

THE 2011 COLLECTION

A CELEBRATION OF THEWORLD'S FINEST HI-FI







STEREO AMPLIFIERS
BEST STEREO AMPLIFIER £2000+
LEEMA TUCANA II

"If you get into h-fi to enjoy music, we doubt whether you'll find a more engaging alternative for the money"

"We're massive fans of Leema's Tucana II: it's closer to being all things to all people than any other high-end amplifier we know"

What Hi-Fi? Sound & Vision



Award Winning Hi-Fi



















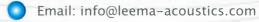




















YOUR EXPERTS



Paul Messenger

PAUL is the UK's foremost expert on loudspeakers. Having worked as a speaker designer and reviewer for over 30 years Paul is internationally recognised for his ability to assess loudspeaker performance and report on developments in the field.



Jimmy **Hughes**EXPERTISE: SYSTEM BUILDING

JIMMY has been involved in hi-fi for an incredible 40 years. He is the UK's leading authority on system-building and set up. His knowledge of the high-end, and hi-fi in general, is without rival and he writes exclusively for *Hi-Fi Choice*.



Ed **Selley**EXPERTISE: TECHNOLOGY

ED is *Hi-Fi Choice's* Staff Writer and he brings his experience in selling, supporting and developing hi-fi products to the job. He also acts as *HFC*'s troubleshooter, helping readers with problems and those in need of help with upgrading their systems.



Alvin **Gold**EXPERTISE: THE HIGH END

ALVIN is an internationally respected audio reviewer who has contributed to a huge range of magazines over the years. He has a very full 30 years of reviewing under his belt and has a passion for both high-performance and high-end hi-fi.



Jason **Kennedy**

EXPERTISE: TURNTABLES

JASON edited Hi-Fi Choice through the Brit-pop era and relinquished the helm after 17 years on the title. A hi-fi addict since his twenties, Jason fell for the beauty of vinyl and has never looked back. He brings a huge amount of knowledge to HFC.



Malcolm Steward

MALCOLM is a legend in hi-fi magazine circles. A former editor of *Hi-Fi Review* he was one of the best-known and most outspoken reviewers of the 1980s and 1990s. He now writes exclusively for *Hi-Fi Choice* and he loves being 'back'.

elcome to Hi-Fi Choice's
The Collection 2011.
Brought to you by the same passionate, expert team behind the monthly mag, this special annual is unashamedly immersed in the very best hi-fi money can buy: the high end.

It's the stuff of dreams: hyper-fi, where no-compromise equipment is lovingly crafted in the pursuit of sonic excellence. It's about beauty, exclusivity and pride of ownership. And although the material cost is high, getting closer to hearing music as the recording artist intended is indeed priceless.

These hi-fi heavyweights are all about luxury. Sumptuous build quality, cutting-edge technology, ground-breaking design, all wrapped up in a compelling aesthetic package. Long-term satisfaction is a given and many of the components on these pages will give a lifetime's pleasure.

Hi-Fi Choice's reviewing team comprises the UK's foremost audio experts. No other UK hi-fi magazine offers the collective knowledge brought to you by our 'golden-eared' panel. Over the next 132 pages, our experts will be revealing some truly exceptional hi-fi products from traditional valves and vinyl, to streamers and hard disk source components.

These products represent some of the very best available in the UK today and I hope you enjoy discovering them as much as we did.

Dan **George** Editor dan.george@futurenet.com



contents

Source components

- 20 Krell Evolution 525a
- 23 Pro-Ject RPM10.1 Evolution
- 24 Brinkmann Bardo, 10.5 & EMT Ti
- 27 Shanling CD-T2000
- 28 EAT Forte-S
- 31 Copland CDA 825
- 32 McIntosh MCD1100
- **35** Olive 06HD
- **36** Clearaudio Innovation Compact, Magnify & da Vinci V2
- **39** Monrio Top Loader 2
- 40 Esoteric K-01
- **43** Krell S-350a
- **44** Wadia Series 9

Loudspeakers

- 48 PMC fact.3
- **53** Triangle Genese Lyrr
- **54** Sonus faber Amati futura
- **57** KEF Blade
- 59 Monitor Audio Gold GX200
- 60 MartinLogan Theos
- 63 Audiovector Ki 3 Signature
- 64 Zingali Client Name 1.2
- **67** DALI IKON 7 MK2
- **68** Wilson Sophia 3
- 72 NEAT Ultimatum XL6
- **75** B&W 802 Diamond
- **76** Magico Q5

Amplifiers

- 80 Burmester Phono Preamp 100
- 83 Resolution Audio Cantata
- 84 Audio Research LS27 & PH8
- 87 Mark Levinson No.326S
- 88 Pathos InPolRemix
- 91 Audio Research DS450
- 92 Dan D'agostino Momentum
- 95 Unison Research S6
- **96** Trafomatic Experience Two

Solutions

- 102 IsoTek Super Titan
- 105 Cyrus Stream XP
- 106 Lyra Kleos
- 109 Naim NDX







110 Leema Antila IIS Eco, Agena & Tucana II

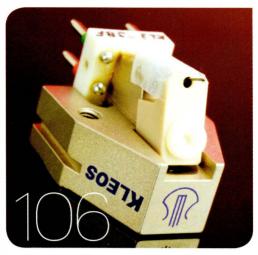
113 Classé CP-800

114 Furutech Reference-Series III-NI

117 Isol-8 Substation LC/HC

Interviews

- 13 Martin Brewster, Audio Reference
- 15 Dieter Burmester, Burmester
- 17 Pete Thomas, PMC















-32.0 Ped





We're about the music and the journey you take to get there...

Guildford Audio and The Audio Warehouse deliver a specialist bespoke Hi-Fi Service because each client is individual and their needs different.

Whether you are spending a few hundred pounds or thousands, we understand that you expect the best performance and value for your money and that's exactly what we guarantee.

For a very different approach to reproducing the finest music in your home, give us a call today on: **01483 537 577**.

Vreuer Martin

-OUR COLLECTION INCLUDES-

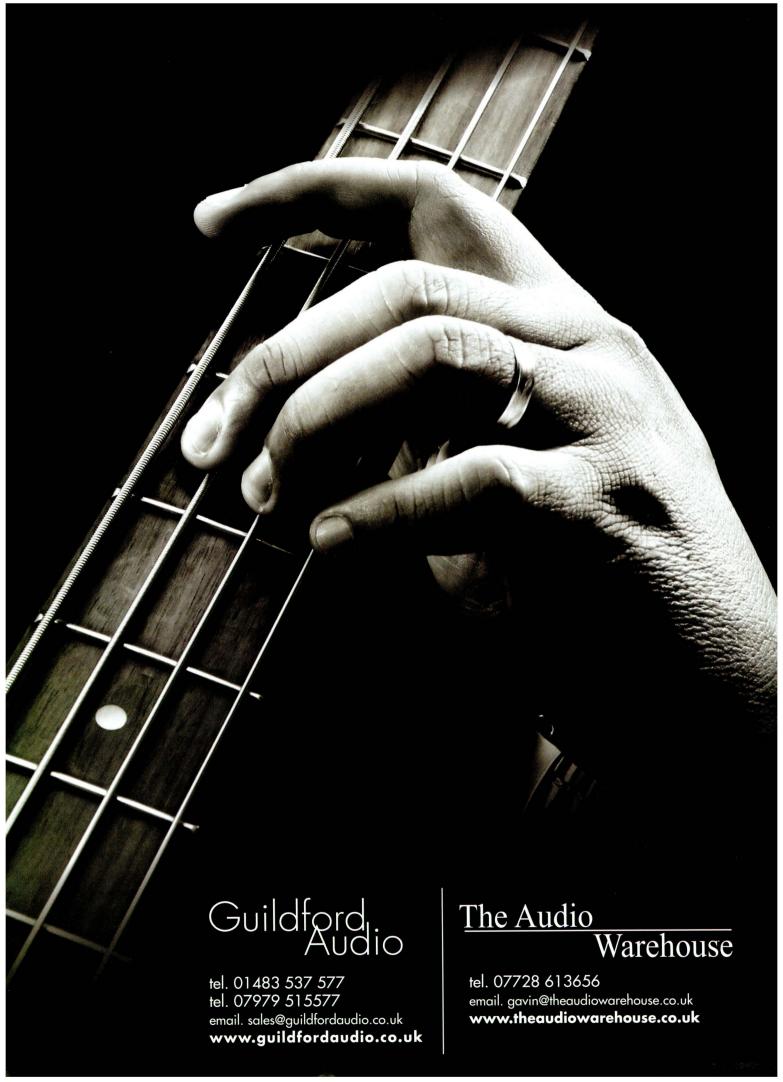
AUDIO RESEARCH • COPLAND • CRYSTAL CABLE

DAN D'AGOSTINO • DARTZEEL • DREAMVISION • EAT • JADIS

KOETSU • KRELL • MARTIN LOGAN • MICROMEGA

MIMETISM • PRIMA LUNA • SONUS FABER • THETA DIGITAL

TRANSPARENT CABLE • WILSON AUDIO • YTER



Jimmy Hughes explains why high-end audio is about more than just music-making, it's about style, pride of ownership and er, riding a Harley...

udio nerd Rip Van Winkle fell asleep in the late 1960s – and woke up in 2011. In 40-something years, what had changed? The answer is surprisingly little! Valves and vinyl were going strong, horn loudspeakers were flourishing and all those involved in the hi-fi industry still disagreed about virtually everything...

Admittedly, Rip was shocked by the prices of high end kit. With an unlimited budget, he realised he could easily spend

upwards of several hundred thousand pounds he didn't have on a system. The cost of cables seemed incredible and he was bemused by the claims that they enhanced the sound. "Not in my day, son..."

amps on the market – and their high cost relative to output. The gargantuan size and weight of modern turntables was another shock. All that trouble for a bit of black plastic...

But suppose Rip Van Winkle was into photography. Let's say he fell asleep in the late nineties and woke up today. He'd be absolutely astounded by the changes that had taken place in just over a decade. When Rip closed his eyes, film was dominant and a digital SLR with 1.5mp resolution cost around £30k. In 2011, you can buy a 12mp digital SLR for around £300 and film usage is the preserve of a few enthusiasts. Hardly anyone makes new film cameras and those still available - like the Leica MP and Nikon F6 - are very expensive. Retailers like Jessops have changed beyond all recognition, and few specialist camera shops are left.

Going back to our roots

Now you may want to quibble with some of the above, but broadly speaking it's true. High end hi-fi has remained remarkably faithful to its roots, resisting the pull of technology





Wouldn't such a device spell doom to the high end? Logic would say so, but maybe not. Actually, such a product already exists.

Devialet's D Premier (above, see *Collection 2010*) is a combined amplifier and DAC offering fantastic technical performance, superb styling, small size, and the utmost user-convenience in a neat hi-tech package. Admittedly, at £11,000 it's not cheap, but when you look at what it does – and how well it does it – in high end terms it's actually good value. Sales have been excellent but, crucially, the D Premier has not killed off interest in conventional high-end products. And why should it? After all, it's a bit like thinking a new, small, light, fast, cheap-to-run high-tech motorbike would kill Harley Davidson sales. Now the new bike might be faster, easier to handle, cost less to buy and maintain, and be cheaper to run. It's more comfortable to ride, and safer too. An even bigger bonus is that, aged 60, you look less conspicuous sitting on it. But, to ageing *Easy Riders* whose hearts are set on a Harley, none of this matters.



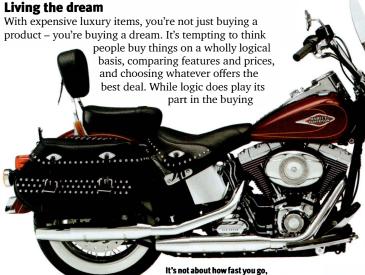
"High end is all about the best-sounding result, not convenience or low cost"

process, other more powerful forces are at often at work. There's a cachet with certain brands that makes them hugely desirable. By owning that brand, you're making a statement about yourself; you're telling people you've got taste, style and – last but not least – money. In the real world, you may be ordinary, but by owning certain brands you join the elite.

It's this sort of delusional thinking that makes some women spend ludicrous sums on designer handbags that cost an arm and a leg – despite being mostly made from plastic. Some men buy expensive mechanical wristwatches that keep worse time than a cheap quartz-battery model. It's crazy. But, who's to say they're wrong?

It's about feeling good. Buying a genuine Fender Stratocaster or Gibson Les Paul won't make you a better guitarist, but – when you hold a high-quality instrument in your hands – your aspirations miraculously rise. You'll actually try to play better and want to practise more in order to be worthy of an expensive guitar. A newer, more modern guitar may feel and play better, but an older instrument has heritage and its classic, worn look

makes it irresistible. Against all logic, you buy the vintage instrument as much for what it represents, as what it does. You choose it because you feel special when it's in your hands.

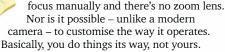


more how you get there

The camera never lies

In the world of photography, Leica cameras hold an exalted position. A surprising number of photographers aspire to own one. The brand enjoys almost mythic status, helped by the fact that so many of the 20th century's most iconic pictures

were taken using Leicas. But, is it a good choice for the average snapper? The modern Leica digital M has everything – heritage, style, feel, outstanding build quality and classic lines – but it's a challenging camera to use well: you have to



It's akin to admiring Django Reinhardt and wanting to own a guitar like his, to better emulate his playing style. He was undoubtedly one of the guitar greats, but his axe was a battered old Maccaferri with a high action. He got his results *despite* the guitar, not because of it. Maybe owning high-end hi-fi isn't quite the same as holding a vintage musical instrument in your hands or riding a classic motorbike. Nevertheless, a hi-fi system that takes up lots of space and holds a dominant position in your home affirms the importance of music in your life – it's proof of a more than casual interest.

Does high end hi-fi make you a better listener? In itself, no – but it might make you listen with greater seriousness and intensity. If your hi-fi produces a big, commanding sound that has real presence and immediacy, you'll pay increased attention and respect to the music – as though present at a live concert. And, for most of us, that's what it's all about; we want to feel we're in the presence of the performers as we listen; we want to sense they're there in front of us.

Let the good times Roll

We love intense musical encounters and high -end gear, by virtue of its size and scale, plays a big part in creating that experience.

It's the polar opposite of having a small, neat system that's hidden away so you can't see it. You don't own a Harley to be unobtrusive; you don the gear and ride it to be seen!

Anyone who looks at the work of a great photographer will probably wonder what camera they used to take such pictures. With

> photographers active from the forties to the sixties, the medium format Rolleiflex

was probably their weapon of choice. A good B&W print from a Rollei can look absolutely stunning. Some years ago, a London exhibition of Lee Miller's wartime photos – all taken on a 1940s Rollei

Automat with uncoated Tessar lens – stunned all who saw it. The prints looked fantastic. Obviously, their pictorial content was hugely interesting, but so too were technical things like a 3D sense of depth, rich tonality, and incredible sharpness.

Seeing Lee Miller's pictures makes many photographers want to buy a Rollei. This writer actually owns Rolleiflex cameras similar to those used by Miller and Doisneau, and they're gorgeous. But, by modern standards, they're not easy cameras to use. It's hard to 'see' though the dim waist level finder and – inevitably, perhaps – there's a deep sense of anticlimax when you peer into the ground-glass screen and see the grubby reality of Peckham high street rather than romantic Wartime Paris. It's like buying a vintage radio, and expecting it play music from the fifties and sixties!

Hearing is believing

A big problem with high-end hi-fi is being able to experience what it has to offer first-hand. Looking is just not enough: you actually need to hear what a high end hi-fi system does in order to be convinced that all the time, trouble, and expense is worthwhile. Unfortunately, it isn't easy to get a convincing demonstration.

Hopefully, hearing a high-end hi-fi system strut its stuff might make you want to acquire something similar yourself. Having a high-end system is like a portal into the past. Suddenly, you can experience a vast range of music, some of it recorded before you were born, in impressive sound. A high end hi-fi system is your vehicle to explore the fascinating world of music. It's not about getting from A to B in the fastest possible time or in the greatest comfort – it's as much about the ride as reaching the

"The time is right for a technological revolution in state-of-the-art sound"

destination. The almost visceral pleasure you get from listening is part of the musical experience.

Added to this, there's enjoyment to be had from outstanding build quality and lavish engineering. The firm click of a button, or the silky-smooth manner in which a knob turns is something very satisfying. Although hi-fi is (or should be) all about music, the equipment itself is definitely part of the experience.

Perhaps some of the fun went out of hi-fi once spartan became the orthodoxy. Older amplifiers, festooned with knobs and dials and boasting enticing names like Loudness or Tilt, looked like the flight deck of Concorde. Today's high-end products are notable for their lack of frills and extras.

Future perfect?

So, does high-end audio have a future? As long as people love music and want to listen to it in their homes, you'd have to say 'yes'. But low cost and convenience are factors that determine the choice of many – even people who have enough disposable income to invest in a good (read expensive) hi-fi set up. If you can get something half decent that does the job for a few hundred pounds, why go to all the trouble and expense of getting something bigger and more elaborate? Why spend £7k on a high end CD player when you get one for £250 that – on paper at least – offers much the same specification?

The answer, of course, is that the £7k CD player sounds significantly better than its cheaper counterpart. Alas, many seem to think that any difference in performance is likely to be

.



KEEP MUSIC LIVE

While the hi-fi industry has been in dire straits for several decades, live music is in rude health. CD prices may have dropped, but the cost of going to a gig to see top acts like The Rolling Stones or Lady Gaga has skyrocketed.

Lavish world tours are where the money is made now. It seems that we're willing to pay whatever's asked for a ticket, but expect to download albums for free. 30 or 40 years ago it was the other way around. Album sales brought in big bucks, while live concerts were part of the necessary slog to ensure buoyant record sales.

In one sense this is only right music is meant to be heard live, after all. Recordings should not usurp the reality of seeing and hearing music performed, But. how ironic – the quality of sound reproduction has improved, yet top-class hi-fi is seemingly more and more a minority interest.

very subtle; the sort of thing that only an expert could discern. It's therefore not worth owning something so esoteric, runs the naysayer's argument.

Naturally, we disagree. We think that hearing good hi-fi should be like going to a photographic exhibition and seeing prints so technically good, you're blown away. You not only want to know the camera and lens used, you end up enrolling in a photography evening class to learn more about camera technique.

Unfortunately, the rise of low-quality formats like mp3 means many younger people have little concept of what good sound quality is. Because of the information lost by compressed digital formats, the music itself seems to lack something vital. It no longer communicates as it should. Superficially, everything seems to be in place - the sound is crisp and clear, and there's plenty of immediacy and attack - but (somehow) the music doesn't seem all that memorable. It doesn't involve and excite; you can take it or leave it. As a result, music becomes a casual peripheral interest - it's not central to vour life.

Nevertheless, the thing that undoubtedly restricts the popularity of high-end audio is its huge price. Maybe the time's right for a technological revolution that delivers state of the art sound in a small, easily affordable package. How about Devialet D Premier quality for under £500? We want one! But is such a thing possible? Dream on...

But, wait; someone buying a £30k digital SLR in the 1990s would not have believed how rapidly technology would advance, and how far prices would tumble. Like it or not, as consumers we've become conditioned to expect more and more for less and less. Why should high end hi-fi buck this trend?

Jimmy Hughes





TRUE BEAUTY IS ON THE INSIDE

Comprising over 1700 components, 34 regulated power supplies, and using precision SMT manufacturing on a four layer PCB (Printed Circuit Board), the Audiolab 8200CD has one of the most advanced internal circuit designs in the industry. It is truly a beautiful piece of engineering.





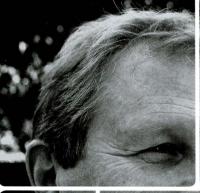






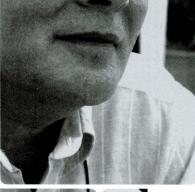


















an you tell us a bit about the brands you bring into Britain and what they offer?

Acapella's stunningly individual loudspeakers from Germany, many of which feature ion tweeters and midrange horns; the award-winning range of Clearaudio turntables, tonearms, cartridges and other associated analogue products; Convergent Audio Technology's classic high-end valve pre and power amplifiers; Gamut's stunning audiophile hi-fi systems from Denmark; the legendary Graham Engineering Phantom tonearm; Shun Mook and Shakti-Audio Innovations' resonance, EMF control and room tuning devices; the exquisitely musical Transfiguration moving coil cartridges which hail from Japan; and state-of-the-art valve amplifiers from Aesthetix in the U.S.

What's the latest and most exciting thing you have in your portfolio?

The Io Eclipse Aesthetix phono stage with volume controls offers the greatest resolution with organic musicality that I have heard from any phono stage. It has the added bonus of a line input so that a CD player or tuner can be used through the phono stage so dispensing with the need for a preamplifier. There is a choice of one or two power supplies (one for both or one for each channel) It looks pretty stunning, too!

Can you tell us anything about future products from your brands?

Aesthetix is introducing its first DAC – the Pandora – which is vacuum-tube-based with three digital inputs, USB and zero global feedback. A second version – the Romulus – comes with a CD drive. Upon early listening the player is able to resolve the finest detail, but in that organic and musical Aesthetix way.

What's the most affordable and the most expensive system (i.e. source, amp and speakers) that customers can buy from Audio Reference? The most affordable system costs around £6,500 and combines GamuT's Dana speakers and Si 100 integrated amplifier with the multiple award-winning Clearaudio Concept turntable.

At quite the other end of the scale, the most expensive system, which would set you back £463,000, comprises the Clearaudio Statement turntable, arm and Goldfinger Statement cartridge, the Aesthetix Io Eclipse phonostage, CAT's Legend preamp and Statement power amp and the Acapella Sphaeron Excalibur speakers. System wiring is the excellent Kubala-Sosna Elation! cable.

You have a musical background; can you tell us a bit about it? Has it helped you to choose brands and products for your portfolio?

I have been a gigging musician for 42 years, playing kit drums for jazz ensembles, big bands and rock groups, as well as doing studio and theatre work. Nowadays I only play for recreation with a few of my friends!

What excites you about the future of hi-fi?

There's the constant possibility of new equipment getting us a little closer to the real thing – but we are all a long way from it still!

Finally, if you were building a system for a customer from scratch, (i.e. source, amp and speakers) how would you divide your budget?

I always feel that the speakers are the most important, as these are interpreting the information, providing the link between the ear and system. If they are not of a reference standard you cannot judge anything earlier in the system.

I suppose second would be source – turntable, arm and cartridge or, of course, CD player. If the information is not lifted accurately from the substrate you have erroneous information processed all the way through the system.

handcrafted in France

Magellan

www.triangle-fr.com

TRIANGLE products are available in the UK through our four authorized dealers:

THE MUSIC ROOM

JACK LAWSON Glasgow, Scotland 0845 4000 400

KRONOS AV
DAVID CAMPBELL
Dungannon, N. Ireland
0288 775 3606

MAYFLOWER SOUNDS
PETE DUNSTAN
Scrooby, South Yorkshire
01302 711 528

AUDIO IMAGES

TIM DEARING Lowestoft, Suffolk 01502 582 853

HIFI GEAR LTD

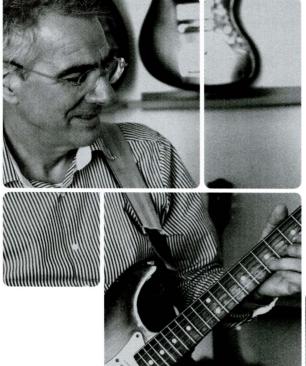
PHIL GLAZZARD Gloucester 01452 306 412

15 AUDIO Peter Woolliscroft Lewes 08448 221 115

TRIANGLE INDUSTRIES S.A.S

Avenue Flandres Dunkerque - Z.I les Etomelles - 02200 Villeneuve Saint Germain - France T.+33 (0)3 23 75 38 20 - F. +33 (0)3 23 75 38 21 info@triangle.tm.fr - www.triangle-fr.com







Dieter Burmester **Owner, Burmester**



o, Burmester is back in the UK! Can you tell us a little about your presence here to date? We are still in the process of setting up our network in the UK. Final negotiations with carefully selected and exclusive high-end dealers are happening right now and we are looking forward to introducing our products into the UK market by the end of this year.

What plans do you have for the UK going forward?

Being the high-end market *per se*, we are aiming at long-term representation in the UK. In order to achieve this we intend to work closely with the UK audio press and our dealer network.

Describe your products in three words.

Timeless. Handmade (in Germany). Innovative.

How would you describe the 'Burmester sound'?

Burmester products are known for their natural, warm, powerful, substantial sound. Our aim is to transfer music and culture and let people forget about the technology behind it.

What distinguishes Burmester from rival high-end manufacturers?

Burmester is an independent company which places great value into the sustainability of the development process and the production. Apart from the distinct sound, Burmester products are stable in value. Even units that have been produced 30 years ago are still in perfect shape, bringing audiophile pleasure to the ears of its owner to the present day. To a large extent this is due to the high quality of the parts that are used in the production. Furthermore, sustainable service is very important for us. Therefore, we

have a stock of spare parts for every product that was ever produced by Burmester.

You're something of a musician yourself; how has this helped you to create high-fidelity equipment?

Music has always had a strong influence on my life. I started playing in bands at the age of 15. From this experience and from recording in my private studio I have learned what I can, or rather have to, demand from an audio system. When reproduced on a sound system, I often missed the directness of the music I experienced while performing on stage. This is what motivated me to start building my own components.

In my opinion it is extremely important that technical equipment works so flawlessly that you stop thinking about the system behind the music. Only then you can fully experience and immerse yourself into the music. Only when you cease to notice what is around you can you then let go and experience your music with all its nuances and colours of sound.

Can you tell us about Burmester's relationship with Porsche?

Porsche and Burmester are both representatives of German engineering. Porsche has similar ideals regarding innovation, engineering, performance and manufacturing quality. It was a perfect match when we started the joint project, launched with the Burmester sound system for the Porsche Panamera.

The aim of this project was to transfer the tonal concept and pretensions of Burmester into the automotive field. The feedback we have received so far shows that we were successful in our mission. The Burmester sound system for the Porsche Panamera and the Porsche Cayenne is regarded as reference in its field.

DEFINITIVE AUDIO

EXCLUSIVE HIGH FIDELITY









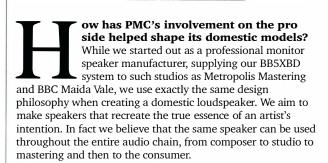


The finest quality hi-fi.









What do you think have been the biggest developments in speaker tech in the last decade?

The single biggest influence in accelerating the loudspeaker development process is the computer. Loudspeaker measurement and simulation software have reduced development times by an order of magnitude allowing the designer to explore more avenues than ever before.

What are your three top tips for speaker set up?

Position your speakers so the front face is forward of any object that protrudes into the room.

Make sure the speakers are equidistant from the listening position and toe them in slightly so the axis of each speaker meets approximately 50cm behind the listening position.

Move both speakers forward or back an inch at a time and listen using a familiar recording. Look for changes in image placement and low frequency performance. A small movement can make a large improvement.

What are the sonic qualities that studio customers demand most? – and are there similarities on the consumer side?

The ability to accurately reproduce music with the ultimate resolution and imaging at all volume levels without causing

listener fatigue. They are exactly the same requirements that consumers have.

On the electronics side, which hi-fi products do you believe have shaped the hi-fi landscape in the past decade?

The new breed of products that allow us to reproduce high bit-rate digital music files, such as those that come straight out of the studio, in our own homes. The Bryston BDP-1 is a perfect example of this – simple and easy to use, no moving parts and the closest to the original recording yet.

If you could build a cost-no-object speaker, what would it look like and what materials would you use?

We already make it! It's the active BB5XBD. Perhaps the single greatest improvement in performance is by going active, replacing the passive crossover with separate amplifiers directly coupled to the drive units. The drive units themselves must be handmade to push their performance to the edge. Despite the allure of exotic materials, doped paper and fabric drive units are still at the cutting edge of drive unit technology.

Our BB5XBD designs use four handmade drive units (two 15-inch woofers, a 3-inch dome midrange with a 34mm soft dome tweeter) The use of our Advanced Transmission Line bass-loading system allows the system to effortlessly extend below 16Hz while keeping distortion to a minimum.

You haven't heard anything until you hear a BB5XBD. It will reset your reference levels!

What do you think will domestic speakers look like in 10 years' time?

The fashion for last 10 years has been for cabinets to be increasingly narrower and deeper. I'm sure it's time for a renaissance of the very wide and not very deep speaker!

O'Brien Hi Fi

60 Durham Road Wimbledon SW20 0TW 020 8946 1528

www.obrienhifi.com

Audio Research

Moon

Krell

Sonus Faber

Martin Logan

Wilson Audio

Ayre

Copland

Naim

music and film













Sources







- 20 Krell Evolution 525a
- 23 Pro-Ject RPM10.1 Evolution
- $24\,$ Brinkmann Bardo, 10.5 & EMT Ti
- 27 Shanling CD-T2000
- $28\,$ EAT Forte-S
- 31 Copland CDA 825
- 32 McIntosh MCD1100

- 35 Olive 06HD
- 36 Clearaudio Innovation Compact, Magnify & da Vinci V2
- 39 Monrio Top Loader 2
- 40 Esoteric K-01
- 43 Krell S-350a
- 44 Wadia Series 9





Evolution 525a

Superb dynamic capabilities ultimately set this top-of-the-line CD player apart

he days of the dedicated single purpose disc-spinner are almost over except at the affordable end of the market, but it's a different story at the high end. The 525 is a modular disc player which is available in various forms, all of which have two things in common: they all say Krell on the front panel and they're all reassuringly – almost ruinously – expensive.

The subject here is the 525a, the suffix indicating that it's a CD-only player. There is also an audio transport version – the 525t – and a DVD-capable player called the 525v. These two versions are limited to a digital output and are intended for use with an outboard D/A converter, or streamed through an external system.

The 525a has an S/PDIF digital output as standard, alongside balanced and single-edged analogue outputs, though any D/A converter it is used with will have an analogue output by definition. The next version upstream is the 525v, a DVD player, though it will also cope with compact disc. Finally, there is the all-singing, all-dancing 525av, which can also be used as a CD player. CD replay is the baseline ability of any version of the 525s, which is also a universal player and includes SACD in the mix, with all audio and video options (standard-definition for now). That said, a Blu-ray player – the 555 – is in the works. Naturally the 525av is rather more expensive still, at £14,298.

This test covers the baseline CD-only model, the 525a. With the existing models, each can be converted or upgraded to senior models from the list above. Unless and until you do, many of the front panel controls, which serve all the different 525 versions, are redundant and won't be of any use to you.

As is its wont, Krell describes the 525a as being suitable for reference-calibre playback, and it comes equipped with a CAST output – Krell's high-performance proprietary analogue interface that can be matched to the CAST input found on a number of the brand's upmarket amplifiers.

An impressively machined full function remote control is included with the player, similar to those supplied with older Krell players. The front panel of the remote is festooned with a complete set of user controls, which has the perhaps unintended effect of making the player look intimidatingly busy at first sight.

A good-quality and comprehensive blue dot-matrix display is also included and the disc transport has an impressively smooth-running slot loading mechanism. Naturally, the player will cope with all the standard variations on the Red Book theme: CD-R/CD/RW, 48k WAV files and MP3 compilations using either of the (re)writable media.

Apply the can-opener to break inside the superbly presented case and you will find a Krell multi-section linear PSU rather than a switching power supply which is fed from a high-capacity torroidal transformer. CD conversion is performed by one 24-bit/192kHz DAC per channel, avoiding the usual current-to-voltage conversion stage, which, using the Krell CAST topology, reduces

the number of voltage gain stages for a complete system to one. In the absence of a CAST-equipped amplifier, the player was used with balanced connections, (with Nordost Valhalla wires), but from previous experience the CAST interface works extremely well, with no tradeoffs other than cost.

This is Krell's top-of-the-line CD player, inhabiting a rarefied price area for which the end user is entitled to demand something truly special. And the Evolution 525a certainly is that. We have had some experience with an earlier flagship model, the fabulous KPS25, a class-leader in its day. Its aural character was quite different; powerful and muscular, with tremendous resolving power, very much Krell house qualities.

SOUND QUALITY

The Evolution 525a has an incredibly powerful and architectural bass, and its midband and treble resolving power is simply in a class of its own, but there is none of the warmth and slight softness of the earlier model. The 525a gets to the heart of a musical argument with laser-like precision but without even a hint of the harshness that could be an issue with previous player generations.

But it's the 525a's dynamics capabilities that really set this player apart. Full scale orchestral material is reproduced with passion. Orchestral basses are layered so that each

"Krell's flagship CD player gets to the heart of the music with laser-like precision"

instrumental group has its own identity preserved and this is in the context of what sounds for all the world like a fully formed, three dimensional sound field.

Human voice at best has a ravishing beauty that at times (and not so rarely either) causes the hairs on the back of the neck to stand on end and you will be left in no doubt that the piano is a truly percussive instrument. And yet there is an underpinning warmth and grace here that tells you that this is a performer of rare pedigree whose musical performance comes from the heart, and is in no sense just another mechanical copy. CD replay has truly come a long way.

Alvin**Gold**







Same technology – same great performance

The application may vary but wherever there is a requirement for high performance audio, Tannoy's Dual Concentric™ speaker technology delivers.

Chosen for the world's tallest building and countless other prestigious installations globally, revered by professional recording studios and music venues worldwide, the same trusted audio technology is at the heart of Tannoy's Revolution loudspeaker range; a dynamic new blend of design and performance which is set to revolutionise music and movie entertainment at home.

Sumptuously finished in real wood veneers, the slim and elegant Revolution models provide the emotion, scale and drama of much larger designs. **Find out more at www.tannoy.com**





Recommended Revolution DC6T





Pro-Ject

RPM10.1 Evolution

Pro-Ject has combined the suspended subchassis and high-mass turntable in fine style

£2,000 Henley Designs 01235 511166 www.project-audio.com

ro-Ject is no longer satisfied with just cornering the budget market. It's set its sights on the high end with the RPM10.1, a turntable that directly addresses one of the key issues with music on vinyl: trackability.

The RPM10.1 comes with not one, but four alternative counterweights, which are supplied so that the arm/cartridge resonance can be kept totally under control in order that the system can track anything you throw at it.

This turntable is a revision of the RPM10, but quite a significant one. There are two key differences: one in the base, or Ground It Deluxe 3 (which is the rectangular slab that supports everything) and the other in the tonearm.

The Ground It incorporates magnetic decoupling through its four adjustable feet and provides a literal physical ground on account of its 13.4-kilogram mass.

The 10cc version of the Evolution arm has had a lot of attention applied to controlling resonance and Pro-Ject has used more carbon fibre in a tighter weave than the previous incarnation. It has also incorporated Sorbothane damping in the four counterweights, each of which covers a range of cartridge weights ie: 4-6g, 5-8g etc, but there is some overlap between them.

In other respects, this 10-inch arm is made of a single piece of carbon fibre with a conical shape, in order to combat standing waves. The bearing is an inverted type that uses ABEC7 ball races in a substantial ring-shaped housing for maximum rigidity. You can adjust armbase height in order to vary VTA and the armtube can be rotated so that azimuth can be changed. As with most Pro-Ject tonearms, the arm wiring is terminated in a pair of RCA phono sockets, so that alternative cables can be used to connect with the amplifier.

The rest of the RPM10.1 is hardly less substantial than the Ground It, the plinth is made of 63mm-thick MDF, with the same dark-grey gloss finish as the base. It sits on three sorbothane-damped aluminium cones and incorporates the armbase and a magnetically supporting inverted bearing for the platter. This part is 60mm-thick and made of acrylic, but is described as 'a sandwich construction' which seems odd as it's clearly one-piece, albeit one five-kilo-plus piece that's topped off by a brass record puck.

The motor is effectively free-standing and sits atop a piece of metal of the same diameter and finish. Pro-Ject supplies a spacer device so that it can be placed the correct distance from the platter and connected by a thin square-section rubber belt. On/off switching is atop the motor and speed-change a case of switching pulleys.

The picture does not lie: this is a superbly finished turntable with plenty of attention to detail and the tonearm is particularly inspiring, thanks to the chunky bearing housing, although the thread and weight anti-skate system seems a shade old-school these days.

SOUND QUALITY

All that mass in the platter confers a certain stability to the sound of this turntable; we fitted a van den Hul Frog LO moving coil into its carbon-fibre arm and used the supplied

interconnects to connect it with a Trichord Dino+ phono stage and got a smile-inducing result. Tom Waits picked a very fine band for the album *Swordfishtrombones* and this turntable certainly brings out the quality of the recording, with plenty of acoustic around the percussion and double bass.

The tiny fingerlift is a bit tricky to drop into inner grooves, but the lift/lower device can be used for this purpose, while the arm is notably microphonic when you move and dock it in the clamp. This is not a problem while playing, however, and where resonances are higher, this is not necessarily a bad sign.

There is very little sense of the 'halo effect' that can challenge acrylic platters because of the deck's mass and

"The sound is nice and smooth and capable of delivering weighty bass"

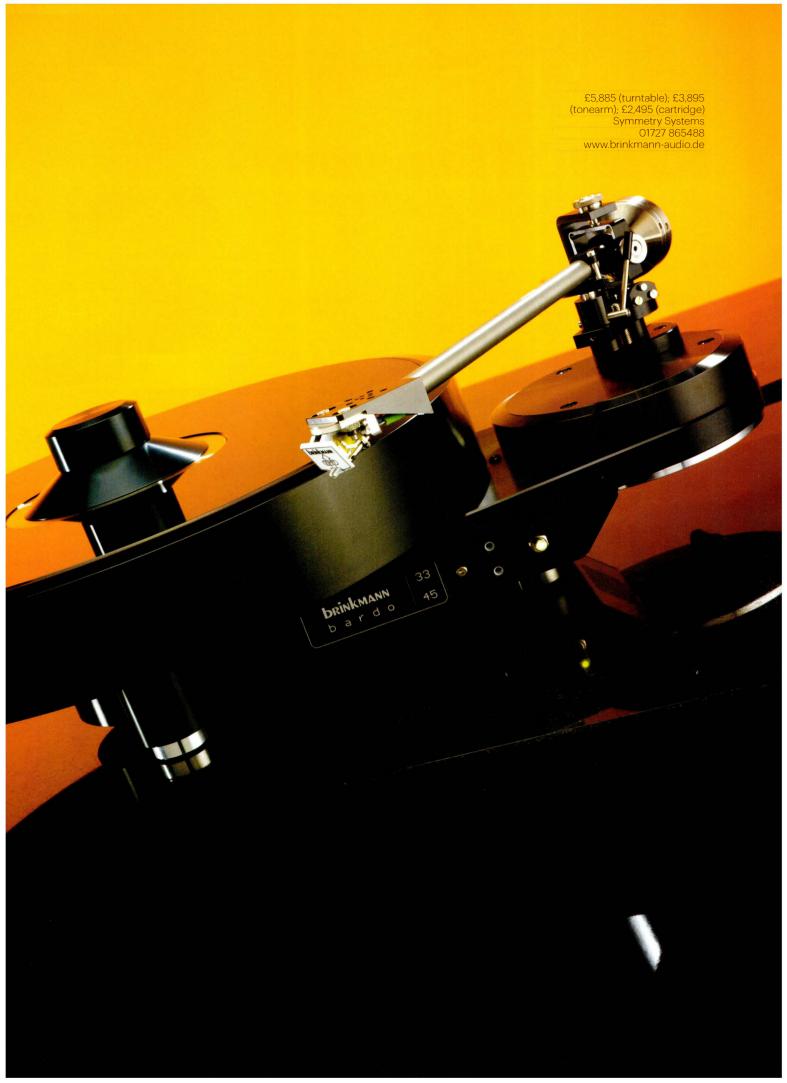
clamp. The sound is pretty damn smooth, capable of delivering weighty, tuneful bass which helps to create good image depth. In fact, the bass can be sumptuous when the record delivers the goods. Rickie Lee Jones' *Flying Cowboys* does it with a chewy bass guitar beneath and a crisp high-hat up top, while another track reveals superb string tone above a beautifully timed bottom end. This is a classy turntable, no doubt about it.

We investigated the benefits of the Ground It base by using the turntable both with and without a Custom Design stand. It certainly proved its worth by allowing the RPM10.1 to deliver a considerably more open sound that lifts and separates in true 'cross your heart' style. The bass gets a lot more room to breathe in and you can hear distinctly more fine detail across the range.

With its comprehensive approach to cartridge set up and the efforts put into keeping resonance at bay with the Ground It base, this Pro-Ject is clearly a sophisticated beast – a state of affairs that's reflected in a resolute and engaging sound. Thanks to good dynamics and timing, not to mention excellent separation of detail – it needs to be auditioned.

Jason Kennedy





Brinkmann

Bardo, 10.5 & EMT Ti

Direct drive has now been de-cogged for your maximum listening pleasure

nce upon a time, many of the world's most desirable turntables had direct drive; driven by a motor beneath the centre of the platter that eliminated the need for a belt or idler. Then the LP12 and a number of other high-profile turntables came along and the technology went out of fashion.

It never went away, however, because in the professional world of radio, and latterly DJing, the rapid start and robustness of direct-drive are very useful things. The Technics SL-1200 was only recently taken off the production line but nonetheless represents one of the longest-running, biggest-selling and most iconic turntables ever built. The high-end examples of Japanese direct-drive turntables still fetch respectable sums and there is a growing range of aftermarket modifications for the more affordable examples. So what's the deal with direct drive? Is it better or just different? Over to Brinkmann...

Brinkmann is a well-established German turntable company that decided to look into this question a few years back with its first direct drive model, the Oasis. We didn't manage to get our hands on one of those, but prior experience with the top model, the belt-driven La Grange, was more than enough to spur us on to tracking down the latest and most affordable Brinkmann direct-drive design, the Bardo.

Because the motor is hidden beneath a high mass (9.8kg aluminium alloy) platter, this is as minimal a turntable design as you will find in the high end. The bearing and motor are one part, with energy being transmitted by a magnetic drive system developed by Brinkmann for the Oasis. A circular magnet is mounted in the platter bearing and driven by four concentrically mounted coils in the PCB beneath. These coils are distributed in a 22.5 degree roster in order to minimise cogging issues.

This is a factor with most electric motors because the drive is produced by a finite number of coils around a stator, but it can be a real problem when there is no compliance in the drive like you get with a belt. This issue can be reduced if high torque is not required – something that you need with a professional turntable but not so much at home. The Bardo takes a few revs to get up to speed but the chances are that it will have reached 33.3rpm by the time you sit down.

On a standard Bardo, the platter is faced with acrylic and the separate power supply is housed in a plastic case, but there are upgrades which replace the acrylic with glass and the plastic with metal to get to Upgrade stage 3, which is the way that this model was supplied.

The chassis is a slab of duraluminium that has been shaped to minimise resonance. It sits on three adjustable feet and was supplied in this instance with a granite base to stand on. The armboard is designed so that it can be rotated to accommodate both 9 and 10.5-inch tonearms and has a quick release mechanism for easy arm changing. Various arm cable arrangements are available, but our sample had a pair of XLR sockets on the rear of the chassis that provide a balanced output.

The Bardo was supplied with Brinkmann's 10.5 tonearm, an extremely elegant device based on the classic Breuer design using gimbal bearings and – as the name suggests – a

10.5-inch length. It looks like simplicity itself, is easy to set up and nice to use even without a fingerlift. The final part of the equation is the Brinkmann EMT Ti moving coil, also a classic design that Brinkmann modifies to minimise resonance.

All three elements of this record player are built and finished to an exceptional standard. The quality of metalwork, for example, is up there with the finest in the business.

SOUND QUALITY

This Brinkmann record player is as sonically precise as its construction is first class. It presents a clear-cut, focussed sound that gets to the fine detail of everything you spin. There is a sense that nothing is masked – in other words, the

"This record player is as sonically precise as its construction is first rate"

quiet parts of a piece are as easy to follow as those that stand out. The percussion is as clear as the voice, for example – unusual for any turntable and probably a quality that relates to the Bardo's drive system.

As the Brinkmann 100 phono stage has XLR inputs, we were able to make a direct connection with balanced cable from the Bardo's output. This was made mildly confusing by the absence of any channel indicators on the player but proved a very worthwhile exercise. The sound became more refined, smoother and positively luxurious with the right slab of vinyl. Stevie Wonder's *Superstition* sounded fat, rich and deeply funky.

There is also a strong sense of speed stability with this turntable. It has a calm assuredness that gives the impression of total control in the speed department. Speed can be adjusted with trimmers next to the rather nice illuminated toggle switch for 33 and 45 rpm, and when we put light to strobe disc it was right on the money.

Combined with a decent phono stage, the Bardo, 10.5 and EMT Ti make up a formidably revealing and massively entertaining record player, one that combines the precision of digital sources with the irresistibility of the analogue groove. If this is what direct drive is capable of, then let's have more of it.

Jason**Kennedy**



PINEWOOD MUSIC

For those with minds and ears open to the sound of progress





Pinewood Music was the first Devialet dealer in the UK. We had already taken on Magico. Why? Because we are always searching for fidelity to the source, and in these two names we instantly recognised a huge leap towards that truth. There's no voodoo or black art here; just the meticulous application of science. The music simply follows naturally.

The Pinewood Music Company Somerset

Telephone: 01460 54322 Mobile: 07860 351113 E-mail: brianriv@mac.com

Shanling CD-T2000

A CD player that's closer to SACD performance levels than anything on the market

£1,895 Real Hi-Fi 01257 473175 www.shanling.com

hanling's new CD-T2000 shares the stunning aesthetic of the former CD-T1500, but, although superficially similar, the two players are, in fact, quite different. The CD-T2000 is a Red Book CD player constructed around a high-quality Sanyo HD-850 transport. It also features a Burr-Brown PCM 1792 24-bit/192kHz upsampling DAC. There are actually two 12AUX7 (ECC 82) tubes per channel (four tubes total), because the player offers the option of single-ended or balanced operation.

Like many new CD players, the CD-T2000 features a USB socket, enabling you to use its DAC with computer-based music storage systems. It also has a digital input (and digital output) via RCA phono sockets. Two sets of variable analogue outputs are provided – single-ended via RCA phono sockets and balanced via XLRs.

Output voltage levels are claimed to be 2.1V and 4.2V for unbalanced and balanced respectively. The volume control is a digital-type and, having variable output, allows you to connect the CD-T2000 direct to a power amp – though the unbalanced output voltage of 2.1V may be a bit low for some power amps.

There are three power transformers: two for the analogue outputs and one for the digital side of things. To retain the smooth classic lines of the earlier player, while offering various switching options, three of the four corner posts feature selector switches: power on/off; output volume and a CD player/USB input switch.

The Sanyo transport is a high-quality device that's virtually silent during operation. There are no audible whirrs or clicks – important for an 'open' player like this, as there's no case to reduce the noise. The transport offers fast track access and reasonably speedy fast search – certainly, better than the CD-T1500, which was very slow.

Shanling's SCD-T2000 (SACD/CD player) had a solid-state output with the option of a tube buffer stage to add a bit of valve warmth. However, this player has a proper tube output stage and no solid-state option.

Like most Shanling products, the CD-T2000 offers 'battleship' build quality and a very high standard of finish. The entire chassis is made from solid aluminium panels around one-centimetre thick and sits on four corner turrets. It weighs in at about 11kg, which is remarkably heavy for a CD player, and whether or not its substantial build affects performance is debatable. But the sound certainly has a 'solid' quality to match the look and feel of the player.

While the chassis dimensions are more or less the same as earlier Shanling players, having the feet at each corner has effectively made the player wider. Indeed, so wide, it only just fits onto a 'normal' 46cm-width hi-fi equipment shelf. Ideally, you need one with a width of about 50cm.

If this product were manufactured in the USA, it would probably cost three or four times what Shanling is asking here, and at just under £2,000, it's a veritable bargain. You can buy it secure in the knowledge that few products anywhere at any price will match it for build quality and finish.

SOUND QUALITY

Before auditioning the CD-T2000, we'd been enjoying the sound of the SCD-T2000 SACD player. When playing SACDs, the latter delivers a very open, detailed sound that's very natural and the difference between CD and SACD on this player has been fairly marked (but that's what you'd expect given the technical advantages of a higher-resolution format like SACD).

With CD, however, the CD-T2000 sounds better than the SCD-T2000 and while the latter delivers a very open sound – it lacks that slightly hard 'closed-in' tonal balance you almost always get with CD. This difference is very noticeable on

"A player that can make CD sound as good as SACD is hard to resist"

instruments like cymbals. Via the CD-T2000, cymbals reproduce with a lovely breathy openness that sounds like good analogue. Transients have crisp attack and there's plenty of body and shimmer. But what's unusual and remarkable is the lack of tonal hardness – something that really lets you experience the sound of stick on metal – or metal to metal when orchestral cymbals are crashed together.

Playing the recent Boulez recording of Mahler's orchestral song cycle *Des Knaben Wunderhorn*, we were forcibly struck by the truthful natural quality of the sound – the pure uncoloured timbres and spacious naturalness produced. Had we not known otherwise, we'd have thought we were listening to an SACD rather than a CD – there was a comparable purity and 'rightness' about the sound.

We spent many hundreds of hours listening to the CD-T2000 on all kinds of music recorded over a vast period of time and always the sound had a pure, open naturalness that seemed like an open window on the music. If the aim of high-fidelity is to reproduce the original without adding or subtracting, then the CD-T2000 gets pretty close to that ideal. It's a player that satisfies your needs without leaving you hungry for more.

This unusually good player sounds as good as it looks. It delivers a smooth, natural, well-balanced sound that lets you hear the music as it was originally recorded. Considering our enthusiasm for the SACD player, the prospect of a player that could make CDs sound almost as good as SACDs proved too much to resist. The thought of going back to something 'inferior' once the review was over nearly broke our hearts. Jimmy **Hughes**







Forte-S

The 'small' Forte boasts a 15kg, 36cm diameter platter. Who said irony was dead?

hen we first tried to lift the fully assembled EAT-Forte-S, we half-wondered if it was screwed to the floor! It weighs around 35kg and 15kg of this is the massive 36cm-diameter platter with vinyl mat. We had to laugh. But why? It's that letter 'S' – it stands for 'Small'. Small? There's nothing diminutive about the Forte-S: it's a veritable monster. But Small it is because – you've guessed it – there's an even bigger version available. As so often in the world of the high-end, words like 'small' and 'affordable' are purely relative terms!

As already mentioned, the platter weighs in at 15kg, and measures 36cm diameter. It's 6.5cm deep and features alloy construction with Sorbothane damping. The centre bearing needed to support such a heavy load is bound to be pretty massive and so it is – an inverted shaft, 2cm diameter topped by a ceramic ball.

To prevent premature bearing wear and to reduce rumble, the platter assembly floats on a magnetic cushion provided by two neodymium magnets. The massive plinth is damped with metal and sand, and supported by four adjustable magnetic feet. Two AC synchronous motors are provided, each driving the platter via a silicon belt.

One of the fascinating things about turntable design is the huge divergence of opinion when it comes to how things should be done. Obviously, EAT favours the 'mass and damping' approach. With such a massive platter, you'd expect the drive motors to be big and powerful. But, perhaps surprisingly, they're not. Rather than have a high-torque motor that really 'drives' the platter, EAT has opted for a low-power approach. Indeed, power is actually reduced once the platter has reached speed.

The idea is for the huge mass of the platter to maintain momentum, with the motors just keeping it turning at the right speed. The aim is to achieve a smoother drive, reducing the 'cogging' effect one tends to get with AC synchronous motors. And it seems to work. The Forte-S sounds unusually relaxed and effortless. Clarity and detail are excellent, creating an overall impression of rock-like solidity and smoothness.

But there was something more – and that word effortless best sums it up. The music just seems to 'happen' with this turntable. There's no sense of struggle or strain; the reproduction has a smooth flowing quality that is both natural and beguiling. We've experienced this before, notably with the French Platine Verdier.

Our Forte-S came fitted with the superb Ikeda 12-inch tonearm fitted with Koetsu's amazing Urushi Sky Blue phono cartridge. These obviously played their part in creating the smooth, effortless sound delivered by the Forte-S. Nevertheless, we'd say the turntable was the dominant component here.

The Forte-S can be had in a choice of two high-gloss finishes: piano black or – as seen here – a natural ebony wood finish called Makassar. The latter also has a slight price premium: the piano black version costs £4,545 compared with £5,000 for Makassar. The Ikeda arm costs £6,500, while the Sky Blue Urushi Koetsu comes in at £4,185.

The Ikeda tonearm is hand-made and represents a luxury option for those wanting the best. It's a 12-inch design in a

chrome finish, with silky smooth bearings and a detachable headshell. However, it's anticipated that most Forte-S decks will ship with the cheaper Pro-Ject Evo 12-inch arm.

SOUND QUALITY

The cartridge was the amazing Koetsu Urushi Sky Blue – enough said. This combination, partnered with an Audio Research PH8 phono stage and LS-27 line preamp (p84), delivers a beautifully smooth yet tactile sound that's both focussed and highly detailed.

By this, we don't mean the music sounds lazy and softcentred; it's actually very crisp and detailed, yet there's an ease of delivery that so relaxed it's almost uncanny. Voices and instruments exude a very 'real' tangible quality that reminds one of hearing a good live performance.

Pitch stability is steady as a rock, and – assuming a well-centred LP pressing – we'd say even the most critical listeners will be fully satisfied by the Forte-S. Playing LPs of piano or guitar music, there is no hint of pitch wobble or wow. It was like listening to a good SACD; maybe even better...

Surface noise is very low and rumble completely nonexistent. The four adjustable suspension feet pit opposing magnetic

"Delivers real high-end turntable performance at an affordable price"

forces against each-other to suspend the heavy plinth from the surface that supports it. Being weighty and heavily damped, the plinth transmits very little vibration to the stylus, even when physically tapped.

We found it helpful to give the platter a quick spin by hand when starting up. Because motor power is reduced after 10 or 15 seconds, the platter may not reach its proper operating speed from a cold start. But, once up to speed, the platter rotates with near-perfect precision, delivering a smooth ultra-stable result.

The EAT Forte-S delivers real high-end turntable performance, doing so at a surprisingly affordable price. It's built like a battleship and should last a lifetime. While adding the fabulous Ikeda arm and a Koetsu raises the total price, it could of course be partnered with less expensive alternatives.





Distinct and Different

Imagine a violin or guitar constructed from braced MDF. Sterile detail quickly disappoints. This is the problem of modern loudspeakers: formula design, constructed in batches, praised in magazines, oversold.

For the same price, The Music Room since 1979 sell crafted products from respected designers.

Client Name series two (launched this season 2011-12) are the culmination of a lifetime of research, passion, and pride of Giuseppe Zingali. All Zingali is 100% designed and crafted in the company's spacious, modern facility in Italy. Here everything is developed as an organic whole: drivers, cabinets, horns, filters, and the all-new reflex ports. Zingali components work acoustically like an organic biosystem to avoid subtractive crossovers and cabinet damping which remove the life and detail essential to the music. Series 2 is custom-built in 10 – 14 days in a wide variety of custom finishes.

Contact us for your nearest dealer or for technical papers and specifications.



NEW! Zero Series

From £1,695 (per pair including tax) you can enjoy Omniray technology. The new Zero series features the latest Zingali woofer, compression high frequencies driver, down-firing reflex port, and (of course) the unique patented horn.



The Music Room

4 Park Circus, Glasgow, G3 6AX, Scotland, UK

- t > 0141 333 9700
- f > 0141 333 9097
- e ▶ jack@music-room.com
- w > www.music-room.com

Copland CDA 825

Five years in the making and totally redesigned, this toploader hits the bullseye

£4,287 Absolute Sounds 020 8971 3909 www.copland.dk

or its CDA 825 CD player, Copland has gone back to the drawing board and come up with a fresh machine – top loading and incorporating a new type of filter utilising psycho-acoustic findings as the basis for its operation.

Its styling is classic Scandinavian cool: no clutter nor inscriptions, save for the laser-cut lettering. This, combined with the circular top cover, makes it the best bit of design we've seen in ages. But then Copland has a reputation for making high-quality, competitively priced audio electronics that often use valves alongside transistors. So when it brings a new CD player like the 825 to the market, we're always interested. Unfortunately, that doesn't happen very often: the last time was the award winning CDA 823, five years ago.

Copland has not just put the building blocks of the CDA 823 into a more contemporary case – it has totally redesigned the player from the ground up. The chassis has been optimised to isolate the player from the low-frequency vibrations produced by loudspeakers. Tap the top and it doesn't seem all that solid, but this is because the damping system isn't designed for high-frequency resonance and doesn't use rubber or plastic. Instead, it has carefully placed fixings which tune out the sort of resonances it has to deal with in real life.

On the digital to analogue conversion front, Copland has used Wolfson's well-regarded WM8741 24-bit/192kHz converter chips with two in each channel. This dual-differential approach produces a balanced output that is designed to eliminate noise. It's a tried and tested route in high-end digital sources that offers a benefit, whether you use the single-ended or balanced outputs.

Going against the growing trend for offering digital inputs like USB on modern players, Copland has produced a dedicated CD spinner with only outputs, analogue and digital. It is therefore as committed to its task as the clarity of casework design would suggest and you have to wonder whether those into PC audio would be in the market for a player at this price.

SOUND QUALITY

Understated in appearance and sound, this is a neutral and undemonstrative machine. Yet it becomes apparent after a few tracks that it has a hard to define appeal that stops you from pressing the next track button, let alone Stop or Pause. A few more tracks and we realise that the appeal lies in what is absent rather than present, namely that this CD player doesn't exhibit grain or glare, something that the vast majority of digital sources produce when you play piano or female vocals. This is some revelation and we can't help thinking that it has something to do with the apodising filter that set out to eliminate a flaw in digital systems that has not been tackled before. Whatever it is, it works like a dream. We stop thinking why doesn't this player sound super transparent and turn our attention to how we can get the system to be more revealing. One question is why did PMC have to take back its fact.8 speakers? Their incredible openness would have revelled in the calmness of presentation from the Copland.

The transparency is, to an extent, a factor of warm-up: two or three hours are not enough and a weekend later there is no shortage of resolution on offer. The player doesn't have a bright, super-clean sound but it reveals an awful lot of harmonic detail right across the band – it's more of an analogue balance in fact. Not warm or in any way smoothed off in the mid or treble but devoid of digital crispness, in practice this means that small bells have a pure, shiny ring to them and bass drums have weight and power while the mid band lets you hear right into the mix.

With a great recording such as Tord Gustavsen's *The Ground*, this means that the speakers disappear and let the musicians (or their sound) inhabit the room in a very solid fashion. It brings out the shimmer of the cymbals, the woody resonance of the double bass, and the body and mass of the piano to spectacular effect. In fact, we don't recall hearing this sound being so evocative of the live event. If only more discs were recorded this well. Keith Jarrett's *Testament* disc is also

"Reveals just how enthralling your music collection really can be"

gratifying, the solidity of the piano and the stage it's sitting on is palpable thanks to the Copland's extraordinary control and speed in the bass.

Even the less spectacular discs don't disappoint, they may not offer the same degree of realism but they have more going on in the mix than is usually apparent. Thanks to the aforementioned lack of grain you can play louder too, so the quality of musicianship is even more entrancing.

It doesn't seem like a fast player in the manner of a Rega or Naim, but the bass is extremely well defined, yet delivered in a totally effortless fashion. There's no undue emphasis of leading edges, which is not something you often encounter in audio sources of any persuasion. Even at sensible levels, the bass has a weight and solidity that is thrilling. You may not be a bass head now, but once you discover what's lurking on your favourite discs I guarantee that you will be in future.

At the same time as informing your head, this Copland lets the music play with your heart and it's a thrilling experience. The last time we encountered that sensation was with an £18,000 two-box EMM Labs, which puts things in context. Don't buy this expecting an instant hit that will fade over time, buy it to find out just how enthralling your music collection is. You don't need a better reason than that.

Jason**Kennedy**



£10,995 Jordan Acoustics 01202 911886 www.mcintoshlabs.com MCD1100 SACD/GD PLAYER TRACK NEXT øsi BACK

McD1100

Gloriously out of time, McIntosh unveils its SACD masterpiece

cIntosh is one of hi-fi's oldest and most iconic brands, formed in 1949. Unashamedly retro, its products seem to hark back to the golden days of hi-fi. A McIntosh is always notable for its unique styling – like a piece of serious lab equipment with Gothic overtones – and the MCD1100 is no exception.

Basically, if Batman owned hi-fi, it would be McIntosh!

We adore the look, but, saying that McIntosh products are 'retro' is misleading. That term implies a deliberate, conscious return to a past style – McIntosh has simply kept the same style. Visually, its gear hasn't changed much since the 60s. Indeed, it already looked retro in the early-70s! Anyway, if you're anything like us, you'll fall in love as soon as the MCD1100 emerges from its box. Some products look and feel the business and this McIntosh is definitely one of them. It seems impossible for something looking that cool not to sound great...

Last year's edition of *The Collection* featured the excellent MCD500 SACD player – and very good it was too. But, with the MCD1100, McIntosh has excelled itself, producing an SACD player that stands among the best of its kind. Not only is the MCD1100 an outstanding CD/SACD player, it also accepts outside digital media.

The heart of the MCD1100 is a new chip set – the ES9018 Sabre32 Reference DAC, claimed to significantly outperform conventional sigma-delta DACs, achieving a signal-to-noise ratio of 135dB with just 0.0001% distortion. Clock jitter is said to be eliminated, leading to improved clarity in cleanness.

To maximise performance, four DACs per channel are used in a special Quad arrangement, with sampling rates of up to 500kHz in PCM, DSD, or SPDIF formats. In addition to playing CDs and SACDs, the MCD1100 can play MP3 and WMA discs, and accept media via USB, co-axial (BNC), XLR, and optical inputs.

Although the MCD1100 will play MP3 and WMA formats, we were disappointed it could not access the soundtrack from DVDs – unlike the slightly more expensive Krell Cipher. Also, unlike the Cipher, the MCD1100 is strictly twin-channel – it does not offer surround-sound options, or subwoofer output.

Throughout our time with the MCD1100, it behaved impeccably. It hardly ever skipped or jumped – and when it did, the disc was clearly damaged. The transport proved virtually silent, mechanically; completely free from annoying scrapes and swishes. Not all SACD transports are as quiet and dependable as this one.

We really like the metal disc drawer, which adds a quiet touch of luxury. The comparably priced Krell Cipher (with its plastic drawer) was a slight disappointment. Build quality is excellent – solid, with beautifully finished surfaces – and (of course) that gorgeous illuminated front panel that looks a million dollars.

Retro? In many ways, McIntosh products are beyond retro. They're classics that exude an air of timelessness. The look is somehow outside fashion – like a Harley Davidson. And as with a Harley, it's as much about how you get there (and in what sort of style) as how fast. But, make no mistake, the MCD1100 is fast. It's a sleek Formula One racing machine – a formidable piece of kit that need fear no comparisons.

SOUND QUALITY

We tried listening to the MCD1100 from ripped CDs stored on our computer hard drive via a USB cable and the reproduction was very good – roughly comparable to the CD itself, though (unlike hearing these same files via Classé's CP-800 digital preamp, *HFC* 350), not an improvement on the original.

The best results are actually obtained playing SACDs, and good examples exhibit impressive openness and clarity, with plenty of crisp clean detail and a wide dynamic range. The sound is very natural and free from obvious coloration, being neither 'warm' nor cool in terms of tonality, but very right-sounding.

Superficially, CD sounds reasonably close to SACD. But listen more carefully, and you start to notice a certain 'sameness' and lack of range. CD doesn't sound quite as clean, nor do individual voices and instruments separate-out

"McIntosh products are beyond retro; they're timeless classics"

as well. The music is relatively free from congestion, but lacks the transparency and breadth of SACD.

Compared with an average/good (cheaper) SACD player, you'll find the MCD1100 sounds quite a bit more dynamic, detailed and transparent, with increased stereo separation, and a far more holographic 3D soundstage. Via the balanced outputs, this difference is made even more apparent and the player really sings.

Playing CDs, the benefits are less tangible – CD being a bit of a 'leveller' due to the inherent technical limitations of 16-bit/44.1kHz technology – though via the McIntosh it still sounds excellent. The MCD1100 minimises the slight coarseness CD tends towards, but never fully matches SACD's effortless clarity and transparency.

The MCD1100 offers a choice of fixed or variable balanced/unbalanced analogue outputs, with balanced via XLR sockets. Normally, fixed outputs sound better than variable ones, but here it was hard to tell much difference. The variable outputs offer about 20 per cent more gain compared with the fixed ones – a big difference.

On SACD it's as good a player as we've ever laid ears on; a sovereign instrument that delights visually, as well as aurally. Of course, it's expensive, but you get a lot for your money.

Jimmy Hughes



coustic

Independent audio consultants

Acoustic Arts has moved to a residential demonstration facility.

Now you can park, relax and enjoy your demonstration.



Demonstrations require advanced booking Tuesday-Saturday 10:00AM to 5:30PM

T: 01582 485316 E: mail@acousticarts.co.uk

W: www.acousticsarts.co.uk

Almarro • Audio Research • Copland • Densen • Dr Fiekert • Focal JM lab • Grad • Harman Kardon • Hutter • Jadis • KEF • Koetsu • Krell • Lector • Martin Logan • Michell • Moscode • Ortofon QED • Quadraspire • Sonus faber • TelluriumQ • Theta • Transparent Audio • Velodyne • VTL • Wilson Audio



New flagship hard-disk player brings huge storage and ease of use to the masses

£4,600 Henley Designs 01235 511166 www.olive.us.com

he 06HD is the current flagship model in the Olive range of hard-disk music servers. Fundamentally, it rips CDs to its internal two-terabyte hard disk, where it stores them for subsequent replay. Olive says the disk will accommodate around 6,000 CDs 'in original quality'. You can virtually double that capacity by storing the CDs in FLAC (Free Lossless Audio Codec) format, which reduces the file size, but does not discard any musical information. The Olive Maestro operating software is happy with FLAC and WAV files, along with the compressed AAC format and the ubiquitous MP3.

Music from the hard disk passes through a pair of TI (Burr-Brown) 24-bit/192kHz PCM 1792s, running in dual-mono configuration – one DAC chip per channel – for conversion to analogue, assuming you wish to use its analogue rather than its digital output. The DAC also includes an ultra-low jitter master clock, an asynchronous sampling rate convertor (upsampling to 24-bit/384kHz) and a second-order Bessel reconstruction filter.

Naturally, it is essential to back-up the music stored on the 06HD, just as one would with any single-hard disk system. This is accomplished through a rear-panel USB port. Obviously, you will need a drive with sufficient space to hold all your music. You will need a 2TB drive or larger as a backup. Modern versions of Windows will not format this to the required FAT32 format, so you will need a third-party program, such as CompuApps SwissKnife, for that purpose. It is important to have a dedicated drive for this task, as the back-up process overwrites everything on the destination disk. So, do not even think about keeping all your family photographs on the back-up disk as well!

An alternative approach to ripping music on the 06HD is to import rips and downloads from a computer attached to the same network. This process only works with file formats recognised by the Olive. Once the music is present in its import folder, accessed through your web browser, the 06HD then categorises it and organises it into its library.

One caveat that Olive points out is that WAV files rarely come with any metadata attached, so import them and you will end up with a host of unknown artists and unknown albums. We'd recommend using dBpoweramp Music Convertor first to encode them into FLAC format, which incorporates Vorbis Comments – as opposed to the inappropriate ID3-Tags used with MP3s.

The unit also happily renders music from external stores, each of which uses UPnP servers other than Twonky or TVersity, of which Olive seems to approve.

The 06HD can connect to your network through a wired or a wireless connection: there are no prizes for guessing the one that we chose. Even Olive recommends using wired if you are transferring a lot of material to the device, which implies a lack of trust in wireless.

Other clues disclosing its audiophile intent, include the separate DAC and amplifier to drive the headphone outlet, anti-vibration, two-part polymer feet to help isolate the server from the environment and eight layers of noise-cancelling

padding supporting the internal hard disk. We have already mentioned the 24-bit/384kHz up-sampling DAC feeding the balanced/unbalanced analogue outputs.

Finally, the Maestro software that controls the player seems a little more responsive in the 06HD, than it did in the manufacturer's 04HD (*HFC* 333).

SOUND QUALITY

A 24-bit/96kHz version of The Allman Brothers *Live at Fillmore East* clearly demonstrates that the 06HD is not an emotion-free zone. Similarly, the 24-bit/96kHz rip of Robert Plant and Alison Krauss' *Raising Sand* reinforces our suspicion that the 06HD can be spirited, drop into a groove and convey feeling, as well as plenty of hi-fi detail.

Playing *Art Pepper Meets the Rhythm Section* (a 24-bit/96kHz vinyl rip) shows that the 06HD can turn in a

"Capable of a first-class performance with decent material"

first-class performance with decent material: Philly Joe Jones' drumming 'grooves' was replete with texture and dynamic contrast, as is Pepper's luminescent sax-playing. Our only reservation is that the sound of the player seems a tad recessed in the high frequencies: not dull, but not sharp enough.

Playing Speed Caravan's aggressive *Kiss of Electric Sand* brings the matter into sharper focus: the Naim HDX is faster-sounding with better defined note-shape, which makes the Olive sound warm and slightly fuzzy in comparison when both played through the same DAC – either the M2Tech Young or the Naim. Curiously, the Olive sounds cleaner and more transparent through its analogue connection, which seems more musically rewarding than its digital output.

The Olive 06HD is a machine whose performance leans more towards the American high-end style than that of the UK, but if a high-end presentation is your thing, you will not be disappointed. If you are the 'fit it and forget it type' and are not bothered about 'getting under the bonnet' then Olive's Maestro software will appeal. If you want to manage your music files the way you do those on your PC, then store them on a NAS rather than the 06HD's internal drive.



£4,550 (turntable); £2,375 (tonearm); £3,950 (cartridge) Audio Reference 01252 702705 www.clearaudio.de A Innovatio compa.

Clearaudio

Innovation Compact, Magnify & da Vinci V2

This elegant turntable is a lot more sophisticated than it looks

isit the Clearaudio stand at Munich's High End show and you'll be dazzled by the sheer quantity of luxurious turntables the company makes. It's hard to keep up with the range and the UK distributor has chosen to focus on select models to help clarify matters.

The Innovation Compact is the least expensive tri-star-shaped Clearaudio that Audio Reference keeps in stock but you can still get the older Solution model to order. The new-gen Innovation Compact is so called because it's less substantial than the standard Innovation with only one layer of aluminium and acrylic sandwich in its three-legged plinth. It's a neat and stylish turntable with the motor at the end of one arm and tonearm mounting points on the other two, giving the option of running two arms without modification.

Each end of the plinth is supported on a particularly sharp spike and Clearaudio supplies metal discs with a dimple in to stop these points damaging soft surfaces. These spikes can be adjusted to level the turntable, but, as is usually the case with such systems, you are better off retaining stiffness by keeping them screwed in fully and levelling the surface itself.

The DC motor in one arm is decoupled from the chassis in an isolating housing with switching on top for both the usual speeds, plus 78rpm. Power is supplied from a wall-wart supply on a thin cable that plugs into the rearmost arm of the plinth so it looks pretty tidy on the rack.

You can fine-tune speed with a screwdriver but our sample ran true out of the box. The platter is not acrylic, as has been the case with Clearaudios in the past, but something called high density polyoxymethylene (POM) which is not particularly heavy considering its 70mm thickness – the whole turntable weighs 12kg excluding arm and power supply. It's peripherally driven by a soft synthetic belt and sits on a ceramic magnetic bearing. The white colour gives away the former quality but the magnetic element is less obvious to the eye as it's incorporated into the underside of the platter and the bottom of the bearing. It does, however, remove the need for a thrust pad on the tubular ceramic shaft.

The Magnify tonearm uses a variation on the magnetic bearing system that Clearaudio has been using for a while. This time the company has used precision ball races for vertical movement and a magnetic horizontal bearing that has variable damping. When you are adjusting the counterweight using the micrometer at the end of the stub, it feels unusually compliant for a bearing but seems to work well in practise.

The arm sits on a base that is attached with a single bolt to the turntable and you really need the Clearaudio alignment device to place the pivot point at exactly 222mm from the centre spindle. However, this protractor does make set up a doddle and it's a pity it's not included in the box.

The da Vinci V2 moving coil sits, as the price suggests, near to the top of the Clearaudio cartridge tree. Its aluminium body is coated with a ceramic layer for extra rigidity and it has extremely low moving mass thanks to unusually small and light micro-gold coils. It's a very low compliance design

with a boron cantilever and micro HD stylus that produces a decent 0.8mV output.

SOUND QUALITY

With a nice slab of vinyl on the platter, this is a beautiful-sounding record player, producing mountains of detail with a fluid yet precise sense of timing. It's not the most weighty-sounding deck: the Brinkmann Bardo reviewed on page 24 and an SME 20/3 both deliver a bit more bottom end grunt, but it's highly revealing across the band. We really enjoyed a rather good pressing of *Blues for Allah* by the Grateful Dead that has recently come out on Audio Fidelity. This sounds strong yet has a nimbleness and easiness to it that lets you

"A beautiful record player, able to produce mountains of detail"

completely forget the equipment and immerse yourself in the effortless groove of the band. Higher tone instruments like bells and cymbals are remarkably well served, too: the former have a real shine to them because of the solidity that the turntable delivers. Guitars are rather good too, especially when they are played by Little Feat.

Timing is also a strong point and one which benefits bands like those previously mentioned to a high degree. It's precise yet effortlessly smooth and allows you to really appreciate the skills of the musicians involved. This is undoubtedly related to the way it's so easy to hear what the various voices and instruments are doing even in a dense mix. If there is space in the recording, the Innovation Compact reproduces it in full, and it's this space that opens up the soundstage so that every player can take a place within it.

What particularly appeals is the way in which this turntable is so revealing and analytical, yet, thanks to its excellent sense of pace, never seems to merely measure the groove wall. It is in fact highly musical and probably more revealing than most of the competition. This is an expensive player but it's also an extremely resolute one that's a joy to listen to.

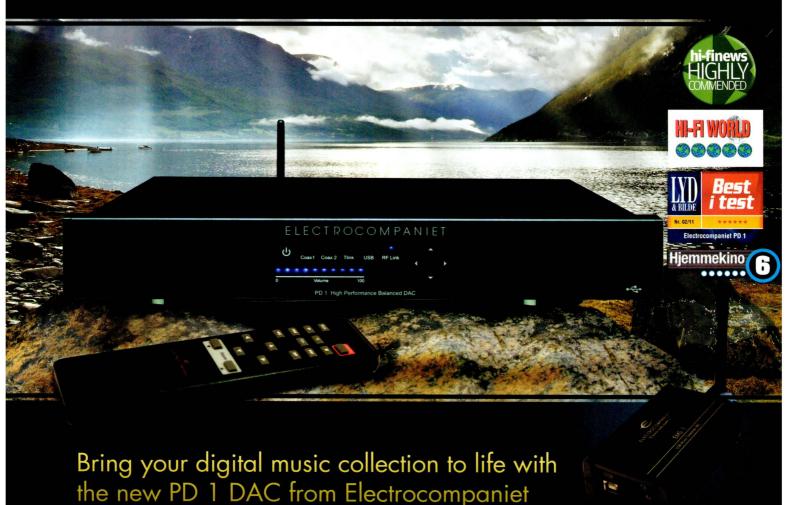
JasonKennedy





ELECTROCOMPANIET

If music really matters™



The new PD 1 is our answer to the growing need for a user friendly DAC with USB interface. With our new DAC you can listen to the music from your CD-player, TV/Satellite tuner, iPod and computer the way it was meant to be. The sound from all your digital sources is improved and listening experience is enhanced.

The PD 1 is easy to install and with the remote control you can change between the sources and adjust the volume – perfect if you connect the PD 1 to a pair of active speakers.

When you connect your computer to the PD 1 all music coming from your computer is upsampled to the best possible quality. The dynamics and the details in the music is restored. With the remote control you can put your play-list on hold or move to the next / previous track without touching your computer.

For wireless streaming from your PC/Mac you can choose to add our USB Music Streamer. With the EMS 1 the music from your computer is streamed wirelessly to the PD 1 and you can put your computer further away from your music system.

Electrocompaniet is Made in Norway

Since the beginning in 1973 Electrocompaniet has always focused on listening pleasure and our main goal is to reproduce music as it was meant to be. Now wonder a lot of studios around the world is using our equipment for editing and mastering – maybe your favourite music is made with Electrocompaniet equipment.

Our main ambition is to give you listening pleasure in your own home and your investment in Electrocompaniet will last for many years.

The vision that drove us in the early days has stayed: If music really matters ...

Made in Norway
www.electrocompaniet.no

Monrio Top Loader 2

This Italian margue has a refreshingly honest philosophy when it comes to hi-fi

£2,500 UKD 01753 652669 www.monrio.it

onrio is an Italian company with a refreshingly honest aim: "Our pretension is neither to bring a real listening experience to your house - it is not possible to do it – nor to imitate the reality but to represent it in the best possible way." Few companies have the strength of character to be this open about their approach.

The Top Loader 2 is Monrio's penultimate CD player and quite a stylish conglomeration of aluminium and acrylic it is too. The question is does it sound as good as it looks?

The Top Loader 2 was built for customers who want the qualities of the company's best player, the Top Loader 3, but without the cost, so the casework is more traditionally shaped and the electronics simplified. The case is still pretty substantial and beautifully finished – Monrio is keen to keep resonance at bay and so builds heavy and strong using aluminium extrusions for maximum rigidity.

The TL 3 has two valves protruding from its flank and these same valves can be found inside the more affordable player. They are 12AU7 triodes with high-voltage transistor regulation fed by a 'generously rated' toroidal transformer with separate windings for the various sections of the player. It has twin Sigma/Delta DACs and uses an I2S bus to keep audio signal and clock data separate prior to conversion. Analogue output is via single-ended or balanced connections and a digital signal can be output from the single coaxial connection.

The unusually slim control buttons look good, but are rather short on tactile response, there is little or no give when you press them. Doing so elicits a response, however, and after a while you learn not to press too hard. The larger control on the right of the facia looks like it might revolve to select tracks but only seems to be a standby switch.

It's a solidly built machine in all respects, except for the acrylic cover that slides over the disc bay. It looks good with its blue tint, but doesn't operate all that smoothly. Discs needs to be held in place with a magnetic puck and the player spins up when you close the cover, a system that does mean you can stop playback by merely sliding the lid back, which makes for button-free disc changes.

This is a great-looking machine with strong design and a lot of flair for the money. Its appearance is slightly undermined by the ergonomics, but disc cover aside, most of these are less of an issue if you have the remote. It's not big on features, there's no digital input as is the prevailing fashion, so you can't attach a streamer or PC and there's certainly no USB input for maximum flexibility. This is a CD player pure and simple, albeit one with a pair of valves inside, not many glasspowered players are all that feature-rich. Build is generally good with decent casework alignment and an encouraging solidity. The feet are spiked with a padded foot to avoid damage to the supporting surface.

At this price there is quite a lot of competition for Monrio. For example, we very much liked Denon's DCD-2010AE, a £1,700 machine that may not have the style on offer here, but it plays SACD and has plenty of support for your iPod. Naim's CD5 XS (£1,950) offers openness, as well as fine quality timing on top of the marque's strong reputation for musicality.

The only machine we've seen in recent times that competes in terms of style is the Consonance Droplet CDP3.1 (£1,995), which is even more extravagant in appearance and also has valves under the skin.

SOUND QUALITY

In the listening room we hooked the TL2 up to Townshend's new Glastonbury Pre, a pair of Mark Levinson No.53 monoblocks and PMC's fact 8 loudspeakers. If it doesn't sound good through this lot it never will.

Fortunately it does, but with a relaxed demeanour that tallies with Monrio's musical experience. It does this very well, thanks to a good sense of timing, calm presentation and high musicality – once a good track is playing there is no inclination to turn it off and move onto the next. While the valves make it a little too relaxed to be considered a pace, rhythm and timing style player, its strong sense of involvement puts in contention with that type of machine.

"Good looking and very easy to live with from a sonic point of view"

Next to a Leema Antila you can hear that it is distinctly lacking in spatial resolution; the Leema sounds extremely open, has a lot of depth and a greater sense of realism. The Antila is a more expensive machine, but there are more closely priced players that deliver a similarly open sound. Leading-edge definition can be enhanced with the right choice of interconnect – we tried some TMS Pulse B in place of the usual Townshend Isolda DCT100 and this enhanced the sense of speed, but undermined the Monrio's ease at high levels. There aren't to our knowledge, any cables that can make this player sound really open but if you can live with that this is a very engaging disc-spinner with its heart in the right place.

Very easy to live with from a sonic point of view, the Top Loader 2 is a good-looking player that is also strong on easy charm. It doesn't have the transparency or urgency of the best at this price but it does make you want to listen to your music and that's a fundamental quality of good hi-fi. It gets very close to offsetting its limitations with its ability to focus the listener on all that's transcendent in the music, but whether you will feel it gets the balance right is a matter of taste and for that matter system-matching. But if you aren't listening enough it could well have the power to put music back in your life. Jason**Kennedy**





Esoteric K-01

Top of the line integrated disc spinner to coax a choir of angels from your music collection

ver the years, TEAC's high-end offshoot Esoteric has been responsible for a series of players which stretch the meaning of terms like 'state of the art' and 'cost no object' to breaking point. Its latest and best one box player is the K-01.

It is fabulously well-built. This is an SACD player, which also plays CDs and the usual recordable and rewritable variants – CD-R and CD-RW. It is an outrageously heavyweight design which tips the scales at 31kg, making it one of the very few one-box CD players that is in effect a two-man lift. The player's internal, catchily named VRDS NEO VMK-3.5-20S transport mechanism on its own weighs in at an almost unheard of 5.2kg.

This new version of the well-known VRDS mechanism is fitted with two 32-bit monaural D/A converters with eight parallel-differential DAC chains per channel. The K-01 has four onboard power transformers, including one per channel dedicated to the D/A converter. The icing on the cake is the USB Type II input which can be driven by a PC or Mac, asynchronously if desired. Unfortunately, this part of the player requires considerable care and time to set up optimally, and it was not possible to make best use of this capability in the time available for this review, so system interconnections were limited to single-ended and (better still) balanced mode (XLR) inputs.

The player's mechanism uses TEAC's customary high-precision turntable, rare-earth-magnet coreless three-phase brushless spindle motor and shaft-sliding pickup, based on previous Esoteric practice. The player has a silky smooth slot-loading mechanism, with a built in shutter for environmental isolation. The D/A converter, is based on the D-01 and specifies Asahi Kasei top-end 32-bit AK4399 D/A chips.

In common with some previous Esoteric players, the K-01 includes facilities to upconvert PCM signals from their original sampling frequency. Four separate output digital filters, including short delay and FIR filters, to reduce pre-echo and ringing, can be selected, or bypassed altogether. DSD (SACD's native data format) and PCM (CD) formats can be converted directly to analogue. PCM can be converted to DSD which is said to have some advantages for jitter suppression. The player has three inputs which can be used with external sources – USB II including asynchronous as noted earlier), optical and coaxial, each of which supports clock rates up to 24-bit 192kHz. A high-precision 32-bit digital attenuator (volume control) variable output is included, so the player can be used as a high-performance digital preamplifier.

Other features (leaving aside the leather-trimmed remote control) include an onboard crystal oscillator specified at 0.5ppm accuracy (well within the domain of high-end external clocks), though – as usual with Esoteric – there is the possibility of an external, even higher-precision master clock generator, including an improved version of the G-Orb rubidium master clock, which now includes a 10MHz sync frequency.

By any standard, the player is elaborately constructed, with liberal use of superbly finished anodised aluminium, smoothly rounded edges and corners and an internal construction that includes five separate isolated compartments for the various circuit blocks.

SOUND QUALITY

What's left then is the bottom line: how does it sound when playing music? For this, we wired the player up to a Denon PMA-SA1 and a pair of MartinLogan's outstanding (but not absurdly expensive) ElectroMotion floorstanders.

Naturally, we paid some attention to how the player compared with the Krell 525a CD player. The answer is that the Krell shows signs of being ultimately the better CD player by a very short margin, but, when the chips are down, the Esoteric K-01 is arguably the better music player. It is SACD-capable after all, which the Krell isn't.

With players like the K-01 – and in particular taking account of the complexity of the set up options – not all of which could be explored in this case, not least because an

"The passion you'll hear in the best recordings simply can't be denied"

external master clock and a computer with an appropriate high performance USBII interface were not available, there is a limit to what this review could accomplish in the limited time available. Even the decoding options such as the various filters and the ability to convert PCM to DSD, add a layer of complexity to the players set up which could not be fully explored.

But limiting the final remarks to the native DSD (unconverted) replay of SACD material, bypassing all filters or extra processing, there is a rightness about the K-01's sound quality that is very rare. The passion you will hear in the best recordings simply can't be denied.

Stereo soundstaging and space are painted with a three-dimensional flourish and a lack of artifice we have rarely experienced elsewhere, with this brand of players or any other (offhand this reviewer would say that EMM Labs and Krell come closest, with a similar dynamic quality and resolving ability). There is nothing soft or overtly analogue about the way music is presented, but there is nothing obviously digital about it either. It just makes music – and it does so superbly.

Alvin**Gold**



the missing link

The Ayre QB-9 digital to analogue converter, in combination with your personal computer, will transform your audio collection in to a new musical experience. Simply store CD's or high resolution downloads on your computer and enjoy the convenience of your entire music collection at your fingertips. You can even use your favourite music playback software to create personal play lists.

The QB-9 features proprietary asynchronous technology to ensure jitter free data transfer of your music files. Advanced opto-isolators provide complete separation of your computer from your audio system, resulting in exceptional sound reproduction.

The Ayre QB-9 brings you closer than ever to your favourite artists, changing the way you listen to music.



w: www.symmetry-systems.co.uk





An entry-level model to herald a new era of high-end CD player affordability

£2,752 Absolute Sounds 020 8971 3909 www.krellonline.com

he very idea of a budget Krell range is a kind of oxymoron, but even this manufacturer is not immune to what's happening in the wider world. If ever the time was ripe for an affordable range of Krell products, the current global economic slowdown has provided the perfect opportunity.

Tested here is the entry-level S-350a, which is a CD-only player. The closely related S-350av adds DVD playback (upscaled to 1080p) and the claim is that it does so without compromise to CD playback performance.

As a CD player, the S-350a is straightforward. It has all the usual search and repeat modes, a neat and very simple backlit LCD display and you can extract the analogue audio signal in single-ended or balanced forms, using XLR sockets on the back. But the player will deliver electrical digital outputs in (optical) TOSLINK or (electrical) S/PDIF form and it will also accept external digital signals, again both optical and electrical. It will even accept high-resolution signals – up to 96kHz anyway, which is the limit for the connector types used.

Internally, the S-350a is well specified, with a massive power supply section and solid build quality. It is also compatible with CD-DA, CD-R/RW and MP3 CD media. Having being made outside of the USA was not used as an excuse for second-rate construction.

The player takes advantage of hardware developments that were originally introduced to service the computer market. The most obvious of these is the player's slot-loading mechanism, which is becoming increasingly common instead of the more traditional loading drawer.

The S-350a is shockingly heavy – the only way to explain the 11.4kg deadweight in a CD player is the inclusion of a typically Krell scale power supply with a massive torroidal transformer of a capacity more appropriate to an amplifier than a CD player – though unusually robust external metalwork is also part of the equation. No one could reasonably claim that the player is anything less than immaculately built and presented.

As usual with Krell, the S-350a has a plethora of small control buttons, far too many to take in at a single glance, which for some will make operation using the supplied remote control more natural. But in its favour, the native control set is positive and gives good tactile feedback through the fingertips.

This player represents exceptional value. It is not just the most affordable way of joining the exclusive Krell owners' club, this is a player that delivers, well beyond what might have been expected.

SOUND QUALITY

The S-350a was supplied for test with a sample of the matching S-300 integrated amplifier and the prognosis is unequivocal; they work brilliantly, separately and together.

Both units – the CD player and the matching amplifier – achieve a very high standard, much higher, in fact, than we had anticipated. There are some obvious mechanical elements of the performance available from this player (and indeed the matching S-300 amplifier) that come across clearly at an early stage. The midband, for example,

is extremely smooth, even and articulate, and essentially free of the flatness and lack of perspectives endemic with many lesser players, as well as some of Krell's early disc-playing hardware.

By the same token, the treble sounds well integrated and highly detailed and the bass is more full-bodied than many earlier generations of Krell players. Discs are handled efficiently, with rapid track access and virtually no sound from the internal mechanism, or the spinning discs themselves. The additive result of these factors is that the Krell is easier to listen to for extended periods and is more believable, too.

Overall it does a fine job of CD replay and it extracts a commitment and passion that is unusual from compact disc. Imagery is handled in an unusually three-dimensional way. Image depths are fully painted-in and the players bass is particularly deep and potent, too. The Krell makes the best of well-conceived recordings and performances by adding a sense of air and presence that other replay systems often fail

"Sound quality to raise the hairs on the back of the listener's neck"

to resolve. This is the difference between plain good sound quality and a performance (with the emphasis on that word) that causes the hairs to rise on the back of the neck.

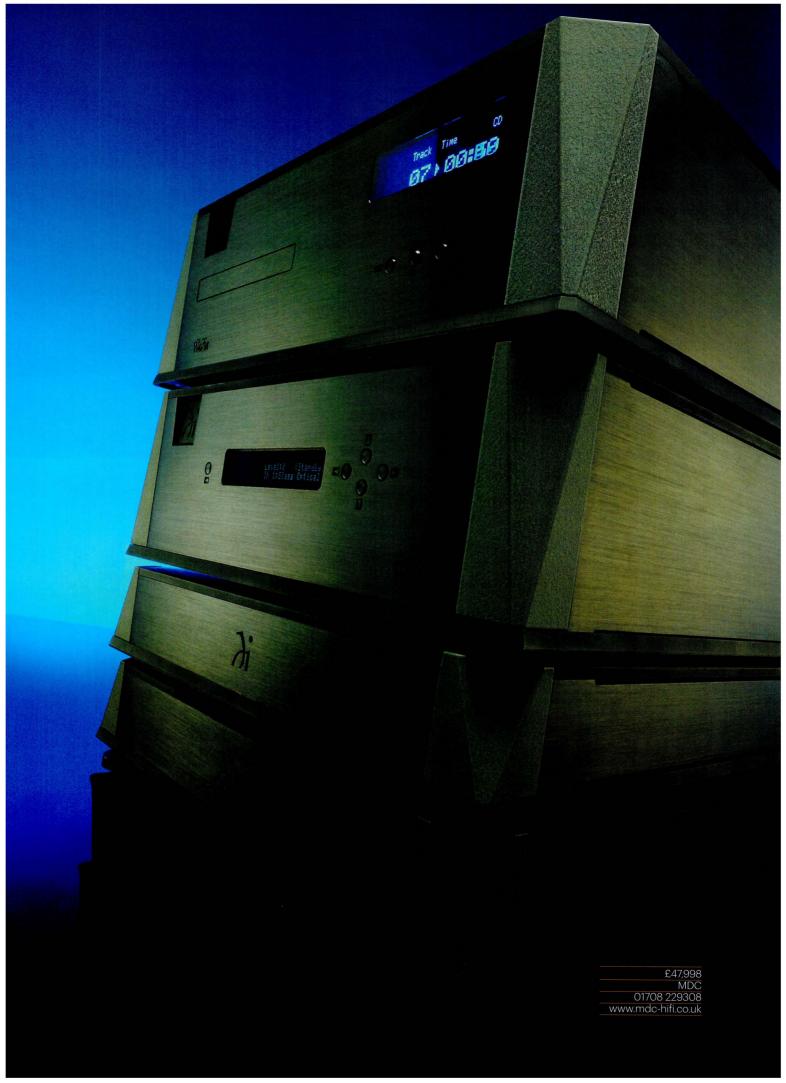
This skill also demonstrates another element of the S-350a: its ability to create a very precisely delineated stereo soundstage, with properly fleshed-out depth and a beautifully articulated sense of scale.

It was even more apparent, or at least more dramatically so, with some more obviously heavy-duty material, including a Signum Classics live recording (in London's Royal Festival Hall) of Schoenberg's massive oratorio *Guerre-Lieder*. The player's ability to bring off testing recordings like this without sounding excessively dense or congested, yet without loss of weight or impact, marks the S-350a out as special. By comparison, many other broadly comparable players tend to sound flat and are difficult to become involved in, but lack of involvement was not a factor with the Krell.

The S-350a speaks for itself. This is a practical player that supports balanced audio and is well-enough endowed to drive compact disc a long way towards the limits of the format. It looks as if the switch from West to East with this range has done little to upset the Krell reputation.

Alvin**Gold**





Wadia Series 9

A compromise-free behemoth designed to extract perfection from the silver disc

he average compact disc weighs sixteen grams, give or take. To take this lightweight piece of plastic and insert it into a replay system that fills four sizable metal boxes and weighs something in the region of 80kg might seem somewhat absurd but those are the headline figures of the Wadia Series 9 transport and DAC. Behind the attention-grabbing premise is a piece of equipment that is rather more astonishing than absurd.

Wadia has been at the cutting edge of high-end digital for over 20 years and its list of innovations in the field is considerable. The Series 9 is the summation of that knowledge, experience and innovation condensed into a money no object digital replay system. This is one of a rare breed of products where the end cost is a result of the price of the design and materials rather than a number set in stone from the outset that the unit was built to. The result is a piece of equipment that goes about achieving what it does in a manner subtly different from most other high-end digital players.

There is the not-so-small matter of this being a four box unit. At first glance, many people will assume the slimmer two boxes are external power supplies for a transport and DAC. This is not the case. The Series 9 is, in fact, comprised of the 971 CD Transport plus the trio of one 931 Digital Controller and a pair of 921 Mono Decoding Computers. The transport sends a signal to the digital controller, which splits it into left and right channels at a digital level and on to the decoders from where they can be amplified.

As well as receiving the signal from the transport and splitting the signal to send to the 921s, the 931 Digital Controller is also fitted with a selection of digital inputs for use in a wider system. Wadia recognises that CD has a finite lifespan so the decoding sections of the Series 9 are intended to support digital in whatever form you intend to move to in a post-CD world. The Series 9 runs fully updateable software for this purpose and the entire system is built around sufficient processing power to do justice to the nascent world of high-resolution audio.

Connection throughout is via twin runs of fibre optic cable fitted with ST-type connections rather than the more usual Toslink. One cable handles signal transmission whilst the other synchronises the clock signal across all four boxes. The output is Class A and zero-feedback and makes use of the proprietary SwiftCurrent technology to rapidly convert output to voltage whilst removing any high frequency noise. Given the use of high-quality, quadruple-shielded transformers and superbly finished aluminium casework, the amount of noise to remove should be kept to a minimum, but it never hurts to be doubly sure. A 100-step output level allows the Series 9 to be connected directly to a power amplifier or alternatively, set to maximum for connection to an external preamp.

SOUND QUALITY

The most effective way to best gain some perspective on the performance of the Series 9 is to start with a musically appealing CD that suffers from the usual faults of modern mastering – recorded too loud and with negligible dynamic range. Expecting great results from this is akin to giving

Gordon Ramsey a tin of chicken soup and some wine gums and expecting an award-winning coq au vin – and yet the Series 9 delivers the goods. Recordings that are thin and compressed on even relatively serious CD players gain a richness and dynamic range that is simply not present on any 'normal' replay system.

Like all truly great high-end products, the Series 9 is extremely relaxed about the business of being exceptional. Nothing is overblown, given false emphasis or made hyper-real. Instead you are treated to recordings – even ones you know intimately – simply sounding absolutely 'right'. There is no need to agonise over whether a violin sounds tonally real or the space of a venue has been captured correctly. The portrayal of the whole overrides any great desire to over analyse a particular detail.

Perhaps the most singular skill in what is a very singular product is the way that the scale of the performance rises and falls perfectly in keeping with the recording. Whether you are

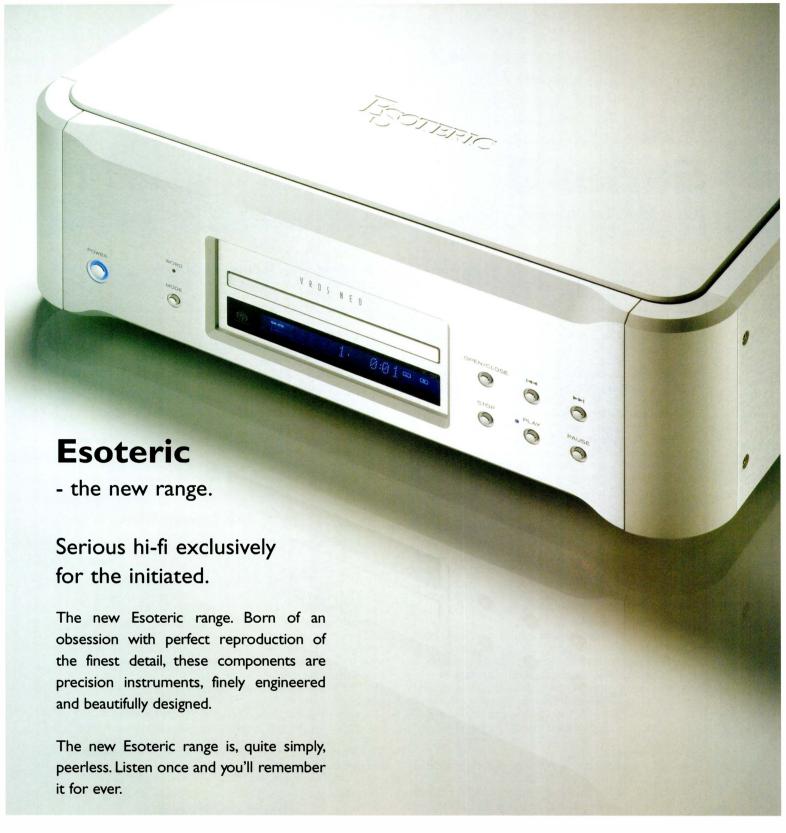
"Combines immense sophistication with the very best materials"

listening to an unamplified human voice or an electronics act on the rampage in a stadium, the Wadia has you covered. It has subterranean bass and impact that can keep pace with the most frenetic recording in your inventory, but a delicacy that allows even the simplest of pieces the space to shine. Even if you have a recording that combines these disparate features, the Series 9 will convey it effortlessly.

The Wadia is an incredible achievement. It is a culmination of countless technical innovations and combines immense sophistication with the very best materials available to undertake a single task as well as it possibly can. There is little doubt in 2011 that the compact disc is in the twilight of its years but the Series 9 reminds the listener of what it is capable of when executed correctly and it will undertake exactly the same role for the next generation of digital.

EdSelley





Despite changing times and whirlwind markets there remain musical and visual connoisseurs who are seeking true excitement. As long as there are such people, we shall develop new products that improve upon the 'state of the art'. We believe this is our mission.



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

For further information contact Symmetry on 01727 865488 or info@symmetry-systems.co.uk

www.teac.co.uk













speakers



- 48 PMC fact.3
- 53 Triangle Genese Lyrr
- 54 Sonus faber Amati futura
- 57 KEF Blade
- 59 Monitor Audio Gold GX200
- 60 MartinLogan Theos
- 63 Audiovector Ki 3 Signature





- 64 Zingali Client Name 1.2
- 67 DALI IKON 7 MK2
- 68 Wilson Sophia 3
- 72 NEAT Ultimatum XL6
- 75 B&W 802 Diamond
- 76 Magico Q5



£4,100 (inc stands) PMC Ltd 01582 405694 www.pmc-speakers.com



Although distinctively slim, this standmount's performance is anything but slender

aving struggled with (and very nearly dropped) a large and heavy MB2 a year or three back, this reviewer turned down the opportunity to review the even more enormous 136kg active-powered BB5s for this year's *Collection*, on the grounds that, once installed, they'd be quite impossible to move. Instead it was pointed out that this little fact.3 was a much more appropriate candidate for a domestic hi-fi system – and also more physically manageable.

It has much in common with the excellent fact.8 floorstander, rated a Best Buy when reviewed two years ago in *Hi-Fi Choice*, issue 327. Indeed it shares very similar ingredients, but packages them into a rather smaller standmount enclosure. The only substantial physical differences lie in the lengths of the transmission lines – 3m for the floorstander against 1.7m for this standmount – and that the latter's bass output is kept well clear of the floor, which is probably a good thing.

According to the spec, bass extension is just 35Hz rather than 28Hz, but the price tag is 'just' £4,100 per pair (including stands), compared with the fact.8's £5,250. Admittedly, neither speaker is small change, but the ingredients are all of the finest quality, with evidence that attention has been paid on the fine detail to deliver satisfyingly refined sound quality.

For a standmount, the fact.3 is a curious shape. Because this two-way design uses twin 140mm bass/mid drivers, it's unusually tall and exceptionally slim, looking for all the world like someone has sliced a floorstander in half and stuck it on a single-pillar stand.

This stand is an integral part of the package, and there's more to it than meets the eye. The base is veneered on five faces to match the enclosure, while a hidden metal baseplate, attached via a constrained damping layer, ensures good spike security. The solitary pillar bolts via cork spacers into recesses in the base and the top and is critically damped by a carefully measured (and bagged) fill of kiln-dried sand.

The enclosure itself is beautifully built and all six faces of its surfaces are veneered in a unusual selection of real wood veneers. The option list includes Rich Walnut, Natural Oak and Graphite Poplar, as well as the attractive Tiger Ebony of our samples. A full length grille in a dark grey fabric fits flush against the front panel, held in place by invisible magnets concealed under the veneer, so no unsightly mounting lugs can be seen if the grille is left in the carton.

Silver plating might well enhance the conductivity of the twin terminal socket/binder pairs and their optional connecting strips. These are fixed through a substantial steel terminal panel, behind which lies a 24dB/octave crossover network, the steep slopes necessitating the 14-element complexity. Two tiny toggle switches on this panel allow selection between three settings for relative bass (0, -3dB, -6dB) and treble (0, -1dB, -2dB) level. Claimed to operate without sonic compromise, these allow adjustment to suit speaker positioning, system or room characteristics and personal taste.

PMC builds the two 140mm cast frame main drivers in house. Each has a lightly doped 95mm diameter flared paper cone. Resembling a model used in recent Spendor designs, the

SEAS-sourced tweeter has a central 19mm diameter dome plus a wide surround with an outside diameter of 32mm that also contributes. It's claimed that dispersion is enhanced by the protective perforated metal cover.

SOUND QUALITY

This speaker is a generous size by standmount standards, so it seemed sensible to start off by siting the pair well clear of walls, in order to minimise midrange coloration. Voices are beautifully reproduced with fine realism, believability and emotional communication, but full-tilt rock material seems lacking in authority.

Painstaking experiments with positioning soon yielded positive results. The bass alignment proves well suited to some – but not too much – close-to-wall reinforcement: leaving a 25cm gap between speakers and wall seemed about right. Little Feat's *Waiting for Columbus* started rocking out in a more

"A superb standmount that confidently achieves its objectives"

convincing manner. It's still no great bass excavator, but that's hardly surprising considering its predecessor in the listening room had huge 417mm bass drivers.

While close-to-wall can helpfully boost the mid-bass, it also tends to create unwanted midband colorations, so experimenting to achieve the best compromise here is important. Optimally positioned, the fact.3 shows fine agility and performs an excellent 'disappearing act', simply creating an essentially neutral and spacious soundstage between – and even beyond – the spread of the loudspeakers.

Measurements confirmed much of this. Although there's little in-room output below 45Hz, the rest of the output holds within an impressively smooth +/3dB average right across the audio band, albeit with a hint of 500Hz-1kHz forwardness. Incidentally, sensitivity is a useful 89dB, alongside an easy-to-drive amplifier load.

Aided no doubt by the extra stiffness conferred by the folded transmission line, box colorations are very low and the dynamic range is correspondingly wide.

The bottom line is that the fact.3 fully and confidently achieves its objectives.

Paul **Messenger**



FURUTECH

Pure Transmission Technology

Refinement Has a New Name Debuting Furutech's Top-of-the-Line Flux Cable series

Flux Cable Series









Speakerflux

Lineflux (XLR)

Lineflux (RCA)

Powerflux-18UK

Furutech α (Alpha) OCC Pure Transmission conductors terminated with beautifully-engineered high performance rhodium-plated connectors. The substantially-built extremely nonresonant connector bodies are finished in layered carbon fiber and nonmagnetic stainless steel providing improved mechanical damping for greater resolution, clarity, and powerful dynamics.







Reference III Series



Ref II Speaker Cables



Ref III Audio Cables

Double-shielded Alpha OCC conductor interconnects, power cords, speaker, and digital cables featuring extraordinary build quality and Formula GC-303 antimagnetic EMI-absorbent modules surrounding the cable offering greater resolution, more powerful dynamics, and virtuoso performances from all your equipment.

Evo II Speaker Cables





Evo II Audio Cables



Pure signal and power transmission performance for the value conscious audiophile - The Evo II series incorporates rhodium-plated pure copper conductors and features advanced precision engineering in every detail resulting in beautiful design and quality to enrich every music experience.

Ag-12 Tonearm Cable





"The award for best performance and highest build quality at the lowest price goes to the Furutech AG-12."

Michael Fremer, Stereophile July 2009 Vol.32 No.7

Furutech Pure Transmission Technology, improving every element of signal transmission, from the AC to the speaker

Make a More Powerful Connection with Furutech!















Furutech Co., Ltd. Tokyo Japan service@furutech.com www.furutech.com

For more information on our products please contact Sound Fowndations:



+44 (0)1276 501 392 info@soundfowndations.co.uk







What do you listen to?

≈COOL GALES

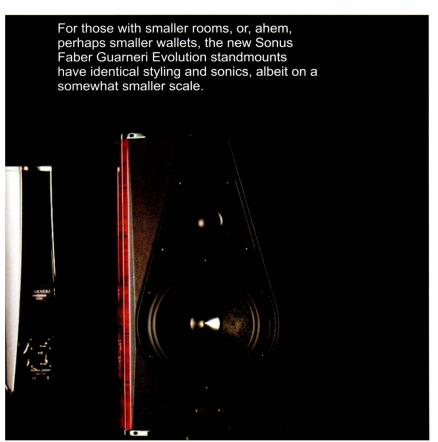
We're often asked this question. At Cool Gales, we're fortunate to be able to audition a huge range of high-end hi-fi gear, from the well-known "usual suspects" to obscure exotics, from components with eye-watering price tags to those that are eminently affordable, from classic vintage gear to the latest cutting edge.

Little wonder, then, that our customers frequently ask us to distil our experience, curious to know what exactly we fire up in the evening when we want to listen to music.

We've been utterly smitten by a recent addition to our portfolio, the Sonus Faber range. Visitors here are immediately drawn to the "oh, wow!" visual appeal of the Sonus Faber Futuras, shimmering creations of high-gloss wood and mirror-finish surfaces, quite possibly the most beautiful speakers ever created.

Ours are in the dazzling violin red finish (there's also a soft grey graphite), which Alan Sircom, editor of *Hi-Fi+*, described in a rave review in issue 79 as having "a glowing translucent lustre that will make you walk around and around the speakers, and not be disappointed, ever."

The sonics, astonishingly, more than live up to the appearance, lucid, beguiling, flawless. Alan again: "In a way, the best of all possible Sonus Faber worlds would be a loudspeaker that combines the small-speaker clarity of the Guarneri with the grace of the Amati and the bass energy and dynamics of the Stradivari. And, while all of these Homage loudspeakers remain in the catalogue, the Amati Futura is that best of all possible worlds. It combines the benefits of all three, and adds that uncanny sensuality and passion. This is a real game raiser!"





Indeed, Sonus Faber offer a wide range of models, from the Toy and Liuto right up to the Cremona and Homage collections, to match any music lover's room or budget. All you really need is a passion for beautiful sound.

What do *you* listen to? If your system beguiled at first, but now proves tiring over a evening's listening, why not give us a call? We can arrange for an audition either here at Cool Gales or in your home. For more information, reviews, and brochure downloads, visit www.coolgales.com/sonusfaber

www.coolgales.com 0800 043 6710

The Victoria School House ≈ Bath

Triangle Genese Lyrr

Triangle's new Lyrr boasts a whole lot of driver tech for just a modest sum

£3,300 Triangle Industries 0033 323 753 821 www.triangle-fr.com

ounded some thirty years ago and one of three major French speaker companies to make a real impression on the international stage, Triangle's success is primarily due to its very distinctive drive unit technology.

The £3,300 per pair Lyrr is the largest of three stereo pairs in the Genese range, which itself occupies the middle ground between the inexpensive Esprit EX series and the seriously upmarket Magellan range. The common ground between the three Genese models is unmistakable: all share the half-external horn-loaded tweeter on the top and the curved veneered enclosure sides. In truth, and since both are floorstanding three-ways, the Lyrr is much closer to the Quartet, with similar pleated-surround midrange drive units and steel plinth arrangements.

The Lyrr's three-way driver line-up has three 160mm bass units with 120mm fibreglass/carbon fibre cones and high-excursion rubber roll surrounds. This impressive-looking collection is mounted with one above and two below a twin 'Siamesed' port arrangement and takes up much of the front panel. The large moulded twin port, separated by a central horizontal divide, is presumably arranged to load the driver above and the two below separately, reflecting an internal divide that creates two distinct sub-enclosures.

Above the multi-driver bass section and positioned unusually high off the ground, is one of Triangle's unconventional midrange drivers. This also has a 160mm-diameter cast alloy frame, but in this case it is fitted with a plain 133mm-diameter paper cone and a short-travel pleated surround. The point is that a driver that only covers midrange frequencies doesn't require cone excursion – the cone actually behaves a little like a drumskin and the surround's job is merely to absorb the vibrations that get to the edge of the cone and avoid re-radiating them.

Above the midrange driver and actually well above seated ear height, the Lyrr's tweeter is a horn-loaded 25mm titanium dome, mounted in a pod that's half-in and half-out of the enclosure proper. Although the mounting arrangements would seem to promote wide dispersion, in fact this is likely to be cancelled out by the relatively narrow distribution created by the horn.

The whole thing sits on a proper steel plinth, which comes fitted with rubber feet and a front-centre 'grounding' pointed cone with captive disc, all of which ensures polished floors won't suffer damage.

The Lyrrs were fed primarily from a system comprising a Naim NAC552 preamp and NAP500 power amplifier (driven from Naim CDS3/555PS and Rega Valve Isis CD players) and a Magnum Dynalab MD106T FM tuner. Vinyl record players included a Linn/Rega hybrid and a Funk modified Linn with FXR II, both using a Soundsmith Strain Gauge cartridge.

SOUND QUALITY

Positioned well clear of walls, as common sense indicated and subsequent measurements confirmed, first impressions are very positive, thanks to the loudspeaker's fine overall

neutrality across a wide bandwidth. The bass goes satisfyingly deep, while staying free from unwanted mid-bass emphasis and thickening; the midband is well projected and dynamically involving, while the treble is well integrated and free from fierceness or edginess.

Perhaps the Lyrr's most distinctive characteristic is its unusual height, which somehow aids the precision of the stereo image. Exactly why this should be the case we cannot say for sure. Perhaps it's down to the midrange driver slightly reducing the impact of floor reflections, or maybe due to the relatively directional nature of the horn tweeter and the consequent reduction in room-reflected top end. But, there is no disputing the evidence of the ears, or the general superiority of the Lyrr's imaging.

Bass is certainly well balanced and extended. It fills in the bottom end very effectively, but doesn't exactly impose itself on the music. First and foremost one notices the midrange and while the bottom end doesn't in any way lag behind in

"Midband is involving, treble is well-integrated and bass is deep"

timing terms, it doesn't seem to drive the music along with any particular purpose or intent.

The midband is a wonderfully communicative through the voice band, delivering fine expression

and the full intentionality of singers and speech. Furthermore, this is achieved

without sounding either 'shut in' or unpleasantly aggressive – in other words, the presence band and the mid-to-treble transition is very well-judged indeed.

The Lyrr is far from inexpensive, yet it ticks an awful lot of boxes. Though physically far from discreet, it's good looking in a 'tall dark and handsome' way and fashionably slim to boot.

It's a sonically very attractive prospect, too. The Lyrr supplies a fine neutral balance with deep and even bass, a dynamic and well-projected midband and a well-integrated top end. It's not the last word in bass authority, perhaps, but its stereo imaging is first class. Not for the last time, we'll wager, vive la France!

Paul Messenger





Sonus faber

Amati futura

Electrifying speakers to enhance the enjoyment of any living room

talians have a knack for making beautiful things, be they cars, clothes or women. The Amati futura does nothing to undermine this observation. In our humble opinion this is among the most gorgeous audio products ever made. The contrast between bright, polished stainless metalwork and deep, lustrous veneer is breathtaking in its elegance. It is no exaggeration to describe this speaker as drop-dead gorgeous.

The Amati futura is the first fruit of the project that created the company's statement of intent, The Sonus faber, a massive, technologically ambitious and immensely capable megabucks design that put the company at the top of the European high-end tree when it was launched last year. That speaker was a limited edition with a price that put it out of reach for all but the fattest cats, but the development of The Sonus faber has resulted in a raft of innovations which is trickling down into more realistic products.

The Amati futura incorporates three ideas from its big brother. Firstly, you will notice the plinth has two steel layers. These are separated by compliant spacers in what Sonus faber calls its low vibration transmission system. The idea is that less energy is transmitted into the floor, meaning that the rest of the system doesn't have to cope with large amounts of resonance. This speaker also uses the stealth reflex system, a para-aperiodic port that is significantly quieter than traditional reflex ports. The third element that comes directly from The Sonus faber is the tuned mass damper, a system which consists of a three-part non-magnetic cone that's broken up by rubber gaskets. The idea is that this mass absorbs vibration and turns it into heat, thus reducing energy produced by the cabinet. These systems combine to reduce the noise floor of the speaker by minimising cabinet resonance which is the enemy of low-level resolution. The final part of the equation is the speaker's exoskeleton which is formed by the nickel-plated plates on top and bottom and the fins that run up the back. These are also designed to eliminate vibration in a manner not far removed from the torsion bar inside the Sonus faber - not just for show, then.

This isn't a huge speaker, standing 116cm high. Combine this height with its boat tail cross section and phenomenal standard of finish and you have an extremely room-friendly speaker on your hands.

The driver selection consists of a large 29mm soft dome tweeter designed by Scan-Speak co-founder Ragnar Lian, a 179mm midrange with a cellulose fibre cone and two 220mm woofers with aluminium/magnesium alloy cones. The latter are unusual for having a particularly long 1.5-inch throw. These are fed by a crossover with a dual staggered transfer function at low frequencies and a hot/cold tweeter high-pass filter. It also incorporates Mundorf Supreme capacitors and Jantzen inductors.

SOUND QUALITY

The impressive spec sheet is all well and good, but doesn't explain why this is the most musical and effortless loudspeaker we've heard for years. For starters, the way it seems to bypass all the mechanical aspects of sound reproduction and bring you the music is simply spellbinding. Then there's the tone:

whatever you play – be it a singer, an orchestra or a band – the timbre of voices and instruments is as deep as the gloss on the flanks of the loudspeaker.

This is not the only quality that shines through, of course: the way that musicians play and sing is also placed front and centre, the tempo, the phrasing and the vibe all combine to lure you into the glory of the musical moment. If you love music, you may find it difficult to tear yourself away for the everyday distractions of food and sleep, as absorbing this speaker's magic is just too much fun.

The Amati futura is supplied with spike receptors to stop those sharp points from ruining the floor and these were used even though the floor in question is carpeted. However, removing the receptors and letting the spikes grip the floor had quite a dramatic and positive effect, specifically on leading edges which tightened up the sound and added definition throughout. Basically, if your floor isn't too shiny, the nailed down approach is the way to go.

"The most musical and effortless loudspeaker we've heard in years"

Playing hi-res music files proved extremely gratifying. The transparency is staggering, giving the performers a palpability that is 'reach out and touch' real. Unlike some high-end designs, the Amati futura achieves this in an entirely musical fashion, making for a powerful result that will have you seeking out more big

files to stream.

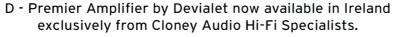
Going from this Sonus faber to speakers that previously seemed revealing is a painful experience; what was once smooth, clean and refined now seems gritty and lacking in finesse. The Amati futura raises the stakes in no uncertain fashion when accompanied by a top-notch vinyl front end. The SME 20/3 turntable, van den Hul Condor cartridge and Trilogy 907 phono stage is just such a source and, boy, does it sound sweet via a Krell FB1 integrated and this Italian beauty. Electrifying barely begins to describe the sound of clean vinyl through this speaker.



Jason Kennedy

Sound sinker to the housing 201

Sound staintent to the housing 10 to 10 **AMPLIFIER** D — Premier



DEVIALET

For more information visit www.cloneyaudio.com Cloney Audio, 55 Main Street, Blackrock, Co. Dublin, Ireland. Tel: +353 (0) 1 288 9449





Celebrating 50 years of loudspeaker innovation with its sharpest floorstander in decades

£20,000 KEF Audio 01622 672261 www.kef.co.uk

n recent years KEF's preoccupation seems to have been with multi-channel home cinema, through an impressive succession of clever designs, but the Blade looks likely to put it back on the stereo hi-fi top table.

Fabricated in moulded fibreglass, the Blade looks very similar to the Project Blade prototype that appeared two years ago and is no shrinking violet. It stands more than 1.6m tall, and also needs to be sited well clear of walls in our room, so it will certainly be a dominant feature in any normal domestic environment. Looking wonderfully slim from the front with a moulded enclosure formed into a continuous series of curves, the sharp profile resembles a machete. The body proper is then supported on an equally elegant plinth, dough-moulded in a mineral- and metal-loaded resin to provide good mass and footprint stability.

The variation on KEF's Uni-Q driver used here is different from its predecessors. While it still adopts the classic technique of positioning a tweeter powered by a compact neodymium magnet on the central pole of the midrange driver, much work has gone into maintaining a consistent acoustic wavefront transition between tweeter and midrange. The tweeter's titanium alloy dome uses a two-part construction to improve rigidity and achieve a wide bandwidth, and loads the diaphragm with short horn and a 'tangerine' waveguide in order to deliver a spherical wavefront.

The midrange driver is even more radical. The flared diaphragm is constructed on a skeletal substrate moulded in liquid crystal polymer, faced by a ribbed diaphragm in a lithium/magnesium/aluminium alloy. The mid/treble Uni-Q is mounted in a small sub-enclosure that is mechanically decoupled from the main enclosure and acoustically integrated via a carefully shaped rubberised trim pad.

Not to be outdone, the bass is equally radical. It uses four 230mm drivers with shallow-dish 175mm alloy diaphragms (roughly equivalent to one 17-incher), mounted on both sides immediately above and below the Uni-Q. The magnets are housed within large 115mm voice-coils that are deliberately decoupled from the diaphragms to limit the bandwidth, and the drivers are mounted in back-to-back pairs, so that their reaction forces cancel each other out. Besides plenty of reinforcing ribs, the enclosure is internally divided, so that each pair of bass drivers is reflex-loaded by half the total volume and a rear port.

SOUND QUALITY

The first thing one notices on connecting up and playing the Blades was their stunning stereo imaging – tightly focused and precisely layered, with convincing depth perspectives and accurate lateral locations.

Although the best image is inevitably available for those occupying a 'hot seat' equidistant from the two speakers, the Blade still gives a remarkably good image around and between the speakers. Furthermore, walk around the room and the character of the sound remains very consistent and stable, which is actually quite remarkable when compared to nearly all the competition. The tonal balance, too is beautifully

smooth, open, evenhanded and neutral, at least above the upper bass region.

The exceptional stereo imaging along with refreshingly 'open' voicing are the first things one notices after connecting up these speakers, so much so that the bass end doesn't immediately attract attention with most programming. It is in fact deep, powerful and well timed, but also almost uncannily free from any colorations. Pick a drum solo and wind the volume up. Walk up to the speakers, put your hand against the enclosure and notice how much vibration you can feel. That's right – nothing! The power of force-cancellation in avoiding any trace of cabinet coloration is truly remarkable.

Despite its considerable surface area, there's no evidence of any enclosure coloration here, either as a result of

"A bold visual statement and truly impressive triumph of technology"

vibrations generated within the structure itself, or as an acoustic consequence of the shape of the front baffle. That is reflected in both an impressive freedom from any boxiness – or indeed any tendency for the image to cluster around the speakers – and in an exceptionally wide dynamic range, due to a freedom from low level 'hash'. The latter gives exceptional results with classical material in general, and choral performances in particular, where the accurate rendition of low level ambience plays a

crucial part in creating an effective illusion.

The Blade is very much a visual as well as a sonic statement. This loudspeaker is a truly impressive technological achievement, stuffed with clever ideas that come together to deliver exceptional performance throughout the whole audio band.

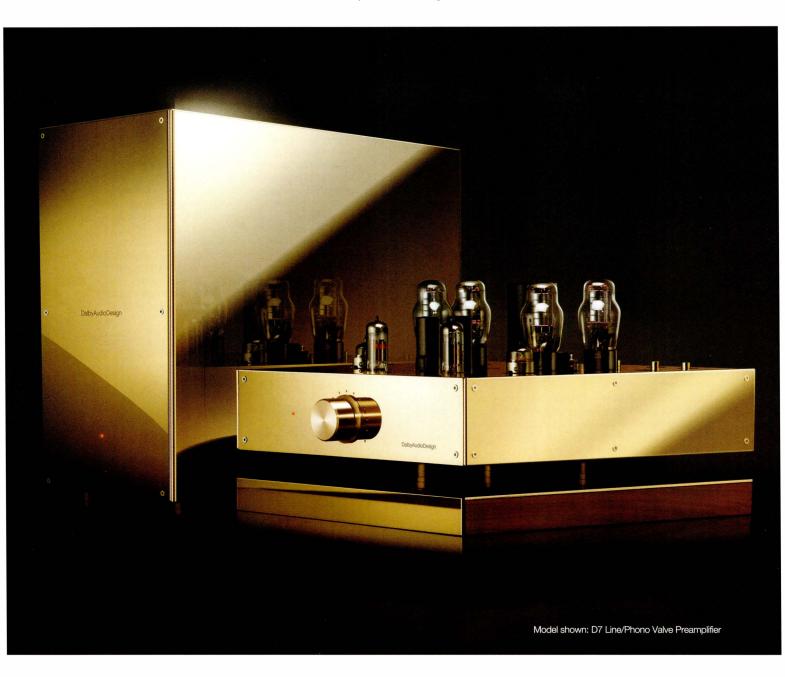
While the stereo imaging is its most outstanding and obvious characteristic, it's also always very informative and entertaining across the whole gamut of musical styles and genres, and works well with speech and movie soundtracks, too. It's a Blade that's truly at the cutting edge.

Paul**Messenger**





DalbyAudioDesign



D7-LP

DalbyAudioDesign are proud to announce the arrival of the D7-L and D7-LP valve preamplifiers. Designed and exclusively hand made in England.

Monitor Audio Gold GX200

This golden boy enjoys many of the refinements of the more costly Platinum range

£2,300 Monitor Audio 01268 740580 www.monitoraudio.co.uk

number of the advanced design techniques that were first introduced in Monitor Audio's Platinum series have now 'trickled down' into the new and rather less costly Gold GX series tested here and it's these design 'luxuries' that we're most interested in with the GX200, the model that Monitor Audio's representative thought showcased the strengths of the new range best.

Not that these £2,300 GX200s can be considered inexpensive by most standards, but they're certainly aimed at a competitive sector of the serious loudspeaker sector. The complete Gold GX range is very extensive, consisting of four stereo pairs plus several models specifically intended for multichannel home cinema. This GX200 is the smaller of two floorstanders and is a genuine three-way design, using twin bass drivers to keep the front view fashionably slim.

Monitor Audio has long opted for a deep-anodised aluminium/magnesium alloy as a cone material; the deep-anodising process converting the surface to an oxide that considerably improves the stiffness. Whereas the Platinum series also added 'dimples' to the surface further to increase the stiffness, alongside a costly honeycomb sandwich construction to provide damping, the simpler cones used in the Gold GX series stick to a metal/oxide diaphragm but have replaced the dimples with more pronounced ridges – a ring around the location where the voice-coil former terminates, plus a series of radial arms reaching out towards the cone edge.

By adding a degree of depth dimension, extra stiffness is achieved, while finite element analysis (FEA) has also been used to create an optimum parabolic profile. The twin 140mm bass drivers each have 100mm diameter cones and operate up to a nominal 400Hz, crossing over to the 100mm anodised alloy midrange unit that has a 95mm cone. That in turn operates up to the 2.6kHz crossover point to the tweeter, which is a vertically oriented ribbon-type device, similar but not identical to that used throughout the Platinum range. The ultra-light (18mg) diaphragm is roughly 55x8.5mm and is energised by neodymium magnets and loaded by a modest horn. The delicate diaphragm is protected under a widespaced metal mesh.

In another nod towards the Platinum models, the enclosure is created by building up and bonding together multiple layers of thin MDF. The end result is 20mm thick, but this technique allows the sides to form a gentle curve and avoid the focused-frequency standing waves generated by parallel faces. Tighter radii are then used to soften the appearance of the front and rear edges and the whole has additional internal bracing.

The slim rear panel accommodates a modest diameter port and foam bungs are supplied as an option – probably worth trying if the speakers have to be mounted close to a wall. Twin terminal pairs are solidly attached to a vertically oriented cast-alloy panel; bi-wiring or bi-amping is therefore available (the terminal pairs separating the bass units from the mid and treble), though as supplied, the speakers are fitted with proper wire 'jumper' links.

Monitor Audio's own silver-plated cabling, called Pureflow Silver, is used internally, along with high-quality crossover components that include air-core and laminated-core inductors and polypropylene capacitors. Metal mesh grilles are supplied for those who prefer to keep their drivers hidden and attach via hidden sub-veneer magnets, so that unsightly mounting arrangements are avoided.

SOUND QUALITY

This is not a bass-excavator of a speaker; while it sounds suitably agile and hangs on in pretty well, the bass end is not the part of the band that one particularly notices. Rather it leads with its upper midband, presence and lower treble, so that voices are notably clear and open, ensuring fine

"Despite its modern appearance, the tonal balance is vinyl-friendly"

intelligibility of lyrics and speech. If the top half of the audio band sounds a shade exposed, it's also pretty clean and sweet with it and this does mean that plenty of fine detail is well projected, even when the system is playing at whisper-quiet levels.

Although this speaker has a decidedly modern appearance, we did find that its tonal balance was very well suited to replaying old-fashioned vinyl discs, as this medium tends

to have a sweeter and slightly more restrained presence than CD in general.

The much more costly speakers that we were using prior to installing these GX200s did indeed have significantly less relative output through the presence and top end. Although moving to the smaller and much less expensive GX200s did require some adjustment in terms of low end authority, clarity and overall warmth, their extra top-end energy proved welcome.

Admittedly, the GX200 does somewhat favour the upper half of the audio band, but it does this rather well, with a sweetness and detail projection that many rivals fail to match. A deserving gold medal winner!

Paul**Messenger**





Martin Logan Theos

An ESL that combines elegance, transparency and relative affordability

artinLogan has established itself as a leader in electrostatic loudspeakers and one reason for this is the superb standard of build and finish it achieves with even its most affordable model.

Even though it stands 1.5m tall, the Theos is the smallest model to feature an electrostatic panel for mid and treble (there is a more affordable Electromotion model, but that has a Folded Motion tweeter).

It's a hybrid design with a passive dynamic speaker producing bass in a real-wood veneered cabinet and the driver is an 8-inch aluminium unit chosen to match the speed of the 112cm panel above it. If nothing else, it blends in physically; we had to look hard to realise that it was a metal driver.

The panel itself is what MartinLogan calls an Xstat transducer. It's the same height as the panel in a Summit X but is narrower at 230mm and thus has a tighter curve in order to achieve the 30 degree dispersion pattern that the company prefers. This has been achieved by reducing the gauge of the steel stators – the perforated metal plates that sit either side of the moving diaphragm. This results in a panel that is effectively translucent so you can see whatever is behind it, although we wouldn't recommend putting one right in front of the telly.

The crossover in the Theos was designed by 'professor' of engineering Joe Vojtko (see MartinLogan's promos on YouTube). It's based on the one developed for the mighty CLX full range electrostatic and uses point to point rather than PCB wiring. Electrostatics need a bias voltage to operate and this is usually very high, in the thousands range, albeit with very low current. This is supplied by a transformer which requires power and therefore a power cable.

The Theos has a low-voltage DC power supply produced by an inverter in wall-wart form that has a long, skinny lead so you don't need a big IEC cable connected to the speaker, nor do you need a mains outlet nearby. The only drawback with the supply for us Brits is that it comes with a two-prong Schuko plug, which needs an adaptor.

The manual for this speaker is a hefty tome, covering every aspect of ESL speakers in general and how to set the Theos up in particular. It details how to establish the correct toe in using a torch and what the best position is relative to the size of the room. In our 2.72m wide room the optimal distance from the side wall to the centre of the panel is 75.5cm – pretty close to where we usually place speakers. It also points out that it's a good idea to establish position prior to fitting the chunky floor spikes that are supplied. This isn't a particularly heavy speaker, but we'd certainly agree with that.

There is also a fair amount on room acoustics and how to get the best out of the speaker in your room, which is useful. The spec indicates a sensitivity of 90dB which tallies with our findings and suggests that you don't need an unduly powerful amplifier to get the best from a pair of Theos.

SOUND QUALITY

We used the D'Agostino Momentum monoblocks (p92) at one end of the scale and a Leema Tucana 2 (p110) integrated at the other and got differing, but wholly thrilling, results with

both. The speaker revels in the fine detail and fluidity of the Momentum and delivered a more muscular, punchy result with the Leema which suggests that it's the nature of the amplifier that counts, not the power rating – nothing new there, but with this degree of transparency on offer this message is clearly reinforced.

What makes this speaker so thrilling is the speed at which it produces notes. It's not until you hear a decent ESL that you realise the tremendous advantage they have in this respect. This is obvious at both low and high levels and results in further admiration of the playing abilities of the musicians on the recording. The source and amplifier have to be up to the job to make this apparent, but with a great turntable and a favourite record you can bask in the rhythm till the cows come home.

What ESL makers tend to emphasise is the imaging capabilities of the technology – and these are indeed spectacular – but pace is what really counts. Here, you can

"The speed at which this speaker produces notes is simply thrilling"

hear it wherever you sit and whatever the recording style; it's the nub of musical enjoyment.

The Theos makes almost anything you spin sound irresistible, as does the way it delivers voices. Rarely have we encountered a more direct line of emotional communication than this speaker achieves with

a great singer. Stevie Nicks' voice on Fleetwood Mac's *Dreams* is enough to stir the feelings of the most stony heart imaginable.

Naturally, the imaging isn't shabby. It puts most dynamics in the shade, especially when it comes to height, which is up to the ceiling - if not sky-scraping - thanks to that long panel. It creates voices and instruments of palpable presence, especially if they happen to be in the mid and upper registers. The bass is solid enough, but naturally restricted by the relatively compact nature of the bass cabinet, so it's not surprising that the next model up in the range – the Ethos – has active bass.

The Theos is a beautifully constructed, room-friendly speaker that has pace that's to die for and the ability to raise the hairs on your neck with the right record.

○ Kennedy



ESOTERIC





K-03
DIGITAL SOURCE DEVICE / SACD / CD PLAYER



K-01
DIGITAL SOURCE DEVICE / SACD / CD PLAYER



I-03
INTEGRATED AMPLIFIER

Discover The Greatness of Esoteric

No review can express the tactile pleasure, build quality, and musical performance of the world's most acclaimed stereo components.

From RZ-1 to K-01, three full Esoteric systems (nine products) are on permanent demonstration at The Music Room.



symmetry

- t > 01727865488
- e ► info@symmetry-systems.co.uk
- w ► www.symmetry-systems.co.uk

The Music Room

4 Park Circus, Glasgow, G3 6AX, Scotland, UK

- t ► 0141 333 9700
- f > 0141 333 9097
- **w** ► www.music-room.com

Audiovector

Ki 3 Signature

These upgradable speakers can be improved when funds allow – a unique Danish delight

£2,050 Henley Designs 01235 511166 www.audiovector.com

he Ki-series is relatively new and also relatively inexpensive by Audiovector's standards. The Ki 3s are the sole floorstanding models in a range that also includes a standmount and home cinema oriented variations. But each Ki-series model comes in three versions – Standard, Super and Signature – with superior engineering features as one moves up the ladder.

All three Ki 3 variations share the same basics, which are themselves somewhat unconventional. The unique upgradeability is a key Audiovector USP but no less interesting (if a little more common) is the quarter-wave bass loading this model uses. It's a relatively unusual technique that has something in common with tuned-column and transmission-line loadings, but in this case the shape of the tapered column behind the drivers leans significantly towards horn-loading. A handful of speaker companies have adopted this approach in recent years, the most prominent being Castle Acoustics with its 'twin pipe' models.

The Ki 3s have just the one internal quarter-wave column, which forms a V at the bottom front edge and is created by a partition set at a narrow angle so that it stops well short of the top and roughly bisects the depth. The partition, therefore, creates a rather narrow horn behind the two bass/mid drivers, with a very small 'slot mouth' created between the enclosure base and the plinth.

The two identical main drivers are 130mm units, allowing the enclosure to have an exceptionally slim front view. They operate in tandem right up to the 3.2kHz crossover point and feature 90mm diaphragms made from a woven mix of glass and carbon fibres, impregnated, sealed (and damped) within a polymer matrix.

The tweeter has a transparent 25mm woven-fabric dome, driven from a neodymium magnet with high-viscosity ferro-fluid damping. This Signature version exclusively uses rubber grommets in the mounting to isolate it mechanically from the cabinet above 2.5kHz. The crossover network is a deliberately simple, minimalist affair, as care is taken to optimise the drivers to make this possible.

Besides the decoupling tweeter mounting, the other feature exclusive to the Signature Ki 3 is a so-called Superstand – a neat, if rather small plinth. Nicely shaped and finished in silver, it does extend the stability footprint a little. Crucially, however, it incorporates a leaf spring in the fixing for the front spikes, so mechanically decoupling the speaker from the floor.

Another feature, this time shared with the Super version, is extra reinforcement for the front and back panels. The top half of the front panel, where the drivers are mounted, is laminated with an extra silver-painted panel 8mm thick; the back is laminated by a shaped and much thicker (up to 24mm maximum) panel, again painted silver but extending the full height of the enclosure.

The main driving system comprised a Naim NAC552 preamp with NAP500 and NAP135 power amplifiers, driven from Naim CDS3/555PS and Rega Valve Isis CD players, as well as a Magnum Dynalab MD106T FM tuner. Vinyl record players included a Linn/Rega hybrid using a Soundsmith Strain Gauge

cartridge. Cables were from Naim, Phonosophie, The Chord Company, TM Systems and Vertex AQ.

SOUND QUALITY

This speaker shows a smooth and even overall balance, a wide dynamic range and good basic coherence. Stereo imaging is particularly good, with very little evidence of boxy effects and very fine central focus. Furthermore, while the bass might lack some ultimate weight and scale, it does possess the liveliness and clean, crisp character associated with quarter-wave loading, which is musically more useful.

According to the designer, the Ki 3s were designed: "to be used as both traditional hi-fi speakers and as party speakers," and they were equally at home with heavy electronic stuff and more familiar material from English-speaking bands like Tool, System of a Down and Audioslave.

While the Ki 3 shows good loudness capability and handles plenty of power without distress, its mild upper-mid

"Designed to be used as both traditional hi-fi and party speakers"

forwardness is happier operating at low and medium volume levels than playing heavy material at 'party' levels.

This is a speaker that does a very good job of disappearing, sonically speaking. It might have certain limitations in terms of dynamic vigour, and doesn't really offer the grip and tension one might find with a larger speaker. It could also do with a little more sweetness and transparency at the top end of the band, but the good enclosure control means that the actual dynamic range and coloration levels are both low.

On balance, Audiovector's Ki 3 is impressive. Its super-slim front and suggested near-to-wall location certainly makes it an attractive package. The taut, tight and clean bass is a particular joy, underpinning a smooth, if somewhat forward tonal balance. The sound is basically free from coloration, with fine stereo imaging.

Paul Messenger





Zingali Client Name 1.2

This exquisitely finished Italian looks unique and sounds decidedly distinctive

f you were to describe the Client Name's shape what would you say? Jelly Baby? Russian Doll? Perhaps both resemble this curious, curvaceous and decidedly unconventional loudspeaker. Giuseppe Zingali follows nobody else's rules and consequently comes up with speaker designs that are highly distinctive and very unusual.

Italian speakers are well known for extravagant hardwood cabinetwork, but few can compare with this exquisite creation. Using a poplar-like wood called Toulipé that Zingali imports from South America, the front, back and plinth are carved into lovely curved shapes, entirely free from sharp edges and corners and then finished in Natural, Walnut, Wengé, or Cherrywood (our samples) with a high-gloss lacquer. The sides, base and top are built up from a series of barrel-like staves that gradually get smaller from front to back, so ensuring that there are no parallel surfaces.

In the interests of control and consistency, everything is designed and made in Aprilia (just South of Rome), including driver manufacture, assembly, cabinet making and finishing. The Client Name bit refers to a plate inset into the front panel for inscribing the purchaser's name. Our samples were assigned to dealer/distributor The Music Room, but this may be changed if and when required.

In outline this is a two-way reflex-loaded floorstander, but it's an awfully long way from the market stereotype in virtually every respect. Just consider the basic physical data: it weighs a considerable 52kg, and despite being just 95cm tall, the enclosure is 65cm deep, and built up from a combination of thick 44mm MDF and 45mm hardwood.

Using a 12-inch bass/mid driver crossing over at 800Hz to an Omniray horn-loaded tweeter, the CN 1.2 takes its inspiration from early-60s US West Coast classics like the JBL 4320. That two-way studio monitor had a 15-inch bass driver and a horn/lens tweeter, not unlike the earlier Client Name 1.5 model. This CN 1.2 is the 'down-sized' version!

That Omniray horn is Zingali's unique selling point. It's effectively a waveguide extension to the compression tweeter mounted down its throat. Around 15cm deep and with a maximum diameter of 28cm, this beautifully shaped and crafted horn mouth in matching Toulipé wood dominates the appearance of the speaker as a whole, and should control the dispersion and further enhance the headroom of the tweeter.

Apparently more Altec than JB Lansing in inspiration, the 30cm bass driver has what appears to be (deep-set behind a thin and transparent integral fabric grille) a 230mm diameter doped-paper cone and a pleated surround, driven from a large 64mm voice coil. A large 'quarter moon'-shaped port exits below this bass/mid driver and twin terminal pairs fit through a substantial inset panel on the rear. The speaker proper is spaced a couple of centimetres above a large carved plinth.

SOUND QUALITY

Occasionally one encounters a speaker that's so different from the norm that one inevitably gets the feeling that 'if this one is right, then all the rest must be wrong'. There's certainly something of that about the Zingali CN 1.2. Both its tonal balance and the published specification seem distinctly out of kilter, but happily neither ends up spoiling what turns out to

be a very entertaining end result. This speaker does have flaws and idiosyncrasies, but they aren't particularly relevant in the context of some other things that it does rather well. The published specification claims a high sensitivity of 96dB, for example, alongside an impedance of eight ohms. However, on our tests (based on averaged in-room far-field traces, referenced to 2.83V input, or 1W into eight ohms), it only approaches 96dB between 45Hz and 200Hz, and is more like 86dB from 1.3kHz to 3.5kHz. At the same time, the impedance trace is exceptionally benign, staying around or above 16 ohms throughout.

There's no denying the CN 1.2's tonal balance is less than neutral, with a distinct lack of relative output in the upper mid and presence parts of the audio band. This was immediately audible as soon as the speakers were hooked up, and subsequently confirmed by an in-room far-field frequency response trace that confirmed that average output was about 5dB down all the way from 600Hz to 4kHz.

"Detail reproduction is exceptional at both ends of the audio band"

The subjective consequences are that the speaker has a tendency to soften the sound and studiously avoid any tendency towards aggression. This can go a bit too far occasionally – we found Ry Cooder's guitar on *Boomer's Story* a little lacking in 'edge'. However, with much material, especially large scale classical orchestral, the somewhat distant perspectives along with excellent dynamic grip and superior time-coherence provided ample compensation.

Detail reproduction is exceptionally good at the top as well as the bottom of the audio band – audience applause sounds realistic, and string tone and textures are no less impressive.

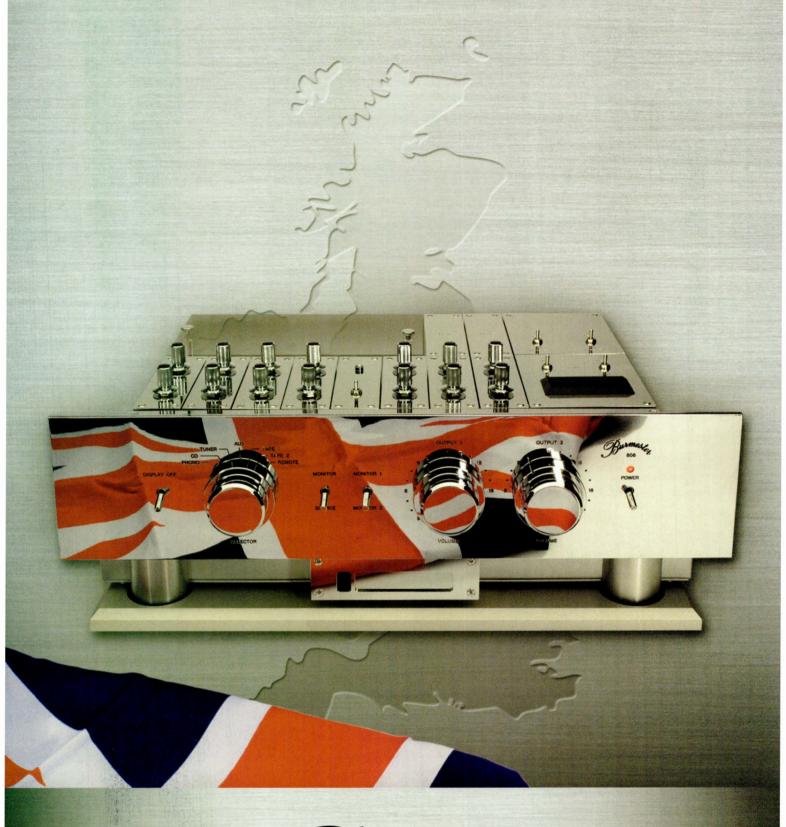
The stereo imaging is interesting. While it's

inevitably set rather lower than usual, the focus is very tight and precise, probably because the Omniray horn will tend to favour direct over room-reflected sounds, and operates above a low 800Hz.

The fine bass grip, high sensitivity and an easy load all help create a highly entertaining and enjoyable performance. It might not adhere to strict standards of neutrality, but the fine timing invariably delivers an involving musical experience.







Burmester PAULO THE CRADE

RETURNING SOON TO THE CRADLE OF HIGH-END AUDIO

BURMESTER AUDIOSYSTEME GMBH · WILHELM-KABUS-STR.47 · 10829 BERLIN GERMANY · WWW.BURMESTER.DE

DALI IKON 7 MK2

Proprietary drivers and Danish assembly is a combination that delivers high-end sparkle

£1,699 DALI UK 08456 443537 www.dali.dk

he IKONs are Danish-made loudspeakers, so manufacturing isn't cheap. Furthermore, the value of the Danish Krone (linked to the Euro) has appreciated significantly compared to sterling in recent years, so a significant price rise for this MK2 range was inevitable. Even so, an increase from £999 to £1,699 over a six-year span is pretty hefty, especially for a speaker finished in vinyl woodprint.

The new IKON range consists of five stereo pairs, alongside three extras oriented towards multichannel duties. This IKON 7 is the largest in the line-up and is a tall, quite deep and substantially built floorstander, though fashionably slim in the modern idiom.

Our samples were dressed in black woodprint vinyl covering the back, top, sides and base, while the extra-thick front panel is plain matt-black. The net result is a rather dour and monolithic appearance. A 'light walnut' woodprint over five faces is also available, though that is the only alternative option.

The entire enclosure is stiffened by carefully positioned internal bracing, while the front panel is constructed from two substantial layers of MDF, bonded by a glue that provides a measure of damping. Since the enclosure is quite narrow, alloy outrigger feet are supplied and fulfil the two functions of improving the physical overall stability and ensuring proper spike-fixing.

The IKON 7's front panel has an impressive array of five drivers, topped by DALI's exclusive 'Hybrid Tweeter Module' (HTM), which is featured in all the IKONs (bar the subwoofer). It's a combination of a conventional 28mm fabric-dome tweeter that starts operating around 2.5kHz, plus a 17x45mm ribbon unit that starts coming in at around 14kHz, maintaining wide lateral dispersion well beyond audibility. Both are mounted on the same chassis/faceplate.

The bass and the midrange are handled by three apparently identical 165mm cast-frame units, with dish-shaped diaphragms made from a reddish-brown mix of wood fibres and paper pulp, 115mm in diameter. The lower two only operate through the bass region, rolling off above 700Hz, while the uppermost one handles both bass and midrange duties, right up to the main 2.5kHz crossover, where it hands over to the HTM.

SOUND QUALITY

It's not possible to estimate just how much improvement DALI has wrought when taking the IKON 7 to MK2 status, but there's no denying it's a thoroughly impressive performer that remains very competitive, even at its new and significantly higher price.

The enclosure engineering seems particularly good here, in that there's very little evidence of it making unwanted contributions that add colorations and muddy up the sound. The result is superior freedom from boxiness and a very low 'noise floor', giving a wide overall dynamic range, even though dynamic expression itself is unexceptional. The tonal balance that we mentioned earlier is also an improvement on its rather

dry-sounding predecessor. The bass end is generally full and reasonably even with it, bringing a welcome warmth to the overall character. It's as good or better than any of its immediate competition, bringing the requisite richness to the proceedings and acting as an appropriate foil to the sweet and open top end.

The twin tweeter arrangement seems to work very well indeed. It's certainly smooth and well extended, without ever drawing unwanted attention to itself and presumably contributes to the fine transparency and precise stereo imaging that this speaker delivers. The midband is expressive and involving and doesn't seem to add significant coloration.

Perhaps the most important feature of the IKON 7 MK2 might well be its overall top-to-bottom coherence. While this doesn't perhaps, quite match that achieved by those speakers that use a solitary 'full-range' driver (the inverted commas are quite deliberate, as 'full-range' is invariably optimistic), it does,

"This is a tremendously effective communicator of the musical message"

nevertheless, possess fine overall timing across the whole audible frequency range.

At most normal listening levels the speaker sounds 'just right'. This is an unavoidable

consequence of the way human hearing works: at low sound levels it shows greater relative midband sensitivity than when perceiving much louder sounds.

We're getting into a very complex area of psychoacoustics here, the simplified upshot being that the speaker designer has to make choices that are related to personal preferences. While it's not exactly a game-breaker, this is a speaker that marginally favours low listening levels.

The IKON 7 MK2 does unquestionably deliver the sound-quality goods. It's not a high-end model, but it does offer a substantial percentage of high-end performance at a far more realistic price.

Paul**Messenger**





Wilson Sophia 3

Sexy floorstander that delivers top performance at a more affordable price

iving loudspeakers a woman's name is a bit risky.
When your wife suddenly learns you've got a date
with a mysterious, exotic creature called Sophia,
things could get a bit sticky.

This Sophia we dated is a loudspeaker from the famed American company Wilson – makers of the fabulous Alexandria and Maxx. It's a compact three-way ported floorstander that retails for just south of £17,000. While definitely not a bargain basement, this is almost budget-price compared to other Wilson speakers.

However, don't be fooled into thinking 'downmarket compromised version' of Wilson's larger more expensive offerings. The company's website points out that many well-heeled listeners – easily able to afford Wilson's bigger costlier offerings – choose the petite Sophia because they love the sound of her voice...

The original Sophia launched in 2001 and was seen as Wilson's entry-level speaker. Compared with the company's bigger models, Sophia was deliberately designed to be less critical of amplifier quality and room placement, while still delivering the clarity, focus and precision Wilson speakers are noted for.

The new Sophia 3 boasts a number of improvements over previous versions, among them better midrange and high-frequency drivers, as used in Wilson's more expensive Sasha and Maxx models. The woofer has a more powerful motor, while the cabinet is more rigid, resonance-free and phase-aligned.

SOUND QUALITY

Sophia's voice is smooth, open, well-balanced, natural and very truthful. The music sounds crisp and focussed, with extended highs and lows. Imaging is very precise, with left/right positional information handled superbly well. Transients display impressive attack and immediacy, with no smearing or overhang.

Although there's plenty of detail, the sound avoids being over-analytical – you never worry that the music is going to be pulled apart. Overall, the result struck us as impressively homogenous and integrated – almost as though the cabinet housed just a single drive unit, rather than three.

Clarity is excellent. On music with dominant vocals, you could always follow quieter backing voices and instruments – things don't 'come and go', depending on how loud the main voice is. Even on demanding complex music, the whole sound picture stays clear and solidly focussed.

We used a darTZeel pre/power combination and Metronome CD player; without question, an amazing ensemble. But, all credit to Sophia 3 for revealing the special qualities of these expensive components, and highlighting the amazing focus and precision they're capable of.

Bass is full-bodied and surprisingly extended. The low frequencies sound clean and free from boom, with good pitch definition and dynamics. The midband is smooth and open, delivering a neutral, truthful tonality. The highs are clean and razor-sharp, with crisp transient attack.

Although we've drawn attention to the detail and precision of the sound, we actually feel Sophia 3 itself has little or no

sonic signature. The presentation is very neutral and unexaggerated. Any faults or colorations heard are more likely to be down to the recordings played, or the partnering equipment, than the loudspeakers.

Imaging is tight and precise. Listening to a solo piano recording, we briefly wondered if the image was perhaps a little too 'wide'. Instead of a centrally-placed instrument between the speakers, we experienced a slightly-spread piano image. But, this was not a loudspeaker fault – Sophia was merely showing how the recording had been made.

Playing a wide variety of recordings, we kept noticing how the sound changed to reflect the qualities of the source. On multi-miked recordings, for example, it was very clear how certain voices and instruments had been spotlit to enhance clarity. Given such precision, these speakers would make excellent studio monitors.

While Sophia 3 is not exactly unkind to faults, such innate precision makes it very revealing. It's a loudspeaker that

"Music sounds crisp and focused with extended highs and lows"

thrives on detail, allowing subtle differences to be perceived. For this reason, it pays to partner this speaker with the finest ancillary equipment you can run to – but then, don't all ladies have a taste for the best?

Sure, Sophia 3 is discerning and revealing, but it's not excessively demanding or high maintenance. During complex busy passages, we found it easy to chat over the music without having to shout to make ourselves heard. The music sounded crisp and imposing, but was never unpleasant or forceful. We put this down to low distortion and a lack of cabinet resonance – things that allow you to hear deep into the music/recording. Given a good source and a high-class amplifier, you'll find Sophia 3 very

transparent – almost as though the music were materialising in the space between, behind and above the enclosures.

Sophia 3 is a speaker that delivers on two levels. She can be enjoyed uncritically because she speaks in a beautifully natural and coherent voice. At the same time, a wealth of fine detail invites critical listening, and demands you pay attention. It's a lovely mix; ear-candy and real substance. The perfect woman? Could well be. Just don't tell my wife. Jimmy**Hughes**





web site: www.jordanacoustics.co.uk

Follow Jordan Acoustics on Confession



LEGENDARY PERFORMANCE™

Since 1949, McIntosh has defined quality sound reproduction and continues to set the standard for performance, reliability and service.

Every music lover has their own personal reasons for owning McIntosh. For some it is the workmanship and tank like build quality. For others it is the prestige and history of a brand that never stops listening to it's customers.

The reasons are many, but what brings every customer together, is the need for the most accurate sound in their listening room and McIntosh delivers every time.



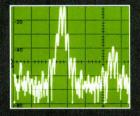
A tremendous level of detail goes into the design and construction of a McIntosh product. It can take up to two years from initiating the concept to creating the final product.



PC boards are built in McIntosh's factory in Binghamton. Two auto insertion machines are used for most boards. Unique boards are delicately crafted by hand.



McIntosh design its unique Output Autoformer® for use in many solid-state power amplifiers. The manufacturing sequence begins with coil winding techniques that have been used for 50 years.



Power Guard dynamically adjusts the input levels to avoid "clipping" while preventing harsh sounding distortion. The volume adjusts at the speed of light to prevent overdriving.

subject to conditions

free unbiased advice ▶ large product range ▶ free parking ▶ 0% flexible finance*





MCLK12 "ICONIC" Clock

Designed to either hang on the wall or to fit in an equipment rack. Illuminated digital meters for hours and minutes. A true collectors piece for all McIntosh fans.



Twin moving coil/moving magnet, Dedicated headphone amp, USB Input, Integrated DAC.



300wpc, Larger/Easy to read power watt meters,
Ultra low distortion design.



Twin moving coil/moving magnet, Dedicated Headphone amp, USB Input, Integrated DAC.



MC452 Quad Balanced Power Amplifier 450wpc, Most powerful McIntosh stereo amplifier, Luxurious McIntosh engineering.

bournemouth showroom

telephone:

01202 911 886

e-mail: bournemouth@jordanacoustics.co.uk address: Unit 2 - The Old Cart Building, Parley Court Barns, Parley Green Lane, Hurn, Bournemouth, BH23 6BB Open: Tuesday - Saturday. Closed Monday.

glenrothes showroom

telephone:

01592 744 779

e-mail: glenrothes@jordanacoustics.co.uk address: 20-22 Cadham Centre, Glenrothes, Fife, KY7 6RU Open: Monday - Friday. Closed Saturday.



Sentry Monitor is a fuse-less short circuit, which disengages the output stage before current exceeds safe operating level and resets automatically.



The McIntosh Blue Watt meters have become a symbol of superior quality sound. McIntosh customers appreciate both the aesthetics and the protective function.



McIntosh cuts 1/8 to 1/2 inch glass faceplates with genuine garnet dust to diminish friction and protect your investment over generations of enjoyment.



McIntosh black faceplates are painted with 12 layers to deliver a beautiful finish that is easily viewed in softly lit rooms. Each face plate is examined for quality by dedicated McIntosh experts.

McIntosh is about music as a whole and not about what type of music you like. Whether you love Classical, Jazz, Pop, Dance, Rock or Heavy Metal, no matter how eclectic your musical tastes, McIntosh delivers the music you love as the artist intended.

McIntosh legends

Visit the McIntosh web site (www.mcintoshlabs.com) where you will discover a wealth of resources, including videos from legendary musicians who explain why they will never part with their much loved McIntosh systems.

Hear the difference and join the McIntosh family

Why not give us a call on 01202 911 886 or **01592 744 779** to arrange an appointment to come and experience McIntosh because ordinary isn't for everyone.

*subject to conditions

part exchange* ▶ large selection of used items ▶ home demonstrations*



MT10 Turntable

Factory preset tracking force, anti-skate and cartridge position. Two sapphire (horizontal) and two ceramic (vertical) bearings, custom tonearm, .5mV (ebony body) moving coil cartridge included



MXA60 Lifestyle System

Integrated Audio System: 75 Watt Amplifier/pre, CD/ SACD Player, AM/FM Tuner and Loudspeakers (pair). Measures 22.5" long, 10.6" high, and 14.9" deep, including loudspeakers



XR200, XRT1K and XRT2K

McIntosh produce a formidable range of loudspeakers. Perfectly suited to both 2-channel and Home Theater, they sound as striking as they look



There was an immediate sensation apparent upon hearing this McIntosh combination, even from ice cold: that of true greatness in every sense of the word."

Ken Kessler, Hi-Fi News, May 2011





Ultimatum XL6

Delights with natural and uninhibited performances of any genre of music

iewed from a comfortably seated position in front of these loudspeakers, the NEAT XL6 looks like a regular floorstanding two-way. Take a closer look, however, and a different story starts to emerge. To begin, the drive unit count is not two but six per cabinet. There are a pair of super-tweeters firing upwards from the top panel, and within that robust, inert enclosure fabricated from Birch-plywood, there is a two-driver, isobaric bass system. This goes some way towards explaining each enclosure's 45kg weight, which you will have already noticed when you removed them from the wooden crates in which they were shipped.

The isobaric section is ported to optimise the low-frequency performance of the speaker, and all the drive units in the damped cabinet are housed in their own discrete chambers to fine-tune their performance and prevent their rear radiations interfering with the other drivers.

Once unpacked and bolted to their spiked supports, which usefully also extend the footprint and hence increase the stability of the metre-high cabinets, the XL6 is not an imposing design. It doesn't visually dominate the room. The only feature that attracts attention – albeit slightly – is the baffle area. The enclosure is constructed from 18mm Birch Plywood while the driver baffles are 45mm thick sandwiches of Birch Ply, Polyethelene and MDF to provide the rigid and low-resonance support required for the drive units.

The XL6 performs exceedingly well when placed about 30cm from the rear wall and toed in a small amount, firing down the longest room dimension. Nonetheless, it is worth experimenting with their exact placement because there will usually be one sweet spot where the XL6 will sound rather magnificent: and that might well be just a centimetre or two from where you have them positioned now, so spend some time fine-tuning the positioning. When you discover that sweet spot, it is not unlike the sonic equivalent of watching the image in a camera viewfinder snap into sharp focus.

The XL6 does not present a taxing load to an amplifier. It sounded its best with a bi-amplified Naim NAP250 set-up driving it, but gave thoroughly acceptable results when powered by Creek Evolution 5350 and Naim SUPERNAIT integrated designs.

Speaker cables used were the ferociously revealing TelluriumQ Ultra Black and the primary source was a Naim HDX-SSD/DAC/XPS hard disk player and DAC combination.

SOUND QUALITY

Traditionally, NEAT speakers have been superbly musical designs, having no difficulty in conveying vital pitch and timing information. To their credit, they present that information with gusto and alacrity, which allows them to deliver all manner of music with remarkable conviction. The XL6 is no exception to this rule, and it delivered an outstandingly vivid account of the challenging recording of Edgard Varèse's *Amériques*, by Maurice Abravanel and the Utah Symphony Orchestra. The speaker conveyed the vibrant majesty of this composition with disdainful ease and appeared to relish the diverse palette of tonal colour made available to it – especially the 21-piece percussion section with its microtonal

horns, sirens and whips. The XL6, furthermore, generated an impressively wide, deep and tall soundstage complete with credibly located instruments within generous boundaries that extended way beyond the loudspeaker enclosures.

The XL6 is an especially fast-sounding design: notes start and stop decisively with no time smear. Such is its precision that it did not sound unduly wanting when auditioned alongside considerably more expensive active loudspeakers. This extends to vocal recordings as well, and it regularly brought to notice phrasing subtleties and nuances that escaped the majority of passive speakers.

That is the real beauty of this design: the amount of information that is relevant to the music it reveals is unreservedly compelling. It is a cliché to say that it presents familiar music in a new light, but it does. It gets to the heart of a composition and links together its constituent parts the way you know, instinctively, that the composer intended them to connect.

"The amount of musical information this speaker reveals is compelling"

Dynamically, the XL6 is an absolute *tour de force*. Whether the contrast is overt or subtle, the speaker presents it with an assured ease that makes performances appear genuinely real – assuming they ever were, like the 1957 *Art Pepper Meets The Rhythm Section* LP rip. Here you can savour Philly Joe Jones taking his drum kit for some brisk exercise with it

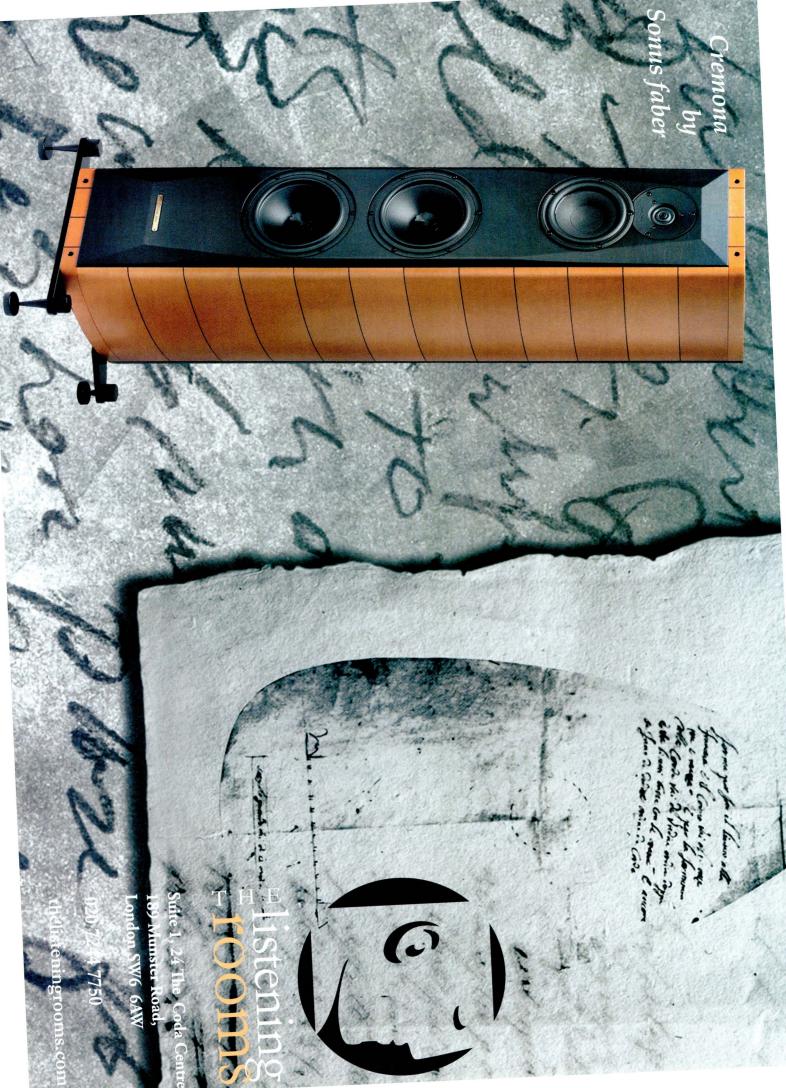
kit as anyone could wish to hear.
The sound tells you that
these guys are truly
loving playing together
and enjoying getting
into a resolutely
magnetic groove.

sounding as close to an acoustic drum

NEAT has certainly achieved its aim of a "natural and uninhibited" performance from the XL6. The speaker is in no way laid-back, yet it never shows any signs of being under duress: music just seems to flow effortlessly from it. And that is a truly special achievement – to step aside and let music communicate without any undesired additions or hindrance is a rare quality, and one that few loudspeakers accomplish so profoundly.

Malcolm**Steward**







802 Diamond

Easily the best loudspeaker that Bowers and Wilkins has ever made

£11,500 Bowers and Wilkins 01903 221500 www.bowers-wilkins.com

he first sight of Bowers and Wilkins' 800 Series
Diamond models immediately called to mind "Plus ca
change, plus c'est la meme chose". The diaphragms
might be much as before, but the motors driving
them have seen big changes. The manufacturers have a very
extensive collection of computer modelling techniques,
including the highly regarded Klippel suite and these have
provided the tools for reducing motor distortion and
maximising sensitivities.

Large ferrite magnets (traditionally used for bass drivers) inevitably place a large, flat and, therefore, very reflective surface immediately behind the diaphragm. Rather, the 802 Diamond's twin 200mm bass drivers mount twin neodymium/iron/boron alloy magnets actually inside the voice coil, improving the field symmetry and lowering distortion. And the new motor considerably reduces the reflecting surface immediately behind the cones. A new four-magnet motor is also used for the diamond dome tweeter.

The speaker actually comes fitted with ball-castors, but a reversible spike/foot kit with the option of nylon studs or massive, wicked spikes is also supplied. The plinth is shaped to mimic the shape of the curved and reasonably slim enclosure, while the spikes are set well in from the sides.

The bass enclosure is formed from a single piece of 26mm plywood, shaped in a continuous curve around the sides and back. Inside, Matrix 'honeycomb' bracing further increases rigidity. Besides the compact motors described earlier, the twin 200mm drivers each have 150mm diameter 'sandwich' diaphragms, with thick cores of Rohacell structural foam laminated between woven carbon fibre. A port fires downward between the base and the plinth to add further bass output.

The midrange unit is virtually unchanged in this model. It's unique 'free edge' design known as an FST (fixed suspension transducer), in which the outside edge of the 140mm diameter woven Kevlar cone rests against a foamed polymer damping ring. This is housed in a sizeable and very heavy teardropshaped sub-enclosure, made from mineral-loaded Marlan (a mineral-loaded polymer). The internal shape is a combination of a sphere and a cone, which is claimed to be very effective at dissipating the rearward radiation from the driver.

The 802 Diamond was mostly driven from a system comprising a Naim NAC552 preamp with NAP500 and MSB Mono 202 power amplifiers. Speaker cables were Vertex AQ Moncayo, while Mini Moncayo bi-wire links were also used. Sources included a Rega Valve Isis and Naim CDS3/555PS CD players, a Magnum Dynalab MD106T FM tuner, and a Linn/Rega/Soundsmith vinyl record player.

SOUND QUALITY

Given the five-year gap, it's impossible to say for sure just how much of an improvement the 802 Diamond offers over its 802D predecessor, especially as the 802D's bigger and rather superior 800D acted as a regular reference loudspeaker through much of the interregnum.

What is absolutely certain is that the 802 Diamond is a truly exceptional loudspeaker and indeed one that even improves

on the earlier 800D in several significant respects. It might not match its older, bigger brother in terms of bass grip, authority and drive – arguably the 800D's biggest strength – but the overall out-of-the-box transparency, low level articulation and stereo image precision are all clearly superior to anything the previous generation could offer.

As the measurements showed, this latest 802 Diamond is a couple of decibels brighter than its predecessor, relatively speaking. This is clearly audible and also mostly welcome, as the top end always sounds almost uncannily clean.

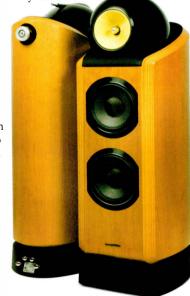
Although the in-room response traces do indicate some unevenness, this doesn't seem to result in significant levels of coloration. Two factors are likely to be responsible. First, any enclosure-generated colorations are exceptionally low: this is very obviously audible in the speaker's vanishingly low 'hash' floor, which makes the gaps between the notes as clean and clear as the notes themselves. Secondly, the overall coherence and timing across the whole audio band is quite outstanding.

"A speaker that's clearly been designed by people who love music"

The acid test for any speaker is to get it onto your home turf and play familiar material through and from familiar components. The 802 Diamond has a wonderful ability to distinguish between FM radio, CD and vinyl sources and then to go further by clearly revealing the quality of the recording. This is indeed a genuine monitor.

Anyone who speculates that Bowers and Wilkins might be hidebound by its impressive engineering resources, only has to spend an hour or two with a pair of 802 Diamonds. Superb imaging, dramatic dynamic range and excellent total coherence, this speaker has unquestionably been designed by people who listen to and love music.

It's undoubtedly the best B&W speaker that we've heard to date. That all this has been achieved through painstaking refinement rather than headline-grabbing radical innovation is also rather appealing. Paul**Messenger**





Vagico Q5

Complex American is big on drive units and bigger on cabinet innovation

nyone attending 2011's Consumer Electronics Show, (CES) Las Vegas will have had the opportunity to see a cut away model of Magico's Q5 and if they did, they will certainly have been struck by its astonishing complexity. This loudspeaker behemoth, which weighs in at an astonishing 420lbs (190kg) is a triumph of over engineering.

The frame, which defines various internal cavities, uses 50 parts: one of the side panels is perforated by nearly 100 threaded holes, and there are more than 350 fasteners of various kinds and ten tubular trusses to secure the baffle to the back panel. The enclosure is machined from aluminium and brass at Magico's US facility, where the trademark polishing and hard anodizing are applied.

The five-driver, four-way Q5 is the first Magico product to feature complete in-house control of all design and build variables. It takes nearly a week to assemble a single pair, so this is no high-volume design.

Drivers are fitted to the baffles from behind so there are no visible fixing screws to cause diffraction, and eventually loosen off. No magic here but this is typical of the kind of thinking that typifies this loudspeaker. The Q5 has a claimed 87dB sensitivity rating from its sealed (ie non-vented) enclosure, and there is some suggestion that it is a difficult electrical load, although we have not seen any direct evidence for this.

The picture, then, is of a loudspeaker that uses conventional-ish technology, which has been addressed in a particularly painstaking way using materials which are as close to ideal as can be contrived and with as few shortcuts as possible. Yet in many ways it is a reviewer's nightmare: it's incredible 190kg bulk meant we had to audition our sample at length in the UK distributor's listening rooms.

According to Magico, in the absence of computer-controlled machining such as they use here, the Q5 would cost a great deal more than it does, if it could be built at all. In this sense, the Q5 counts as a notable bargain. The driver compliment comprises Magico's new MBe-1 Beryllium tweeter plus Magico-designed Nano-Tec drivers for the midrange (six-inch), midbass (nine-inch) plus two nines for the bass. A technology called Bass Mechanical Resonance Cancellation (BMRC) has been applied which is said to allow the company to acoustically cancel break-up modes by precisely offsetting the bass drivers' acoustical centre and angle.

SOUND QUALITY

Given the limitations inherent in the review process, there are boundaries to what can be said about the Q5, but we gathered enough evidence to confirm that this speaker is a wholly remarkable offering in just about every sense.

The balance of the Q5 is essentially neutral and its demeanour is not as demonstrative as some. Levels of detail are unusually high and the Q5 qualifies as a high-resolution speaker by any standard. Loudspeakers based on a wood enclosures will almost inevitably have a residual boxiness, if only at low level, but the Magico is about as free of cabinet- related colouration artefacts as any loudspeaker this reviewer can recall.

The Q5 doesn't really have an obviously identifiable character of its own, whether played at high levels, or at very low levels – it has a consistent dynamic quality. At low levels, musical detail springs organically from a black background. With a recording of Elgar's cello concerto, the Q5 managed a palpable recreation of the lead instrument through the speakers with a strong sense of weight, and there was a similarly large scale, generous performance with Schoenberg, Mahler, Beethoven and others. A similar performance standard was available with well-recorded voice.

But in every case, the clarity of which the Q5 was so notable was combined with discipline and realism. Nothing was overcooked or exaggerated; everything was naturally expressed, but always with a proper sense of subtlety and passion, combined with considerable grace. The way the Q5 manages to avoid sounding boxy or coloured is remarkable, yet we can envisage some criticising this speaker because it just doesn't have the obvious qualities of many of

"This speaker is a wholly remarkable offering in just about every sense"

its peers. The qualities referred to here including heaviness, edginess or box-related effects.

The aim was evidentially to design a loudspeaker that would be as smooth and as unobtrusive as could be contrived and in this, Magico has been very

successful, a quality that this reviewer has noted previously with some of its earlier designs. You will need to be careful positioning the speakers: to avoid any edginess from the tweeter, for example, it is best to orient them so that you hear the treble from slightly off the main forward axis.

Subtle instrument sounds are expressed almost to perfection, irrespective of volume level with a three-dimensional soundstage that is deeply alluring. Indeed, it's hard not to fall in head over heels in love with this American giant.





'Fundamentally, this speaker just gets out of the way and lets the musical message through unobstructed. The hallmark of the very best loudspeakers is that they somehow manage to communicate the differences between different sources and even recordings, and in this regard the Ultimatum turns out to be a very good speaker indeed...

Qualitatively, the bass end is quite superb. Very few speakers can match its ability to deliver genuinely deep in-room bass without muddying things up with excessive and thumpy mid-bass the bonus era is the the back is lest expondly wile an

lively, and cabinet colour-



Over the long haul of several weeks, my respect for this speaker continued to grow. Few if any can match the way it combines the coherence and communication skills of a simple two-way with most of the advantages of a much larger design.

The Ultimatum is an exceptional achievement in every respect.'

Hi FI Choice

The ULTIMATUM XL6 is a multi-chamber, multi-facet loudspeaker system incorporating six drive units per enclosure. The visible drive units are mounted on sub-baffles, attached to the main enclosure via a polyethylene met orane. The ULTIMATUM XL6 decaker of flustarings

design which adheres to all the principles that have marked out the ULTIMA-TUM project and given it such enduring success. The ultra-rigid birch-plywood enclosure, innovative baffle-decoupling technology, 'isobaric' bass loading and use of twin EMIT ribbon-type supertweeters are employed here to deliver the ULTI-MATUM promise of a life-time of musical enjoyment.

The main structure is damped 18mm Birch Plywood, whilst the drive unit baffles are constructed from a 45mm thick 'sandwich' of Birch Plywood, Polyethylene and MDF.

This provides a rigid nonresonant platform, which is ideal for optimal performance of the drive units.

The two hidden isobarically loaded Neat 168mm main drivers are flux optimised for purpose and use dust-caps for rigidity.

The main Mid/Bass driver is a special version of the Neat 168mm driver with an aluminium phase plug to aid dispersion and reduce dynamic compression.

w r extur e

A sealed sub-cavity contains the main HF drive unit. A separate sub-cavity contains two EMIT type super-tweeter drive units.

Two bass-only drive units are located at the bottom of the cabinet, in isobaric configuration, with one union the bottom panel facing downward. Acting as a passive subwoofer, these units are linked together and both receive the same signal, in phase. There is a sealed cavity in between

neat acoustics

loudspeakers shaped by music

www.neat.co.uk

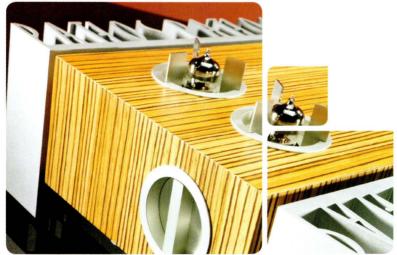








amplifiers



- 80 Burmester Phono Preamp 100
- 83 Resolution Audio Cantata
- 84 Audio Research LS27 & PH8
- 87 Mark Levinson No.326S
- 88 Pathos InPolRemix
- 91 Audio Research DS450
- 92 Dan D'agostino Momentum
- 95 Unison Research S6
- 96 Trafomatic Experience Two



Burmester

Phono Preamp 100

The shiny facia gives the game away - Burmester is back in the UK and it sounds sweet

any people call their phono stages preamps because in a sense they are just that – they pre-amplify a signal. However, in the traditional sense, they are gain and EQ stages rather than devices that you can attach directly to a power amp. This Burmester is just that: it has onboard volume control and all you need to do to change level is broadly aim the enormous remote handset in its direction and a blinking red light tells you that it's getting louder or quieter. This will hopefully be pretty obvious to your ears as well.

As a phono stage, the Phono Preamp 100 makes most other examples of the art seem like the dull black boxes they often are. It can do everything you would possibly want to do with the output of your cartridge and quite a lot more besides. Adjustments to gain can be done remotely, as can changes to input impedance or capacitance. Do you know how many other phono stages offer this facility? We'll tell you: none. This is the Bentley Continental of the cartridge-amplifying world: it not only looks the business in terms of features, it is also one of the most entertaining and enjoyable components we've had the pleasure of listening to in a long time.

You can run it with all its lights on and have the VU meter illuminated, or you can dim those lights down through degrees to the point where only the power light tells you there's someone at home. You may well ask what a VU meter is doing on a phono stage and how come you can select it to measure one channel or the other, or give you an overall reading in mono. At first it seems like a device to make the front panel look more interesting, but when you come to terms with the array of in and outputs on the back panel it becomes clear that, despite the classic polished-chrome styling, this is a forward-looking piece of kit.

There is a USB B socket on the back and an ADC (or analogue to digital converter) inside the box. Those of you with numerical minds will have figured that it's possible to play the beloved black stuff straight into a computer and, should that computer have recording software installed, it can be used to record the output. A few other enlightened phono-stage makers have realised that a USB output might be useful, but none to our knowledge has equipped theirs with a level meter so that you can adjust the gain to avoid overloading the recorder at the other end of the chain. Admittedly, recording software can also be used to do this, but what would you rather look at – and for that matter, trust? A piece of virtual ware or a proper VU needle?

Elsewhere on this beauty there are two inputs which can be either MM or MC, and a subsonic filter to get rid of the rumble

on old classical recordings and the excesses on some OTT modern ones. There's also the option of increasing overall output by 6dB, should you need a bit more grunt in the system and the ability to choose between three oversampling rates.

Admittedly, the Phono Preamp 100 is very expensive, but it's also very well equipped. Unlike a Mercedes, none of these features are extras – they are all part of the sumptuous package. So are balanced inputs for your tonearm cable. As few such leads come equipped with balanced XLR plugs Burmester supplies adaptors, but it also makes a variety of arm

"One of the most enjoyable components we've ever listened to"

leads for the purpose and these were duly used. They make a difference, too – in fact they take this stage from being very good to world-class quality. Any end user would be foolhardy not to follow this lead, so to speak.

SOUND QUALITY

This is both a refined and revealing stage and a powerful and dynamic one. It can make your vinyl sound not merely better than all the alternatives available to the modern music lover, but vastly superior. This product assures you that every penny spent on the king of formats was well spent. It has the stability, assurance and precision of top-quality digital along with the openness, depth and solidity of great analogue. Give it a clean slab of vinyl and it will repay you with a living, breathing musical experience in the living room. With an SME 20/3A and vdH Condor cartridge plugged in, there is no sense of the mechanical about the music: it has a fluency and transparency that you rarely encounter in amplified music.

This makes for an entrancing experience with a great piece of music. That which previously seemed merely good is transformed into exhilarating sound. Taj Mahal's rendition of Sweet Home Chicago has long been a test track round these parts but never has it scaled the heights to this extent. The backing vocals come alive and his voice and guitar are right there in front of us. It can't have sounded much more real and magical in the control room way back when – which is perhaps the ultimate testament to this superlative phono stage's performance.

Jason**Kennedy**







Opera Grand Callas Loudspeakers

"It's the imaging that really sets this speaker apart from the herd, and indeed this is the key feature that makes it a particularly interesting proposition." - Hi Fi Choice







Thorens TD-309 Turntable in cool white lacquer

European Turntable of the Year 2010/2011.











Unison Research S6 Integrated

"In the right system the S6 is capable of sonic magic. Hear it working properly and we defy anyone not to fall for its charms."



UNISON







"The Nuovo offers an authentic taste of the high end at an attractive price. A Thoroughbred." - Hi Fi Choice







PAHOS



Pathos Acoustics InPol Remix

10 Watts of pure Musical Pleasure. (note: iPod Touch not included)

FOR MORE INFORMATION PLEASE CONTACT:

t 01753 652 669

e. mail@ukd.co.uk
WWW.UKd.CO.UK

Resolution Audio

Cantata

The matching 50-watt integrated amp for our favourite CD player of 2010 hits the spot

£5,995 Redline 01268 858222 www.resolutionaudio.com

ast year we had some bad news. Resolution Audio discontinued one of our favourite CD players, the Opus 21. The good news was that it replaced it with the Cantata Music Centre, which went on to win several accolades in our 2010 *Awards* issue. Now we have the follow up, a Cantata amp in a matching box, containing a British circuit design and a less-is-more ethos. The 50 suffix indicates power output, making this the least powerful solid-state amp we've seen at this price, so what gives?

The new amp has four, rather than two, T-network capacitors, a mains transformer that's 60 per cent more powerful and a significantly bigger heat sink – the top of the casework is solid aluminium and performs this function. Why does the heat sink change things? Because it allows the FET output transistors to be run at a higher bias and this means more power output.

The Cantata 50's speaker terminals are a little different. They feature a third terminal for earthing the amp to the speaker, something that DNM Reson cables are designed for, if not many loudspeakers. It requires the speaker to have an internal connection to the drive unit baskets, which are electrically floating. Tannoy has included earth terminals on some of its speakers, because the earthing idea comes from Japan, where the Scottish company has a strong following.

The speaker terminals are in socket, rather than binding post, form to keep the metal content down in true DNM style. Resolution Audio has not gone to the extreme of using Perspex casework, but does have aluminium oxide spacers on the FETs attached to the heat sink, in order to minimise eddy currents that are induced in metal if there is an AC field nearby.

The most distinctive thing about this amplifier is its beautifully machined shell; this stunning piece of industrial design makes the Cantata products stand out a mile. If there was any justice in the world, then this amp would be on the front of the finest design magazines in the land. It probably also accounts for a fair portion of the final cost, but when you consider its sculptural qualities, it's money well spent.

Build quality is very high throughout. Not only is the machining on the shell itself state-of-the-art, but the buttons, display and connections are all top notch. It's not a big amplifier, width is about average but height and depth are petite, continuing the less-is-more theme. The speaker terminal sockets are deliberately minimalist, but there is the option of having conventional binding posts, too.

SOUND QUALITY

The Cantata Music Centre made a big impression and so expectations were high for the partnering amp. As it turned out they weren't high enough, as this is the most musically engaging amplifier we've heard in a long time. It's hard to pin-down exactly what it does that's so effective but it is incredibly fast; it doesn't increase tempo but it just stops and starts like quicksilver. It also makes most amps sound badly time-smeared and sluggish. This is partly because it's not a powerful-sounding amp: it can deliver good scale, but can't match the room-filling grandeur of real powerhouses. What it

does instead, is let you know precisely what's going on in the music and if you liked that music before you will be charmed by it through the Cantata. The Opus 21 CD player proved itself to be extremely capable in this regard by providing the signal being amplified, we tried another player for size and quickly went back because this amp is so revealing of a source's capabilities.

On the other end of our Townshend DCT cables was a pair of PMC fact.8 speakers, an 89dB-sensitivity floorstander that revels in the Cantata 50's company.

The way it reflects the original recording is quite startling. The speed factor means that transients can literally make you jump when they strike at the start of a piece. Instruments and voices also seem very real – it's much easier to understand lyrics and to appreciate just how dirty-sounding an electric guitar can be. More sophisticated material has a beauty that is totally beguiling, melodies are placed front and centre and the whole emphasis is on the music rather than the sound.

"This is a tremendously effective communicator of the musical message"

Rather a lot of amplifiers work hard to deliver an impressive, rich and powerful sound that somehow manages to put the music in second place, but good sound alone is a novelty that wears thin.

This amp is a tremendously effective communicator of the musical message. Once an album is playing it's a struggle to take it off unless the house is on fire or you think of another album that can't wait. A good example of the sound/music conflict is Wyclef Jean's *Thug Angels*. This is a well-produced and substantial modern recording that can sound glorious with its fast bass line and multi-layered vocals. But, on most occasions, we only listen to the first minute and get the idea. Here we stayed for the full six-and-a-half and enjoyed them to the max, despite the lack of gut-churning bass.

The Cantata 50 is a hi-fi product for the music lover rather than the audiophile. It provides a lot of what the hi-fi nut enjoys in its pacey delivery, very low distortion and densely packed detail, but it doesn't set out to wow with scale or power. Rather it concentrates on getting the music to the speakers without damaging its emotional integrity.

It's also hi-fi for people with an aesthetic understanding and an appreciation of great design. You only have to look at it to realise it is a thing of beauty, far removed from the dumpy boxes we're so familiar with. Here's another winner from Resolution Audio, then. The bar has been raised.

Jason**Kennedy**





Audio Research

LS27 & PH8

A taste of Audio Research's Reference kit at a much more affordable price

udio Research's LS27 is one of our favourite high-end preamps. While hardly inexpensive, it's nonetheless not too stratospherically priced, offering real high-end performance that invites comparison with preamps costing much more. It's a solidly built stable unit that's free from gimmicks – a product that inspires confidence.

Despite an input marked Phono, the LS27 is a line-level unit. If you want to use a turntable, you'll need an outboard phono stage like the Audio Research PH8 – more on this later. ARC warns that a burn-in time of around 600 hours may be necessary before things sound at their best. During this time, they ask for your patience.

But what exactly does the LS27 offer over 'lesser' ARC preamps, such as the LS17/SP17? The answer is balanced operation. The LS27 has six balanced/unbalanced inputs, a processor input (unity gain), a monitor loop, and two balanced/unbalanced variable outputs, plus one set of fixed balanced/unbalanced outputs.

There are individual high/medium/low gain settings for each input and you can configure each to work balanced or unbalanced according to requirements. Controls include left/right stereo balance, phase invert, stereo/mono and the ability to compare balanced with unbalanced working.

The latter is very useful. Suppose you've splashed out on expensive balanced cables with XLRs and want to be sure you've spent wisely – just A/B compare balanced with single ended. The difference will almost certainly convince you the expenditure was worthwhile.

We really appreciate the other features offered – especially phase invert and stereo/mono. For example, when playing old mono LPs you'll find switching the PH8 (or LS27) to 'mono' delivers a dramatic reduction in surface noise and pressing rumble.

Similarly, the facility to alter absolute phase can bring recordings that subjectively sound diffuse or backward into sharper focus again. Moreover, with these controls duplicated on the remote handset, you can make changes from the comfort of your listening chair.

The LS27 is a pure Class-A tube/transistor (JFET) hybrid design with zero negative feedback. Its massive power supply is fully regulated, with gain provided by twin 6H30 triodes. Many circuit changes and other refinements have resulted in greatly improved performance over the previous LS26 model.

"Like its big brother," ARC says, "the LS27 combines great resolving power with a tonal richness, purity and naturalness that is immediately involving. The grain structure is superfine and electronic artefacts have been banished. Bass impact and control are also superb". This strikes us as a fair assessment of the LS27's strengths.

The volume control is an electronic type with 104 fixed steps and a digital readout. This enables you to set volume levels precisely and repeatably – useful when you're comparing equipment and need to make sure that volume levels are kept to constant values.

The LS27 has no built-in phono stage, so you'll need to add an outboard type like ARC's PH8 to play LPs. The PH8 is one

of ARC's newer products, and interestingly, it seems able to accept virtually any cartridge – from a low-output moving-coil, to a high-output fixed-coil – with no need for gain adjustment.

To ensure comparable volume levels to your other audio components, simply set the gain of the LS27 accordingly. Impedance values can be set to suit the cartridge being used. The impedances offered – from 47k, 1k, 500, 200 and 100 ohms – will fine-tune the sound of your pickup.

Technically, the PH8 benefits from circuit and parts improvements derived from ARC's expensive REF Phono 2. However, rather than using four 6922 tubes, the PH8 uses two

"Solidly built, free from gimmicks and inspiring complete confidence"

6H30 tubes along with special low-noise FETs. Vacuum tube power regulation incorporates a 6550 and a 6H30, as featured in the REF Phono 2 and REF5.

Capacitors are identical to those featured in the REF Phono 2, including the same coupling caps. Teflon caps are used in both the RIAA stage and for bypass purposes. There is also a new R-core transformer. Circuit board material is the same as in ARC Reference products.

SOUND QUALITY

Fortunately, our LS27 and PH8 had seen some action before we received them and both sounded impressive from the off. The sound is clear, solid and stable, with an attractive clarity and openness. And it stays that way.

Again, the aim is to offer users a real taste of ARC 'Reference' performance at a vastly more affordable price. Certainly, the PH8 did not disappoint. Used with an EAR Forte-S, Ikeda arm, and Koetsu Urushi Sky Blue, we obtained a gorgeously vivid, yet smooth and open, sound from our LPs.

The PH8 is very quiet, with vanishingly low hum/hiss levels. Being tube, the casework gets mildly warm – as does the LS27's – but not excessively so. But most importantly, music sounds focussed and clear, with outstanding fine detail and wide dynamic contrasts.

Jimmy**Hughes**





Introducing the all-new M2 Power Amp from Roksan Audio Available November 2011

The New M2 Stereo Power Amp is a thing of beauty. Housed within a sleek minimalist shell, this high quality component will push out a powerful but well controlled 125 Watts into both channels.*

*125 Watts at 8 Ohms - 85 Watts at 4 Ohms

The M2 Stereo Power Amp joins the M2 CD Player and M2 Integrated Amplifier in Roksan's premium range of Hi-Fi electronics.



Mark Levinson

No.326S

It's official - a preamplifier costing as much as a small car really can make a difference

£8,170 Karma-av 01423 358846 www.marklevinson.com

hat better time than the new era of austerity for us to discover how much difference a really good preamplifier can make to an already impressive high-end system.

Mark Levinson was one of the first to build seriously engineered high-end amplifiers. We don't mean excessively large or massively powerful, although it was ahead of the power game, we mean Rolls Royce or SME-style build quality.

It's unusual for us to review a preamplifier on its own, but the new No.326S is such a phenomenal-sounding piece of equipment that we had to tell you about it. In truth, this product has rearranged our notion of what really counts in a high-end system and that doesn't happen very often.

At present, the No.326S is the only preamplifier in the Mark Levinson range, which seems a little incongruous in the context of its power amps which top out at just over £40K (for a pair of No.53 monoblocks), a matching reference preamp is on the way to plug that gap, but this compact beast is probably up to the job.

It has been painstakingly designed to keep all forms of noise away from the power supply and hence the audio signal itself. This is achieved with shielding in the form of steel boxes encasing both signal processing circuitry and the power supply itself. It is dual-mono right back to the mains transformer – there are two of these, but not for each channel – one is for the control circuitry.

Internally it's separated into three sections: power supply, signal processing and control circuitry. Incoming AC is heavily filtered using noise suppression and isolation techniques of the variety usually found in external power filters, all of which is designed to keep the signal as clean as possible. The PCB itself is made of Nelco, which replaces Arlon in the previous incarnation and is said to have even better dielectric (insulating) properties.

Volume is indicated in tenths of a decibel (above 23dB, 1dB increments below that) which seems a little bit on the fine side – it makes changing level with the remote a bit slow – but these steps come into their own at the top and bottom of the range where small increments are more useful. If you want to reduce volume quickly the mute button is the best bet, especially as you can dial in just how much attenuation you want. There are two volume attenuators inside the box, one for each channel, continuing the dual-mono theme.

Useful features include a mono setting for older recordings – The Beatles' mono box set sounds significantly better than its stereo counterpart for instance – and polarity or phase inversion, both available on the remote handset.

The said remote is a comfy lump with a rubber pad on the underside so that it doesn't slip off the sofa, plus it has a reassuringly heavy build that exudes nearly as much quality as the unit itself. Everything from the matte-finished buttons and knobs to the anodised metalwork of the chassis exudes quality and durability. The RCA phono sockets are made to M-Ľs design and are a shade smaller than usual, which is very nice when you have extremely tight-fitting plugs to deal with, as is often the case with high-end cables.

In terms of value, the No.326S looks pretty strong. It's very expensive, granted, but it is built with utmost attention to detail by a company with a track record for making some of the best amplifiers in the business. Bowers & Wilkins does all its listening and tuning using a pair of Mark Levinson No.33 monoblocks and has been doing so for years.

SOUND QUALITY

Our first impression with this preamp was not necessarily positive, because it seems to remove all the edges from the sound, smoothing things out and giving the impression of reduced detail. But it's not long before it becomes apparent that what has been removed is hash in the high frequencies; essentially noise that most amplifiers add to the signal in such a subtle way that it seems like part of the music, but once it's taken away the amount of musical and spatial detail that comes through is nothing short of astonishing. It's not just audiophilia either, by which we mean it's more than sound

"Enjoys a world-beating sense of timing and an uncannily clean sound"

effects like sparkly highs or bone-crunching lows against an 'inky black' background. It's more of the notes, more of the acoustic, and more of the music...

It's surprising that any one component can do all this, let alone the one that changes the volume, yet this is clearly a very difficult thing to do really well otherwise the No.326S wouldn't stand out so dramatically.

Led Zeppelin III is one of our favourite albums and is remarkably well recorded to boot. The preamp delivered Bonzo's chugging beats and Percy's voice at its finest, while focussing on the inventive compositions of Page and Jones. All the micro-dynamics are there to be enjoyed alongside the compressed vocals that seem so small compared to the band.

What also makes this component worth its weight in sonic gold is the incredible three-dimensionality it can produce, its uncannily clean sound which allows you to play at silly levels without discomfort and a world-beating sense of timing.

Bass lines are reproduced with a coherence and precision that is all too rare and this foundation means that rhythm and melody are delivered in a totally coherent, fluid fashion. This and the ability to show you the fine details of the recording in the context of a gripping overall presentation makes the No. 326S an addictive bit of kit. The price is high, but the rewards are truly the stuff of a music lover's dream.

Jason**Kennedy**





Pathos

InPolRemix

Experience the sound of Pathos' InPol technology in a smaller cheaper package

t's only 10 watts output – let's be clear about that from the off. But listening to the Pathos InPolRemix, you could be forgiven for thinking it's a lot more powerful. It has the scale and soundstaging of a much bigger amplifier. Against a Musical Fidelity kW750 (750-watt output), the smaller amp holds its own disturbingly well.

Of course, you'll need sensitive loudspeakers to make the most of such limited power output. Much will depend on the size of your listening room, how close you sit to the speakers, and how loud you like to listen. Your choice of music will have an effect, too. We'd say speakers with about 93dB sensitivity (or greater) are essential.

As its name implies, the InPolRemix makes use of Pathos' patented InPol technology. It's a hybrid tube/transistor design, using a feedback-free Class A circuit design. The preamp is tube-based and fully-balanced, being optimised to drive the output stage to maximum effect.

The pure Class A solid-state output stage is designed to deliver high current and low impedance in order to drive loudspeakers accurately. The power stage is entirely balanced, and features two InPol circuits driven in opposite phase to each other. The idea is to cancel distortion without the need for feedback.

Large coils are used as energy reserves to ensure ample current delivery in a manner that's fast and efficient. The power supply is unusual too, featuring something Pathos dubs PHYSICS (Pathos Hybrid Stabilised Independent Current Supply). In this arrangement, the tube section is powered by its own dedicated supply.

The output stage is independently fed by a switch-mode power supply that's able to deliver high current when needed. Further benefits are increased efficiency and greater isolation from variations in mains quality. Both power supplies are completely separate and carefully shielded from each-other.

The InPolRemix is line-level only, with a choice of balanced (XLR) or unbalanced (RCA) inputs. There's the option of a built-in 24-bit/192kHz DAC for £550 extra, enabling digital sources to be accessed via a pair of USB sockets. Our review sample was not fitted with the DAC.

In terms of controls, the InPolRemix is fairly sparse. There's a switch-type volume control and press buttons for input selection. Unfortunately, no visual indication of volume level is provided. Nor are the various press buttons identified. Even the remote handset is blank. You quickly memorise what each button does, however.

It's a solidly built little amplifier. The big 'Pathos' heatsinks are a matter of taste, but they sure make the amp look cool – as well as helping it *stay* cool. We'd have liked a visual indication of volume level, if only to have some idea of how close we were to maximum – always a concern with low-powered amps.

SOUND QUALITY

Of course, the million dollar question with amplifiers like this is whether or not 10 watts is sufficient for a typical listener's needs. Given sensitive speakers, the answer is a definite – 'yes'. The InPolRemix certainly produces a gorgeous sound. It's rich and warm, yet crisp, lucid, and detailed, with excellent clarity.

Its musical presentation is impressively nimble and fast, with a snappy 'live' sort of quality. It disguises its limited output power masterfully and for much of the time you're fooled into thinking there's power to spare. What taxes it? Large choral works and solo female voice are especially challenging.

A pure-toned soprano, recorded without compression or limiting, can be amazingly demanding, with peaks easily going 10-15dB beyond average levels. When pressed to deliver more than it's able, the InPolRemix tends to compress slightly, and soften dynamics. Pushed hard, it shows slight signs of congestion.

Uncompressed recordings of piano music are exacting too. Counterintuitively, loud, aggressively recorded pop and rock are less demanding of low-powered amplifiers than you might think. Heavy compression means there are no sudden peaks that call for extra power to reproduce wide dynamic swings. Fortunately, the InPolRemix disguises its discomfort very effectively. It doesn't hard-clip, or become harsh and ragged.

"This is a gorgeous little amplifier that punches well above its weight"

Push the amp too far and you may notice a little intermodulation distortion that adds a slight roughness to the sound. But the amp never spits or snarls at you – it tends to soft-clip like a tube amp.

Because a difference of just 3dB results in a doubling (or halving) of power, speaker efficiency is very important. When comparing speakers with a sensitivity of 90dB and 93dB, subjectively you won't notice much difference in loudness. However, the 90dB speaker will theoretically need double the wattage for the same volume level.

Anyway, the InPolRemix is a gorgeous little amplifier – one that punches well above its weight – delivering a beautifully smooth, rich, yet lively quality of sound that has impressive depth and dimensionality. It's a bit limited in terms of the number of inputs offered, but the optional USB DAC increases its versatility.

While not an amplifier for headbangers, the InPolRemix is capable of handling most types of music, providing your speakers have a sensitivity of (say) 93dB or more.

Jimmy Hughes





"A boy's dream has become true. I am most happy with all the sonic results..."

A.J. van den Hul

For more on the quest for 3T, visit henleydesigns.co.uk or vandenhul.com.

The entire range of 3T cables is now available through these specialist retailers:

Acton Gate Audio (Wrexham) - 01978 364500 Analogue Seduction (Peterborough) - 01733 350878 Audio Affair (Birmingham) - 0845 869 3237 AV Distribution (Bacup, Lancs) - 01706 878444 Eric Wiley (Castleford) - 01977 556774 Hi-Fi Cables (Worthing) - 01903 210212 Hi-Fi Gear Ltd. (Gloucester) - 01452 306412 Sound Cinergy (Aldridge) - 01922 457926 Adams & Jarrett (St. Leonard On Sea) - 01424 437165 Audible Fidelity (Daventry) - 01327 301006 Audio Venue (Ealing) - 020 8567 8703 Divine Audio (Desborough, Northants) - 01536 765531 Future Shop Ltd. (Borehamwood) - 0208 9051555 Hi-Fi Sound (Stockton-on-Tees) - 0845 6019390 High-End Cable (Spalding) - 01775 761880 Unilet S&V (New Malden) - 0208 942 9567



Audio Research

DS450

The 450 watts of the US valve stalwart's first Class D power amp prove addictive

£7,555 Absolute Sounds 020 8971 3909 www.audioresearch.com

iven its penchant for producing behemoths, Audio Research's launching of a Class D power amp is more than slightly surprising. While Pure Class A still sets a benchmark when the highest quality results take precedence, there are many practical drawbacks – excessive heat, large size, high price, massive power consumption – need one go on? The DS450, on the other hand, features an analogue-based Class D pulse-width modulated switching output stage. High output power, low-running temperature, low-power consumption and excellent sound quality are promised. But can such clever technology really challenge Class A's sonic supremacy?

While the DS450 is not massively heavy, it is fairly big and ungainly, so the handles are useful. The amp is quite solidly made, but we're not talking heavy 'battleship build' here. The finish is extremely good and the sculpted Audio Research logo looks cool and classy. The internal layout is very neat and the Cardas speaker binding posts are easy to use and give clean and tight connections.

ARC has given the amp a generous power supply with a large power transformer and something like 1239 Joules of energy storage – twice that of the DSi200! Hence the DS450 weighs in around 25kg (55lbs) and is somewhat front-heavy, because the power transformer is forwardly placed.

Manufactured, built, and tested in ARC's Plymouth Minnesota factory – the DS450 is not assembled from parts fabricated elsewhere, or built in the Far East. Many components are custom-made and/or designed in-house, including power transformers, filter chokes and the Litz wiring used internally.

Like most power amps, the DS450 is fairly simple. You've a choice of unbalanced/balanced inputs – via RCA/XLR sockets – and a single set of loudspeaker output terminals using Cardas binding posts. Add a mains on/off switch, plus sockets for remote on/off and that's about it.

Audio Research first used pulse-width modulation technology in its DSi200 integrated. But the DS450 ups the stakes, employing twice as many 500-watt MOSFET power devices on each side. As a result, the DS450 delivers around 450 watts per channel into eight ohms.

Many previous ARC power amps have been massively big and heavy, producing huge quantities of heat, while drawing sizeable amounts of current from the mains supply. Indeed, the company's reputation was built on no-compromise designs that sacrificed everything for sound quality. So the eco-friendly DS450 is a totally new departure. It's not just that it's solid-state, rather than tube; Class D pulse-width modulation technology is the real talking point. Given the reputation of ARC's Class A tube designs, the DS450 has a lot to live up to.

SOUND QUALITY

The best sound is produced via the balanced inputs. To utilise these you'll need a preamp with balanced outputs. Audio Research's LS26 offers this option. With balanced you can look forward to a more spacious sound, with increased dynamics. So, investing in a set of XLR balanced cables is mandatory.

Physically, this power amplifier is almost totally silent: there's no transformer buzz and – obviously – no noise from cooling fans. The amp is quiet electrically, so those with ultra-efficient speakers should hear no residual hiss or hum – even with an ear to the drive units.

The DS450 replaced a Musical Fidelity kW-750 power amp driving Impulse H1 loudspeakers. Our preamp was a Musical Fidelity Primo (pure Class A tube) with a Musical Fidelity AMS tube CD player. The kW-750 is a powerful (750 watt) Class A/B bridged design with unbalanced inputs.

The DS450 delivers a clear, clean, open sound with tight, firm bass and crisp definition. Used with unbalanced cables (the MF does not offer balanced) the amp initially sounds very slightly 'smaller' in scale, compared with the kW-750, even after volume levels are increased.

However, after replacing the MF Primo with an Audio Research LS26 preamp (£5,499) and using balanced interconnect cables, the DS450 sounds bigger and easily

"Those with an open mind will find much that pleases the ear"

matches the big MF for scale and dynamics. Sonically, the LS26 and DS450 seem to go very well together – a very symbiotic partnership.

Although the LS26 is a hybrid tube/transistor design, it has a classic tube sound – open, rich, full, and very holographic, with excellent detail and dynamics. Paradoxically, the all-tube Primo produces a sharper more lucid sound – crisp, tactile and open – and to its credit the DS450 mirrors this accurately.

Partnered by the LS26, the DS450 sounds fuller, smoother, and surprisingly tube-like. The balanced interconnects definitely create a bigger/deeper soundstage, enhancing size, scale and dynamics – qualities one associates with Audio Research components. Bass has impressive power and weight.

While some Class A/tube diehards may not take the DS450 seriously because of its Class D output stage, those with an open mind will find much that pleases the ear. If you always fancied Audio Research, but were put off by things like size, weight, heat, and price, the DS450 is the answer to a prayer.

Jimmy **Hughes**





Dan D'Agostino

Momentum

How can such a substantial amplifier produce so much musical beauty?

an D'Agostino is the man who founded Krell, the man who arguably put high-power amplifiers on the high end map. Not so long ago however he ended up being kicked out of his own company as a result of a takeover that did not work out in his favour. Not dispirited he went back to the drawing board to produce a new amplifier using tried and trusted technologies enhanced by the wealth of knowledge he gained through nigh on three decades of amplifier design. The result is the Momentum, a 300 watt monoblock in the most stunning casework that a high power amplifier has ever worn.

By Krell standards, the Momentum is compact. It's just over a foot wide (31.25cm) but it's also extremely dense, weighing a bone-crunching 40.8kg. This is because the case is largely hewn from solid billet aluminium. The absence of visible fixings gives a clue to this, as does the machined nature of the entire surface.

This is combined with copper heatsinking, a material that no one else in the business uses because aluminium is so much cheaper. But, according to D'Agostino, copper has some distinct advantages aside from its appearance. It gives immediate heat transfer for the attached output devices and remains at a stable temperature regardless of the demands being placed on the amplifier. This also has positive effects on the eventual sound, but we'll come to that soon.

The most distinctive feature is the VU meter on the front. This is angled up so that you don't have to bend down to see it and has a defeatable green light and three modes of operation. It looks superb: the styling was inspired by Bugatti dials and Breguet watches.

The display options, via back panel micro switches, offer off, 1x and 10x metering, but you'll need to be driving pretty deaf speakers to alarming levels to get any serious swing out of them even at their most sensitised. They do move at lower levels – and rather seductively, too – but one's attention is soon drawn to what's coming out of the speakers.

In terms of topology, they are based around a classic circuit using through-hole components, that uses individually soldered parts rather than surface-mount devices (SMD). D'Agostino has also avoided the use of microprocessors in the signal chain. One of the trickiest aspects of the design was fitting a big enough transformer into the case. In the end, a two-inch-thick custom toroid with a diameter of nine inches was shoe-horned in. This accounts, in part, for the amp's considerable mass.

Another challenge was to ensure that the copper would not oxidise over time, one of the likely reasons, apart from cost, for its absence in this field. D'Agostino developed a technique of rough-cutting 99.99% OFC copper and then heating it to draw out the remaining oxygen prior to the final machining and clear-cut sealing. The result looks – and sounds – stunning.

SOUND QUALITY

These amps are in another league to most of the power amps we've encountered over the years. They not only have truly veil-removing transparency but they time beautifully, showing you things in your favourite records

that have never even been hinted at before. This is most apparent in terms of image depth: they open up the soundstage to the extent that each instrument and voice in the mix has more space to work in; more space to show off its timbre and the nature of the playing.

Stereo is a remarkable thing when its reproduced with this degree of accuracy and musical fluidity. The way that the Momentum brings micro dynamics into the mix is positively valve-like – albeit in the context of a wider bandwidth. There's also considerably more control than can be achieved with any glass-powered device. The fact that this amp is biased to Class A operation must have something to do with

"A low distortion amp that lets you connect with music on another level altogether"

this, but it's also the reason why this amp is so illuminating even at low levels. You get the full dynamic envelope even at sensible levels. This makes records that have plenty of fine detail even more fascinating.

Keith Jarrett's solo playing is always good, but here it takes on another dimension, becoming more intimate and bridging the gap between recording and live event. Sounds unlikely, we know, but this is a very revealing, exceedingly low distortion amplifier that lets you connect with the music at a whole other level.

It's very rare to find an amp with this sort of power on tap that also has delicacy. Its ability to give every instrument and voice in a composition the breadth to do its stuff means that musical perspectives are far more coherent. If the words are the key part of the piece, they are clear and their inner meaning more apparent; the same goes for the mood and scale of a piece. It's 3D without glasses, especially if you close your eyes, and makes music you know and love all the more vivid and meaningful.

This may be a very expensive amplifier but it is also a work of art in build and sound quality. You can't often say that about an audio component.

JasonKennedy







MidlandAudioxchange has earned one of the highest reputations for supplying some of the worlds finest audio equipment. With over 25 years of experience, our portfolio represents what is 'state of the art' in hi-end audio. Add to that, a wealth of knowledge and purpose built facilities set in the leafy village of Belbroughton, makes for a perfect backdrop so you can carefully build a music system, tallored around your specific needs.

Audio Research Martin Logan Wilson Krell

MidlandAudioxchange Ltd. The Old Chapel, Forge Lane, Belbroughton, DY9 9TD sales@midlandaudiox-change.co.uk T. 01562 731100 F. 01562 730228

Unison Research

S6

Offers audiophiles pure Class A operation and a honey-rich glow

£2,990 UKD 01753 652669 www.unionresearch.com

lthough solid-state amplifiers offer many practical benefits – smaller size for a given power output, cooler running, higher maximum power output and potentially lower noise – tube amplifiers promise a certain extra 'something' that many audiophiles seem to find irresistible.

But is it all imagination and hype? While tube amps might seem to hark back to the golden era of high-fidelity, do they really offer any tangible benefits over a good transistor design? With its pure Class A output stage, the Unison Research S6 has all the right credentials. It undoubtedly talks the talk, but does it walk the walk?

Like most modern amplifiers, the S6 keeps things simple. It offers five unbalanced line inputs, a set of tape outputs and a single set of loudspeaker outputs. There's no built-in phono stage and no socket for headphones. The volume and input selector knobs have a nice solid feel and the amplifier comes with a handsome wood-clad remote control that looks like a late '80s mobile phone.

Bear in mind it's actual output is 'only' around 30-35 watts and obviously, much depends on things like room size and the volume levels you like to listen at, but ideally it needs reasonably sensitive speakers to avoid running out of steam during loud climaxes.

Six EL 34 output tubes are used (three per channel) along with a pair of ECC 82s. Each output tube features useradjustable bias and there's a moving-coil meter to help you set the correct value. If you remove the output tubes and mix them up, you'll need to check and reset bias again. It's very easy to do this and once set, you shouldn't have to adjust bias again – though it's worth checking every now and again, just to make sure things haven't drifted.

Being pure Class A, the amplifier runs pretty hot. Naturally, the six EL 34s put out quite a bit of heat, but, being as they're not enclosed by casework, they ventilate naturally.

The S6 is solidly made, being built on a steel chassis and sporting a 2mm-thick alloy front panel with wooden inserts.

SOUND QUALITY

The S6 produces a very rich, smooth alluring sort of sound that we found immediately likeable. It delivers a big, weighty sort of presentation that's full-bodied and solid. There's something 'right' about the combination of incisive clarity and rich pungent depth it offers. On naturally miked recordings of acoustic music (classical, jazz), it recreates vocal and instrumental timbres in a manner that's wholly believable and 'real'-sounding.

For decades now, audiophiles have debated whether or not valves sound as 'accurate' as transistors. But, how do you judge accuracy? Unless present when the recording was being made, it's hard to say with authority what is or isn't accurate. What you can say with greater certainty is whether or not something sounds authentic. Judged in these terms, the S6 delivers results that are very convincing and real-sounding.

As mentioned earlier, at just 35 watts, it's not massively powerful. But, it definitely punches well above its weight and

(in the nicest sense) cons you into believing it has all the power you could ever need – and maybe even a bit to spare. Leastways it does when partnered with reasonably sensitive loudspeakers – say, those over 93dB/W. However, this is an illusion – if pushed too hard, the sound loses its dynamic clarity and transparency.

While the S6's tonal balance has a honey-rich glow and warmth, the sound is not 'soft' or lacking in detail. Indeed, it's often remarkably tactile and incisive, with crisp dynamics and 3D stereo imaging. At the same time, bass and treble extremes remain beautifully balanced and integrated, so that the higher frequencies never 'lead' the midrange and bass. The bottom end is clean and firm – maybe not quite as deep and powerful as certain direct-coupled transistor designs, but solid and weighty when it counts and free from smearing and boominess.

For such a hot-running amplifier, the S6 sounds pretty good from a cold standing-start. It does become a little freer and

"If you're new to valves, this superb amp is the perfect introduction"

more mellifluous after an hour or so, but it's very listenable from the off (our review sample had seen some action at a couple of hi-fi shows and was more or less fully run-in).

During those all-important few minutes when we first got the amp up and running, we had an immediate 'I like it' moment – being smitten with its combination of smooth, lush warmth and crisp incisive clarity. It definitely delivers that airy, three-dimensional quality Class A amps are famous for.

If you're new to valves and wonder what all the fuss is about, Unison's Research's S6 would be the perfect introduction. It sounds absolutely gorgeous, delivering that sweet glowing richness that tubes are famous for, without loss of bite or immediacy. Indeed, it's the combination of silky smoothness and crisp immediacy that is so alluring.

Jimmy**Hughes**





Trafomatic

Experience Two

An exercise in simplicity from a lesser known brand, tweaked for the UK market

any of the brands that feature in *The Collection* are almost unknown to the wider public, thanks to their relative specialisation and exclusivity. Trafomatic has taken this one stage further and, at present, is not hugely well known within audio circles, let alone the wider world.

The Serbian company started life as a producer of output transformers, devices as vital in the construction of good valve amplifiers as the valves themselves. One of the best ways of demonstrating your wares is to place them into a demonstration product and, as a result, the company began building complete amplifiers that made use of their transformers. This has since blossomed into a full range.

The Experience Two is simplicity made flesh. This is a single-ended triode design built around a pair of 300B valves with 6SN7 and 5U4G valves in preamp and rectification duties. The all-important output transformers are clothed in circular housings towards the rear of the chassis. These allow output via a four- and an eight-ohm tap to a pair of suitable speakers. Suitable is the right word here: with 8 watts on tap, the Experience Two will need a pair of speakers with reasonable sensitivity to function to its full potential.

This valve amp is brought into the UK via Definitive Audio, long standing valve aficionados and makers of the truly extraordinary Living Voice Vox Olympian loudspeakers that graced *The Collection 2009*. In keeping with the Definitive ethos, you can buy an Experience Two as designed by Trafomatic for £2,975 or you can let Definitive work a little of its magic on it. For £3,675, the 'tweaked' Experience Two seen here mounts upgraded valves and considerably improved film capacitors.

Aesthetically, the Trafomatic is charmingly uncluttered. The wooden sided chassis is metal topped and the valves are arranged symmetrically across the top. Two small knobs on the front panel control input selection and volume (the latter with remote assistance) and the power switch is hidden around the back for the sake of elegance. The build is absolutely superb and the overriding impression is that the people that built the Trafomatic know exactly what they are doing and care deeply about doing it right.

Given the uncomplicated nature of the circuit, the ubiquity of the triode being employed and the high quality of the components involved, it might not be unreasonable to ask what could possibly cause the Trafomatic to sound anything other than typically charming in the classic 300B style. The best retort is that cooking a good-quality fillet steak properly ought not to be a difficult business either and yet many people still ruin it. With ten minutes of warming up completed, the Experience Two leaves you in no doubt that it is perfectly prepared.

SOUND QUALITY

The Trafomatic is superbly open and revealing in a way that single ended designs excel at. Voices and instruments grab and hold attention – not through being overwrought and dominating but simply because they sound effortlessly natural. This tonal accuracy seems unfazed by even relatively complex pieces. Provided that you have chosen speakers

with any nod to sensitivity, the Trafomatic will reproduce even relatively large groups of musicians playing at substantial levels and capture both the flavour of the entire performance and a wealth of individual detail.

There is a sense of space and life to performances that is so utterly compelling it is hard to stop listening. Talk of a sense of 'valve magic' is something of a cliché but the Trafomatic genuinely brings a sense of immediacy and presence to recordings that are beyond even considerably more expensive solid-state models. Of course Trafomatic would argue that the magic here has more to do with the quality of the components and the care and attention to detail employed in using them.

Where the care and attention that has been lavished on those bespoke output transformers really comes into its own is in the

"A confident performer that does justice to anything thrown at it"

bass performance. Historically, the 300B valve has not been seen as an especially strong performer in this regard, but the Experience Two has both an assured sense of timing and a surprising punch to low notes. There is a definition to the bass that further helps the incredibly natural sense of detail present in the upper registers. What can often be a little monotonal with some single ended designs is a detailed and nuanced reproduction. The Experience Two has timing and fleetness of foot that is the result of the attention to detail that has gone into the construction.

Above all, this is a remarkably easy product to live with long term. It sounds more than acceptable from cold and warms up quickly. It's almost totally silent, even with the volume levels set relatively high and the remote control adds a touch of civility that only helps its appeal. With a sensible set of loudspeakers, this is no one trick pony for those with more gentle musical tastes.

This is a confident and assured performer that will do justice to almost anything thrown at it, looking fabulous whilst it does so. Trafomatic might not be a famous name yet, but if the Experience Two is a statement of intent, expect that to change, sharpish.

EdSelley



AudioVenue

bespoke audio visual consultants







The finest products Absolutely





www.audiovenue.com

\$ 27 Bond Street, Ealing, London W5 5AS - T 020 8567 8703 - E w5@audiovenue.com

\$ 36 Queen Street, Maidenhead, Berkshire SL6 1HZ = T 01628 633 995 - E info@audiovenue.com

AUDIO REPUBLIC

IS PROUD TO PRESENT

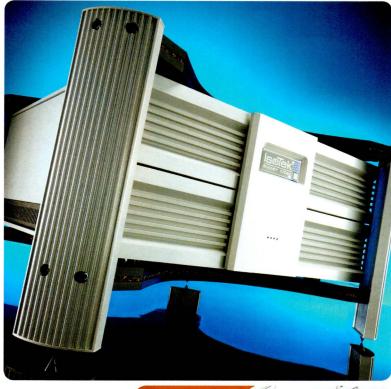


"MUSIC AS IT SHOULD BE"

The Audio Republic provides high quality, excellent value audio systems for the discerning enthusiast. All of the products we carry have been carefully selected and will be offered for audition with the aim of maximising the synergy between your newly selected and existing system components. We pride ourselves in providing a complete service. Please call us on 01132 177294 or email sales@ audio-republic.co.uk; we will almost certainly be able to help.











solutions



- 102 IsoTek Super Titan
- 105 Cyrus Stream XP
- 106 Lyra Kleos
- $109 \quad \text{Naim NDX}$
- 110 Leema Antila IIS Eco, Agena & Tucana II
- 113 Classé CP-800
- $114 \quad \text{Furutech Reference-Series III-NI}$
- 117 Isol-8 Substation LC/HC



Solek Super Titan

The original Titan seemed to be as good as it got - then along came Super Titan

wesome is a somewhat overworked adjective when it comes to hi-fi. It's routinely applied to products that (while impressive) do not fully deserve such a description. But with IsoTek's Super Titan, awesome is for once fully justified. Its massive size, 'battleship' build quality and amazing performance deserve nothing less.

Looking like a big power amp, IsoTek's Super Titan stands about 30cm tall and measures around 50cm square. It weighs an impressive 30kg and has four power outlets using silverplated 32-amp Neutrik connectors. It's capable of delivering 9,200 watts of continuous power. Wow!

Transient power delivery is around 35,500 watts, with a constant current delivery of 32 amps. Basically, the Super Titan offers a doubling over the company's highly regarded Titan model; twice the power, twice as much filtering and double the number of power outlets. If that's not truly awesome, what is?

There's no doubt that mains quality is a serious limiting factor when it comes to sound quality. Like contaminated petrol in a car, mains noise and distortion has an adverse effect on performance, meaning your equipment operates below its full potential. The result is poorer sound quality. The solution? A mains purification device that deals effectively with noise issues without restricting current delivery.

Super Titan came into existence because there was nothing being made to partner really big high-current power amplifiers. So, first and foremost, this mains conditioner was designed and built to address this specific need. We used our review sample with a system that included a Musical Fidelity kW750 power amp. This gives a meaty 750 watt output, with more than double this into lower impedances. But, while the kW750 is a large and powerful amplifier, the Super Titan is intended for much bigger fare than this. With its massive reserves, it's even suitable for some of the huge American behemoths.

Now, this might imply Super Titan is a niche product, aimed only at those with big powerful systems and wallets to match. But it's also usable with smaller set-ups. Having such vast current capability means there's almost no limiting effect on available power – a fault that can and does afflict smaller power conditioners.

Having vast headroom means superb transient detail and no restriction of dynamics. While aiming to provide clean, pure mains, IsoTek is committed to designing units that do not act as a limiter in terms of current delivery. Super Titan is the ultimate expression of this approach to design.

But, does one really need a product like this? Is it necessary to go to such extremes? Of course, if you're a rich audiophile with a big system and money to burn, then investing in something like Super Titan won't be an issue. But what about those of us with smaller systems? Do we need one?

SOUND QUALITY

Annoyingly, the answer turns out to be a resounding 'yes'. Certainly, if your mains quality is badly contaminated with noise and distortion, and you have additional items like computers running off the supply, the improvement in clarity

and detail delivered by a device like this will be bigger than you'd ever imagine.

IsoTek's better mains purification devices, like Super Titan, deal with both differential and common-mode noise, along with RFI and EMI. Each mains outlet is isolated, which prevents cross-contamination. This means that self-noise generated by (say) a large power amp will not affect your preamp or CD player. Subjectively, this means you'll hear a cleaner, more solidly focussed sound that has greater clarity and separation. Depending on how dirty your mains supply is, the music will sound smoother and cleaner, yet crisper and more immediate at the same time. The sound will be noticeably more refined and effortless.

We'd say Super Titan will improve the sound of any hi-fi system it's used with. It will allow you to hear exactly how your equipment is performing. Moreover, the improved clarity and separation will allow you to fine-tune your hi-fi system as never before.

"Your music will sound smoother, cleaner and much more immediate"

You'll find that certain 'difficult' or disappointing recordings suddenly sound a whole lot better – in some cases, the improvement will be so great, you'll wonder how and why they could ever have sounded so bad. Lastly, your system will sound consistently good, regardless of when you listen.

Although Super Titan takes up quite a bit of floor space, it's otherwise undemanding. It doesn't get warm during normal use and it's whisper-quiet. Even with an ear close-by, there's no hum or buzz to be heard. So you can place it near to where you sit, without having to worry about mechanical noise or heat dissipation.

Our home mains supply is actually quite clean and we already use a high quality PS Audio Premiere mains conditioner. Even so, Super Titan resulted in an audible improvement. Be warned – don't mess with Super Titan unless you have the cash!

Jimmy**Hughes**



Reference-grade audio cables. UK-designed & built. Available worldwide.



Analogue • Power • MP3 • Speaker • Digital • Video • USB



DETAIL. DYNAMICS. DYNAMIQUE...

Review, Issue 80, Alan Sircom

"Every cable brought out deep and powerful bass, with a broadly neutral midrange, a silken sheen to the upper mids and fine soundstaging... also very well-extended... as you might expect, a dynamic sound too."

"As a newcomer, this is a brilliant rollout of quality products from the get-go. There are brands that have been making cables for years that don't have this kind of consistency and neutral midrange. Dynamique roques!"

Review, June 2011, Richard Black

"Near faultlessly neutral in the midband...precise and stable images with very good depth definition... we were delighted to hear excellent dynamics on offer; swinging from loud to soft effortlessly without compression or exaggeration."

"They are both rather characterless; that is, they don't impose themselves on the music. Unless you are of the mindset that likes to regard cables as tuning devices, that's very much a point in their favour; neutrality being a hi-fi Holy Grail".

Web: www.dynamiqueaudio.com, Email: info@dynamiqueaudio.com, Tel: +44 (o) 7786 310 910.

audio physic

25 years of exceptional speakers Four very special new models

No loss of fine detail Don't buy anything until you've heard them!





C-tech audio / tel:01903 885 008 / email:info@c-techaudio.co.uk / web:www.c-techaudio.co.uk



After 25 years in hi-fi, Cyrus embraces the potential of streaming-compatible products

£2,000 Cyrus Audio 01480 435577 www.cyrusaudio.com

treaming is the bandwagon to be on in 2011. Any electronics manufacturer worth its salt has realised as much and many are already fighting for a slice of what is considered to be the future of audio.

Cyrus has jumped in with three new streaming-compatible products that compete head-on with the leaders in the field. The Streamline is the integrated solution with onboard amplification, the Stream X strips things right back to pure streaming functionality, while the Stream XP – as featured here – combines that with a high-quality preamp and DAC.

All three products are built around the Stream X core, which can stream wired or wirelessly, has USB and digital inputs, offers TuneIn net radio and is designed to be driven with the rather clever Cyrus n-remote. They will stream most of the worthwhile music formats, the only notable exception being Apple Lossless, which could be an issue for iTunes enthusiasts. iPod users, however, are catered for with a digital USB input. The same input will also stream from a USB drive and the maximum bit rate for streamed inputs is 24-bit/96kHz.

To this roster, the Stream XP adds twin Burr-Brown DACs, a preamplifier with fixed and variable outputs on RCA phonos and a headphone output on a mini-jack socket. It's also the only model in the range that will accept the worthwhile Cyrus PSX-R power supply upgrade.

The key to all three units is the incredible n-remote. This not only drives any other component in a Cyrus system (and third-party components, to boot, as it's a learning device), but has two-way comms, so it can display all the pertinent information about the music in your 'library'. The value equation is greatly enhanced by the n-remote. Look at the competition in this sector and you won't find a handset that comes near it in terms of breadth of application and ease of access to your music collection.

The company's preferred suggestion for music storage is a wired NAS drive, but rather than simply connecting the drive to your router and then wiring that to the Stream XP, Cyrus encourages the use of a switch in between.

As well as streaming stored music, the device can also bring you any station or podcast on the TuneIn net radio service. This offers 30,000 stations from around the world that you can save in presets using the n-remote. Usefully, chosen stations can be synced across multiple devices, so that you can find them on your smart phone as well.

The total absence of analogue inputs on this product is unusual and rather undermines the unit's potential for vinyl users, for instance, but as it's a totally digital product up until the output stage, adding them would have increased cost.

This Stream XP is built as per all the company's product; in a die-cast case that, while not the shiniest in the land is, for audio purposes, extremely well thought-out. It provides high resistance to vibration and more than adequate heat-sinking on a compact half-width footprint and, as Cyrus has pointed out in the past, because of the initial outlay die-cast chassis are pretty rare in this market.

A product like the Stream XP is as much about ease of set up and use, as it is about sound quality and Cyrus appreciates

this. The company provides a quick start-up guide for setting up the NAS drive with the player and pairing the n-remote. Both procedures are straightforward and we had the XP up and running in five minutes (wiring up the NAS drive and switch had been done beforehand).

It's when you come to search for the albums and tracks on the drive that issues can crop up; the most likely one is that files ripped as WAV and AIFF do not maintain their metadata. Cyrus recommends ripping everything as uncompressed FLAC, the format that most hi-res downloads come in as well.

SOUND QUALITY

The sound quality produced is impressive for a streamer. It's not in the front league, but there are few streamer/DAC/ preamps in this price range for comparison and we found the results very good indeed. The bass is not the most weighty, but is never short on agility; sinuous bass guitar-playing is very

"3,000 stations from around the world can be saved in presets"

easy to enjoy as are great voices, thanks to a little added richness which helps to flesh things out. It's not the most transparent midband in the business but voices do work well, revealing plenty of ambience and emotional intent. If you are after a hard-hitting sound, then there are more expensive alternatives, but those who want to relax with their music will find much to enjoy here.

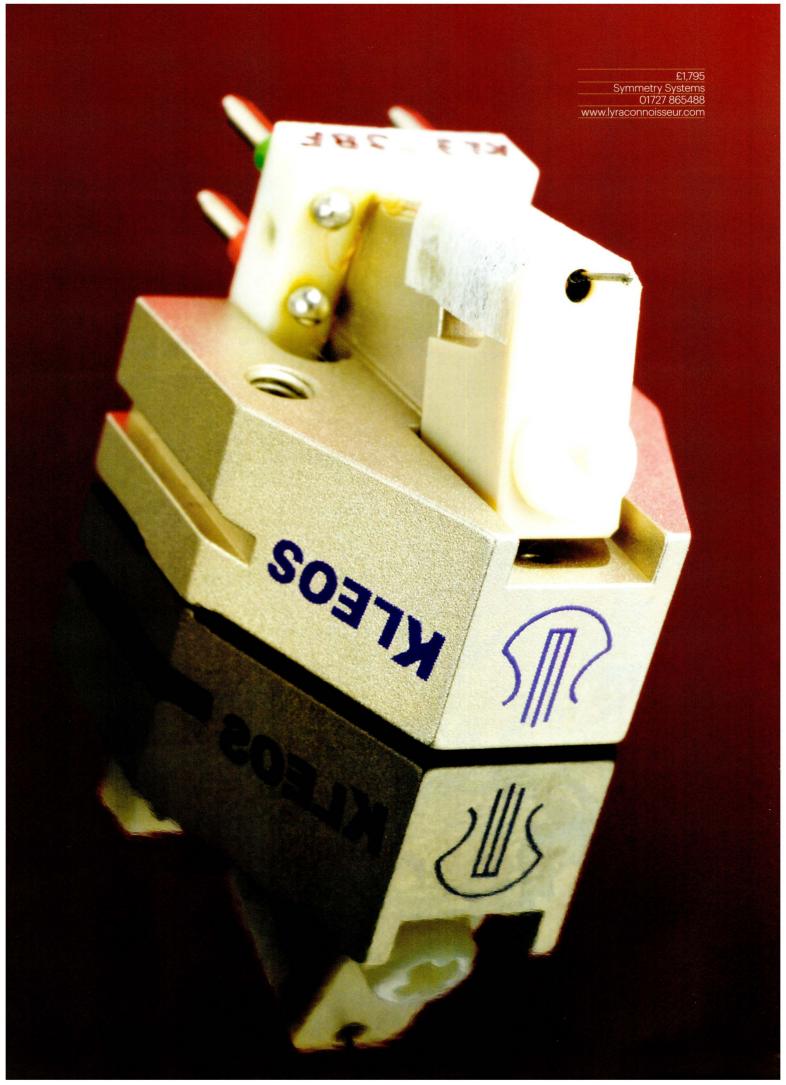
As a digital preamp using an S/PDIF input, the character is a little more open and clear-cut (than streaming), but not dramatically so. We recalled that Cyrus likes DNM single-core cables, so tried an interconnect with the XP. This tilts the balance upward and gives a bit more bite to leading edges, which helps with dynamics.

The Stream XP is a remarkably flexible and capable piece of kit that's allied to a very impressive remote handset. Not having to point the thing in the right direction is a luxury in itself! As an overall streaming package, the Cyrus approach is commendably straightforward to set up and use.

The standard of sound quality is high and, while not quite up with pricier rivals, there is no alternative that offers so many features and this puts it in a class of its own.

Jason**Kennedy**







Handmade in Japan, the Kleos brings a new angle to moving coil design

yra has an enviable reputation in the analogue audio world. Not only does it make some of the finest moving coils at its Tokyo facility but, as its URL suggests, it is also behind the highly regarded Connoisseur phono stage. The company is unusual in that its headed up by a Norwegian Stig Bjorge, has an American designer in Jonathan Carr and a Japanese master craftsman by the name of Yoshinori Mishima. An unlikely triumvirate, perhaps, but the success of its products suggests that a multicultural approach is very good for business.

Lyra currently makes seven moving coil cartridges, three of which are mono models. It's a surprising figure, revealing that mono is far from an obsolete format. There is an eighth MC in the range, the Olympos, but you can't merely order one – you need to have an example of the Lyra Parnassus to use as a donor because certain parts are no longer available. That model naturally sits at the top of the Lyra tree. On the other hand, the Kleos is the second of the four stereo models and incorporates what the company calls new angle technology.

New angle is a system of optimising the position of the (moving) coils while the cartridge is tracking the record. This might seem the only rational way to design a cartridge, but coils are often in the right position when the stylus is in the air, but they move slightly out of position when tracking force pushes the stylus up and thus coils down. Lyra is not the only company to do this – Rega for one takes a similar approach in its Apheta MC – but it's surprising that any cartridge maker wouldn't. The Kleos' chassis (or body) is machined from aircraft-grade aluminium alloy and is a pre-stressed construction with the minimum of parallel surfaces in order to minimise resonance in the body.

It has a Lyra-designed line contact stylus which is fitted to a boron cantilever manufactured by Ogura, making it the least expensive model in the range to feature this part. This particular brand of cantilever is not exclusive to Lyra, you can find it on Transfiguration and the top Sumiko designs, but it does seem to be exclusive to high-end cartridges. Its platinum-plated output pins are claimed to help achieve an exceptionally quiet noise floor.

The Kleos comes with unusually comprehensive installation and set up instructions which detail not just the most suitable impedance loading, as is usually the case, but the most desirable load according to the total capacitance between cartridge and phono stage. This takes into account the tonearm cable which has a significant influence on the desirable loading. The instructions offer a suitable impedance range for 12 total capacitance ranges – in essence, the greater this figure is, the lower the input impedance needs to be. But, it's never simple when you start getting close to these things: Lyra points out that input loading is not so much about electrical matching, but more about taming RF energy which can upset some phono stages. The company points out that there's no substitute for analysing the options you have with your ears.

SOUND QUALITY

We found that the Kleos's character didn't change appreciably between a range of input impedances on the Burmester Phono Preamp 100 (p80) but that's because it's not the sort of stage that is easily upset. It required a medium level of gain (43dB) thanks to a healthy half millivolt output and delivered a stonking result with the minimum of set up fuss. At least it would have been the minimum had we quizzed the distributor about the best way to accommodate this cartridge first.

The cartridge can really sing, producing wide, open sound-staging and a deep juicy bottom end where the vinyl can provide it. Our Rickie Lee Jones album *Flying Cowboys* sounded luxurious thanks to the top-notch musicians and lavish production.

The Kleos manages to combine precision with depth of tone and clean, clear leading edges and good pace as a result. This became abundantly clear with the MartinLogan Theos electrostatics (p60) in the system; the cartridge revealing

"A clean and expansive MC that digs deep into the record groove to pull out a wealth of detail"

the effortless flow of the music in the context of rich detail from all the instruments and voices in the mix.

This is not the most romantic of cartridges: there's no danger of mistaking it for a Koetsu, for instance. Rather it's a very clean, quiet and expansive MC that digs deep in the groove to pull out detail. It can also conjure up widescreen imaging from a decent recording, revealing the depth and character of the acoustic around instruments and letting you know just what each musician is contributing to the overall result.

If you want to hear the backing as well as the lead and yet still feel the irresistible pulse of the groove, it's the tool for the job. This much became abundantly clear when Al Green's *Let's Stay Together* was put on and sparked a spontaneous eruption of grooving in the listening room. Be careful what you spin – it's a slippery slope.



"it has a sweetness and detail projection that many rivals fail to match"

- GX200 - Hi-Fi Choice September 2011

Transcendence

Monitor Audio's fabulous GX series sets the pace of technological and aesthetic advance in home entertainment speaker design. Hand-built and fine-tuned with technologies from our flagship Platinum range, GX establishes a new standard of excellence for its class.

monitoraudio.com | 0800 0352 032





A high-performance streamer that's certain to pull new enthusiasts into Naim's orbit

Naim Audio 01722 426600 www.naimaudio.com

he number of digital streaming devices available to the hi-fi enthusiast continues to grow on an almost daily basis. Each player seems to have a distinct musical character and its own particular selection of features

Take the Naim NDX, for example. This truly versatile machine provides network music replay, internet radio, digital iPod/iPhone connectivity and USB playback straight out of the box. Its integral DAC is available to external sources - CD players, set-top boxes and the like - through three S/PDIF inputs. There is also an optional module for any buyer who wants to include FM/DAB radio.

The player follows Naim tradition in being performanceupgradeable through the addition of an XPS or 555PS power supply, along with the external Naim DAC. You should probably regard adding the DAC as an icing-on-the-cake move. because the integral DAC in the NDX is based on the same technology and its performance does not lag too far behind. It uses the same innovative, SHARC DSP-based buffering with fixed clocks, along with Naim's proprietary 16-times oversampling and low generated noise, digital filtering algorithms. The three S/PDIF inputs - two transformerisolated coaxial and one buffered optical - will all accept signals at up to 24-bit/192kHz resolution.

To stream music from computers and NAS (Network Attached Storage) units, the NDX uses the well-established UPnP (Universal Plug and Play) protocol. Naim has also written its own version of this for its sources, the HDX and UnitiServe, which can also act as UPnP servers. We tested the NDX using these and the more widespread Asset and Twonky servers installed on two NAS drives.

The player will stream WAV, FLAC, AIFF, AAC, Windows Media-formatted content, ALAC (from iPod), Ogg Vorbis and MP3 files from any appropriate UPnP server or USB-connected storage device. The iPod connection is especially noteworthy: it is Apple-authenticated and it bypasses the DAC in the device and feeds a digital signal directly to the NDX and its rather more sophisticated and painstakingly optimised Burr-Brown PCM1791A DAC circuitry. This, for example, uses very similar RAM buffer and master-clock jitter-removal techniques as the 'big' Naim DAC.

Its value for money might seem questionable when compared to streaming devices from other manufacturers and, indeed, Naim's own products such as the UnitiQute, but one has to remember that the NDX is more than just a streamer. Its high-quality DAC can be shared with other devices that can exploit its outstanding performance.

SOUND QUALITY

The NDX is certainly sympathetic and is so right across the board: it seems completely musically agnostic, even to the point of relishing high-quality examples of the country genre; the likes of Willie Nelson, Emmylou Harris and Caitlin Rose.

A major appeal of the NDX is that it manages to combine the traditional Naim temporal fluency, with the cosmetic depth and richness that one normally associates with predominantly

American high-end equipment. We were surprised to find ourselves concentrating on the timbral qualities of instruments and voices while listening. It effortlessly brings out the single-coil pick-up sting of a raw Telecaster guitar, while being equally effusive about the complex harmonic texture of rosin-coated bows on violins and cello in a string quartet and vividly contrasts the differing tonalities of modern and ancient horns in orchestral ensembles.

Despite the straightforwardness with which the NDX reveals all these fine distinctions and nuances, there is never any impression of the sound being at all disjointed or chromiumplated, a problem that befalls much hi-fi equipment in its attempts to convey detail. The NDX manages to sound natural and unforced at all times and this makes it easy to listen to music that could never be described as 'easy listening'.

Its portraval of vocal harmonies is sublime. The voices of Caitlin Rose and backing singer, Rayland Baxter gel magically

"An amazingly plausible and persuasive player with all types of music"

on Shanghai Cigarettes and add a genuine frisson to the song. And that, after all, is what great hi-fi is about: delivering emotional buzzes that make you feel rewarded. The NDX manages that none-too-easy task with alacrity.

In truth, it is vividly revealing of the quality and character of voices, which readily enhances its portrayal of all vocal music. It is a genuinely expressive piece of machinery that not only articulates the words a singer uses, but also communicates the emotions behind them. It is an amazingly plausible and persuasive audio player with all manner of vocal music. It makes listening an experience filled with soul.

The NDX is the latest in a long line of superb Naim Classic kit that retains all that range's traditional communicative musical personality traits augmented by strong leanings toward the cosmetic presentation favoured by the high-end scene. It's an interesting, rather than schizophrenic mix that might well attract new buyers to the Naim fold. It also has a respectable amount of lifestyle appeal thanks to its slick operation with an iPhone/iPad app and its meaningful integration with iPod products.

Ultimately, though, it is the superlative and supremely communicative performance that makes certain it stands out from the crowd.







Leema

Antila IIS Eco, Agena & Tucana II

A trio of Goliath-baiting, feature-rich components from the innovative Brit

e're big fans of Leema. It's a British company run by ex-BBC engineers who clearly have a passion for great sound and innovative electronics. These superbly built and finished units feature bead blasted, anodised aluminium casework with distinctive heatsinking down either flank. In truth, only the amplifier really needs this much cooling capacity but it gives the components an aesthetic coherence and probably keeps casework costs down.

The Antila IIS Eco got its name as a result of the many upgrades its enjoyed in its short life. It got to 'mkII' with new output filters and a revised audio board, then added the 'S' with a metal loading tray (which looks a lot more substantial than the usual plastic variety), new servo and servo interface along with replacement firmware. The latest Eco suffix indicated a major revision and the introduction of Quattro Infinity DACs, a full eco standby mode, new motherboard, firmware and the replacement of a Burr-Brown digital receiver chip with one from Wolfson.

The Tucana II is a dual mono design with three power transformers driving a multi-bipolar output stage which produces just short of 150 watts per channel. It has useful features like a dedicated headphone output, a front panel minijack input and one balanced plus five RCA phono inputs, all of which can be individually adjusted for gain.

The Agena phono stage is part of Leema's Reference series alongside the aforementioned Altair IV and Pyxis preamp. It's a two input, MM/MC stage with variable gain and impedance/ capacitance that can be altered using the front panel display. Each input has two settings so that you can match two cartridges in separate head shells, should that float your boat. More useful, one suspects, is the onboard analogue to digital converter (ADC), and both SPDIF and USB digital outputs so that you can digitise your record collection with some hi-res software. Five levels of input resistance (impedance) are available for MCs alongside eight levels of capacitance; this alongside seven degrees of gain. Unlike the Burmester stage (p80), this cannot be done remotely, but it's a lot easier than flicking dip switches, as is usually the case. Agena also has a rumble filter at 15Hz and a treble filter at 15kHz for taming less refined recordings.

SOUND QUALITY

The Agena is a very fine piece of kit: we got it up and running with a number of turntables and cartridges and consistently enjoyed its powerful and tactile sound. The ability to adjust gain and impedance on the fly – the unit mutes when it makes the change, so there are no nasty noises – is a real boon for set up – so easy in fact that it's worth changing gain for individual albums if they happen to be particularly loud or quiet. As with the other Leema components, sensitivity to dynamics is excellent and this, combined with an innately strong sense of timing, makes vinyl even more of a joy than usual. Leo Kottke's steel guitar strings have a real zing to them but don't obscure

the beautiful fretless bass playing in the background, thanks to the abundance of space in the soundstage. It's not quite as finessed as the big Burmester, but at less than a third of the price, something has to give. In truth it's not a lot, however, especially if you like a solid sound.

The new Antila is a distinctly more refined player than its MkII predecessor, making that unit sound almost flat by comparison but retaining its skill in the musicality department. It has the ability to focus your attention on the key elements of the piece rather than trying to thrill with sound alone, but the sound is by no means shabby. There is more depth to the acoustic and instruments sound more subtle, notes also have clear attack and decay which gives the music a more natural sound.

"More affordable, but no less revealing a high-end system"

The Tucana II impressed us even more than usual by taking the place of significantly more expensive amplification in our system yet managing to sound more powerful. It may not have quite the finesse of serious high-end designs, but when it comes to grip you need to be looking at some pretty burly hardware to do better. We suspect that the power figure that Leema gives is a conservative one, because the Tucana has little difficulty in driving Bowers & Wilkins 802 Diamonds in a very coherent and timely fashion. It's also clean enough for the MartinLogan Theos (reviewed p61) which delivered some of its most physical results with this amp in charge.

This may be one of the more affordable systems in this publication, but it's no less entertaining, revealing and exciting as a result. This is high-end at a sensible price.

Jason**Kennedy**



The Si 3 Range -Beauty Born of Performance

AUDIOVECTOR







Audiovector speakers are available through a knowledgeable dealer network with superlative demonstration facilities:

Acoustica (Chester, Cheshire) - 01244 344227

Analogue Seduction (Peterborough, Cambridgeshire) - 01733 350878

Audio Emotion (Banbeath, Fife) - 01333 425999

PJ Hi-Fi (Guildford, Surrey) - 01483 504801

Sevenoaks Sound & Vision (Holborn branch, London) - 0207 8377540

Tavistock Audio (Tavistock, Devon) - 01822 618940

Audiovector is distributed in the UK by Henley Designs Ltd. Web: www.henleydesigns.co.uk - Tel: 01235 511 166 - Email: sales@henleydesigns.co.uk

Classé Audic CP-800

Deceptively simple-looking, but features abound on this ground-breaking preamp

£4,450 Bowers & Wilkins 01903 221500 www.classeaudio.com

he CP-800 has more features than any dedicated two-channel preamp we have ever encountered. For starters it has digital as well as analogue inputs and, of these, two are USB connections; one in the front panel for your Apple device and another on the back for a computer. Then it has five output channels with which to incorporate a second system or extra power amps and subwoofer(s) and that's only the connections.

Inside the sleek aluminium casework it's stacked with technological firepower, including bass management, so that you can optimise low-frequency performance almost regardless of where speakers are placed and parametric EQ. If that weren't enough it also has something we've not seen on a high-end preamp since the seventies: tone controls. All this with barely a button in sight, thanks to a 16:9 touch screen.

The preamp also has an unusual power supply (PSU). One reason why it costs less than its predecessor is that the PSU is onboard rather than being in a separate box, but that's not the only difference. The CP-800 has a switched-mode PSU that operates at very high frequencies, which its claimed makes it less noisy than traditional linear supplies. It also makes it more efficient (as is usually the case) and this product hits the EU target of sub single-watt power consumption in standby.

The CP-800 is superbly built; Classé knows how to put a product together and how to finish it better than most. Many build heavier, shinier and more bolt-laden products, but few high-end companies are able to execute their products to this standard. It is also replete with inputs, 15 in total including balanced and unbalanced analogue in and outputs, all the usual variations of digital input and the 12-volt trigger outputs beloved of North American manufacturers. There's even an RJ45 Ethernet socket which will allow the preamp to stream content directly when a future software update is made available. Those extra three outputs are unusual on a two-channel preamp, but allow the use of two power amps per channel, plus a single subwoofer, or even up to three subwoofers.

There is the option to configure all the inputs and outputs, so that one could be unity gain and use a connected sub, while the others just use the main two channels. Inputs are nameable and can be assigned a specific amount of gain and/or balance setting. We seriously doubt whether there is another two-channel preamp that is this configurable and flexible, it is clearly a variation on a multichannel processor in this respect.

The iPod user will be also be pleased to see that the CP-800 is happy to work with most versions of the gadget, including Nano, Classic and Touch, not to mention iPhones and iPads.

SOUND QUALITY

A carefully ripped CD sounds better played back from a computer than the original disc played via S/PDIF from a decent CD player. The difference isn't even subtle to be honest, the file produces music that is more revealing and considerably more interesting. A live performance of solo piano is extremely convincing, transporting us to the original

venue, thanks to the stature of the instrument and the scale and nature of the acoustic being so palpably real.

Perhaps the S/PDIF input has one hand tied behind its back for the purpose of making the USB input sound better, but that seems unlikely. Especially when you compare it with the USB input of our reference DAC/preamp (the Resolution Audio Cantata) which sounds almost flat by comparison. Classé has clearly done a fine job with this input and raised the bar for the genre as a whole.

As a preamp with analogue signals, the CP-800 has a hidden secret that must be unlocked for its full potential to become apparent; this is the 'analogue bypass' tick box. Sounds simple, but you need to track it down and tick it for each analogue input, otherwise the DSP gets in the way and undermines performance. Once this had been sorted analogue signals are reproduced in a coherent and well-integrated form, with excellent image depth and width. It also has fine bass extension and articulation. It has a smooth, clean presentation,

"A future-proof preamp that does a stunning job with computer signals"

rather than one that emphasises the midband, in order to give the impression of greater transparency, such as you can find with valve preamps, but neither is it dry nor fine-grained in the style of many solid-state devices.

The Classé doesn't have a phono stage, but can reveal the finesse of a good external one such as the Trilogy 907.

Playing an iPod Touch via the front USB input elicited a pared-down result by the standards of more traditional sources, but a vibrant, clean and crisp one that's devoid of grain. It's in the same league as the better digital docks if not the best in class. We didn't have an iPhone, but if one could outperform a CD transport then this reviewer would eat his hat.

This is an immensely well-featured preamp with the power of a multichannel processor under the lid. It does a stunning job with signals that emanate from a computer, better than we've previously encountered, in truth.

If you are looking for a totally future-proof preamp that can be used to not only make subtle alterations to tonal balance for those great, but poorly recorded albums, but can also assist with room balance on a per channel basis, then the CP-800 is definitely in a field of its own.

Jason**Kennedy**





Furutech

Reference-Series III-NI

Luxury hi-tech audiophile cables from Japan that make a real connection with the music

hen naming the three most important factors to consider when choosing cables, the answer is a simple mantra. Sound Quality, sound quality, and, last but not least, sound quality. Cables allow us to 'fine tune' the sound of our hi-fi set-ups, ensuring we achieve an end result that pleases the ear – a bit like adding seasoning to food to make it taste better.

Or is it? A very different school of thought says a good cable simply acts as a pure neutral conduit – neither adding nor subtracting from the original signal. While this is an admirable concept – textbook 'high fidelity' – it's surprisingly difficult to define. How, for example, can one be totally sure nothing's being added or subtracted?

Furutech's approach to cable design and manufacture is a very high-tech one. Its Reference-Series III-NI cables feature Double-shielded Alpha-OCC Conductors to eliminate radiated noise and Formula GC-303 Antimagnetic EMI-Absorbent Modules around each cable – those 'blocks' near one end.

Beautifully engineered rhodium-plated RCA or XLR connectors are a given. The centre pin of Furutech's RCA plug looks like a stranded cable, rather than a solid piece – and is described by Furutech as 'a high-contact work of engineering art composed of nonmagnetic rhodium-plated phosphor bronze with Teflon dielectric'.

If nothing else, this should ensure a much better/cleaner contact. The RCA connector itself has a backbone composed of non-magnetic rhodium-plated eutectic-cast brass with a non-magnetic brass outer locking shell. XLR pins are made from luxuriously finished non-magnetic rhodium-plated phosphor-bronze for superior contact.

Shielding is very important, so Furutech Reference cables feature two. Shield 1 has a 0.12 mm Alpha conductor wire braid. Shield 2 features 'special EMI-absorbent Formula GC-303 Modules for superior noise isolation'. The insulation employs air-foamed HDPE to reduce capacitance.

Furutech claims these things result in greater resolution and increased clarity. Dynamics are more powerful, while at the same time there's an 'ultra-quiet soundstage that allows the music to develop more fully without artificial upper-frequency 'presence region' glare'.

Each Alpha Conductor is composed of Fine OCC Wire Strands treated with Furutech's Alpha Cryogenic and Demagnetizing Process. Clearly, the attention to technical detail is very impressive and the sonic results hopefully speak for themselves.

SOUND QUALITY

And the Furutech sound? Impressively clean and very focused, with excellent detail and clarity. The music sounds crisp and fairly lean, tonally – it's not a lush 'romantic' sort of presentation. There's no sense of the sound 'spreading'; the impression is one of focussed concentration and neutrality – nothing added, nothing taken away.

As mentioned, Reference Series cables use an aluminium box containing a ferrite-type material that absorbs RF noise – the grandly named Formula GC-303 Antimagnetic EMI-Absorbent Modules. We reckon this is a key design detail that determines the unusually 'solid' sound produced by these cables.

There's a welcome reduction in high-frequency 'hash', resulting in a sound that's notable for its cleanness. We especially noticed this with the loudspeaker cables. The Furutech cables replaced a set of expensive silver solid-core types and resulted in a clearly audible improvement – we sorely missed these cables when they went back!

Directionality? For optimum sound, Furutech recommends having the aluminium box closest to the source component, but sonically, the 'directionality difference' isn't huge. Given extended use, cables tend to 'burn-in' and settle down so that the sound becomes optimum in the direction that happens to be being used.

Quite apart from their excellent sonic qualities, build quality was the other impressive thing about the Furutech cables covered here. Part of a reviewer's lot is the almost constant need to evaluate new equipment. This involves regular plugging/unplugging of cables, and it causes much wear and tear. Many audiophile cables are thick, heavy, and inflexible.

"Enjoy exceptionally solid build and quite excellent sonic qualities"

Regular swapping of cables leads to strain at key points and may result in fractures. In extreme cases, the cable may go open-circuit and cease to function. But, usually, the result is simply a drop in performance.

In such cases, a cable may be working, yet operating below its proper level. The sound will be slightly impaired without your being aware there's something's wrong. It's only when you replace the damaged cable with one that's working properly that you'll realise something was lacking.

Furutech cables feel like they're built to last and able to stand up to the strain of being plugged/unplugged better than most. In particular, the Reference-Series III-NI speaker cable impressed us with its exceptionally solid build quality – specifically the termination of the spade connectors and the way these join to the main cable.

Jimmy**Hughes**





Let us do the hard work!

- Call free and speak to our London based impartial experts.
- We review over 6,000 deals from the top UK providers to find the right one for you - with our Lowest Price Guarantee.
- Our experts do the hard work, answer your questions and even arrange your installation!

We're proud to be the only service to be accredited by Ofcom for TV, broadband and home phone comparison























Call us free and we'll do the hard work! 0800 466 1053

Monday-Friday 8am-8pm, Saturday 9am-5.30pm, Sunday 10am-5.30pm www.techradarstores.co.uk/digitalsave Or text "DEAL" to 81400 and we'll call you





Substation LC/HC

A noisy mains supply can ruin the sound of your hi-fi, but help is at hand...

£1,899 (LC); £1,999 (HC) Isol-8 020 8856 8856 www.isol-8.co.uk

ooner or later, even the most sensible hi-fi enthusiast starts to wonder what sort of difference having a mains conditioner might make to the sound of their equipment.

Mains electricity is the 'fuel' that powers your system. So, it stands to reason the cleaner the fuel, the better things should sound. But then doesn't the power supply in each individual hi-fi component deal with whatever impurities that might be present in the electricity supply? Well, to a degree – yes. But noise and the presence of even small amounts of DC can create all kinds of problems that prevent your equipment from delivering its full performance.

Isol-8 SubStation conditioners are passive 'plug and play' devices. There are no user-adjustments to fiddle with. Some devices (like Isol-8's PowerStation, for example) allow users to alter the frequency of the AC mains from the UK's 50Hz to a higher value. But this isn't possible with the Isol-8 – it's purely a mains cleaner.

The design aim is to use inductive/capacitive filtering to reduce mains noise, without compromising current delivery. For example, lots of small 3,300uf electrolytic capacitors are used (18 in the LC 'low current' and 34 in the HC 'high current') rather than a single, large capacitor. This reduces ESR (Equivalent Series Resistance) to less than one milli-ohm.

The input has a special choke to reduce common-mode noise and a separate choke is also used in the earth line. There are many different types of noise on the mains and the Isol-8 SubStation attempts to deal with all of them to ensure than the output is pure and free from harmful high-frequency noise, DC components and voltage spikes.

You can specify the type of mains socket your SubStation comes fitted with – choosing from either a standard 13-amp UK-type, or a 15-amp Schuko. Both kinds of socket feature a hinged protective cover that prevents dust from contaminating the pins, as well as keeping out tiny fingers.

The four sockets on the LC version are individually isolated – each has its own separate filtering network. Some hi-fi components produce self-noise which can get on to the mains supply, affecting the performance of other components. Having each socket isolated helps avoid cross-contamination.

The HC's two output sockets, on the other hand, are not individually isolated – they draw power from a common source point. The design of the LC and HC versions are broadly similar, but the latter is intended for situations where much greater current delivery is called for – up to 16 amps, compared to the LC's eight amps.

Each Isol-8 SubStation is housed in a CNC-milled alloy box. Apparently, full-production samples will feature bitumous damping pads to reduce the risk of case-resonance, but our pre-production Isol-8s were not fitted with them.

A high-quality mains cable is included and this connects via a twist and lock Neutrik plug. Given the build quality and high-spec components employed, Isol-8's SubStation conditioners offer very good value. But, 'value' also hinges on how big a difference adding one (or both) makes to the sound of your system.

Plus – and here's where things get really scary – in the future, problems with mains contamination are likely to get worse rather than better. As electrical devices proliferate, our environment will become increasingly noisy and polluted.

SOUND QUALITY

Obviously, the degree of improvement you're likely to hear with devices like these depends greatly on how dirty your mains supply is. Many audiophiles find the sound produced by their hi-fi varies according to the time of day. Things often sound best after midnight when people switch off TVs and computers, for example.

The presence of noise on the mains makes your hi-fi sound slightly muzzy and out of focus. After installing the Isol-8 SubStations, we noticed the music sounds slightly more focused and immediate, with crisper transients and greater depth. The upper treble sounds smoother and cleaner, with less 'edge' and reduced harshness.

"It feels like you can hear your system sound the way it was meant to be"

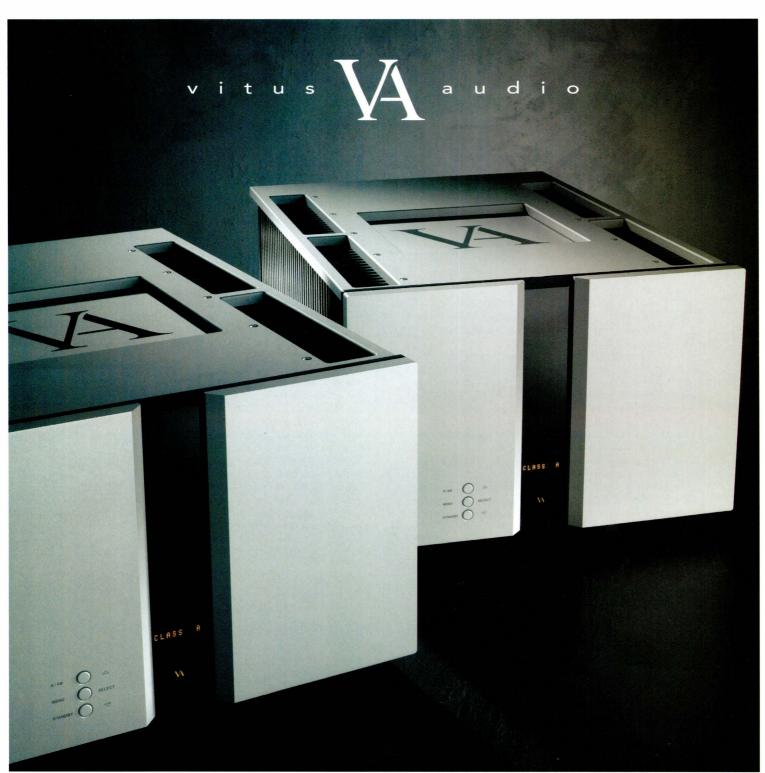
There's an innate 'rightness' about the difference produced. It feels like you're hearing your system sound the way it was meant to be – a thick layer of 'grunge' having been removed. This enables you to play things quieter, with no loss of presence, while seemingly allowing greater dynamic headroom for loud peaks.

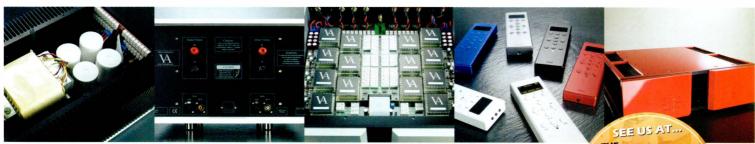
The LC SubStation is very quiet, mechanically – virtually silent – but the HC version produced a 'buzz' with our Musical Fidelity kW750 power amp. Trying the smaller Cayin SP-40M tube power amp (*HFC 343*) in place of the big MF, we found the buzz is greatly reduced. So, the noise level is definitely down to higher current-draw.

While products like the SubStation ideally need to be auditioned in the home, we feel confident that 99 per cent of users will find very worthwhile benefits with either or both

of these devices. Not only should your system sound fresher and more real, you should also find the quality of sound is more consistent on a day-to-day basis. But, be warned: once heard, we're confident that you'll find the Isol-8 difference seriously addictive! Jimmy**Hughes**







www.vitusaudio.com



Vitus Audio is distributed in the UK by Focal

WHITTLEBURY HALL "Never have I had such a sense of palpable presence, of attendance at a musical event."

Roy Gregory, Hifi+

Grande Utopia EM



utopia

electra

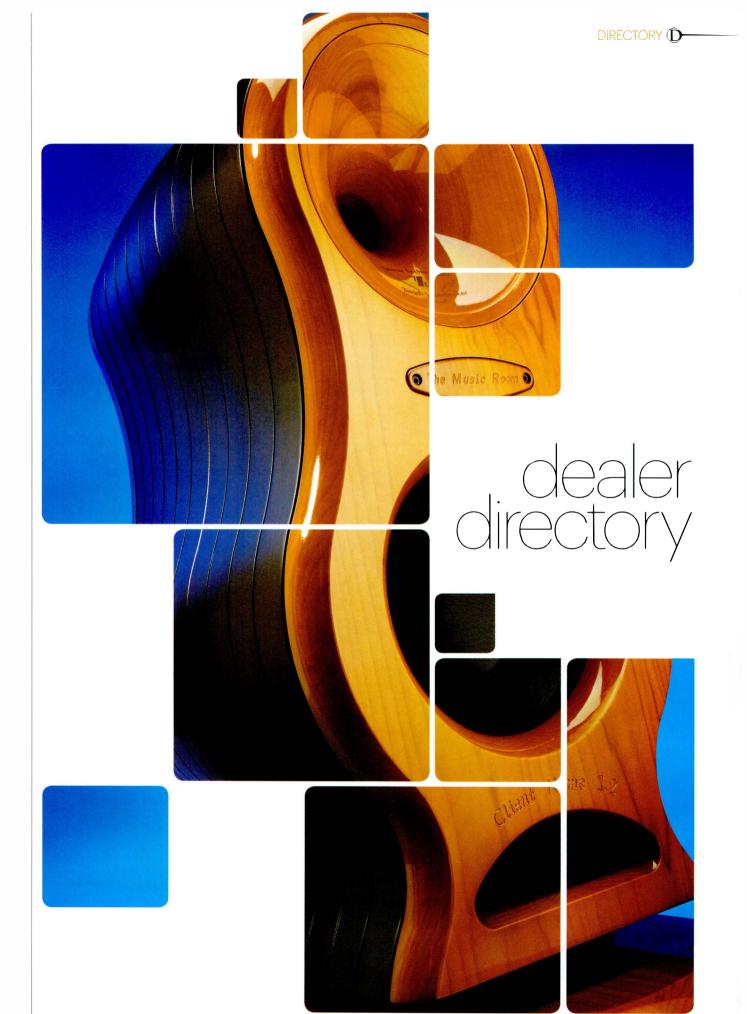
 ${
m ``I'}$ just wish more hifi was like this"

Steve Dickinson, Hifi+

Electra 1028Be



0845 660 2680 www.focal-uk.com info@focal-uk.com



"Hart, We Love Sound!"

The Hart EVO1
Dual Monitor
Modular
Loudspeaker

"Hart has delivered a true high sensitivity speaker without the difficulties inherent with horn systems. No wonder the Quad amp sounded so sweet"

September 8th, 2010 by Jason Kennedy Source: HiFi+

See the full review, gallery and prices at www.hartaudio.com or telephone + 44 (0)1983 612 924 Give 'em a google too!





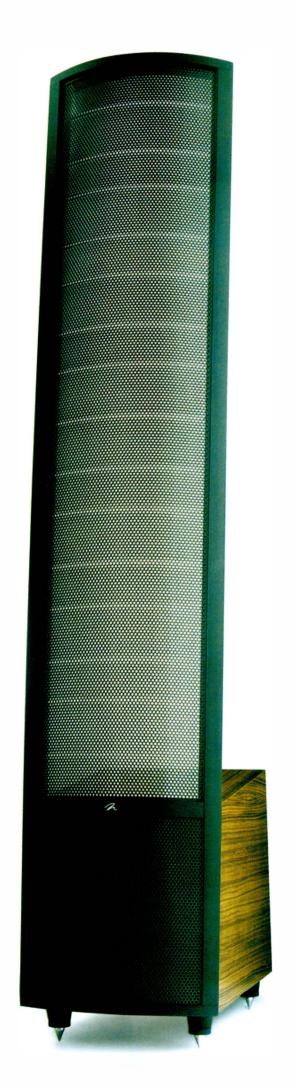
Up North never heard it so good...

Martin Logan Loudspeakers are on permanent demonstration at: HIFISOUND

Castlegate Mill, Quayside, Stockton on Tees, TS18 1BZ, England. t: 01642 267012

w: hifisound.co.uk

e: simon@hifisound.co.uk



Stockists of:

Audioquest Martin Logan Magneplanar

Chord Clearaudio

Audiolab

Anatek Audez'e

Custom Design Dynavector

EAR

Esoteric

Funk

Gamut

Grado

Graham

Koetsu

Krell

Kudos

Lyra

Michell

Monitor Audio

Naim

Nottingham

Onkyo

Ortofon

PS Audio

Quad

Rega

Revolver

Roksan

Graham Slee

SME

Stax

Sugden

Transfiguration

Van den Hul

and much more







UK Distributor for Wadia Products tel. 01708 229 308 email. enquiries@mdc-hifi.co.uk www.mdc-hifi.co.uk

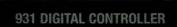
Guildford Audio

tel. 01483 537 577
tel. 07979 515 577
email. sales@guildfordaudio.co.uk
www.guildfordaudio.co.uk











971 CD TRANSPORT

not all things

are created equal...

audio research
copland
dartzeel
devialet
dream vision
koetsu
krell
martin logan
micromega
prima luna
sonus faber
theta digital
transparent audio
wilson audio







<u>audio research</u>



TRANSPARENT

Oxford Audio has been designing & installing bespoke Home Audio & Cinema systems for decades

Established 1988

Since Oxford Audio Consultants was established in 1988, our customers have enabled us to build a reputation as one of the leading UK specialists in high quality 2 channel audio, multi-channel home cinema and multi-room installations.

To provide our customers with optimum results in their home we are constantly striving to find and stock the best equipment in established and new technologies ranging from turntables and valve amplifiers to CD players, digital streamers, internet-connected multi-room systems and state-of-the-art home cinemas.

01865 **790** 879

E - M A I L info@oxfordaudio.co.uk W E B S I T E

www.oxfordaudio.co.uk

ADDRESS

Cantay House Park End Street Oxford, OX1 1JD

Follow us on:





BUSINESS HOURS

10am to 6pm Mon-Fri 10am to 5pm Sat Closed Sunday & Bank Holidays

FINANCE

Ask about our Buy Now Pay Later 0% Finance with No Deposit

















3 Demo rooms

Experience a diverse range of products in one of our 3 demonstration lounges, one for audio, one dual purpose and one for home cinema. In our Home Cinema lounge you will be able to experience some of the best projector, plasma and LCD based systems. In our Audio lounge listen to wireless, internet & digital streamed music as well as the cream of CD and vinyl replay. We provide solutions that are both imaginative and of the highest quality, backed up by long-term customer care and support.

Absolute choice

We can only build the best solutions for our customers using the best brands, which is why we are proud to represent products from Absolute Sounds.

Whether you are looking for an individual product or a complete reference system, there is no finer choice. Our installations range from the invisible to the dramatic, from the modest to the magnificent and no matter what you choose, you can be sure of something that is beautiful for both the eye and the ear!

The world's greatest gadget magazine, wherever and whenever you want.



Available in print, online, on mobile and iPad



www.t3.com

The latest issue of T3 magazine is available now at iTunes, Zinio or at all good newsagents.













FREE Audiobook for every reader*



Experience Audible yourself by starting your 14-Day FREE trial today!

Go to **audible.co.uk/tech** to sign up for a 14-Day free trial and get a **FREE digital audiobook** from a selection of over 50,000 titles.



Get your first 14 days of our one book a month plan for free, and we'll give you a free audiobook of your choice. You will not be charged during your free trial period and even if you decide to cancel you can still keep your free download. After your 14 day trial, your membership will renew each month for just \$7.99 per month so you can continue to receive one audiobook credit per month plus members-only discounts on all audio purchases. No commitment, you can cancel your membership at anytime. Any unused audiobook credits will be lost at cancellation. 'One free trial per person - sorry, if you've had a free trial from Audible before, you are not eligible for this offer. However, follow the link here to find out about special discounted membership offers on-site.



Posh and bucks

Industry expert **Simon Pope** says it's the glitterati

who hold the future of hi-fi

in their hands

few years ago, channel surfing after a few glasses of my regular tipple, the familiar face of former Formula One driver Eddie Irvine flickered into view. The programme title in which he was featured is long-forgotten but its premise was simple – celebrities show an enthusiastic film crew around their expensive and expansive homes to make mere mortals envious.

The tour of playboy Eddie's Irish pad – he casually mentioned he had others in Italy, Monaco and the Caribbean – included a neat little feature; as we drifted from room to room, a little calculator added up the cost of each featured interior item. It soon became clear that Eddie had a passion for Italy – £20,000 for a handmade Milanese sofa, no less. From fabulous furnishings to a £200,000 kitchen, everything was Italian, handmade and, naturally, prohibitively expensive for most of us. I was now seething with jealousy – Eddie had taste, and he hadn't necessarily bought it (which annoyed me further).

It was then, entering one of chez Eddie's many living rooms, the suspicion I had in the back of my mind was confirmed. Among the refined and stylish Italian items stood a lifestyle music system of distinctly non-Italian origin, and by some margin the cheapest item on the ever-increasing total at the top left of the screen. Unlike everything else in his house, it was something that could be bought on the high street. At the time I was working with some very high quality and stylish Italian audio equipment and the reality dawned on me: if only he'd known about it, he would have bought it, no questions asked.

High-end audio has two types of customers: audiophiles and non-audiophiles. Hobbyists are important to a company's respectability and credentials, but it's the latter of the two categories that will increase a company's turnover and profit, and ultimately create revenues for R&D and new products. These non-audiophiles need to be exposed to it outside the somewhat limiting realms of the traditional hi-fi fraternity. A publication like *The Collection*, for example, helps when on

the table of a business-class lounge at an airport, but more has to be done. Often there are top-end manufacturers – a fair few featured in these pages – who venture outside the usual channels of a specialist audio company. Marine and automotive installations and intelligent product placement bring the names of these companies to the attention of the kind of people who have the buying power to not just sustain, but increase the high-end audio business. People that own luxury sports cars and yachts are high end's customers of tomorrow, make no mistake. 'Piggy-back' marketing with these types of sectors is the aim of many a high-quality manufacturer.

By being exposed to an audio experience in the confines of a top-end car, for example, a potential customer will experience music in a 'domestic' environment like perhaps never before and be encouraged to invest further. Our industry needs to

"Owners of luxury sports cars are high end's customers of tomorrow"

combine with recognised luxury goods manufacturers to tap into this market. It's not unrealistic and shouldn't be cynically dismissed. It's not impossible for a relatively significant resurgence of the high-end audio market to happen in the US, UK or other parts of the world. We just have to make it desirable to the type of customer that demands the highest quality from everything.

The 'just for us' attitude that was rife in the 1980s – and still pervades some areas of high-end audio – has to disappear for new success to start. Perhaps then we'll see the type of customers that manufacturers dream of – and actually see in certain markets – starting to invest on a worldwide basis. Then, and only then, can we be slightly smug and say, 'told you so'. But for starters, I'm going to give Eddie a ring...





You can now get a massive 20% off

when you trade in your old loudspeakers against the iconic multi-award winning

KHT2005.3 and KHT3005SE Home Theatre Systems

This promotion only covers purchases made before 1st October 2011. Discount will be given at the point of sale. This promotion is only valid when purchasing from an approved KEF Retailer (detailed on our website www.kef.com). Trade in speakers may be of any brand. This offer is not valid for employees or distributors of GP Acoustics (UK) Ltd.

Bowers & Wilkins



Engineered for the finest moments

PM1 There are times when only music matters. When you want to forget the world and simply lose yourself in sound. The PM1 was designed for these moments. Its carbon-braced tweeter, Kevlar bass/midrange driver and Matrix™ braced cabinet combine to make everything else seem insignificant. It might just be the most refined small speaker we've ever built. Listen and you'll see.

www.bowers-wilkins.co.uk/pm1