberately small specialist showroom in North London.

You'll be surprised I think by the relaxed atmosphere here. That's because I offer just one demonstration slot in the morning, one in the afternoon and occasionally one in the evening. No fuss, no hurry, no interruptions, no other visitors, no parking wardens and no coercion. You'll benefit from my years of experience and you'll receive my undivided attention.

I offer home demonstrations in London, Kent, Essex, Cambridgeshire, Hertfordshire, and Bedfordshire too, and some uncommonly generous upgrade paths from entry level to the pinnacle. Just telephone me on 020 8447 8485.

With me you can listen to the Ayre AX-7e, K-5xe, K-1xe, P-5xe, V-5xe, V-1xe, CX-7e and C-5xe. Also the Thiel CS1.6, CS2.4 and SS1. Finally, the Esoteric, UX-1, P-01, D-01 mono DAC and G-0s master clock generator..

In summary then – calm and intelligent demonstrations for lovers of all types of music.

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

## CLASSIQUE SOUNDS

(LEICESTER)

UK agent for One Thing Audio.

VINTAGE HI-FI & VALVE SPECIALIST. TEL 0845 123 5137 (local rate.UKonly)

### WANTED Vintage and modern hifi eqpt.

Part exchange welcome.

Leak Stereo 20 full rebuild using Jensen Paper in oil caps £299.00

#### FOR SALE. PRE/POWER AMPLIFIERS

Marantz's Duoeto receiver-CD system to include SR110 receiver and CD110 Cd player. All boxed and mint.	£ 230	Anatek AS0. 50 W/ch pure class A int amplifier.	£ 499
CR Developments Carmenta Line valve pre-amp.	£ 450	Woodside SC26 Valve line pre amplifier.Ex cond	£ 690
Woodside STA-50.BG.SE.Valve power amp.Mint.	£ 999	Musical Fidelity F16 Class A power amp. Mint/Bxd	£1350
Quad 77 integrated amplifier. Ex Cond. Boxed.	£ 295	Nad C370 integrated amplifier.Mint & boxed.£450	£ 295
Naim NAC 92 pre-amp. S/NO 161840. Mint. Boxed	£ 299	Quad 33 pre amplifiers. From.....	£ 75
Quad 33 pre amplifiers. From.....	£ 75	Musical Fidelity P270 power amp.150W Class A.	£ 699
Leak TL12+ valve amplifiers.Bronze finish & rebuilt with expensive paper in oil caps & Rhodium plate phono	£ 695	Pair Quad 11 valve power amps. Rebuilt by GT Audio and revalved. Sound amazing and in V/good condition.	£ 695
Meridian Modular pre/power amplifier. Ex cond.	£ 249	Single Leak TL12+ amplifier in Champagne. Nice	£ 249
Arcam 8P power amplifier. Mint/boxed/instructions	£ 175	NVA A60 stereo power amplifier. Good condition.	£ 295
Quad 303 power amplifiers from .....	£ 125	Cyrus 111 integrated amplifier. Excellent.	£ 299
Arcam Zeta 1.Pro logic Cinema amp. Cost £999.00	£ 450	Quad 405/1. Boxed and in good condition.	£ 225
Arcam Alpha 3 amplifier. Mint/boxed/ Instructions	£ 100	Musical Fidelity B1 integrated amplifier. Good cond	£ 125
Marantz PM66SE K1 signature integrated amplifier	£ 199	Tube Technology Unisis valve pwr amp. Mint bxd	£ 995
Linn LK1 pre-amp and remote. Good condition.	£ 249	Linn LK2 power amplifier. Good condition	£ 299
Quad 11s in various condition and prices	£ 299	EPOA Leak Stereo 20 valve power amplifiers from....	£ 10A
Naim Nap 180 power amplifier. Mint. Boxed.	£ 799	Harmon Kardon integrated valve amp.110V. V rare	£ 299
Nakamichi CA5 pre-amplifier. Ex cond. Cost £750	£ 375	Nakamichi PA5 100W/CH power amp. Cost £1300	£ 650

#### TURNTABLES

Project 1 Expression. TT. Mint and boxed.	£ 120	Transcriptors Hydraulic Reference turntable. Nice	£ 799
Mantecore Mantra with Linn Basic-tone arm.Excon	£ 249	Technics 150 with SME 3009 Boxed. Ex condition	£ 299
STD 305S motor unit. No arm. Nice deck.	£ 100	Thorens TD160 with thorens tone arm.	£ 95

#### SPEAKERS

Castle inversion 15 & dedicated stands.Cost £700	£ 345	Acoustic Energy Aesprit AE300.Mint/bxd.	£ 400
Acoustic Energy Aegis Evo 3 in maple. Exc, boxed	£ 199	Snell E2's with dedicated stands. Just Serviced.	£ 699
Pair Quad ESL63 speakers in black. All new panels and full service. 1 year guarantee. Ready for beginning Aug.	£ 1799	Heybrook Heylios. Black. Boxed. Ex condition	£ 199
Pair Quad ESL63s. Black finish and Exc condition	£ 1000	Kef Cresta 1. Mint & boxed. Black ash finish	£ 59
Pair Quad ESL57. New treble panels.Nice cond.	£ 899	Quad ESL63 speakers. Upgraded with the Black Gate cap mod and all new panels 18 months ago.Boxed	£ 1399
Quad ESL63 speakers. Upgraded with the Black Gate cap mod and all new panels 18 months ago.Boxed	£ 1399	Pair Quad ESL57 spkrs. Fully rebuilt by One Thing Audio. Black cloth fronts.5 star review in Hifi World. Mint.	£ 1799
Rupert stands for Quad ESL57 and ESL63 speakers	£ 200	Mordaunt Short MS201 pearl. Brand new. Black	£ 169
B&W 602.5 Series 3 floorstanders. Beech finish.	£ 295	Celestion F30 floorstanders. Mint. Boxed.Black ash	£ 129
Quad ESL57 speakers.All fully serviced with full 3 months warranty.Hear what ESL57s should sound like From£ 900 pr	£ 295	Phillips Motional feedback speakers. Rare	£ 175

#### OTHER ITEMS

Nad C541i Cd player. Mint,boxed and remote	£ 199	Quad MC phono module for Quad 34 pre amplifier	£ 40
EAR 834P MM/MC Valve phono pre with volume.	£ 449	SME 309 tone arm. Mint & boxed @ only	£ 475
Mod Squad passive pre amp.Absolutely stunning	£ 299	Audionote DAC 1. Valve Dig to analogue converter	£ 399
Trichord Research Pulsar 1 Dac with Michell PSU	£ 999	Trichord Research/PDS707 transport.Clock 3. Exc.	£ 450
Trichord Research powerblock 500. Mint condition	£ 195	Trichord Research Powerblock 1000. Ex condition.	£ 295
Sony D777ES DAB/FM/MW/LW/RDS Tuner. Mint.£ 299	£ 299	Pioneer F-504RDS Precision FM/AM Tuner. Boxed	£ 125
Pioneer PD-S505 Cd + PSU & Mod by Tom Evans.	499	Pioneer PDR-509 CD recorder/player. Boxed £300	£ 99
Nakamichi DR4 Cassette recorder.. Mint.	£ 150	Nakamichi CR3E Cassette deck. Mint & boxed.	£ 195
Sony HAR-LH500 CD with built in 80G hard drive	£ 249	Revox G36 2 track R/Reel. Valve and very rare.	£ 249
Bulgin 3 pin mains plugs for Quad/Leak etc.Each @£ 10	£ 10	Bulgin style P29 mains plugs for Quad 11's etc.	£ 25 pr
Phillips CD100 CD player.The first. Booklet/instr.	£ 150	Marantz CD63 top loader cd player. Collectable.	£ 125
Quad FM1 Valve tuners. Various prices from only	£ 10A	Stax SR5 electrostatic headphones with energizer.	£ 125
Trio KT880L synthesiser tuner. AM/FM. Black.	£ 75	SME 3009 tonearms from.....	£ 150
Decca London international tone arm. New. Boxed.	£ 175	One Thing Audio Stereo Decoder. New.	£ 200
Linn Tuner. Mint.Boxed. Very unusual. Cost £549	£ 249	Quad FM3 tuner in excellent condition.	£ 99

#### QUAD ESL57 & ELS63 PANELS/SERVICING ETC

Full rebuild including latest Otec panels/ bass panels & cosmetics 57's £1175

Reconditioned Quad ESL57 speakers from only £999.00.pr.Why spend £4000+?

**ESL57 SPEAKERS STANDARD SERVICE £550.PR.Price**

includes 2 completely rebuilt treble panels etc. Ring for further info.

"Classique Sounds servicing restores the Quads to a position where they can hold their head high", Jon Marks. HIFI WORLD. April 1999.Full servicing facilities available.

**TRANSLUCENT. (somewhat of a bargain) Hifi World. Jan 1999**

#### PURE SILVER INTERCONNECT CABLE

99.99% pure silver conductors. Quality gold plated RCA phono plugs.

Half Metre terminated £70.00 One metre terminated £90.00. Available with Eichmann plugs + £30

New Translucent ULTRA + Heavy duty. 99.99% pure silver (4N).

Eichmann 24 Kt gold plate plugs £199.00 per metre. Or £149 per half metre.

7 day money back guarantee if not better than existing cable

New for 2005. Translucent digital cable. 99.99% pure silver conductor. 1M @ £59 .5M @

£39 Translucent Ultra + digital cable & Eichmann plugs. 99.99% silver conductor.

1M @ £99 .5M @ £69

1.0MM 99.99% pure silver wire @ £15m.....0.5mm pure silver wire @ £6.00m  
New 24K gold plated Nakamichi locking banana plugs and RCA phones @ £4.95each  
New Quality Rhodium plated RCA phono sockets. The best @ only £4.99 a L/R pair.

#### QED SPEAKER CABLES AT 30% OFF.

Silver Anniversary @ £385M.....Micro @ £120M.....Original @ £195M..... Contour flat @ £1.60M

Bronze special edition @ £2.10M.....Genesis silver spiral bi wire.....Awesome cable at only £42.00M

Silver Anniversary bi-wire @ £7.00.....Profile 4X4 @ £7.00M.....Original Bi-wire @ £3.45M

TEL. 0845 123 5137 (Calls charged at local rate anywhere in the UK)

Tel 0116 2835821 or 07815188040 (Mobile). Callers by appt only.

Opening times 10.00am-6.00pm Mon-Friday.10.00am-2.00pm Saturday.

61 Aylestone drive, Aylestone, Leicester, LE2 8QE. Email [classique\\_sounds@yahoo.co.uk](mailto:classique_sounds@yahoo.co.uk)

**0% FINANCE AVAILABLE FOR UP TO 3 YEARS ON SELECTED ITEMS.**

**SUBJECT TO STATUS. CONDITIONS APPLY.**

**SPEAKERS**

Sonus Faber Extremers with stands £2995  
 Mordaunt-Short MS 3.30 speakers £95  
 ATC SCM 20/2 Active Loudspeakers boxed/superb £2250  
 Audio Physics Tempus £795  
 B&W Silver signature 30's £3995  
 Spica TC-50 speakers 275  
 Orchid LWO speakers ex-demo £2795  
 Thiel CS6 speakers £4495  
 Martin Logan CLS11 speakers £2250

**PRE-AMPS:**

Mark Levinson 28 with phono stage £1195  
 ATC SCA 2 Pre Amp boxed superb £2250  
 Exposure 11 & 12 pre with power supply £595  
 Naim Nac 92 with Nap 90/3 amp £595  
 Toft LBPA pre-amp (balanced) £495  
 Audionote M8 with phono, remote (new) £12500  
 Audio Research SP14 1495

Proceed PAV pre-amp £1395  
 Mark Levinson ML32 ref pre-amp with phono £8500

**AMPLIFIERS**

Acouphase E37 Integrated Amp Mint £2500  
 Acouphase A20V Class A Amp Mint £2500  
 Sinus (Gamut 2) Power amp latest spec £1795  
 Mark Levinson ML 432 Power amp £4750  
 Rotel RC-995 Remote pre-amp with RB-992 power amp (balanced) £850  
 Mark Levinson ML 33 Reference mono's £15995  
 Perreux 200ip int. amp £1395  
 Krell KAV-250A/3 3 channel amp £1495  
 Parasound HCA 1206 6 channel amp £1595  
 Mark Levinson ML432 400 watts per chan. Amp £4750  
 Macintosh MC 2000 Ltd edition amp (Rare) £7995  
 Audionote Neiro mono-blocks £3495  
 Parasound HCA 1000A amp £3750  
 Mark Levinson ML336 power-amp £15000  
 Audionote Kepon mono's (new) £15000  
 Acouphase A20 class A amp £2950  
 Advantage integrated amp £1495

**CD PLAYERS & TRANSPORTS**

Mark Levinson 390S Mint £3995  
 47-LAB Flat Fish Transport/Progression DAC/PSU £3750  
 Lab 47 flat fish with Progression dac & PSU £3995

Roksan Atessa with ROC DA1 dac & PSU £895  
 Gamut CD-1R CD player £1495

**MISCELLANEOUS**

Nakamichi ZXL 1000 Ltd ed Gold plated cassette deck. £3495  
 Sony ST-SE570 Tuner £60  
 Denon DCD 590 CD Player £80  
 PS Audio Power Plant main conditioner £1695  
 Krell Home Theatre Standard processor £2495  
 1 Mir pair Madrigal CZ Gel bal' interconnect £250  
 15 Foot Transparent Music Wave Super single mono run. £795  
 Zerodust Stylus cleaner (new) £25  
 Zerodust CD & lens cleaning cloths (new) £17.50

**TURNTABLES, CARTRIDGES & TONEARMS**

My Sonic Eminent (EX review) £1995  
 Audio Tekni Cartridge with step up (Ex review) £2250  
 Blue Pearl (the prototype) Turntable with Gold Plated SME-V arm £9995  
 Zyx airy Cryogenic copper cables £995  
 Project 6.9 Turntable (without cartridge) £425  
 Audio Tekne Cartridge with step-up transformer £2995  
 My Sonic Eminent cartridge (new) £2750  
 Dynavector DV-DRT XVT5 cartridge £2195  
 Project 9c S carbon fibre silver wired arm £375  
 Project RPM9 turntable without cartridge £550

ALL USED CARTRIDGES ARE CHECKED UNDER A MICROSCOPE BEFORE BEING OFFERED FOR SALE.

VISA - SWITCH - MASTER CARD - AMEX - DINERS CLUB WELCOME.  
 WE TAKE PART EXCHANGE ON NEW & USED STOCK and buy in for cash

**3D by SHANLING**  
 acoustics  
**Premier Dealers**

**UK & IRELAND DISTRIBUTOR**  
 Real Hi-Fi  
 Tel: 0870 909 6777  
 www.realhi-fi.com

<b>BUCKS.</b> Noteworthy Audio 01296 422 224	<b>KENT</b> Matrix Hi-Fi 01322 292 391	<b>NORTHANTS.</b> H.G. Rapkin 01604 631 515	<b>SUFFOLK</b> The Emporium 01379 870 873
<b>CAMBS.</b> The Hi-Fi Company 01733 341 755	<b>Sounds of Music</b> 01892 539 245	<b>NORTH WEST</b> Orpheus Audio 0161 428 1539	<b>Audio Images</b> 01502 582 853
<b>ESSEX</b> Audition Music 01255 863 905	<b>LINCOLNSHIRE</b> AudioLincs 01476 591 090	<b>SCOTLAND</b> Shadow Audio Consultants 01592 744 779	<b>SOMERSET</b> Alternative Audio 01984 624242
<b>HAMPS.</b> Origin Live 02380 578 877	<b>LONDON</b> KJ West One 0207 4868 262	<b>The Audio Salon</b> 0141 333 9700	<b>TYNE &amp; WEAR</b> Global Hi-Fi Centre 0191 230 3600
<b>ISLE OF MAN</b> The Musical Experience 01624 817230	<b>Walrus Systems</b> 0207 724 7224	<b>Hi-Fi Corner</b> 0131 566 7901	<b>YORKS</b> Premier Audio 01924 255 045
	<b>Unique Sound &amp; Vision</b> 0207 2720922		<b>Vickers Hi-Fi</b> 01904 629 659

**MUSONIC STYLI**

**How to get the most out of your record player in 3 easy steps:**

1. Buy from Musonic
2. Fit your purchase to your player
3. Turn up the volume

**After 50 years in the business We know what we're talking about!**

**Manufacturers and suppliers of Styli, Pickup Cartridges and Audio Accessories.**

Musonic (UK) Limited  
 Unit 13, Wenta Business Centre, Colne Way,  
 Watford, Hertfordshire, WD24 7ND  
 Email: sales@musonic.co.uk  
 Tel: 01923 213344  
 Fax: 01923 213355

For info and to buy online visit:  
**www.musonic.co.uk**

**High End Cable**  
 www.highendcable.co.uk  
 Call Dave 01775 761880 or order online

 Stereovox SEI 600II Reference interconnects	 Stereovox HDXV Digital interconnect
 Nordost Red Dawn	 ISOL-8 Qube
 Nordost BRAHMA power cord	 STAX earspeakers

Chord | Acoustic Zen | Stereovox | Nordost UK | van den Hul | ISOL-8  
 Black Rhodium DCT | Ayre | STAX | Ortofon | Turbosound | Second hand  
**Free delivery worldwide on all interconnects.**  
 For many more money saving offers and information please visit  
**www.highendcable.co.uk or call Dave on 01775 761880**



# Oxford Audio Consultants Ltd.

OUR SUPERB SERVICE IS THE SAME REGARDLESS OF PRICE



## Now Demonstrating



Ex-Demonstration & Previously Owned Equipment

### SALE LIST

AUDIO NOTE OTO SE	£895.00
CONRAD JOHNSON PF1L PREAMP	£595.00
COPLAND CD822	£1,195.00
GM AUDIO BCD 4 SHELF TABLE	£700.00
GRAAF 13.5 PREAMP	£1,195.00
GRAAF GM100 POWER AMP	POA
JADIS JD3	£1,295.00
KRELL KAV250P	£495.00
KRELL KPS20I	£2,995.00
KRELL KPS28C	£5,995.00
MARTIN LOGAN QUEST	£1,495.00
MERIDIAN G08 CD	£1,295.00
MONITOR AUDIO RADIUS 180 7 SPEAKER PACKAGE	£495.00
ONKYO INTEGRA SYSTEM	£3,500.00
ORIGIN B2 SOLO SPEED CAMERA DETECTOR	£295.00
QUAD ESL63	POA
SONUS FABER AMATIS	£6,495.00
SPECTRAL CABLES	£495.00
SPECTRAL DMC15/DMA100S NEW PRICE	£3,995.00
STANDS UNIQUE REFERENCE TABLE	£395.00
STAX SIGNATURE SYSTEM	£495.00
TANNOY DIMENSION TD10	£3,750.00
TANNOY DIMENSION TD12	£4,500.00
TEAC D2 D/A CONVERTER	£495.00
TRANSPARENT MUSICLINK SUPER	£250.00
TRANSPARENT REFERENCE PHONO CABLE WITH SME ADAPTOR	£595.00
WADIA 64.4 DAC	£995.00
WADIA WT2000 CD TRANSPORT	£995.00
WILSON AUDIO SYSTEM 7	£13,995.00

SH - Second Hand XD - EX Demonstration

**0% interest free credit**

Licensed Credit Broker

REFER TO OUR WEBSITE FOR THE LATEST UPDATED SALE LIST.

Agencies include: Anthony Gallo, Artcoustic, Atacama, Audio Aero, Audio Analogue, Audio Research, Avid, Beyer, Blok, Bose, Burmester, Canton, Chord Company, Copland, Creston, darZeel, Denon, Diapason, Dreamvision, Fujitsu, GM Audio, Graaf, Harman Kardon, Hitachi plasma, I-scan, Isobue, Isotek, Jadis, Jamo, Kef, Koetsu, Krell, Linn Klassik, Living Control, Loewe, Lyr, Marantz, Martin Logan, Michell, Mission, Musical Fidelity, NAD, Naim, Nevo, Nordost, Opera, Opus, Ortofon, Parasound, Pathos, Pioneer, Prima Luna, Project, Pure, Quadraspire, Rako, REL, Sennheiser, Sharp Aquos LCD, SME, Sonus Faber, Sonus systems, Speakercraft, Spectral tables, Stands Unique, Stax, Stewart Screens, T & A, Tannoy, Teac, Theta, Tivoli, Transparent, Unison Research, Triangle, Vantage Point, Vogel, Whest Audio, Wilson Audio, Wireworld, Yamaha

Cantay House, Park End Street  
Oxford OX1 1JD

Telephone: Oxford (01865) 790879

Facsimile: Oxford (01865) 791665

E-MAIL: enquires@oxfordaudio.co.uk

WEBSITE: www.oxfordaudio.co.uk



V.A.T. No.  
729580013



QUALITY USED  
EQUIPMENT,  
BOUGHT, SOLD, PART  
EXCHANGE

TEL/FAX  
0121 747 4246



REQUIRED  
HIGH END AUDIO  
EQUIPMENT

	RRP	NOW £
AUDIO RESEARCH D130	2000	795
AUDIO RESEARCH VSI55	2895	1995
AUDIO RESEARCH CD3 MK11	5190	3495
AUDIO RESEARCH SP16L	1999	1295
AUDIO RESEARCH VS110	3999	2795
AUDIO RESEARCH V70	4000	1295
AUDIO RESEARCH LS2	2000	595
ARCAM DV29 DVD	1600	995
ACOUSTIC ENERGY AE1 BLACK BIWIRE STANDS	N/A	495
ACCPHASE DP55V	3000	1995
ACCPHASE PS500	3600	1995
ATC C2 SUB	1600	895
AVI S2000MC REFERENCE CD	1395	395
BAT VK51SE 6 MONTHS OLD	7950	3995
BOULDER 1012 PRE DAC EX DEM	12950	7995
BOULDER 1010 PRE EX DEM	9500	6495
BOULDER 1060	16500	9995
BRYSTON BP20 PRE	1800	895
CHORD SIGNATURE SPKR CABLE 8MTR PAIR	1850	995
CLEARAUDIO CHAMPION LEVEL 2 + UNIFY ARM	3000	1395
COPLAND CD288 HDCD BLACK	2000	795
COPULARE AMP STAND 19X19 INCH	950	295
DENNON DVD1600	400	150
DENNON AVC-AISR BLACK	3000	995
HITACHI 55PMA550 55 INCH PLASMA 3 MTHS OLD	5500	3495
HOVLAND HP200 WITH PHONO EX DEM	7325	4995
HOVLAND SAPPHIRE	7000	3495
KRELL KPS20IL	12000	2795
KRELL KRC-HR KPE PHONO	7639	2495
MARTIN LOGAN ASCENT I 3 MONTHS OLD	4333	2995
MARANTZ CD7	3500	2495
MERIDIAN DSP 6000 24/96	11500	5495
MERIDIAN DSP 5000 24/96 ROSEWOOD MK1	4500	1995
MERIDIAN M60C BLACK	1000	495
MICHELL GYRO SE SILVER	940	550
MUSICAL FIDELITY NUVISTA CD	3000	1495
MUSICAL FIDELITY TRIVISTA INTEGRATED AMP	4000	2495
MUSICAL FIDELITY A3.2 INTEGRATED AMP	979	550
MUSICAL FIDELITY A3.2 CD	999	550
MUSICAL FIDELITY A3.2 TUNER	699	395
MUSICAL FIDELITY A3.2 PRE	999	550
MUSICAL FIDELITY XLP	150	75
MUSICAL FIDELITY XCAN V2	150	75
MUSICAL FIDELITY A3 CD	800	395
NAIM 500 s/n 179450/177734	12350	6995
NAIM NBL BEECH s/n 159946	7500	3495
NAIM 252 s/n193419	4265	2995
NAIM 82 s/n 102930	2600	1195
NAIM SNAXO 3-6 S/n 187399	829	350
PATHOS LOGOS 3 MTHS OLD	2700	1795
PLINIUS SA100 MK111	4000	1795
PIONEER 757AI MULTI REGION CD/DVD/SACD EX DEM	750	295
QUAD 12/L BIRDSEYE MAPLE LAQUER	499	299
QUAD CENTRE BIRDSEYE MAPLE LAQUER	399	250
QUAD 22/L BIRDSEYE MAPLE LAQUER	899	495
RED ROSE PASSION INTEGRATED	2400	995
REL STAMPEDE BLACK 2 MONTHS OLD	550	395
REGA MAIA 3	549	365
REGA EXON 3	1195	795
RICHARD GREY 1200 CUSTOM MAINS DISTRIBUTION	1900	895
SONY DVP-NS999ES CD/SACD/CD	999	395
TEAC VRDS 9 CD	700	295
TANNOY DIMENSION 8	4000	1995
TARA LABS DECADE 2MTR BALANCED	2300	395
T AND A TALLIS 5.1 NEW UNUSED	2200	995
TRANSPARENT MUSIC WAVE PLUS BIWIRE 15FT 900	400	450
WADIA 850	5000	1995
ZINGALI OVERTURE 2	2500	1395

OPEN MON-SUN 10.00 TO 8.00  
Website: www.centralaudio.co.uk  
E-mail: tony@centralaudio.co.uk

ALSO AGENTS FOR

Advantage. Balanced audio technologies. Boulder. Burmester. Eggleston. Hovland.Kharma. Lumley. Pass labs. Sound lab. VTL.

.....Part exchange upgrades a speciality - Try us, you might be surprised! .....

hifisound, 30b Larchfield St, Darlington, County Durham, DL3 7TE. Tel: 01325 241888 Email: world@hifisound.co.uk

www.2ndhandhifi.co.uk



## ...what are you up for?

Digital - CD, DVD etc		Amplifiers		Speakers		Analogue				
AHI Nioe Tjoeb	99	Adcom	GTP5001I GF#545II Pre/Power	399	Acoustic Energy	AE1 Standmount	399	Alchemist	Bragi Phono stage c/w Forsetti p/s	399
Arcam	Alpha 1	AMC	2445 Power	199	Acoustic Energy	AE1 Mk2 Standmount	449	Ariston	RD80 Hadcock228	249
Arcam	CD82T	Arcam	A85 Integrated	419	Acoustic Energy	AE105 Floorstander	119	Audiolab	PPA Phono stage	449
Arcam	Alpha 9	Arcam	A75+ Integrated	249	Acoustic Energy	AE1mk3 Standmount	Call	EAR	834P Phono stage	379
Arcam	CD7ZT	Audio Analogue	Pucini Setkanta ex dem	749	Acoustic Energy	Aelite 3 Floorstander	549	Chord	Phono stage	999
Arcam	Alpha 7SE	Audiolab	8000 Monoblocks	799	Acoustic Energy	AE2 Standmount	899	Heybrook	TT2	149
Audio Analogue	Paganini ex dem	Audiolab	8000A Integrated	249	Acoustic Energy	AE505 Floorstander	349	JBE	SlateSeries 3/Mission774	349
Audiolab	8000DAC	Audiolab	8000P Power	429	Amphion	Xenon Floorstander	1299	Kinshaw	Perception phono stage and p/s	479
Audiolab	8000CDM and DAC	Audio Research	LS7 Preamp	699	B&W	60253 Standmount	249	Linn	LP12/Syrinx P/S	549
Audiomeca	Obsession	Aura	PA200 Power	299	B&W	60353 Floorstander	349	Linn	LP12/Lingo/Ekas	1499
Caim	Fog V2 24/196	AVI	S2000M Integrated	299	B&W	80153 Matrix Floorstander	1999	Linn	LP12/Vaihalta/Akito	399
DPA	Renaissance	AVI	S2000MP Preamp	279	Epos	M5 Standmount ex dem	279	Linn	Basik, Akito	229
Marantz	DV41000SE	AVI	S2000MM Monoblocks	699	Epos	M15 Floorstander	279	Linn	Basik (no arm)	99
Marantz	CD17Mk2	AVI	S2000MP/MM Pre/Monos	899	Epos	ES11 Standmount	Call	Linn	Axis, Akito	299
Marantz	CD17 K1	Caim	4808A	Call	Heybrook	HB100 Standmount	79	Linn	Itok 12"	999
Marantz	CD60000SE	Caim	4810	Call	JPW	200 Standmount new	79	Logic	Tempo/Datum arm	149
Meridian	208	Creek	4330Mk2 Integrated	249	JPW	204 Floorstander new	269	Michell	Gyrodec Export	699
Meridian	508/20	Crimson	510/520 Pre/Power	199	KEF	Q10 Standmount	89	Michell	Reference Hydraulic/Fluid arm	699
Micromega	Stage 1	Crimson	610C/6300 Pre/Monos	349	Meadowlark	Shearwater HiRad Floorstander	999	Michell	Reference Electronic/ SME3009	599
Micromega	Stage 2	Croft	Linestage Preamp	499	Mission	752 Floorstander	349	Michell	Prismo/AT arm	999
Micromega	T-drive and T-dac	Cyrus	7 Integrated	399	Mission	753 Floorstander	349	Michell	Focus One/Focus arm	379
Micromega	Duo CD3/BS2	Cyrus	3 Integrated	229	Monitor Audio	Silver S8 Floorstander	from 449	Michell	Gyrodec SE	Call
Micromega	Optic	Denon	POA6600 Monoblocks	699	Monitor Audio	Silver S5 Floorstander new	349	Michell	Tecnoarm A	Call
Mission	Dad5/Dac/Isoplant	ITL	MA80/MA100/MA100 Pre/Power x2	349	Monitor Audio	Silver 8i Floorstander	349	Michell	Iso/Hera	299
Musical Fidelity	XPSU	Magnum Reference	MP300/MF125 Pre/Monos	599	Monitor Audio	Silver ICR Centre new	149	MTM	The Source	1399
Musical Fidelity	XDAC	Magnum	MAA120 Integrated	149	Mordant Short	912 Standmount	349	Nottingham Analogue	Hyperspace/Mentor arm	1399
Musical Fidelity	XPSU v3	Meridian	605 Monoblocks	799	NEAT	Mystique 2	149	Nottingham Analogue	The Foot Tonearm	599
Musical Fidelity	CDT	Meridian	505 Monoblocks	899	NHT	VT2 Floorstander	449	Odysey	RP1-XG	499
Myriad	T20	Meridian	205 Monoblocks	599	QUAD	ESL63 Floorstander	1299	Pink Triangle	LPT/RB250	379
NAD	C541i	Micromega	Tempo 1	449	QUAD	ESL63 Floorstander	699	Project	Xpression 1	149
NVA	Transparent Statement	Musical Fidelity	3a Preamp/P150 Power	Call	QUAD	12L Standmount new	449	Project	Phono box LE	59
Poss Lobs	D1 DAC	Musical Fidelity	3cr Pre/Power	Call	QUAD	12L Standmount ex dem	399	Rego	Pianar 2/RB250	149
Pioneer	PS-5904	NAD	912 Power	119	REL	Q50 Subwoofer	199	Rego	Pianar 3/RB300	179
Proceed	PDT2	NAD	C340	119	Ruark	Tempor - ex, boxed	199	Rego	Pianar 78/RB250/Mono Cart	175
QUAD	99CDP	NAIM	62/140 Pre/Power	549	Tandberg	Studio Monitor Large standmount	399	Roksan	Xerxes/Tabriz Zi	449
Resolution Audio	Opus 21	Primare	A20 Integrated	379	Tannoy	Chotsworth Floorstander	649	Roksan	Radius 3/Tabriz	429
Roksan	Caspian	Quad	405 Power	from 149	Tannoy	DC100 Standmount	119	Roksan	Radius 5/Nima ex dem	679
Roksan	Kandy Mk3 ex dem	Quad	44 Preamp	249	Tannoy	Revolution 3 Floorstander	99	Rotel	RQ970	799
Roksan	Caspian M series ex dem	Quad	405/2	from 199	TDL	Studio 1 Floorstander	199	Graham Slee	Projects Era Gold ex dem	299
SAT	CDFix	Quad	33/303 Pre/Power	199	TDL	RTL3 Floorstander	179	Graham Slee	Projects Era Gold/Elevator ex dem	729
Sony	MDP850D	Quad	77 Integrated	299	Triangle	Antal ES Floorstander	749	SME	309	449
Sony	XA2ES	Quad	909	699	Wilson Benesch	Curve Floorstander	3899	Thorens	TD160b/Mission 774	249
Sony	CDP940	Rega	Brio Integrated	129	Arcam	T61	159	Thorens	TD160b/Mayware	249
		Roksan	Luna Integrated	179	Creek	4030	99	Transcriptors	Skeleton/Vestigal	649
		Roksan	Caspian M Pre/Monos x/dem	Call	Denon	DRS810	99	Transcriptors	Saturn	199
		Roksan	Caspian Integrated	349	Marantz	ST4000	79	Trichord Research	Hydraulic Reference	649
		Roksan	Cospian Power	299	Myriad	T30	199	Voyd	Dino	599
		Roksan	Kandy Mk3 ex dem	479	Myriad	FM2	149	Voyd	Valdi/Helius Scorpio	599
		Rotel	RC95 Preamp	249	Quad	66FM	379	Wilson Benesch	Act/Act 2 arm	2499
		Shearme	Phase 2 Integrated	279	Quad	FM4	from 199	Wilson Benesch	Full Circle ex dem	1399
		Sumo	Andromeda Power	299						
		Sumo	Artemis/Andromeda III Pre/Power	Call						
Audio Analogue	Primo - CD and Amp									
JPW	204/200/208 - 5.1 Speakers									
QUAD	33/303/FM3 with sleeve									
QUAD	99CDP/909									
QUAD	34/306 FM4 Pre/Power/Tuner									
TEAC	A1/D1/T1 - Amp/CD/Tuner									

VISIT OUR WEBSITE, OR CALL 0845 6019390 TO SPEAK TO A REAL PERSON  
TUESDAY TO SATURDAY 10 TO 5-ISH

Quality hifi equipment always required for cash. Call us before you trade in. Commission Sales too.  
0845 6019390 or world@2ndhandhifi.co.uk

# turntableworld!

is THE place to make your next analogue choice. Our Dem facilities offer a wide selection of all types of analogue equipment from all the best brands including...

Clearaudio, Dynavector, Tom Evans, Goldring, Grado, Hadcock, Lyra, Michell, Moth, Nottingham Analogue, Origin Live, Ortofon, Project, Graham Slee, SME, Sumiko, Transfiguration, Trichord, Whest Audio and Wilson Benesch

...there is no better analogue decision

turntableworld! is at 30b Larchfield St, Darlington, DL3 7TE. Tel: 01325 241888 or email: world@turntableworld.co.uk

# dial a dealer

This is a comprehensive directory of Hi-Fi Dealers throughout the UK and Ireland.

## BRISTOL & BATH

**THE RIGHT NOTE** Tel: (01225) 874728. Are you happy with your system? We find that most audiophiles listen for most of the time to systems that are 'not quite right'. Forget the 'Best Buy' reviews and putting a system together like a patchwork quilt. Let us assess the vast range available, you judge the results. We'll help you to plan a system for the future, even if you spread the purchases. Leave 'up-grade-itis' behind, save money and enjoy music all the time. Just listen, and you'll know.

CD: Accuphase, Audio Synthesis, Bel Canto, dCS, Resolution Audio, Wadia.

Vinyl: Basis, Clearaudio, DNM, Graham, Michell, Sumiko, Transfiguration.

Amps: Advantage, CAT, DNM, Gamut, Spectral.

Speakers: Audio Physic, NEAT, Verity Audio. Tuners: Magnum Dynalab. (Credit Cards Accepted).

**V'AUDIO** HiFi Consultants: 36 Druid Hill, Stoke Bishop, Bristol. BS9 1EJ. Tel: 0117 968 6005. ATC, AVI, Alon, ALR Jordan, Audio Analogue, Avid, Black Rhodium, Electrocompaniet, Eslab Digital Amps, Harman Kardon, Infinity, Jamo, Lyra, Origin Live, Opera, Ortofon, PS Audio, Ruark, Michell, REL, SME, Sugden, Townshend, Triangle, Unison Research Valve Amps, VPI. Specialists in Video Projectors by SIM2, Infocus, Sanyo; screens by Stewart, Draper, Da-Lite, Owl, and Amps/DVD's by Harman Kardon etc. Demos by appointment only. Home trial facilities. We are not a shop.

## CHESHIRE

**ACOUSTICA** 17 Hoole Rd, Chester CH2 3NH. www.acoustica.co.uk. Tel 01244 344227. All the best in HiFi & Home Cinema from Amphion, Arcam, ART, Audiolab, Ayre, B&W Nautilus, Classe, Focal, JM Lab, Monitor Audio, Naim Audio, Primare, Rega, REL, Rotel, Sendor, Sugden, Thiel,

Wadia. We offer full demonstration facilities, interest free credit and delivery & install systems throughout Cheshire, Merseyside & North Wales. Opening hours are Tuesday to Saturday 10.00 to 5.30.

**ACTON GATE AUDIO** 4 Ruabon Road, Wrexham, North Wales, Tel. 01978 364500. www.acton-gate-audio.co.uk Audio Visual Specialists. Arcam, Audio Analogue, AVID, Bose, Celestion, Castle, Denon, Harmon Kardon, Jamo, JM Lab, KEF, Marantz, Michell, Mission, Onkyo, Opera, Pro-Ject, Musical Fidelity, NAD, QUAD, Roksan, Ruark, Tannoy, Teac, Tivoli, Unico, Unison Research, Wharfedale, Yamaha, DSP Club Member, Demo Room, installation service. Easy Parking and Motorway access. All major credit cards accepted. 9.30 - 5.30 daily. Closed Sunday & Monday.

**DOUG BRADY HI-FI** Kingsway Studios, Kingsway North, Warrington, WA1 3NU Tel 01925 828009 Fax 01925 825773. Visa, Mastercard, Lombard Tricity, 2 dem rooms, home trial; Agencies include: Arcam, Tag McLaren, AVI, B&W, Castle, Caspian, Chord Electronics, Exposure, Harbeth, Heybrook, Krell, LFD, Michell, Meridian, Musical Fidelity, Monitor Audio, Naim, Nautilus 800 series, Pink Triangle, ProAc, Roksan, SME, Wilson Benesch, XTC and many more.

## ORPHEUS AUDIO.

Tel: 0161 428 1539 email: anything@orpheusaudio.co.uk www.orpheusaudio.co.uk Demonstrating fine two channel music systems, Turntables from VPI's award winning range, Whest Audio, Lyra, Sumiko, Ear/Yoshino, Consonance: including Droplet, Music First, Wireworld, Triangle, Shanling, BCD, Hyperion, Brilliance, Horning. Home demonstrations at your convenience, evening calls welcome.

## CORNWALL

**BIGEARS AUDIO** To find a system that will allow you to hear the music instead of the equipment

phone Bigears Audio, here you will find an interesting array of NEW and GOOD QUALITY used EQUIPMENT! MY INTENTION IS TO HAVE SATISFIED CUSTOMERS WHATEVER THEIR AUDIO PREFERENCES. chrisbirchley@btinternet.com Tel: 01736-740421

## LEICESTERSHIRE

### DIVINE AUDIO

The Courtyard, Bennett's Place, High Street, Market Harborough, LE16 7NL 01858 432999  
Leicestershire's freshest hi-fi and home cinema retailer, offering a service that you expect in an environment that will excite you. Stunning cinema and two channel demonstration facilities, comfy chairs and coffee! We get outstanding results from Arcam, Art Loudspeakers, Audio Analogue, Chord Company, Exposure, Focal JMLab, Infocus, Isobue, Kube Design, Metz televisions, NAD, Opera, Oray Screens, Partington, Pathos, ProAc, Pro-Ject, Quadraspire, Revolver, Sugden, Triangle, Unison Research and a few other surprises. Open Tuesday - Saturday 9.30 - 5.30 or by arrangement. Free parking 01858 432999, www.divineaudio.co.uk, info@divineaudio.co.uk

## MIDDLESEX

### RIVERSIDE HI-FI 422

Richmond Road, East Twickenham, Middlesex, TW1 2EB. Tel: 020 8892 7613 Fax: 020 8892 7749. www.riversidehifi.co.uk  
Audio Research, Blueroom, Bose, B&O, Copland, Denon, Elac, Infocus, Krell, Linn, Living control, Martin Logan, Michell, Monitor Audio, Musical Fidelity, NAD, Project, QED, Rel, Sennheiser, Sonus Faber, Teac, Theta, Wilson. Finance available. Subject to status. Written details available on request. Export orders welcome. UK mail order available. 3 demonstration rooms. All major credit cards. Open 10am-5.30pm Mon-Sat.

**STAFFORDSHIRE****ACOUSTICA 114**

Wolverhampton Rd, Stafford ST17 4AH. [www.acoustica.co.uk](http://www.acoustica.co.uk). Tel 01785 258216. All the best in Hi-Fi & Home Cinema from Arcam, ART, Audiolab, Ayre, B&W, Focal, JM Lab, MJ Acoustics, Monitor Audio, Naim Audio, Primare, Rega, REL, Rotel, Spondor, Sugden, Thiel, Wadia, Yamaha Pre Eminent. We offer full demonstration facilities, interest free credit and delivery & install systems throughout Staffordshire & the Midlands. Opening hours are Tuesday to Friday 10.00 to 5.30, Saturday 10.00 until 5.00.

**SUFFOLK**

**AUDIO IMAGES 128** London Road North, Lowestoft, Suffolk, NR32 1HB Tel: 01502 582853. [info@audioimages-hifi.com](mailto:info@audioimages-hifi.com). [www.audioimages-hifi.com](http://www.audioimages-hifi.com) Castle, Denon, Harmon Kardon, Jamo, Mirage, Ortofon, Roksan, Sugden, Screen Play, Synthesis, Triangle, Tom Evans Audio Design, Vienna, Vincent, Volta Cables. Refreshingly different selection. Dem Room, Professional AV installer's from budget to high end. Full credit facilities. 9.30 to 5.30 Mon & Sat

**SURREY****VIVANTE PRODUCTIONS**

**LTD**, Unit 6, Fontigarry Business Park, Reigate Road, Sidlow, Surrey, RH6 8QH  
E Mail: [sales@vivante.co.uk](mailto:sales@vivante.co.uk)  
On Line: [www.sales@vivante.co.uk](http://www.sales@vivante.co.uk)  
Tel: 01293-822186  
Fax: 01293-820509  
Vinyl, SACD, XRCD, HDCD, HDAD, CD etc. - We do the lot! Check our website to see the thousands of interesting titles we have available. Contact us to receive our free monthly newsletter. Ps: we pride ourselves on friendly, fast service and a world beating Musical selection!

**YORKSHIRE (EAST)**

**THE AUDIO ROOM 2** George Street, Hedon, Hull, HU12 8JH. tel 01482 891375. [www.theaudiroom.co.uk](http://www.theaudiroom.co.uk)  
The Norths premier hifi dealer, stunning showrooms and dedicated demonstration rooms. Authorised agents for, Naim Audio, Spectral, Accuphase, Nagra, Peak Consult, Cyrus, Linn, Focal

JM Lab, ProAc, Spondor, B&W, Rotel, Rega, Dynavector, Unison Research, Audio Research, Sonus Faber, Siltech, Nordost and others. Home demonstrations and credit facilities available. Open Mon - Sat, 9am - 6pm. The Norths friendliest hifi dealer.

**YORKSHIRE (SOUTH)****THE HI-FI STUDIOS**

Hi-Fi - Home Cinema - Custom Installation Tel: Doncaster 01302 727274 or 01302 725550. [info@thehifistudios.freemove.co.uk](mailto:info@thehifistudios.freemove.co.uk) [www.thehifistudios.co.uk](http://www.thehifistudios.co.uk)  
Musical Fidelity, Electrocompaniet, ProAc, PMC, JM Lab, Ruark, Castle, TEAC, Unison Research, Monitor Audio, Impulse, Primare, Harbeth, NAD, Michell Turntables, Nottingham Analogue Studios, Audio Analogue, Living Voice, Densen, Celestion, KEF, Opera, Trichord Research, Nordost, Stands Unique, Ortofon, Project, Goldring, REL, Denon, TAG McLaren, Rotel, Yamaha, Proceed - plus many more. Viewing & Demonstration by appointment in a unique setting. Home trials and installation. Card facilities and 0% available. Please phone for more information. BADA. CEDIA.

**YORKSHIRE (WEST)**

**AUDIO REPUBLIC**, 78 Otley Road, Leeds O113 2177294, [www.audio-republic.co.uk](http://www.audio-republic.co.uk) for the very best in quality hifi in West Yorkshire and beyond, representing Naim Audio, Rega, Totem, Sugden, Shahinian, JM Lab, Filtech, TEAC, Nottingham Analogue, Spectral, Living Voice, Hutter Furniture, Accuphase, Quadraspire, Chord Cables, Dynaudio. Choice of shop or home demonstrations, open Tues - Sat 9.30am to 5.30 pm. Please phone for a chat and directions.

**PREMIER AUDIO** - now demonstrating - Room 1: DCS Elgar, Purcell & Verdi Transport, Plinius CD Lad & 250 Power, Verity Fidelo & Sonus Faber Speakers, Siltech Cables, Isotek Sub Station, BDA Equipment Stands Room 2: Audio Aero, Audio Synthesis, Kora Pre & Power, Pink Triangle CD/Amp, Martin Logan / Audio Physics Speakers, Arcici Equipment Stand, Isotek Sub Station P/S Audio Synthesis, Audio Physics, Audio Aero, Absolute Sounds, DCS, Kora, Plinius, Siltech, Arcici, BDA, Pink

Triangle, Avid Turntables, Project, Ortofon, Van den Hul, Mirage. P/X welcome Home demonstration good selection of S/hand. We are 10mins J39 - M1 10mins J30 M62 Tel: Wakefield 01924 255045 - Colin Grundy.

**WALES****ACTON GATE AUDIO 4**

Ruabon Road, Wrexham, North Wales, Tel. 01978 364500. [www.acton-gate-audio.co.uk](http://www.acton-gate-audio.co.uk) See our main ad under Cheshire.

**IRELAND & NORTHERN IRELAND****NAIM SPECIALISTS-AINM-AV,**

1, Church Rd, Swords, Dublin. tel +00 353 (0) 1 813 7937. m +00 353 (0) 87 247 0559  
Email [peter.williams@ainmav.com](mailto:peter.williams@ainmav.com) [www.ainmav.com](http://www.ainmav.com)  
Naim make the ultimate music systems. Come and listen - hear the music. Two demonstration rooms featuring the Naim range. Complete home cinema / multi-room design and installation service. Individual demonstrations including evenings available by appointment. Pre-loved Naim equipment warmly accepted.  
**FOR NORTHERN IRELAND** contact our new Naim Dealer Moore's Hi-Fi Tel: 028 9181 2417

**VINYL/RECORD MAIL ORDER**

**DIVERSE VINYL 10** Charles Street, Newport, NP20 1JU. Tel/Fax: 01633 259661/256261. Email: [sales@diverse-music.co.uk](mailto:sales@diverse-music.co.uk)  
Probably the most varied and impressive selection of brand new LPs you'll find anywhere: international new releases, reissues and audiophile products. Also UK distributor of the Disco Anti Stat LP Cleaning Device. Call for a free catalogue, or visit [www.diversevinyl.com](http://www.diversevinyl.com)

To  
advertise please  
call  
020 372 6018

# specialist hi-fi dealers

## London

### Oranges & Lemons



020 7924 2040

www.oandlhi-fi.co.uk  
61 Webbs Road, Battersea, SW11 6RN  
email: oranges.lemons@virgin.net

## Two Channel Specialists

simaudio moon  
47 laboratory  
avid  
shahinian  
lavardin  
electrofluidics  
living voice  
sonneteer  
border patrol  
neat acoustics  
isoblu  
resolution audio  
tom evans audio  
dnm/reson  
lfd audio  
audio physic  
slinkylinks



thesoundpractice  
stalbans: 01727 893 928  
www.thesoundpractice.com

## Regional

### shunyata research



the professionals' reference

AUDIO ATMOSPHERE

tel 01785 711232 Stuart@audioatmosphere.com  
www.audioatmosphere.com

## Naim Specialists

tom tom audio

OFFICIAL  
AGENTS  
FOR  
THE  
ENTIRE  
NAIM  
AUDIO RANGE

see new website @  
www.tomtomaudio.com  
st albans 01727 86 86 59

naim

## Vinyl Specialists

vivante

Vivante Productions Ltd.  
Unit 6, Fontgarry Business Park,  
Froggie Road,  
Stalvey, RH2 8QH,  
Tel: 01293 822186  
Email: sales@vivante.co.uk  
On Line: www.vivante.co.uk

### Vinyl is back?

Truth is, it never really went away. That's why we have been busy keeping vinyl fiends happily supplied all these years. Call us for our free catalogue and newsletter and find out more about the huge range of top quality titles we have available.

Not only that – we give friendly knowledgeable service and the best possible prices. Look forward to hearing from you.

## Services & Consultants

### HIFI RECLAMATION WANTED

Classic British Hi-Fi Components and Systems!

Top prices paid for vintage or classic audio separates, accessories or literature.

0845 644 3340

### Front End Problem?

contact

### The Cartridge Man

It doesn't have to cost an arm and a leg to get the best - listen to my Koetsu - and Decca - eater.

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

plus cartridge re-tipping service

020 8688 6565

Website: www.thecartridgeman.com

## Valves & Tubes

**CVC** Chelmer Valve Company  
for audio valves

Buy CVC. PREMIUM HI - FI valves direct from us. All valves processed for improved performance. We also have stock of MAJOR BRAND types inc. MULLARD, GEC, BRIMAR, RCA, GE, PHILIPS, etc.

The Studio, Redway Park, Great Baddow, Chelmsford,  
Essex, SS1 7SY. Tel: 01798 241301 Fax: 01298 241309  
Email: cvc@chelmervalve.com

To advertise in this space  
please call 020 7372 6018  
or email:  
advertising@hi-fiworld.co.uk

NEW catalogue out now  
packed with award winning products



"We defy anyone not to notice the improvement in performance when you switch... to a PowerKord."  
What Hi-Fi, May 2004.

- exclusive mains leads
- exclusive HI-FI equipment
- exclusive speaker cable
- exclusive CD accessories
- exclusive supports



WHAT HI-FI?  
Awards 2004

Best Mains Lead  
Under £100  
Russ Andrews  
Classic PowerKord

Russ Andrews  
Classic PowerKord™  
from £55

order online at [www.russandrews.com](http://www.russandrews.com)

or call UK Local Rate 0845 345 1550 quote AWORLD

Exclusive UK Retailer for

**KIMBER KABLE**

Russ Andrews Accessories Ltd, 2B Moreland Court,  
Westmorland Business Park, Shyp Road, Kendal, LA9 6NS, UK.  
Tel: +44 (0) 1539 797300 Fax: +44 1539 797325

Russ Andrews  
Solutions for better music & movies

# specialist hi-fi dealers

Yorkshire

## Aeon Acoustics

ISO-PLATFORMS & FEET LOUDSPEAKERS  
MADE FROM NEW GYRO-PNEUMATIC  
AUDIO MATERIAL [www.spiralex.com](http://www.spiralex.com)



PCT Patents & Design Copyrights pending



Audio Isolation Materials  
Aeon Acoustics  
Newlands, Littlethorpe Lane,  
Ripon, North Yorkshire, HG4 1UB  
SPC@spiralex.com  
01765 604288

Smart Audio Materials with  
extended bass response & clarity



Loudspeaker Repairs

## D.C. Boultons

Loudspeaker Repairs & Manufacture

All types including P.A. Disco, Hi-Fi, Juke Box etc.

Agents for B&C, Celestion, Eminence,

Fane, Precision Devices etc.

From re-foams to complete re-builds, even with  
slipped magnets.

Trade and retail supplied.

Custom units our speciality.

Over 35 years experience of loudspeaker design

Unit 12, Damgate Lane Ind. Est, Acle, Norwich,  
NR13 3DJ

Tel 01493 750075 Fax 01493 751155

IAN EDWARDS  
MAKERS OF FINE HAND MADE FURNITURE

Elegant Storage Solutions for

Hi-Fi, Books,

LPs, CDs,

DVDs

Special orders welcome



Tel: 01423 500442 Fax: 01423 705200 [www.iansbespokefurniture.co.uk](http://www.iansbespokefurniture.co.uk)

The Old Chapel, 282 Skipton Road, Harrogate, N. Yorks, HG1 3HE

'Super 14 Wizard' Rotary Unit. 2296  
CDs, etc



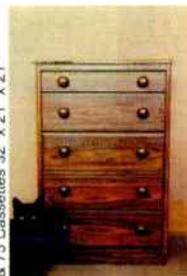
74" 'V-Max' can hold 660 CDs etc



JT Hi-Fi CD/Cassette Unit



Charlotte Drawer unit for 480 CDs  
& 75 Cassettes 32" x 21" x 21"



# meet your maker

MANUFACTURER

A reference guide to Britain's manufacturers and distributors

### CREEK AUDIO LTD

12 Avebury Court, Mark Road, Hemel Hempstead,  
Herts, HP2 7TA.  
Tel. 01442 260146

E-mail: [info@creekaudio.com](mailto:info@creekaudio.com)

Internet: [www.creekaudio.com](http://www.creekaudio.com)

Creek Audio manufactures in the UK. Current products include A50i, A50iR and 5350SE integrated amplifiers, CD50 Mk2 CD player, and T50 tuner. All products are similarly styled providing an easy mix and match choice depending on budget. Our miniature OBH range includes two phono pre-amplifiers, two headphone amplifiers and a passive pre-amplifier.

### EPOS ACOUSTICS

2 Avebury Court, Mark Road, Hemel Hempstead,  
Herts, HP2 7TA  
Tel. 01442 260146.

Email: [info@epos-acoustics.com](mailto:info@epos-acoustics.com)

Website: [www.epos-acoustics.com](http://www.epos-acoustics.com)

Innovative design and superior sound distinguish EPOS speakers from other brands in similar price categories. Nine models in total including a S1 surround system. All available in 3 finishes. Supporting stands and plinths complement the speakers. In addition to its two channel appeal, Epos is now equally sought after in the fast expanding world of home cinema. -

### FALCON COMPONENTS LTD

Unit 12 Damgate Industrial Estate, Damgate  
Lane, ACLE, Norwich, Norfolk, NR13 3DJ  
Tel. 01493 751100 Fax 01493 751155

E-mail: [sales@falcon-acoustics.co.uk](mailto:sales@falcon-acoustics.co.uk)

Web: [www.falcon-acoustics.co.uk](http://www.falcon-acoustics.co.uk)

FOCAL drivers. SOLEN polypropylene

capacitors, TAYDEN high quality PA loudspeaker units. Largest specialist Audio-inductor UK manufacturer. Comprehensive range of DIY speaker parts, kits and accessories. Sub-bass and electronic filters. Audio Amateur Publications. Audio Computer Software. Pro-Audio equipment and loudspeaker repairs. Enquiries send 47p sae for full price list or visit our website.

### GARRARD and LORICRAFT

4 Big Lane, Goose Green, Lambourne, Berks,  
RG17 8XQ.

Tel / fax: 01488 72267.

We make the all-new Garrard 501 and 601 turntables and can service/repair the older 301 and 401 models. We cannot help with the many other turntables that Garrard made. We are also manufacturers of the Loricraft Record Cleaning Machine, as reviewed in the July issue of this magazine. See our website at [www.garrard501.com](http://www.garrard501.com) for more information.

### MONITOR AUDIO LIMITED

24 Brook Road, Rayleigh, Essex SS6 7XL

Tel 01268 740 580. Fax 01268 740 589

e-mail: [info@monitoraudio.co.uk](mailto:info@monitoraudio.co.uk)

website: [www.monitoraudio.co.uk](http://www.monitoraudio.co.uk)

Monitor Audio designs and manufactures British loudspeakers of the highest quality. Since 1972 Monitor Audio has been developing and perfecting the implementation of metal drivers, innovative crossovers, and exemplary speaker cabinet construction and finish to further the ideal of achieving sound which to the original is "as close as it gets". As we enter the 21st Century, Monitor Audio leads the way in offering speakers that suit every pocket and which integrate seamlessly with both Hi-Fi and AV systems.

### PMC/BRYSTON

PMC & Bryston are Emmy award winning Loudspeaker & Amplifier manufacturers - Used throughout the professional world as reference. Our clients record for Deutsche Grammophon, Decca and countless blockbuster Movies. The identical, award winning ATL (Advanced Transmission Line) technology is used in all HiFi designs from the DBI+, TLE1 Sub through to the Active BB5XBD.

PMC Ltd 43-45 Crawley Green Road, Luton, LU2 OAA. Tel: 08704 441044 Fax: 08704 441045

Email: [sales@promonitor.co.uk](mailto:sales@promonitor.co.uk)

Web: [www.pmc-speakers.com](http://www.pmc-speakers.com)

### SUGDEN AUDIO PRODUCTS

Designed and manufactured in the UK each Sugden product is hand-built by one highly skilled technician. A full range of pure class A amplifiers are available including integrated, stereo power and the incredible Masterclass balanced monoblocks. Our stunning Bijou system now comes with a single-ended pure class A power Amplifier with optional integral stand. Two analogue tuners have joined the range matching our A21 and Bijou series, offering a digital user interface with excellent facilities. Each amplifier series has a matching CD player with a class A output stage and heavily modified transport. The class A HeadMaster offers a pre-amp with three inputs a fixed and variable output with remote control. The HeadMaster can be used as a control unit in a high quality audio system and excels with headphones. Please contact us for product information, dealer list and brochures. 01924 404088 email [info@jesugden.co.uk](mailto:info@jesugden.co.uk).

# SONY TV-DVD-Hi-Fi

Highest Quality Hi-Fi offered at unrepeatable clearance prices while stocks last:-



- TA-DA 9000ES AV Amplifier Black finish was £2599 clearance £1199
- SCD-XA 9000 CD player Black / Gold finish was £2399 clearance £1199
- SCD-XA 3000 CD player Black finish was £799 clearance £499

## A.N.Audio

34 Huntingdon Street, St. Neots  
 Cambs. PE19 1BB phone:- 01480 472071  
 e-mail :- sales@anaudio.co.uk



# IAN HARRISON HI-FI TEL: 01283 702875

HI-FI AT DISCOUNT PRICES. FREE NATIONWIDE DELIVERY

## SALE!

TRADE IN YOUR OLD MOVING COIL CARTRIDGE & SAVE UP TO 60% OFF THE RRP.

CARTRIDGES & STYL	HIFI FURNITURE	HEADPHONES	DVD
VAN DEN HUL	BLOK	SHURE	SONY
ZYX	B.C.D.	BEYER	MINI DISC
JAN ALLAERTS	CUSTOM DESIGN	STAX	SONY
DENON	OPTIMUM	SENNHEISER	LOUDSPEAKERS
CARTRIDGE MAN	ASH DESIGN	SONY	OPERA
AUDIO TECHNICA	APOLLO	AKG	TRIANGLE
GOLDRING	SOUND STYLE	GRADO	FINAL
SUMIKO	SOUND	AUDIO-TECHNICA	ELAC
TRANS-FIGURATION	ORGANISATION		HARBETH
LONDON (DECCA)	ALPHASON		EPOS
GRADO			MISSION
ORTOFON			DIAPASON
RESON			WHARFEDALE
CLEAR AUDIO			AMPLIFIERS
KOETSU			CREEK
SHURE			HALCRO
			MOTH
			C.A.T.
			GAMUT
			ALOIA
			EAR
			AUDIO VALVE
			ACCUSTIC ARTS
			GRAAF
			ORELLE
			MONRIO
			AUDIO ANALOGUE
			PATHOS -
			ACOUSTICS
			UNISON -
			RESEARCH

PLEASE PHONE TO CONFIRM PRICE & AVAILABILITY PRIOR TO ORDERING. ALL GOODS ARE BRAND NEW & BOXED WITH FULL U.K. GUARANTEES. NO EX. DEM OR EX DISPLAY GOODS. NO GREY IMPORTS. GOODS ARE NOT SUPPLIED ON APPROVAL. SORRY, NO GENERAL CATALOGUES. PLEASE PHONE OR WRITE FOR SPECIFIC REVIEWS, BROCHURES OR PRICES. SUPPLIER OF HI-FI PRODUCTS & ACCESSORIES SINCE 1986. MAIL ORDER ONLY FROM: IAN HARRISON, 7 MILL HILL, REPTON, DERBY, DE65 6GQ. TEL: 01283 702875. 9am - 9pm INCLUDING SUNDAYS.

The most important and expensive components of a valve amplifier are valves and transformers. £200 or £500 for a pair of huge "push pull" output transformers produces good bass + lots of "inter leaved" windings for better high frequency and "stability". Huge £150 mains transformers gives a less "processed" sound. Selected "matched" set of valves cost £50 or £160. If we could achieve the same quality of sound with £10 volume control, £10 wires, £10 capacitor, we could have saved a lot of money!!!

Money back guarantee (less £30 UK or £100 overseas) that you prefer :-

£850 or £1,000 or £1,250 or £1,450 "KT88 Triode Connection" amplifiers to most transistor amplifiers, most transistor / valve hybrid amplifiers, most Single Ended valve amplifiers, most Ultra Linear valve amplifiers selling for £2,000 to £20,000

£850 "KT88 Triode Connection" + high quality £350 "3 way" speakers to "ultra linear" valve amplifiers + £600 "2 way" and "2.5 way" speakers

£700 EL34 valve amplifiers (40 watts + 40 watts) to most transistor amplifiers and transistor / valve hybrid amplifiers costing £1,000 to £2,000

£500 EL34 valve amplifiers (40 watts + 40 watts) to most £700 amplifiers.

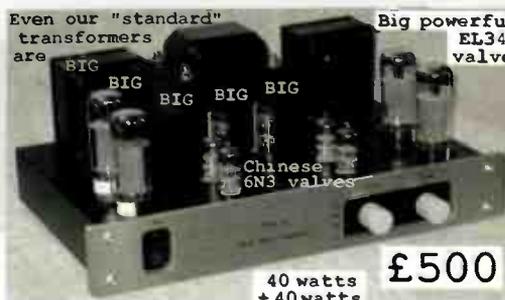
Telephone 01634 268662 anytime or 01634 373410 for Mr Andrew Everard's review in Gramophone Magazine and Summary of 21 testimonials from satisfied customers. [www.affordablevalvecompany.co.uk](http://www.affordablevalvecompany.co.uk)

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

### Buy direct & save £££

Shop prices are expensive because of rent, rates, wages  
**Free UK delivery**  
 Subsidised £50 UPS delivery to overseas countries.

4 years of proven reliability.  
 2 years guarantee.



£500

Massive expensive "potted" transformers  
 KT88 valves are more expensive than 6550 valves



Expensive non-magnetic stainless steel chassis  
 Ultra Linear £1,050 £1,150  
 £1,250 Triode Connection £1,400



2 or 6 pieces of silver capacitors  
 Ultra Linear £650 £750  
 Triode Connection £850 £1,000



40 watt + 40 watt  
 Upgradeable to £1,000  
 KT88 amplifier +£50 carriage +£50 for used valves  
 £600 £700

# private ads

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.

**TAG MCLAREN CD transport CDT20R**, cost £1250, 3 years old, £600. M.S.B. Link Dac IIII 24/96 upsampling power base, cost £770, 2 years use, £250. Leema SPLX12 subwoofer, cost £1100, 18 months, £600. Transparent 10' bi-wire, cost £650, £300. Tel: 07958 492 243 (Nov)

**WANTED: QUADROPOD** stands for the ESL 63's. These are the stands that Quad produced themselves for the 63's. Will pay way over the market rate for mint condition ones. Please Email [zijafferji@yahoo.co.uk](mailto:zijafferji@yahoo.co.uk) or call on 07921 044 254 (Dec)

**CR DEVELOPMENTS** Amphion valve monoblocks Class A 6C33C 12AX7 12AU7 12WPC gold chrome and glass, spare valves, boxed, superb, £845 ono. Delivered. Tel: 01202 481 386 (Dorset) (Nov)

**MONARCHY SM-70 Class A** Zero feedback Mosfet amplifier. Mint, manual, boxed. See Hi-Fi Plus 11. £295. Tel: 01903 247779 (Sussex) (Nov)

**SONUS FABER Electa Amator Mk1** plus Ironwood stands £1300. T+AV10 integrated amp £1800. Advantage S-100 integrated amplifier £800. REL Stampede Subwoofer £300. NHT speakers M6 monitors £400. NHT A1 amplifiers 250w monoblocks £400. Tel: 020 8531 5979 (Dec)

**ARCAM FMJ CD23 CD player**, A22 amp, P25 power amp, B&W CDM9NT speakers, DNM Reson cable bi-wired 4 x 8 metres. Sennheiser HD580 headphones. Run-in 500 hours. £3000 ono. Tel: 01324 622 059 or mobile 07970 330 903 (Nov)

**AUDIONOTE 1011 Gold MC** cartridge £950. Audionote TT3 split-phase Voyd £650. Helius Orion £225. Audionote Rega arm £130. DNM Reqa £145. Sendor amplifier, rare, fantastic vocals £325. Tel: 01275 727 476 (Nov)

**CHORD SIGNATURE** loudspeaker cable. Two 2m pairs, £230/pair. Russ Andrews 4-way mains block/3' Hi-Current PowerKord (Wattgate 350/HSIEC) £85. Hi-Current PowerKords with Wattgate 350 - 3' £60. Two 4' £70 each. Tel: 01752 773 369 (Nov)

**AUDIO RESEARCH VSI 55** integrated amplifier £1400. Naim Nait 5i amplifier, brand new unopened box £570. Tel: 0771 421 655 (Nov)

**VALVE AMPS** for sale. 2 Williamson design 15 watt amps. Just serviced. Mint. 1 Mullard design Type 510. Mint. Serious offers only. Tel: 020 8743 2727 (Nov)

**AUDIO INNOVATIONS 500** integrated valve amplifier. 2 x 25 watt. Beautiful liquid sound, stylish, understated design. Recently serviced, new valves (June). Good condition, boxed £450 (£995). Tel: John 01253 886 609 (Lancs) (Nov)

**AUDIO PHYSIC Luna** subwoofer: the Luna powered subwoofer connects to speakers, power amp, or pre-amp. very fast, accurate, deep bass 10hz - 2khz, 180 watts. light maple. has unique room-gain feature, frequency roll-off, volume. boxed, manual. £850.00. Tel: Michael 020 8550 4223. (London/Essex). (Nov)

**AUDIONOTE ANJ/B** speakers, highly efficient, natural sounding £395 (£795). Dedicated Huygens/Target stands, heavy, spiked £120 (£190). All excellent condition. £495 the lot. Tel: John 01253 886 609 (Lancs) (Nov)

**REGENCY STYLE** television/hi-fi cabinet. Very good condition £180 (£370) Takes 28" TV, Digibox, Midi Hi-Fi (Quad, Linn Classik etc). Phone for dimensions and photo. Tel: 01341 422 111 (Dolgellau, Gwynedd) (Nov)

**QUAD ELS63** speakers. Factory overhaul June 2004. Black cloth, walnut Quadrapods, stands, documented, mint. £1100 ono. Tel: Mike 01246 209 578 day, 01246 570 556 evenings. (Dec)

**CLEARAUDIO REFERENCE** record deck with Clearaudio Master Reference parallel tracking arm and Ortofon MC30 Supreme. Looks and sounds amazing. Can be heard. Buyer collects. £3900. Tel: 01424 465 276 evenings (Sussex) (Nov)

**YAMAHA NS-1000M**, excellent, AR SP-8 Target R-1 stands. Quad ESL-57, black, excellent + stands. Leak Stereo 20, Trichord new Dino NC/PSU, Thorens TD-125, SME 3009, Techno arm, new, boxed, Teac T-1. Tel: 0117 955 6555 or 07979 514 450 (Nov)

**UNISON RESEARCH Smart 845** monoblocks £1750, Graaf WFB1 pre-amplifier £750, Nottingham Analogue Mentor, ET2 air bearing tonearm, Lyra Helikon £1500. PMC FBI loudspeakers £750. Tel: Jon 01923 219 711 evenings, 07736 480 263 daytime (Nov)

**TRICHORD PULSAR One DAC** £400. DPA Enlightenment DAC £350. Nakamichi DR1 tape deck £350. Rotel RT990BX tuner £150. Soundstyle hi-fi rack, four pillar £100, three pillar £75. Tel: 01296 398 166 or 07801 909 912 (Nov)

**AUDIO TECHNICA AT-OC9ML/II** cartridge. Brand new, unopened, £200. Linn Intek amplifier, good condition, £85. Tel: 07833 700 205 (Lincs) (Nov)

**FOR SALE: Whest Audio DAP.10** £450. Perpetual Technologies Monolithic PSU for P1-A and P3-A Enhancer and Converter £200. Tel: 01642 559 078 (Stockton)

**AUDION SILVER Knights 300B** monoblocks. Gold plated case-work. Working and in excellent condition. Welcome to audition at my home. £950. Tel: 01262 670 188 (Yorkshire) (Dec)

**TRANSCRIPTORS SATURN** turntable, Michell rewired. Tonearm v.g.c. £150. Linn Basik tonearm, unused, boxed £30. Quad FM4, serviced by Quad, £200. Quad 34 and Quad 405 II, v.g.c., £300. Tel: 01905 756 057 (Worcester) (Nov)

**QUAD IIL LOUDSPEAKER** maple finish, near mint condition. £250 ono. Tel: Brendan 01262 424 908 or 07855 759 071 (Nov)

**STANDS UNIQUE** Hi-fi/television stand 10mm glass. Natural ash wood. Size 645 x 420 x 450 H. Cost new approx £300. For sale (as new) £150. Tel: 01462 711 108 (Nov)



BUY / SELL
HOME CINEMA
MULTIROOM INSTALL
HI-FI

## www.choice-hifi.com

tel: 020 8392 1959 / 1963 mob: 07768 720456  
info@choice-hifi.com

# diverse vinyl

10 charles st newport south wales np20 1ju  
01633 259661/256261 sales@diversevinyl.com

## RECOMMENDED NEW RELEASES

Elbow	Leaders Of The Free World	£14.90
Eric Clapton	Back Home	£TBC
Espers	Espers	£11.90
Franz Ferdinand	You Could Have It So Much Better	£TBC
Fruitbats	Spelled In Bones	£11.90
Ian Brown	The Greatest (Hits)	£15.90
Iron & Wine/Calexico	In The Reins	£12.90
John Parish	Once Upon A Little Time	£13.90
KanYe West	Late Registration	£16.90
Mylo	Destroy Rock & Roll	£19.90
Queen	Return Of The Champions (Live 3 LP)	£36.90
Richard Hawley	Coles Corner	£15.90
Richard Thompson	Front Parlour Ballads (Diverse Rec)	£17.50

## NEWS JUST IN: KATE BUSH "AERIAL"

Her first new studio album for 12 years, out 7th November

## REISSUES:

Buddy Guy/Jr Wells	Going Back To Acoustic	£TBC
Gil Evans	The Individualism Of (Speakers Cnr)	£21.95
Jimi Hendrix	Live At Berkeley (1st Show)	£22.90
Memphis Slim	USA (Pure Pleasure)	£TBC
Queen	A Night At The Opera	£18.90
Stooges	Funhouse/Stooges(Expanded) each	£12.90
Vashti Bunyan	Just Another Diamond Day	£15.90

## DISCO ANTI STAT LP CLEANER

Probably the most economical LP cleaning device on the market Only £43.95 Call for details



Call for a catalogue of over 3500 brand new LPs, or visit

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

# STOWSOUNDS

01449 675060

Spacesaving clearance on most products - call for other products

Atacama BDS 25 inch stands	15
Fuss subwoofer and satellites	20
Tripod rack - 2 shelf	10
Tara Prism interconnect 1m	20
DNM mains lead 1.25m	25
DNM phono interconnect 1m	20
DNM bullet phono interconnect 1m	40
Grado SR 60	60
Exposure 2010 cd	395
Exposure 2010 integrated	395
Exposure 2010 power	350
Phillips CDR870 cd recorder	50
QED Disclover	10
QED Qnex 4S 1m interconnect	20
Sonic Link Blue Nickel 0.5m interconnect	30
Linn Kan 4 maple	275
Creek A50i	300
Sonic Link Control 1.0m interconnect	45
Epos ELS3	125
Sonic Link Message 1.0m interconnect	20
Music Books -	call for list
CDs -	call for list or wants

For details call 01449 675060, or e-mail [stowsounds@aol.com](mailto:stowsounds@aol.com)



## 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 transform it's performance into the league of super arms with our modifications. The OL structural modification at £75 will enable your Rega to perform at a level exceeding that of some arms costing over £1000!! High performance rewiring with high grade litz wire is also offered at an additional £70 and external rewiring is also £70 further increasing 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 ON STRUCTURAL MODIFICATION

Structural modification awarded 5 star rating by



Structural Modification - £75

Internal Rewiring - £70

External Rewiring - £70

High conductivity phono plugs £20

Slotted arm tube - £85

If you do not have an arm we can supply the OL1 arm (manufactured by Rega) £124

Arm modifications normally returned within 1 - 3 days



## "The single most important upgrade you can ever make to any record deck

concerns the motor drive...nothing can prepare you for the shock of going DC. In a word, gobsmacking."

COMMON GROUND MAGAZINE

"It's value is nothing short of tremendous."

LISTENER MAGAZINE

"The LP12 remains a classic ...but ..upgrade kits by Origin Live can bring a vast improvement to it's performance"

HI FI NEWS

## UNIVERSAL TURNTABLE MOTOR KIT -

No one would blame you for being sceptical of an easy to fit, inexpensive dc motor upgrade. Especially one that improves on the best of other power supplies costing over 4 times as much or your money back. It is simply impossible to imagine the level of improvement attained by eliminating the motor vibration that your stylus amplifies over 8,000 times! Our DC motor kit offers massive improvements to all versions of Linn Lingo / Valhalla, Rega, Systemdeck, Roksan, Rock etc. The kits consist of a drop in replacement high grade DC motor and off-board 2 speed control box. Why not order now? - see web site or phone.

Standard dc Motor Kit - £199

Advanced dc Motor Kit - £339

Ultra dc Motor Kit - £570

Upgrade Transformer - £175

Upgrade DC 200 motor - £129 with kit

ORIGIN LIVE

Tel/Fax: +44 02380 578877

E-mail: [info@originlive.com](mailto:info@originlive.com)

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

# private ads

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.

NAIM ARIVA speakers in cherry finish. Twelve months old, mint condition, original packaging. Buyer collects (East Kent) £700. Tel: 01227 764 000 ext. 3292 (mon-wed), Email: sjay100@hotmail.co.uk (Nov)

LINN LP 12 Sondek Motor Unit, Linn Ekos Tonearm, Linn Arkiv Boron Cartridge, Linn Trampoline Baseboard, Linn Lingo LP 12 PSU, £2500. Linn Linto M/C Preamp £400. Tel: 01462 711 108

KRELL CD player, KAU-250CD/2, excellent condition, £2000. P.S. Audio power and pre amp, 150 watts per channel, good condition with bi-wired speaker cables, £1000. Tel: 07989 595 890 (Nov)

LINN AXIS turntable. Original LVX tonearm, Ortofon 520 Mk2. Original packaging. 45/33 RPM electronic speed control. Near mint condition. Sale due to upgrade to Sondek. £250. Tel: 01564 782 560 (West Midlands) (Nov)

ELECTROCOMPANIET AV.120.DMB power amplifier, dual mono balanced 2 x 120 watts. Latest model, excellent condition. Boxed, manuals, £2400, £1050 ono. Reviews Hi-Fi Choice. Cardas Cross Power Cord £135. SonicLink Black Rhodium 0.5m XLR £100. Tel: 01234 302 769 (Nov)

JUST BUILT. Lynn Olsen ME2 speakers. Stand mounts. Silver with clear laquer finish. External X-Overs to high specification. 8 1/2d x 18h x 8w (small version of Ariel - see April issue.) £365. Will demonstrate, Tel: 0115 975 4070 (Nov)

KEF DRIVE units. Two B139's £90; two B110's £50; one T27 £18. Tel: 01455 612 995 after 6.30pm. Buyer collects, Leicester area. (Nov)

AUDIO INNOVATIONS P2 phono stage, moving coil model, boxed, manuals, mint. £550. Sound Design 150w OTL valve monoblock power amps, £750. Klipsch HG 4.5 loudspeakers, vgc, excellent sound £200. Tel: 020 7622 5420 (Nov)

AUDIOVALVE EKLIPSE pre-amp, mint condition. Audiovalve PPP45 monoblocks. Excellent condition. Pioneer PD91. Reference CD player, mint, £1100. Audiovalve Assistant integrated amp, mint £500. Monarchy Audio 18B De-Lux DAC £275. Tel: 01252 659 058 (Nov)

AUREX SYSTEM SY-C15 pre-amp, SC-M15 monoblocks, ST-F15 tuner, PC-D15 cassette deck, AD-15 adres unit, AR-M1 rack unit. All items very good condition. £450 ovno. Tel: 01252 659 058 (Nov)

FOR SALE, Wilson Benesch Act, Birds Eye maple (gloss), purchased April 05, excellent condition, latest spec with box's, manual, etc. £6750 ono. Tel: 020 8868 7835 (Nov)

FOR SALE One pair of Klipsch horns 108 dB per watt. 120 watts max in white cabinets with external x/overs. X/overs have been rebuilt using premier components. Built in 1984 and have been used for domestic purposes. Recent upgrade forces a reluctant sale. £1300. Tel: 01253 853935 (Nov)

PAIR PROAC Response 2.5 floorstanding speakers. Fantastic condition, Cherry finish. Will include pair of Audioquest Type 4 bi-wire cables. Northern Ireland so collect only. Tel: 028 417 64088 (Nov)

PIEGA C3 LTD coaxial floor-standing ribbon speakers for sale. See A+ Stereophile review for the slightly larger C8 Ltd. £5000 new, £2500 ono. Can demo at home and deliver. Tel: 07989 513 805 (Nov)

ORACLE DELPHI MkII Fidelity Research silver wired arm £600. Sony CDP 337ESD £100. Sony MDS JE520 £100. Saec WE308L tonearm £400. Aurios Isolators £100. Project phono box £20. All ono. Tel: 029 20 369 052 (Nov)

LINN CLASSIC CD, tuner, amp, black, excellent condition, boxed £550. Linn Keilidh loudspeakers, Rosenut, with stands, excellent condition, boxed, £350. Linn K400 speaker cables, 7 metres each £75. Tel: Mr. Moore 01482 872 685 (Nov)

AUDIO INNOVATIONS first audio stereo amplifier. Seven and a half watt direct heated triode. Great amp. £495. Naim NAT 01 tuner plus NA PST power supply, original Naim style £650. Tel: 020 8986 1762 (Nov)

CYRUS CD8X CD player. Very little use, only £725. Russ Andrews Select 1121 phono cables .5 metre with factory fitted WBT connections £195. Tel: 028 417 64088. Will include postage within UK (Nov)

MUSICAL FIDELITY Tri-Vista 21 DAC £600. (£1200). Roksan Caspian M Series CD player £500 (£1100) Both as new. Tel: 020 8393 4265 day, 01737 362 899 evenings. (Epsom) (Nov)

CHORD 1200C power amp £2100 (£4800); ProAc Response 2.5 rosewood £1200 (£3200). Linn Kairn, Karik, Numerik (latest specs) £1800. Tuner, cables and StandDesign unit. All boxed and mint. £14,000+ new. £5000 the lot!. Tel: 07808 472 229 (Nov)

MUSICAL FIDELITY A308 CD player, pre amp and power amp £2600 the lot. £900 each. Mint, boxed. Also Monitor Audio Gold Ref GR60, boxed, unused, £1750 ono. Tel: Steve 07921 572 823 (South London) (Dec)

CLASSIC CROWN DC300A professional power amplifier, output: 2 x 150 watts into 8 ohms. stunning sound quality, in great condition, recently serviced, two available £395.00 each. (postage extra). Tel 07932 664 480. (Dec)

SONUS FABER/Audio Analogue Concertino speakers. Leather and walnut to include matching stands. Bi-wire. £750. Puccini Integrated amp to include Chord Company solid interconnect. £350. All vgc. Tel: 01227 370243 (Kent) (Nov)

ARCAM FMJ CD23 CD player, A22 amp, P25 power amp, B&W CDM9NT speakers, DNM Reson cable bi-wired 4 x 8 metres. Sennheiser HD580 headphones. Run-in 500 hours. £3000 ono. Tel: 01324 622 059 or mobile 07970 330 903 (Nov)



Choice  
hifi



BUY / SELL



HOME CINEMA



MULTIROOM INSTALL



H I - F I

**www.choice-hifi.com**

tel: 020 8392 1959 / 1963 mob: 07768 720456

info@choice-hifi.com

# SIMPLY STAX

When you listen through any Stax electrostatic earspeaker, the air becomes sweeter, colours seem brighter and your senses come alive.

Demand for STAX products always exceeds supply. Consequently global representation is deliberately restricted.

STAX  
earspeaker  
systems  
range in price  
from £349 to  
£2,495 including  
vat.

You can enter the STAX family via previously owned systems from as little as £150 from us - complete with parts and labour warranty.

We demonstrate and supply the largest range of STAX products anywhere and we only sell STAX.

**www.simplystax.co.uk**  
**Telephone 020 8447 8485**  
**Ask for Howard**



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

"Now All your New and Preowned Hifi  
can be Bought and Sold Here"  
Everything from Amplifiers &  
Valves to Loudspeakers & Cables.

With Convenience and Security.  
Dedicated to the U.K  
and European Community.

Your Adverts will be in High  
Resolution color ads,  
seen throughout Europe!

Special incentives for Dealers and Sellers of multiple items

For multiple listings and rates please inquire to:-  
**aaudioman@hotmail.com**

## GREAT RESPONSE!

My last advert, which included a reference to my favourite CD player, namely the AVI Reference, which I have used for many years, has produced a number of phone calls from people who are equally impressed, and it's almost certain that the new Laboratory CD player, will become as popular as the superb Laboratory Integrated Amp. At £1469 and £1499 (£1699 with phono stage) respectively, you needn't really think of spending much more. So, my thanks for those who bothered to respond!. Add one of the smaller AVI speakers (Nu-neutron IV, Pro-Nine +), and you will have a really musical system, but there is nothing like a true 3 way speaker, and now AVI have two models, the Trio at £3250, and the just introduced Brio at £4750 (see [www.avihifi.co.uk](http://www.avihifi.co.uk)), with the Brio in particular creating a superb sound stage. At similar prices I also have the Nola Elite Lotus/ Signature, and the superb little Napoleon 5.1 (£200/speaker, also great in stereo) surround system, including probably the best subwoofer around for only £1800. Add the only other amp I consider after the AVI, namely the Eslab Pre/Power (300watt Digital Amp), a range of turntables from SME, Origin Live, Avid, and VPI and I promise you a visit would be worthwhile, so do phone or send me an e-mail ([icvhifi@yahoo.co.uk](mailto:icvhifi@yahoo.co.uk)).

**V'audio** HI-FI Consultants

36 Druid Hill, Stoke Bishop, Bristol BS9 1EJ  
Tel/Fax 0117 968 6005

# trade ads

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.

**GRAND M25 AUDIO  
JUMBLE @ Leatherhead  
Leisure Centre, M25,  
Junction 9. Sunday 23rd  
October, 10.30am. Tel: 07730  
134 973 for details (Nov)**

VINTAGE HIFI/Record/Music Collectors Fair. Sunday 6 November 2005. 10.30am to 3.00pm Admittance £3.00 Early Admittance 9.30am £10.00 Wolsey Hall, Windmill Lane, Cheshunt, Herts EN89AA For Stall Details Phone Ray 07940110656/Paul 01992 714664 or Email: fair@antfarmstudios.co.uk (Dec)

HIGHLAND AUDIO offers ex-demo AVI audio product: AVI Laboratory integrated amplifier (new model) with MM/MC phono stage, £1800 now £1450: Ecosse Reference Cable - 0.8m Maestro SE A interconnect cable RCA, £175 now only £125: stereo pair 6m MS2.3 (mono crystal) speaker cable banana factory terminated, £355 now only £245: all carriage paid within UK - contact on 01463 831 658 or highlandaudio@aol.com (Nov)

NO:WEBSITE Email 0% Finance TV plasma naff efforts at copying the Odeon Spring Summer Autumn Winter sales normal attempts at trying to get a little more custom £1500 mains leads misleading shop demos leading to divorce when he brings home the 5\* best buy way of stocking 87 brands faithfully extended warranties for products that are poor from day 1 forget 365" punctuation in this P.R. stunt. YES: Real HiFi in 2005. Selling sold enjoying using & abusing Neat Acoustics, LFD Audio, JBL Incorporated, Teac Corporation, Quad Electroacoustics, Cairn Ezo, Audion International. 07736 392 852 Open 18 hours daily 365 a year. 01423 810 990 closed Wed Sat & Sun. (Nov)

"AMPS" VALVE Equipment repaired, restored and upgraded. Kits built. Experienced engineer, free quotations. Valve (tube) equipment only. Tel: 01525 756935 or Email: amps@dhaen.co.uk http://www.dhaen.co.uk/amps/ (Nov)

AMAZING CABLES! Solid silver interconnects from £110, with air/teflon insulation and WBT plugs. Silver speaker and mains cables from £250. Fantastic performance, refund guarantee. Tel: 0115 982 5772 after 7pm, or Email: bob@skydivers.co.uk (Dec)

AUDIOFILE OBJECTIVE for New, XDisplay and Pre-Owned Hi-Fi. Roksan, Epos, Musical Fidelity, Revolver, Creek, Marantz, Inca-Tech, Project, QED, van den Hul. 16 Allen House, The Maltings, Sawbridgeworth, Herts, CM21 9JX. Tel: 01279 724 024. Free Parking, Hi-Fi Purchased. (Nov)

VINTAGE WIRELESS COMPANY LONDON Website: www.vintagewirelesslondon.co.uk Buy-Sell-Exchange. Vintage Hi-Fi. Repairs, Spares, Restoration. All valve equipment Wanted for cash: Tannoy, Quads, Garrard and audio valves. Please call us at 17 Bell Street, London, NW1 5BY. Tel: 020 7258 3448 Fax 020 7258 3449 Email: vwirelesslondon@aol.com (Jun06)

BRILLIANCE'S SYNERGY interconnects were DP's selection in his £5000 vinyl system (Sep05) "An excellent budget choice". Also Teflon digital, audio, video interconnects and speaker cables. Demonstration cables available. Contact Mike on 07963 117 341 www.brilliancehifi.co.uk (Nov)

AUDIOREPUBLIC, 78 Otley Road, Headingley, Leeds, 0113 217 7294. Yorkshire's newest Hi-Fi retailer, stockists of Naim Audio, Rega Research, Conrad Johnson, Sugden, Dynavector, (cartridges and amplifiers) and many more. Please call for advice. (Nov)

FOR SERVICE, repairs, upgrades and re-manufacturing of all valve audio equipment. Also bespoke leads to order. Contact E.F.G. (London) Limited on 020 8743 2727 for details, over 40 years experience. (Nov)

AUDIO SELECTION Colchester. Quad 909 £827, 99CDP2 £979, 989's £4900. EAR 8L6 50wrms Tube £1950. Exposure CD2010 £375. Denon TU260LII £60. Lecson DVD900RC £77. Mail Order, P/Exchange. Tel: Jim 01206 510 392, 07966 400 745 (Nov)

THE LINK FAMILY - Pure Silver & Cryo Treated Solid Core Interconnects with Prices starting from just £99 & Pure Silver Cryo Reference Litz Loudspeaker Cables with RFI reducing technology from only £550. Full Range of High Performance Power Cables and Silver Plated Distribution Systems starting from just £30 - Also a large range of DIY Supplies and Eichmann Products at unbeatable prices. All of our cables are designed and hand-built in our own production facility. Be-spoke work always welcome. The Missing Link - Better by Design - Contact us today - we will be happy to assist - 0115 8779089 www.the-missing-link.net (Nov)

## WANTED - EARLY HI-FI LOUDSPEAKERS

Tannoy, Lowther, Parmeko, Voigt, Vitavox, RCA WE etc  
TURNTABLES  
Garrard, BBC301, EMT SME, Ortofon, Decca, etc.  
VALVE AMPLIFIERS  
AEI, EMI, Leak, Rogers, PYE Quad, WE etc  
AUDIO VALVES  
DA30, KT66, KT88, PX4, PX25, PP3/350, WE300  
CLEAR CRYSTAL SYSTEMS  
John Petrie-Baker  
Tel: 020 7328 9275

SME MODEL 20A turntable. Factory reconditioned turntable with gold print Series V arm sealed box £3250. Jadis JA50 monoblock valve amplifiers balanced 20 hours use boxed like new £4000. SME Series V gold plated tonearm unused boxed £1500. Selection of SME arms available. Lots of new cartridges from Van Den Hul and others available. Wanted hi-end hi-fi urgently. Phone for details 01923 235 423 (Nov)

SUPERB INTERCONNECTS, Mains Cables and Accessories from Simon Lewis Audio. Hand made in England from top quality components ((using Teflon, Gold, Silver and other materials) Good customer feedback. Website: www.SimonLewisAudio.co.uk (Nov)

VINTAGE HIFI/Record/Music Collectors Fair. Sunday 6 November 2005. 10.30am to 3.00pm Admittance £3.00 Early Admittance 9.30am £10.00 Wolsey Hall, Windmill Lane, Cheshunt, Herts EN89AA For Stall Details Phone Ray 07940110656/Paul 01992 714664 or Email fair@antfarmstudios.co.uk (Dec)

## NEXT MONTH

# BIT PLAYERS

December's Hi-Fi World examines DIGITAL IN DEPTH. We ask whether it is audio's state of the art, or the enemy of music? We listen to three generations of CD players from the eighties, nineties and noughties (multibit, Bitstream and upsampling), and then in our supertest round up eight of the latest and greatest digital disc spinners. We examine 'the good, the bad and the ugly' of digital audio, take a detailed look at computer audio archiving and examine the phenomenon of Digital Radio Mondiale. Here's just some of the kit we hope to bring you:



- CD spinner supertest: Cyrus CD6, Musical Fidelity A3.5CD, Naim CD5i, Quad CDP-2, Shanling CD-T80 & Sony SCD-XA3000ES
- Hermstedt HiFiDelio digital audio server
- Musical Fidelity kW CD transport & DAC
- Marantz SA15S1 SACD player
- Denon TU1800 DAB tuner
- Net Audio Sonance DAC
- Copland CSA29 amplifier
- Pinsh Two loudspeakers

**PICK UP THE DECEMBER 2005 ISSUE OF HI-FI WORLD ON SALE OCTOBER 28TH, OR SUBSCRIBE AND GET IT DELIVERED TO YOUR DOOR: p71**



# FRANK SINATRA

## COME FLY WITH ME

### 1957



**T**he most important, interpretive singer the world has ever known, bar none. A man who was influenced by his own heroes, Bing Crosby and Billie Holiday and, in turn, became an influence and a hero for thousands of singers since. From Bobby Darin to Jamie Cullum, Sinatra is not only Swing, from a jazz perspective, he is possibly the greatest ballad, but most certainly the greatest saloon bar, singer in vocal history.

His dramatic style breakthroughs began in the 1940s with his removal of the syncopated style and then subtler, yet just as powerful, changes in basic singing style. His incredible extended breathing technique, note accentuation, use of words and syllables (often introducing his own lyrics into a song) are all used for dramatic effect and are included without losing the meaning of the phrase. In fact, these basic mechanics and modifications count for more than the quality of his voice. In addition, Sinatra almost single-handedly reinvented the standard. The majority of other singers jumped on the latest 'plugged' tunes the labels pushed out the door. He then turned carefully chosen numbers into modern standards...

Arranged by Billy May, the man whose trademark slurping saxes make a comeback on this project, 'Come Fly With Me' introduced the first concept album onto the market, taking the listener on a jaunt around the world, visiting exotic lands: 'South Of The Border', 'Autumn In New York', 'April In Paris' and 'Isle Of Capri'. With May, however, Sinatra

was able to introduce, shall we say, lesser songs and have real fun with them. 'South Of The Border', for example, was often sung in a slightly camp manner previously. Sinatra gives it a testosterone injection, declaring to all that he's off to Mexico to get laid. But then, he turns around and throws Autumn In New York in your face, brimming with heartfelt melancholia.

The surprise package of the album, a real eyebrow raiser, is the sassy version of 'On The Road To Mandalay', based on the Kipling poem. In fact, the UK fans always saw this particular number as a real rarity. Mainly because it was banned in this country by the Kipling estate. Sinatra raged, "Kipling's daughter had the nerve to ban that in England! How dare she?" He then added, rather sarcastically, "Of course, she drinks a little bit, so we'll forgive her."

The most magnificent aspect of the song is the ending, which seems to end, just as Sinatra is building up the song for a big finale, almost halfway through a line. In fact, the song was supposed to finish on the strike of a large gong. Instead, at that point during the recording, Sinatra just picked up his hat and coat and left the studio. The studio band collapsed in laughter and wondered when he was going to come back to finish the song. But he never did – that was how the song was released.

The variations in style and mood on the album were many. A straight-ahead waltz, 'Around The World', a song that many believe is the best ballad on the entire album, showed the surprising sensitivity of May as an arranger, while 'Isle Of Capri' is almost a send-up of the old fashioned – even then – Tin Pan Alley style of writing. Then there's 'Moonlight In Vermont', a song that contains no clichés, a rarity...

Finally, for the opening track, Sinatra, although no songwriter, showed how his influence and feel for a song was right on the money. Written by Sammy Cahn and Jimmy Van Heusen, the title track featured the line "If you could use/some exotic views/there's a bar in far Bombay". Cahn later declared that he informed Sinatra that he had also produced a slightly racier lyric, mainly for Sinatra's Vegas crowd, swapping the 'views' word for 'booze'. Cahn didn't think the word could be used for a Capitol release, as a family album. Without missing a beat, Sinatra ran off and corralled the entire studio band, who were busy supping their own booze at the time and re-recorded the song with the now familiar "booze".

Look out for a remastered version of the album with three extra tracks. The first, 'Chicago', was used to replace the banned 'Mandalay' on the original UK release. The second, 'South Of The Border' is included in its alternative mono version and, the third, is 'I Love Paris', a Cole Porter classic. ■■

ASHFORD  
**Soundcraft** 01233 624441

BATH  
**Audience** 01225 333310

BANBURY  
**Overture** 01295 272158

BRIGHTON  
**Audia T** 01273 609431

BRISTOL  
**Audio Excellence** 0117 926 4975

CAMBERLEY  
**Audio T** 01276 685597

CHEADLE  
**Audio Counsel** 0161 491 6090

CHITTINGHAM  
**Audio T** 01242 583960

CHESTER  
**Acoustica** 01244 344227

CROYDON  
**Kimberley Audio & Visual** 020 8654 1231

EDGESBASTON  
**Music Matters** 0121 429 2811

EPSOM  
**Audia T** 01372 748888

EXETER  
**Sevenaaks Hi-Fi** 01392 218895

GUILDFORD  
**PJ Hi-Fi** 01483 304756

HAYWARD'S HEATH  
**Norman Habbs** 01444 413353

HIGH WYCOMBE  
**The Sound Gallery** 01494 531682

HORSHAM  
**Audio Designs** 01403 267766

HULL  
**Audio Room** 01482 891375

KINGSTON LIPON THAMES  
**Infidelity** 020 8943 3530

LEICESTER  
**Cymbiasis** 0116 262 3754

LONDON N1  
**Grahams Hi-Fi** 020 7226 5500

LONDON N2  
**The Studio** 020 8348 0990

LONDON SE13  
**Billy Vee Sound Systems**  
 020 8318 5755

LONDON SW11  
**Oranges & Lemans** 020 7924 2040

NOTTINGHAM  
**Castle Sound & Vision**  
 0115 958 4404

MANCHESTER  
**Fartissimo** 07740 659086

PORTSMOUTH  
**Audio T** 023 9266 3604

READING  
**Audio T** 0118 958 5463

SALISBURY  
**Salisbury Hi-Fi** 01722 322169

SHEFFIELD  
**Audio Images** 0114 273 7893

SHREWSBURY  
**Creative Audio** 01743 241924

ST. ALBANS  
**Tom Tom Audio** 01727 893928

TAUNTON  
**Mike Manning Audio** 01823 326688

TAYSIDE  
**Robert Ritchie** 01674 673765

WORCESTER  
**Audio Excellence** 01905 619059

WORTHING  
**Phase 3 Hi-Fi** 01903 245577

YEovil  
**Mike Manning Audio** 01935 479361

YORK  
**The Sound Organisation** 01904 627108



n-system

"...the performance is in a league of its own..."

Home Cinema, June 2005

This list does not constitute the full naim retailer list but those which carry the full n series AV System including speaker package.

For more details please telephone  
**+44 1722 332266**

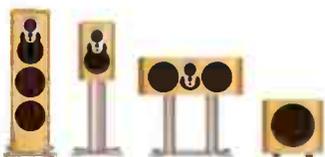
or visit

[www.naim-audio.com](http://www.naim-audio.com)





## The new Artikulat Loudspeaker System. Gorgeous.



Linn Products Limited.  
For more information or a demonstration call 0500 888 909 [www.linn.co.uk](http://www.linn.co.uk)

LINN  
200629



LINN