

# hi-fi+

Issue 7 - Jul / Aug 2000  
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REPRODUCING THE RECORDED ARTS

## Paper weight?

*power that  
delivers*



### ▷ **Big Amps**

*Mark Levinson  
Advantage  
SimAudio Moon  
Lavardin  
Cyrus  
Plinius*

### ▷ **Smaller Amps**

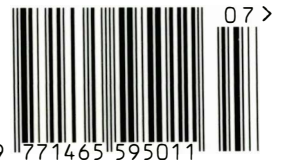
*Samual Johnson  
Nad  
Sugden*

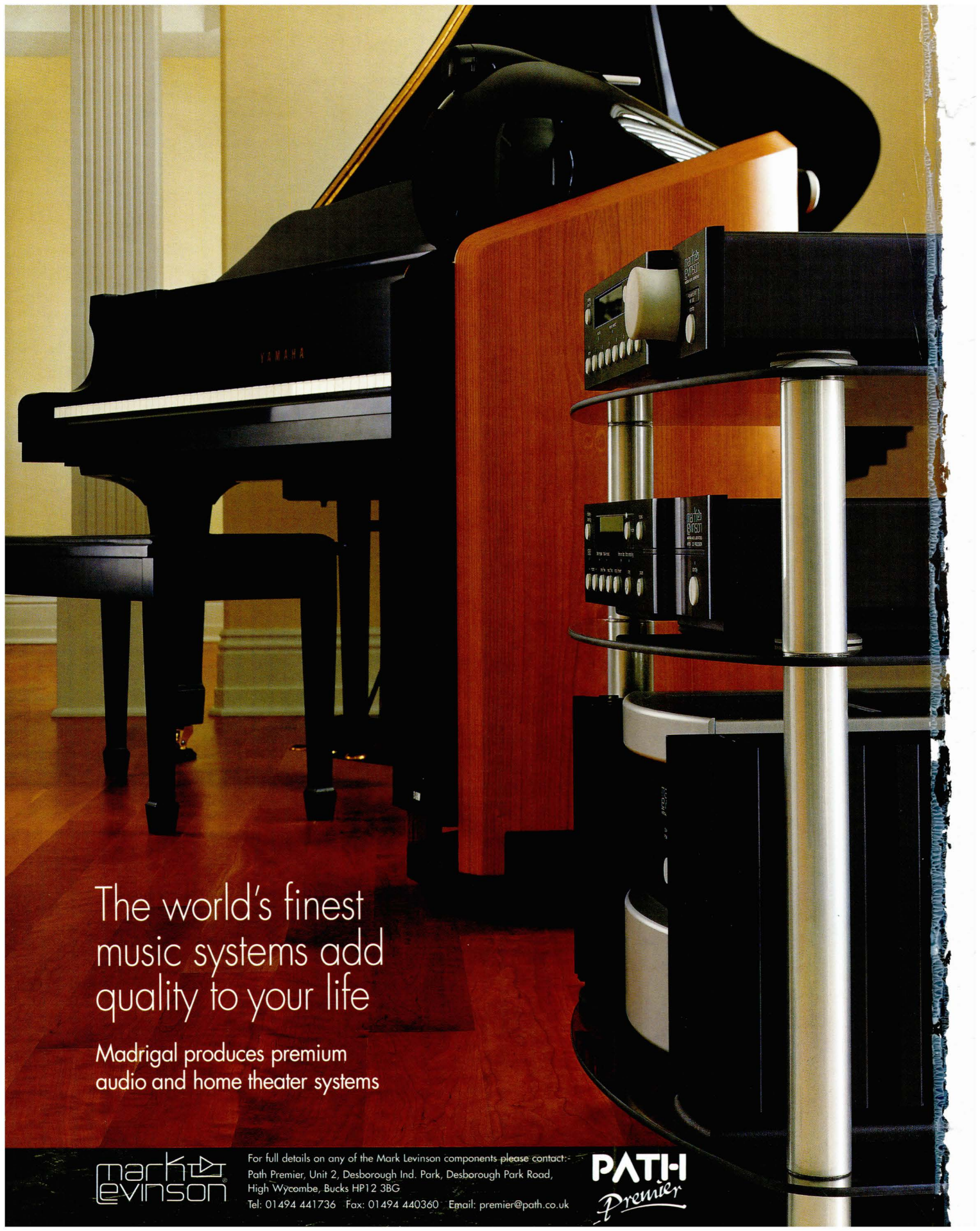
### ▷ **Speakers**

*B&W Nautilus 802  
Beauhorn  
Totem*

### ▷ **Music**

*Why MP3 Isn't Hi-Fi  
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# Editorial

## Editor

Roy Gregory

## Contributors

Dave Ayers  
Chris Binns  
Pete Christie  
Dave Davies  
Jason Hector  
Jimmy Hughes  
Paul Messenger  
Reuben Parry  
Chris Thomas  
Mike Mercer

## Photography

Simon Marsh

## Cartoonist

Dave Davies

## Design

Creative Byte  
Unit 12, Albany Business Park  
Cabot Lane, Poole, Dorset  
BH17 7BX

## Printed By

Stones The Printers, Ltd

Hi-Fi+ is published six times  
a year by; Hi-Fi+ Publishing Ltd

## The Editorial Office

can be contacted at;

Hi-Fi+ Editorial  
Unit 12, Albany Business Park  
Cabot Lane, Poole, Dorset  
BH17 7BX  
Tel. (44)(0)1202-659380  
Fax. (44)(0)1202-659540  
Net. www.hifiplus.com

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Anybody who actually studies the Hi-Fi+ masthead will notice a raft of new contact numbers. That's because we've moved the office, bringing it much closer to home (well, my home anyway). The reason I mention this is twofold: in the short-term, like any office move it will be accompanied by the standard chaos that attends such events: in the long term it should mean a much tighter ship all-round. So, if you could bear with us to start with, you should reap the benefits in the long term. In theory, the new office should be fully functional by the time you read this. However, theory and practice, as we all know, have a way of diverging.

It also seems as though parts of the industry are finally taking a long hard look at themselves, and that the mirror is sending a "could do better" message. This realisation can only be a good thing, and hopefully will lead to improved products and levels of service/expertise. With stereo equipment becoming increasingly diverse and eclectic, specialist knowledge and experience are becoming increasingly important when it comes to realising a product's full potential, vital if your investment is going to deliver the sonic goods.

Finally, the big news chez Gregory is the arrival of a single-ended 300B amplifier that we actually like! Being painted as a single-ended sceptic has become a way of life, so will I be outing the ultra-linear amps and embarking on the road to triode Damascus? Not exactly. One swallow doesn't make a summer, and there are still an awful lot of truly gruesome SETs out there. Which just goes to show that it's not what you use, but the way that you use it that counts. No change there then.



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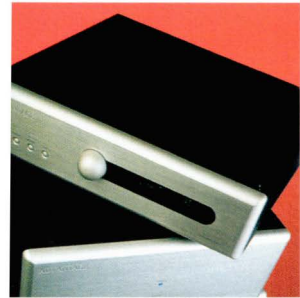
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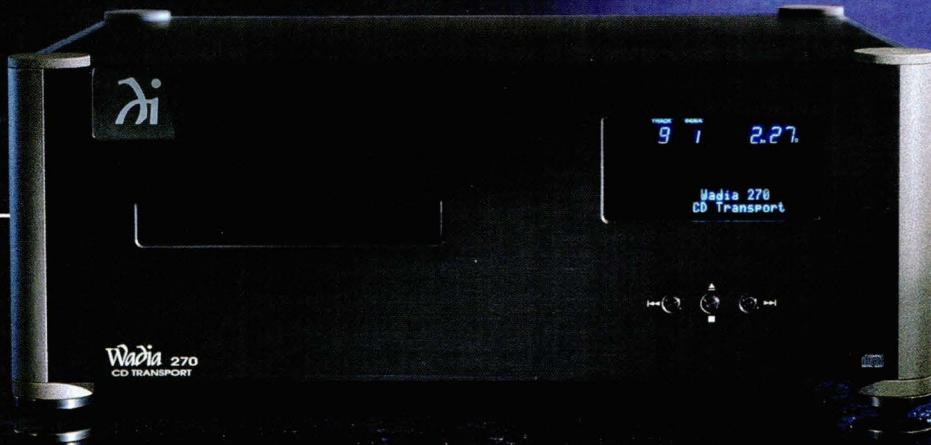
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ClockLink →

Music →

# Sounds of Music

## No Compromise

Having said that, buying hi-fi is always a compromise - the only way to the total truth is to have the performing artists in your own living room. Not too easy in most cases. **At Sounds Of Music however, it is our continual aim to compromise as little as possible** as our extensive ranges will confirm. What you hear in the showroom does not always offer the same performance at home and that is where **our superb one months home trial system** and extensive range really comes into its own.

As you can see, this month we have featured a varied selection of amplifiers from all over the world and at all price ranges. We believe that many of these are capable of producing 'believable' sounds but this still needs confirming by you in your own particular environment and on your own particular hi-fi set up.

**We carry one of the largest ranges of specialist products in the UK**, as well as the Amplifiers and processors featured this month, all being available on our special trial exchange system and in the comfort of your own listening environment. Our one months-trial exchange system is just fantastic, **where else can you try a range as extensive and have the assurance that the results will be, as you want them to be.**

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Our aim at **Sounds Of Music** is to provide you with all the best and latest products, all the best news and technology and the very best sound you can get for your pound.

Buying hi-fi from **Sounds Of Music** could not be more simple or successful and we assure you that to the best of our ability there will be 'no compromise' either.

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ATC

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### Where Else Can You Compare All These Products:

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(75 yards from Tower Bridge)

# New strategy for BADA

We are forever going on about the value of a good dealer - finding one can be quite another matter. The learning curve can be both long and expensive, so any help should be gratefully received. This was the motivation behind BADA, the British Audio Dealers Association, an organisation set up to try and provide customers with a guarantee of professional standards of service and support from specialist audio retailers. It established a code of practice which covered not only the actual demonstration and installation of hi-fi, but introduced genuine benefits in the form of transferable two year guarantees and bonded deposits (meaning that BADA arrange to complete your purchase even if the shop holding your money goes bust!). But all this was some time ago, and public awareness and the subsequent confidence that was the whole point of the scheme has never reached the anticipated levels. In the meantime, standards have slipped as dealers have come to rely on BADA mainly for its fringe benefits (although the recent demise of Image Hi-Fi saw the bonding scheme swing into action).

But full marks to the current membership. Not only have they appointed a full time operations manager, in the shape of Robert Hay,



but they've given him a mandate to put things right. In essence, his agenda can be summed up as follows:

- To establish BADA membership as a mark of quality, similar to IATA in the travel industry.
- To increase public awareness of BADA and the benefits it affords.
- To make BADA an effective route for the solution of customer problems.

All of which is to be applauded. However, it's not going to happen overnight, and it will require a huge investment in staff training and shop facilities before the whole membership can meet their performance targets. The interesting thing is that the BADA AGM endorsed exactly the kind of outward looking, pro-active approach necessary to achieve just that. If BADA are successful in their intentions then we could be moving toward a situation in which BADA membership becomes

a virtual prerequisite for selling specialist hi-fi, which would, in turn, give the organisation real teeth in trying to ensure the performance standards we all want to see.

Currently, there are many excellent dealers who won't have anything to do with BADA, specifically because they can see it, warts and all. But if Robert Hay can give it the facelift it so desperately needs, whilst at the same time pushing it forward into the public gaze, then expect that to change. That should start with a new advertising campaign in the hi-fi press, but don't be surprised to see BADA promoting seminars and events which will cater to both dealers and the general public in future, as they try to widen the message. Assuming it all comes together, then it should be a major step in the right direction. I'll be taking up the prospects and problems with Robert in the next issue, but it could be time to sit up and take a bit of notice.

Readers who'd like to know more can reach Robert on the following numbers:

**Tel. 0800-596444**  
**Fax. 01373-760450**  
**E-mail. [bada1@compuserve.com](mailto:bada1@compuserve.com)**  
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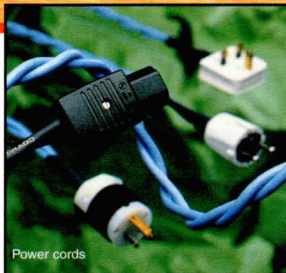


# NORDOST

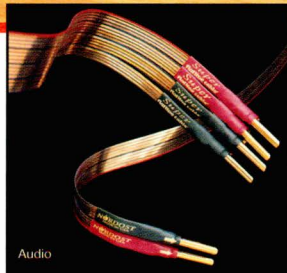
*'Making the connection....'*



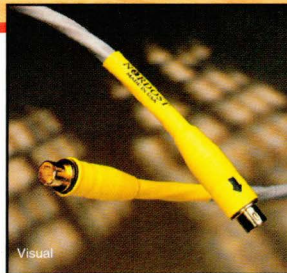
*'...between technology & music'*



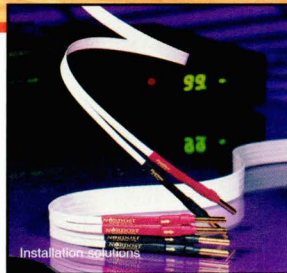
Power cords



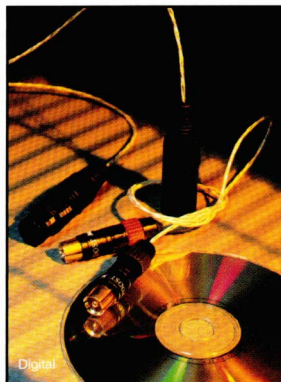
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Digital



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enquiries@nordostuk.com

**Nordost Corporation**  
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U.S.A.  
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Fax: 508-879-8197

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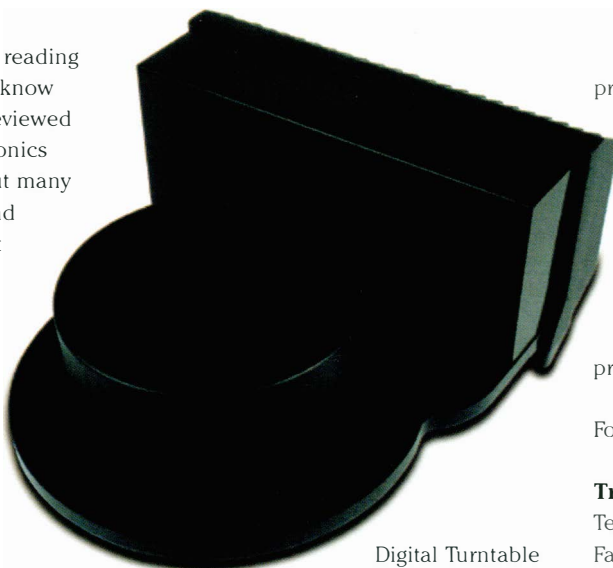


# Michell Electronics Re-Badge

Anybody who has been reading hi-fi+ from the start will know that not only have we reviewed the latest Michell electronics extremely favourably, but many of our reviewers own and rely on their products at home. So it's a matter of considerable interest if things change chez Michell. In fact, when the electronics range apparently changes hands it could provoke mild panic.

Henceforth, the amplification formerly known as Michell will appear under the Trichord Research banner, although this is a less drastic change than it first appears. Trichord have always been responsible for the design, development and production of the circuit boards, and by assuming control of the finished products, servicing and stockholding become much simpler, cutting turn-round and delivery times. Outwardly, name on the badge aside, nothing will change. As a major shareholder in Trichord, John Michell will continue to provide design input to the casework and mechanics of the distinctive range.

The decision to re-badge the amplifiers is part of an overall rationalisation of the two product ranges which sees the Delphini phono stages, Orca line stage and Alecto power-amps lining up alongside the Genesis CD player,



Digital Turntable  
CD transport and  
Pulsar DAC. The entire

electronics range is supported by Pulsewire cabling, Powerlead mains cables and Powerblock mains conditioners. And Trichord will of course continue to offer the Clock 3 CD player modification. Meanwhile, John Michell will concentrate on the continued manufacture and refinement of his turntable range.

The idea is to reduce the ambiguity surrounding the amps, hopefully attracting a wider dealer base from amongst the less analogue enamoured. Given the quality of the products that can only be a good thing.

Despite the name change, prices on all products will remain the same, and all Michell warranties will be honoured by Trichord. Nice to see companies standing by their customers rather than trying to avoid their responsibilities! Totally in keeping with the excellent value offered by the products.

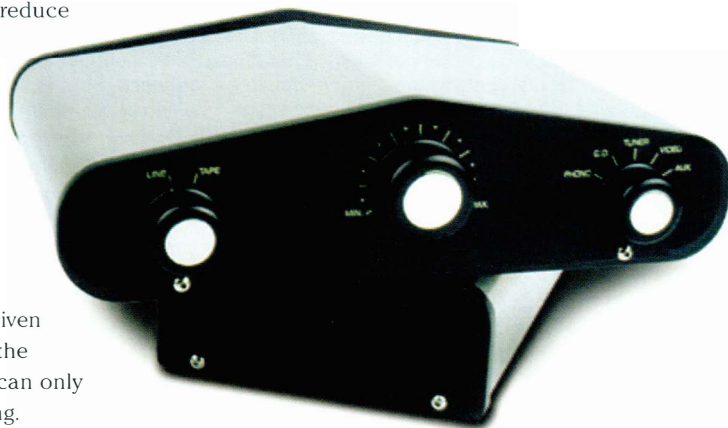
For further information, you can contact

**Trichord Research:**

Tel. (44)(0)1684-573524  
Fax. (44)(0)1684-577380  
e-mail. sales@trichordresearch.com  
Net. www.trichordresearch.com

**Michell Engineering:**

Tel. (44)(0)208-956-0771  
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*Other brands: Forsell, Synergistic Research, Alon Loudspeakers, Jolida Valve Equipment, Silverline Audio Loudspeakers, Z Systems.*



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# Real World Furniture From Aavik

Last issue we reported on a stunningly effective, but stunningly expensive titanium equipment rack from Aavik. At around £900 a shelf, it's way beyond the reach of most of us, magazine editors included. So having whetted your appetite it seems only fair to point out that Aavik also manufacture a whole range of more affordable furniture based on aluminium uprights.

Perhaps the first thing to say is that furniture is the word. In common with a few other brands, Aavik have shed the traditional hi-fi table's angle iron aesthetics, where a glass shelf is seen as the height of visual sophistication, and produced real furniture that looks and feels at home in the domestic environment. The sonic performance hasn't taken a back seat either, with materials selection for both the shelving and uprights the result of extensive listening and development.

The second point is that the racks use only non-ferrous metals, a philosophy which I would thoroughly endorse, and which experience informs me is the basis for superior sonic performance. After all, we take all that trouble with the casework on electronics, using aluminium, copper and even wood and plastics, does it really make sense to stick them into a steel cage? I think not.

The MDF shelves are also carefully selected (there's MDF and then there's MDF), and their bevelled undersides and gently curved edges really soften their appearance.

The racks start with the C Series rack, four shelves and tubular Aluminium uprights with simplified Pulsar Point style feet on the bottom. With black satin lacquer shelves this sells for £180, or you can have beech or cherry veneers for £20 extra.



That is one cost effective rack.

Next comes the A series, a deeper, three legged stand with a massive rear pillar, big enough to pass cabling should you so desire. The same basic design can be had in two depths and anything up to three bays wide, ideal for large AV installations. A basic four tier tripod comes out at £300, with shelves in black, black ash, cherry or rosewood.

Finally there's the AX and ZX racks, aluminium equivalents of the stackable titanium model we reviewed, with three and four legs respectively. At either £250

or £300 a shelf, they aren't cheap, but they seem like it when you compare them to the titanium models.

It's nice to see an increasing number of decently presented, versatile and good sounding racks appearing on the market. You can add Aavik to that list.

For further information, contact:

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Fax. (44)(0)1423-359058

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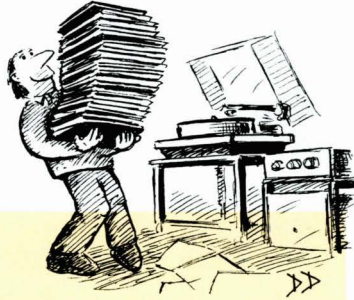
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# Meet The Reviewers

Two more lambs to the slaughter... I mean additions to the reviewing team.



## Simon Groome

### Hi-fi Experience

Having first purchased a "real" hi-fi about 15 years ago, I soon became hooked on collecting music – especially early stereo classical vinyl. I have since become known by many dealers of both new and second hand releases, and have been roped into helping out with the pricing and valuing of records. I regularly attend concerts at The Barbican and Wigmore Halls.

### System

Voyd Valdi, with Wilson Benesch Act 2 tonearm – both modified.  
The Cartridge Man's Music Maker cartridge  
Marantz CD-63SE Compact Disc Player – modified by Pentacone  
Audio Innovations Series 500 amplifier – modified by Pentacone  
– with Border Patrol power supply  
Snell JII speakers – modified by Pentacone – on 4 legged Pirate stands  
Pentacone HGC Silver Plated Interconnects  
Pentacone Grade 2 Bi-wired speaker cables  
Mains leads are home-made to Pentacone "Pentaflex" standards  
Stands by Target and Sound Organisation  
Loricraft Professional Record Cleaning Machine

### Desert Island Discs

Mahler: *Symphony No. 5/5 Ruckert Lieder*  
– New Philharmonia O, Barbirolli, Baker (EMI original)  
Mahler: *Symphony No. 1* – VPO, Kletzki (EMI original White and Gold label)  
Liszt: *A Faust Symphony/Orpheus* – RPO, Beecham  
(EMI original White and Gold label)  
Stravinsky: *The Firebird* – LSO, Dorati (Classic/Mercury reissue)  
Miles Davis: *A Kind of Blue* (Classic/Columbia reissue)  
Eric Bibb and Needed Time: *Spirit and the Blues* (Opus 3)  
Et Eric Bibb and Needed Time: *Good Stuff* (Opus 3)  
– Sorry, but I cannot choose just the one!  
Fairport Convention: *Unhalfbricking* (Island original Pink label)

### Book

*War and Peace* – Tolstoy

### Film

*Blade Runner – The Directors Cut* or *Casablanca* (Depending in my mood)

### Luxury

Fine Italian Food

### Indulgence

Marcus – my four-year-old son, who finds Prokofiev's *Peter and the Wolf* "a bit scary!"

## Michael Mercer

### Hi-Fi Experience:

Lifelong fondness for music and audio gear (included building & re-furbishing playback equipment). Former equipment acquisitions & set-up manager for The Absolute Sound.  
Production assistant to producer Arif Mardin at Atlantic Recording Corp.  
Partner in a pro/consumer audio/video installation outfit.  
Freelance journalist and DJ.

### System:

Technics 1200 turntable w/ Ortofon Silver Pro cartridge  
Melos digital drive bitstream processor  
Toshiba SD-2109 DVD player  
Sony MDP-605 laserdisc player  
Marantz DP870 Dolby Digital processor  
AMC AV81HT THX home theatre pre-amp  
Classe DR-9 amplifier  
Fosgate Audionics 4 channel amplifier  
Sony 55ES amplifier  
System Audio 1110 speakers  
Monitor Audio gold series speakers  
Cambridge Center Channel Plus  
Sound Dynamics active subwoofer  
Nordost SPM speaker & interconnect cables  
Nordost Quattro-fil interconnects  
Luxor Group power cords  
Nordost Pulsar Points  
Rotel RLC-900 line conditioner

### Desert Island Discs:

Billie Holiday *Body and Soul* Mobile Fidelity 24 karat gold UDCC-900  
Peter Gabriel *Passion* Geffen 24206-2  
Stevie Ray Vaughan & Double Trouble *Couldn't Stand The Weather*  
Epic EK39304  
Sara K *Hobo Chesky* DVD 96/24 Super Audio Disc CHDVD177  
Bob Marley & The Wailers *Exodus* Mobile Fidelity 24 karat gold UDCC-628  
Conrad Praetzel *En Trance* Paleo Music PAL-4003-2  
Paul Oakenfold *Tranceport* Kinetic-Reprise 47120

### Book

Irvine Welsh – *The Acid House*

### Film

*Romeo Is Bleeding*

### Luxury

Spending time with my lovely wife. Watching films in my home theatre.  
Writing poetry and working on my music.

### Indulgence

Good times with great people.  
Recording and mixing my music in my own studio.



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# Playing The System

by Roy Gregory

It's a popular word "best", much beloved of headline writing editors and marketing managers alike. It represents a kind of common ground or purpose between these often antagonistic groups. Of course, it's even better when it's combined with other words, like "buy". In a world where all magazines represent businesses trying to satisfy a client base, such considerations have a vital part to play in shaping the information you receive via their pages. After all, magazines want to satisfy their readers, but they also have to satisfy their advertisers, the source of their profits. Which is why the whole concept of "best" is so important. Manufacturers want to sell product. The public wants to be told what to buy. Suddenly the "best" label, whether it's a stick on badge, a swing-tag or a logo at the top of a review takes on a whole new meaning.

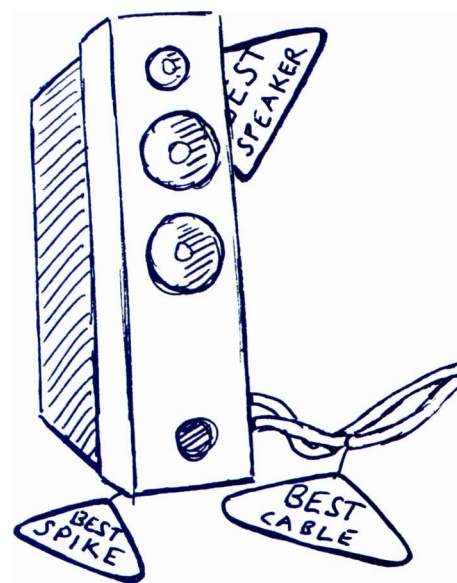
Don't believe me? Look at the sales performance of the What Hi-Fi Awards Edition, or the leap in circulation when Stereophile publishes its Recommended Components listing. The public want to be told. They want the whole thing reduced to simple solutions. They want to buy into the esoteric nature of hi-fi performance without investing the time to understand it properly. Some of them just want music, and can't be bothered with the trivia of actually auditioning equipment and choosing it for themselves. And whilst I have some sympathy for this last group, I'm not sure that giving the people what they want is an entirely sensible course of action.

High-handed and arrogant? Before you dismiss me as the worst kind of patronising, self-styled "expert", let's

actually look at the argument. The problem I have with the dumbing down of hi-fi (because that's what we're talking about here) is that what appears to be a question of mere semantics has very real results. When someone awards a product five gold stars or a best buy rating they are placing that product first in its class, especially if it's the "winner" in a group test. And it may well be the best performer there: In the opinion of the reviewer (even group listening sessions are written up by individuals!); in the context of the system used; in the room where the listening took place; with the reviewer's choice of cables; ignoring all the other members of that product category that weren't tested. Within the limitations of those qualifications, which may or may not apply to your own particular circumstances (you really have no way of knowing) that product might be the "best".

You begin to see the problem. Hi-fi systems have so many variables that the concept of a "best" component becomes pretty meaningless. Even if a group test or review goes out of its way to provide you with as much procedural background as possible, the chances of even a few of those variables coinciding with your circumstances are pretty slim. Which makes the notion of "best" so limited as to be useless. And that's in the context of the original review. Once you take the "title" away from that context, along with all those qualifications, it really is utterly worthless. Which is exactly what you do when you put a five star swing-tag on a product in a shop, or a best buy logo on an advert.

Now walk into your local hi-fi emporium and see how many swing-tags you can see. In fairness, a lot of shops don't use them, for aesthetic reasons as much as anything, but it doesn't stop manufacturers supplying them, and magazines making a healthy profit on printing them. And it doesn't stop the concept of "best"



being rampant in the magazines, or casually bandied about by salesmen and customers alike. Despite the fact that once you actually examine the process which generates these judgements, they have absolutely no universal validity what-so-ever. In fact, the deeper you look the more obvious it becomes that the notion of any individual hi-fi component being



► the best is a complete and utter nonsense.

Stereophile try to get round this by having a listing which categorises a whole sheaf of products into performance classes, thus dumping the whole issue of matching and system context onto the reader. Does that deter people's slavish devotion to the list. Not at all. There are plenty of customers out there who won't buy a product unless it's got a Stereophile Class A rating. I even had one who went on a three year personal odyssey in search of a pre-amp. He finally settled, after extensive audition (and I mean extensive), on a slightly eclectic

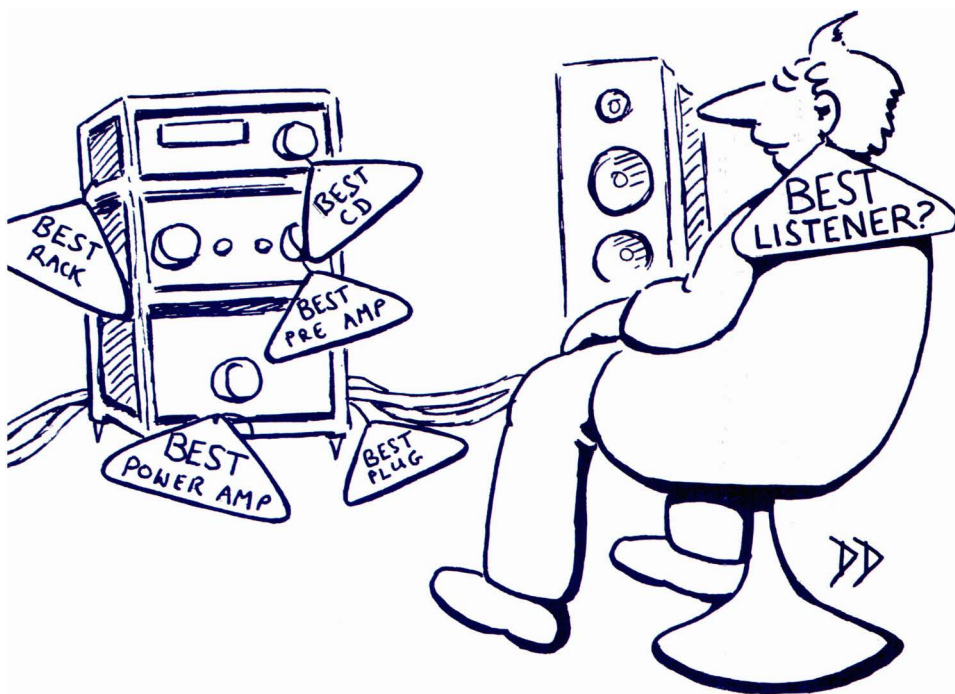
you've just bought a product.) That was a few years ago now, and we've lost touch. But he doesn't buy hi-fi any more - and he doesn't listen to music.

And that really sums up my problem with the whole situation. By telling people that they are buying the "best" we are creating a prat-fall for ourselves. Someone buys a five star product, takes it home and, lo and behold, it really doesn't work that well. The problem is that we've told them it's the "best". From that point onwards we're on a hiding to nothing. They either think that what they're experiencing is the best available, and lose interest in hi-fi, spending their money on Nintendo

under constant and increasing pressure from new and alternative technologies, this cavalier attitude to our consumers represents the worst possible form of short-termism.

Magazines that award these ratings are quick to point out that they tell their readers that going out and buying a complete system of "Best Buy" products is a recipe for disaster. Unfortunately, not only is this a comparatively new state of affairs, it's a bad case of trying to close the stable door long, long after the horse has bolted. People buy these magazines because they promise to tell them which products are "best". That's what they tell them on the cover. That's why the whole concept of "best" was unleashed in the first place. To get people to buy more magazines, and sell more products, and generate more advertising. (You'll notice that the creation of an informed and discerning customer base doesn't figure in that list.) It's such a simple concept, which is what makes it so powerful. It promises complete freedom from anxiety. The trouble is, once that's what you've promised people, you can't then turn round and tell them that it's not quite that simple. They aren't going to listen even if you do!

The conclusion is inescapable. Not only is the whole concept of "best" (and even of ranking or rating individual components) of no practical value what-so-ever, it's actually harmful to the long term health of the hi-fi industry, and therefore to anybody who cares about listening to music at home. Until we start thinking in terms of "systems" (a concept which isn't exactly devoid of marketing potential itself!) and projecting that thought to the buying public, both magazines and specialist dealers are going to have an increasingly hard time justifying their existence. Until they start thinking in terms of systems, hi-fi buyers are never going to maximise their musical pleasure, or the return on their investment. ►+



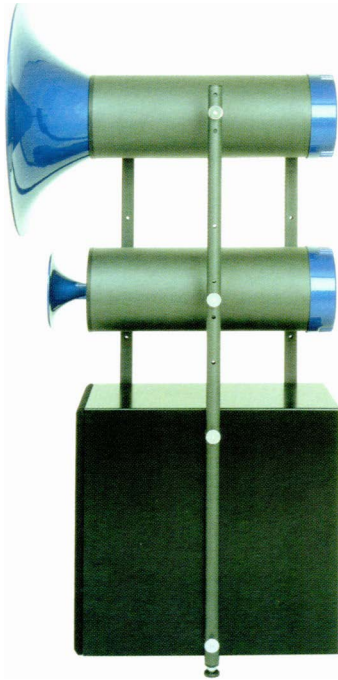
model which happened to suit his needs and his system perfectly. After three months of audio nirvana he sold it. Because Stereophile only rated it Class B! He ended up buying another Class A rated product which he'd previously rejected, having finally "seen the light". (Which just goes to prove the value of that other great piece of hi-fi advice; don't read the reviews when

games, a computer, or whatever the latest hip sport is; or they realise that the situation doesn't add up. If we're lucky, they'll investigate further, but being once bitten they'll be twice shy, which makes getting them back onto the straight and narrow a far more difficult proposition. After all, they've been lied to once already. In a shrinking market place which is coming

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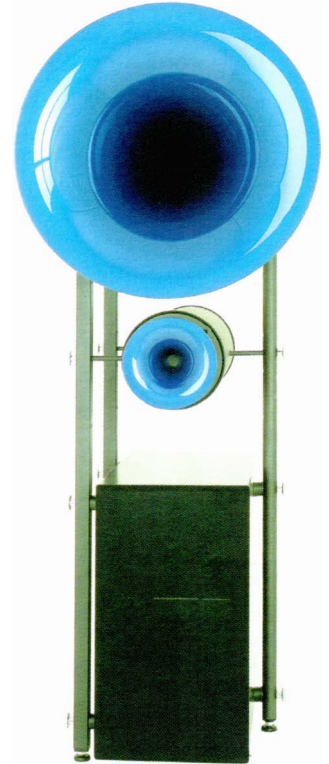


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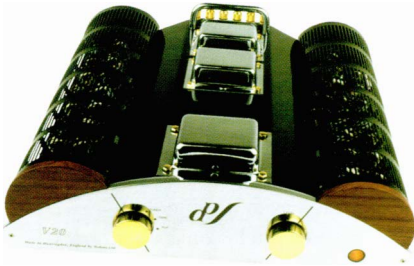
We intended to put some text here, you know, the sort of trite caption we normally put in our ads. But Pete ran out of ideas, and anyway, the captions always paled after seeing them a few times. So these products have been left to speak for themselves. And this space has been left intentionally blank



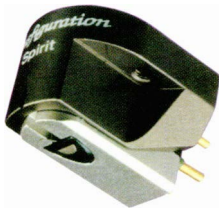
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# Home Truths

by Jimmy Hughes

One intriguing detail to emerge from the Marantz/Tannoy press trip to Prague was the news that Tannoy are adding a new stand-alone super tweeter to their product range - no doubt driven by the advent of SACD. The unit is intended to compliment your main loudspeaker's existing high frequency units, extending the upper frequency response out past audible limits.

As someone who's used super tweeters for a little over five years - a set of inexpensive Motorola Piezo devices available from Maplins - I found it interesting to hear the Tannoy designers describing exactly the kind of sonic differences I myself heard when I first began to experiment at the beginning of 1995.

However, had you asked me about super tweeters as a concept shortly before, I'd have expressed much scepticism. Why bother? So much 'information' above 20kHz is simply noise and distortion; why pay extra to have all this rubbish faithfully reproduced? And why extend the high frequency response of a loudspeaker beyond 20kHz when most of us the wrong side of thirty can't hear anything above about 15kHz anyway? Surely there's no point?

The final nail in the wide bandwidth coffin is that nearly all current sources of music (CD, tape, tuner) are bandwidth limited to 20kHz or below. So logically you'd think any potential loudspeaker bandwidth gains would be nullified by this. Perhaps extended bandwidth might interest children and the odd passing dog or bat, but surely it's not going to matter to listeners aged 30+ playing regular source material. At least that's one argument...

But empirical tests prove otherwise. There's a distinct audible difference when a super tweeter is added; the music sounds more tactile and immediate, yet at the same time gains texture and spaciousness with a greater sense of three dimensionality and sharper focus. It's similar to the way adding a good sub woofer increases definition, detail, and treble sweetness - even with recordings that aren't seemingly over-endowed with deep bass.

Another parallel with sub-woofers is the need to carefully moderate the amount added to ensure maximum effect. When most people get a sub-woofer they're inclined to balance it so it's slightly too loud. For the first few weeks, while the sub still has novelty value, you want to be reminded it's there - just to convince yourself it was money well spent! But once the novelty wears off, you turn it down.

Curiously, when you do this something wonderful happens; the sub has even more effect. Not in a chest-thumping bass-in-your-face sense, but in terms of added spaciousness and enhanced treble sweetness. There's an extra sense of realism and naturalness that makes the performance sound more expressive and intimate.

Yet switch off your main speakers, and actually listen to what's being added, and the amount seems miniscule - totally disproportionate to the effect produced; a true case of the sum being greater than the parts. But what is the correct amount? When I first got my super tweeters, I thought I was using a fairly minimal amount. But over subsequent months, as I experimented, it became apparent that it was way too

much - the barest trace would suffice.

Indeed, it seemed the less I used (restricting lower treble bandwidth as well as reducing volume levels) the greater the effect on the overall sound. This was very hard to accept at first - it defied logic. Eventually, I pared away the contribution made by the super tweeter to such low levels, it became very difficult to tell whether they were actually on.

With the main speakers working, I'd defy anyone to say whether the super tweeter's connected or not. Even with your ear against the mouth of the horn-loaded driver it's virtually impossible to hear any change when the unit is connected and disconnected. But, repeat the comparison from your listening seat, and the increased detail and immediacy is clearly audible.

The Tannoy designers were refreshingly honest when it came to explaining why adding super-tweeters works - basically, they admitted they didn't fully understand what was going on. Although several theories exist, none have real scientific validity. Of course, extending bandwidth helps give the leading edge of transients a faster straighter rise time, and electronics need wide bandwidth to reproduce truly square square-waves. But it's long been a debating point as to whether such things really make any audible difference.

And the most curious thing of all? The way, subjectively, the presence of deep bass helps sweeten-up the high treble, while reproducing very high frequencies tightens up the bass, giving greater perceived low frequency attack and projection. Bizarre!



# Speakers Corner

by Paul Messenger

Elsewhere in this edition I got to review the Lowther-based Beauhorn loudspeakers, and am currently trying to explain to Eric Thomas that there's absolutely no urgency for him to come and pick them up, and that I'll happily look after them until he's good and ready. I love horns, and these single-driver Lowther-based ones really do something rather special, even if they do break most of hi-fi's accepted rules and conventions.

shapes, sizes and materials, but their basic modus operandum is actually much of a muchness. They've changed a bit down the years, as new materials have become available, and relatively subtle factors like evolving glue technologies have had a major impact on improving the power handling of voice coils, for example. But the essential physics controlling moving-coil driver behaviour remains little changed.

What has changed, and changed

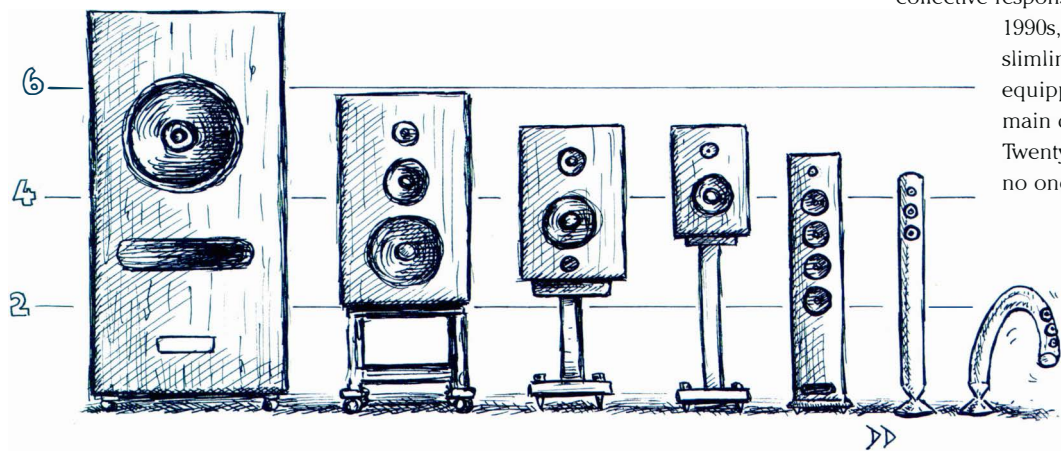
B&O active speakers after carrying out careful comparative listening tests. Those who can afford them do so because they look drop-dead gorgeous and don't take up much space.

The trouble is, the quest for style often compromises sound quality. Everybody seems to want slim loudspeakers these days, and a slim loudspeaker necessarily means small main drive units, which has obvious limitations in terms of bass delivery and dynamic headroom. The designers' collective response, throughout the

1990s, has been to develop slimline floorstanders equipped with multiple main drivers.

Twenty five years ago, when no one seemed to mind fat

looking hi-fi speakers, the majority were two-driver, two-ways, of a shape and size to suit stand-mounting - stereotypically an 8-inch bass/mid driver plus a much smaller tweeter.



In the real world of hi-fi, however, I can't deny they're very much a minority interest. 99.999 per cent of today's hi-fi speakers are so-called 'direct radiators', which don't enjoy the space-consuming luxury of a horn to match the driver diaphragm's impedance efficiently to the air, relying instead on the diaphragm itself (and/or port) to excite the listening room's air molecules 'directly'.

These direct radiator main drivers might come in all sorts of different

quite dramatically over the years, is the shape and size of the loudspeakers we put on the end of our hi-fi systems. Today's loudspeaker is just as much of a fashion victim as my teenage daughter. The budget sector is still price-driven, and performance plays a part right across the board, but the most important ingredient in the total mix today is style, for a sizeable percentage of loudspeaker buyers at least, as a glance down the bestsellers lists clearly shows. People don't buy all those expensive

Nearly all the rest were three-driver three-ways, typically with 12-inch bass and 5-inch midrange, and still as often as not best stand-mounted. However, looking back, I can't honestly remember when I last encountered a hi-fi speaker with a 12-inch bass driver, and even the 8-incher has become quite a rarity in the modern era.

The vast majority of hi-fi speakers today, both stand-mounts and floorstanders, use so-called 5.25-inch or 6.5-inch frame main drivers, either

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▶ singly or in various ingenious combinations. However, main driver sizes are confusing and inexact things. They're expressed as nominal frame sizes, but nominal is the word, as variations are considerable.

Furthermore, frame size is much larger than the actual diaphragm area, which itself varies according to the thickness of the surround. And does the surround itself play a part in the total radiating area? I don't think anyone knows for sure, though I do recall a paper suggesting that its net effect is modest, because of phase cancellation. Comparing actual cone areas, the 8-incher's cone has nearly twice the area of a 6.5-incher, and a 6.5-incher in turn has nearly twice the cone area of a 5.25-inch driver.

The two-driver stand-mount remains the enthusiast's choice, and there are several good reasons why this should be so. It's the simplest driver arrangement, the shape is superior to floorstanders in distributing box resonances, and also allows a wider baffle and hence larger main driver. And a separate, dedicated stand is likely to give superior support to the integral arrangements of the floorstander.

But the slim floorstander still has style and fashion on its side. Some do indeed use 6.5-inch drivers, but they're the chunkier looking ones, and the multi-5.25-inch driver array is arguably the most common. The classic example is the Mission 753, introduced around 1992, which used four such drivers, operating in pairs, in a 'two-and-a-half-way' configuration, the lower two covering the bass end only, while the upper two cover both bass and midrange. A few years later Acoustic Energy's AE109 enjoyed similar success in the budget sector, using just two 5.25-inchers in 2.5-way mode.

An alternative to the 2.5-way approach, again in the interests of slimming down the cabinet, is the so-called d'Appolito configuration. A pure two-way, but using twin 6.5-inch main

drivers one above and one below the tweeter, the classic example is probably the Linn Keilidh, which still sells strongly some nine years since its launch.

The pluses and minuses of 2.5-ways and d'Appolitos are complex. Neither protect the midrange from low frequency excursion like a full three-way design, but both avoid the latter's crossover complexities and consequent phase anomalies. By rolling one of the main drivers off early, the 2.5-way does introduce some differential phase shift between the drivers. But it also simplifies the actual crossover from mid to treble, as just two point sources are involved, and has a smaller mid driver than the equivalent two-way to make the transition that much easier. The d'Appolito avoids the phase shift of the 2.5-way, but is actually operating as a line rather than a point source up at the crossover point, which makes integration more difficult, usually requiring steep slope networks.

The upshot of all this is that speakers today do come in several more driver combination than they used to, but each involves its own pluses and minuses. And it's also interesting to note that even though the configurations and box shapes are different, the total bass radiating area of mainstream loudspeakers has stayed surprisingly consistent down the years. There have been changes of course: as CD took over from vinyl, port loading became more prevalent, the extra bass generated allowing drivers to shrink a little. Sensitivities have risen too - but mostly by taking advantage of better quality amplifiers able to deliver more current.

Which finally brings me to the point of this convoluted preamble. B&W's current 601 and 602 S2 models have parallels with DM series stand-mounters that hark back to the company's earliest years. But it's another model that's really been tickling my eardrums. The LCR6 S2 is actually listed and marketed as

an AV speaker, and because of that, hi-fi buyers might be tempted to overlook it, especially as it appears rather expensive compared to its straight stereo/hi-fi brethren. But rest assured, it does the sonic business to such an extent that the extra cost is easily justified.

Superficially it looks like a 'stretched' 601S2, using two 601 main drivers either side of the tweeter, in a rather bigger box - half as tall again, and as deep as a 602 S2. It looks like a d'Appolito, but is actually a 2.5-way, and you need to be careful picking it up, as the shielding, double magnets and extra cabinet bracing

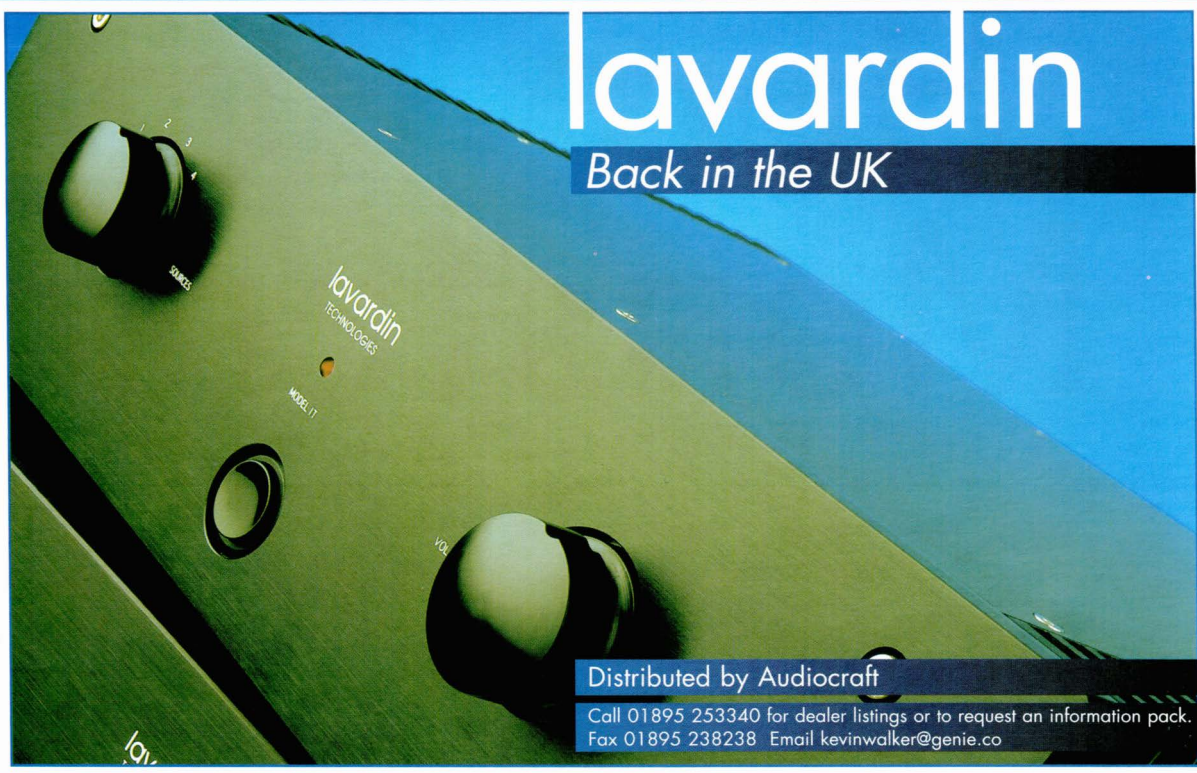
add considerably to the weight.

Forget the TV set, put a pair of LCR6 S2s up on top quality stands (I use Kudos S100s), and enjoy the sheer authority of their performance. For a normal sensitivity speaker in a decent size room, this is about as good as it gets, with fine voicing and balance, good dynamic range, precise focus, and that difficult to define sense of authority. This speaker/stand combo might cost around £1,000, which is nearly twice the price of the floor-standing 603 S2, but I think it's comfortably the better speaker, and might well beat the much more costly Nautilus 805.

Why does it work so well? I'm speculating, but suspect a combination of several factors. First, you won't find many stand-mount 2.5-ways out there, yet the configuration is persuasive. Each driver here has a 4.5" cone, so the total bass cone area is about 30 per cent greater than the 602's single 5.5" unit, yet the mid-to-treble transition has the 601's superior smoothness. The box has half the surface area and better inherent stiffness than the 603, while the speaker stands tall on the S100s, putting the mid/treble axis right up at ear height. The LCR6 might be listed as an AV speaker, but for regular stereo work it makes a great deal of sense indeed. ▶+

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# Here Be Monsters

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by Roy Gregory

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Think of an orchestral bass-drum. Anything up to six feet across, whichever way you look at it, it's huge. Now imagine someone hitting it, with a large padded mallet, as hard as they can. Just consider how much acoustic energy would result (which probably explains, along with the logistical nightmare, why the bass-drum's orchestral contributions tend to be rare but memorable).

Towards the end of the opening section of Randall Thompson's *Testament of Freedom* (Reference Recordings RR-49), the massed voices of the Turtle Creek Chorale, damned nearly 200 of them, supported by the Dallas Wind Symphony, lift towards the closing crescendo. And just as they get there, the moment is underpinned by repeated blows on the bass-drum.

Now think about that. Nearly 200 voices and a wind orchestra going full-tilt, and then your amplifier has to find the extra oomph to reproduce the scale and attack of a bass drum. And at the same time reveal its skin and volume, the texture of the blow. And at a frequency extreme, rather than in the nice comfortable mid-

band. Now you can begin to appreciate why so many people consider high-power to be a prerequisite for wide bandwidth hi-fi reproduction. Unfortunately it tends to arrive with a lot of undesirable baggage, not least of which is the considerable price tag. Designing a high-powered amplifier is as much a case of avoiding the pit-falls as achieving one's aims, and the most successful designs recognise that fact.

There are alternatives, such as using more efficient speakers, but they are limited by the size/bandwidth/efficiency equation. In a world where few of us have the monster listening rooms that really huge speakers demand, wide bandwidth reproduction will always depend on speakers of lowish efficiency, mostly with an awkward impedance to match. Such are the unpleasant facts of life.

If we accept the necessity for powerful amplification, we then need to decide how best to achieve it, and recognise the flaws that each solution suffers. I'll gloss over valves fairly swiftly, as they're not represented in

this group, but too many high-power valve designs commit the audio equivalent of over egging the pudding. The result tends to be thick, heavy and unpalatably rich. Warm and comfortable maybe, and often possessing tremendous presence and great rolling waves of power, they can also sound rather woolly and sluggish, even clumsy, when it comes to the question of micro dynamics and agility. As always, there are exceptions, but for most heavyweight valve designs, evolution is a constant battle against excess flab.

Big solid-state amplifiers tend to be cut from quite a different cloth. More your nouvelle cuisine; ultra-precise presentation, but where's the fun? The Krells may not have been the first such product to reach the shores of the UK, but they were the breakthrough brand, receiving the kind of critical acclaim that most manufacturers can only dream about. Along the way they established both a pattern and a benchmark against which all others would be compared. They majored on incredibly high-definition sound, great stability, ►



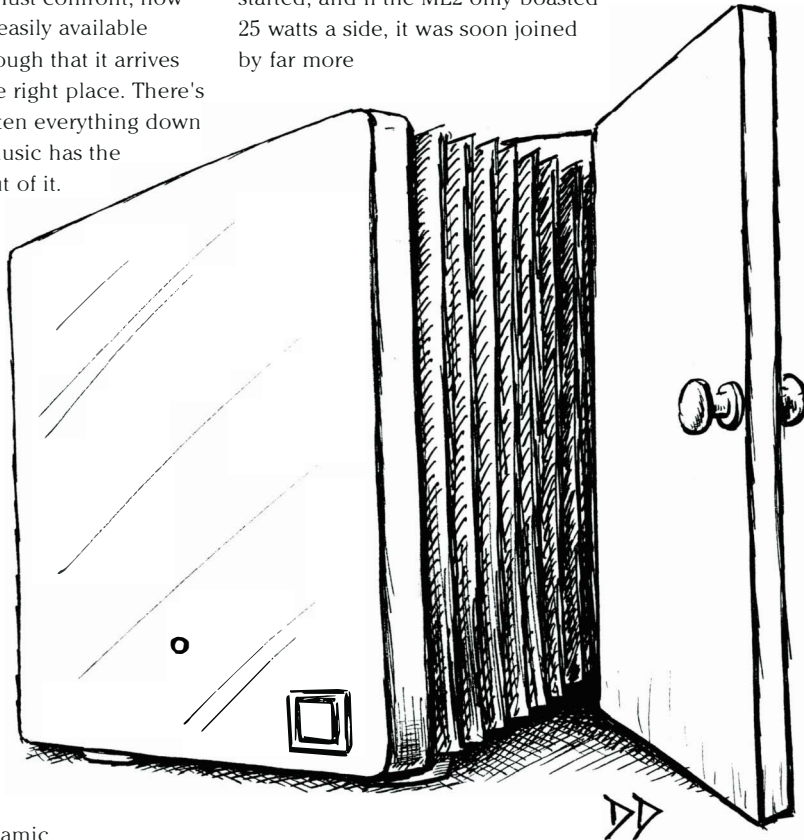
▶ and dredging awesome amounts of bass out of the low efficiency boxes then so prevalent. Along the way, people also managed to ignore the fact that they held the music in the vice-like grip of a steel strait-jacket. So much control, such tight bass that the music had trouble breathing. This is the solid-state Achilles heal, and the battle which all high-powered transistors amps must confront; how to deliver all that easily available power quickly enough that it arrives on time and in the right place. There's a tendency to batten everything down so tight that the music has the life constricted out of it.

There's detail a plenty, along with the incredible focus and stability that had reviewers gushing about walk-in sound-staging and holographic imaging. The problem is that the definition is steady state, with an earth bound quality that doesn't translate so readily into the time or micro-dynamic domains, leading to that rather stolid, sat-on quality.

Obviously, what I've described, just as with the valve amps, is a generalised cartoon of the sound of a whole category of amps. The nature and extent of the problem varies from one design to another. On the one hand, some manufacturers seem to actively court this sound, whilst on the other, they seek an almost valve like quality in a weird form of over compensation. The really successful designs will tread a middle

ground. With powerful amps, just as with everything else in hi-fi, the secret is in the balance.

This group of amplifiers contains an array of options. Representing the established US high-end, we have a pre-power combination from Mark Levinson Audio Systems; particularly appropriate as this is where the story of high-end solid state really started, and if the ML2 only boasted 25 watts a side, it was soon joined by far more



powerful alternatives. It's casework survived all the way up to the 20.5 mono-blocks, although the 335 reviewed here is representative of the new, and altogether sleeker styling that replaced it.

Harking back to the fins and handles days, we have the Plinius amplifiers, substantial performers from the antipodes, joined on this occasion by the sleek and stylish SimAudio Moon pairing from

French Canada.

The clean, Scandinavian good-looks of the Advantage mono-blocks and their matching line stage are a fitting visual allegory for the Swedish efficiency that they so clearly embody (no wasteful Class A here!). Beautifully finished, they provide a fascinating alternative to the

more traditional approaches embodied in the other heavy-weight contenders. Finally we come to the new-wave approaches represented by the Lavardin and Cyrus products. The Lavardin mono-blocks are not especially powerful, but represent the spiritual descendants of the Naim 135s, devoting twice the power supply to a single output stage. They also incorporate Lavardin's proprietary circuit topology, designed to eliminate memory distortion. Despite their apparently

modest output, they're only too happy to get their teeth into a difficult load. The diminutive Cyrus monos (even four of them aren't as big as the next smallest amp here) pack a surprising punch and zero feed-back topology. They also offer the kind of modular approach to the problem of acquiring apparently limitless power that should endear them to would-be dictators and autocrats. Hmm... I wonder what their export order book looks like? ➤



ADVANTAGE

STANDBY  
SOURCE  
DIM

LEVEL

Line 3

45

PREAMPLIFIER

ADVANTAGE

OPERATE

STANDBY

MONO POWER AMPLIFIER

ADVANTAGE

OPERATE

STANDBY

MONO POWER AMPLIFIER

# The Advantage S-2 Pre-amplifier and S-250 Mono Power-amplifier

by Chris Binns

Variety is the spice of life....or so it would seem with the sheer diversity of amplifiers that have passed through this magazine in the last year. From low powered battery models to absolute monsters – there have been a few surprises along the way, but, by and large my feelings have been reinforced and seldom challenged regarding most types of amplification. One of the more enduring aspects has been the influence of output power on performance, a subject that has been discussed in some detail in previous issues. In essence, it seems to be easier to produce a good sounding amplifier of modest power capability; as soon as large amounts of power become a priority they bring a heavy burden in excess baggage right along with them. There are some fairly obvious engineering reasons as to why this situation exists – for example many designers feel that more than a single pair of output devices is a compromise that is undesirable. Why do you think that, despite continual requests, it has taken Naim audio twenty-five years to produce a significantly more powerful amplifier than the 250?

Attractive as the low power / high efficiency solution is, practicality often demands larger amounts of power, if only for unrestrained listening with average sensitivity loudspeakers. Reduce the sensitivity by 3dB or so (in the interests of say, bass extension) and you are back in the realms of needing a hundred watts to achieve realistic listening levels. Depending on your interpretation of the word 'realistic', you could make that two hundred.

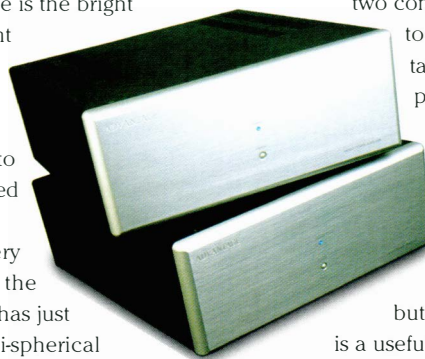
Emanating from Sweden, and somehow visually in keeping with the country of origin, the Advantage S-2 pre-amp and S-250 power-amps look suitably different. Refreshingly so. Although they are large, they do not possess the butch machismo that seems to burden so many more powerful designs. I know that this might disappoint some, but, hey, if that's what you really want you've got plenty to choose from. No, the Advantage amplifiers look, well, clean. The first thing you notice is the bright aluminium front panel which is common to both units and is rounded off to meet the pressed steel wrap, presenting a very smooth face to the world. The S-2 has just one, large hemi-spherical knob for volume control on the front panel with three small push buttons to the left for standby, source selection and display dim. To the right of the volume control is the display itself, which is large and clear without being too brash, and shows the selected input along with a numerical indication of level.

The instruction manuals are lavish and clearly written, although uninformative specification wise. However they do tell us, and I quote, that "the unobtrusive design harmonises with almost every environment and does not compete with your personal sphere." Nice!?! Actually, I think I lost my personal

sphere some time ago...seriously though, I can see what they mean. The last thing this stuff looks like is studio or lab equipment.

Rear panel connections are well laid out and of suitably high quality, with a comprehensive array of, five unbalanced and two balanced inputs using phonos and XLR's respectively. Output is also balanced, and this is the preferred method of operation, but supplemented by two sets of single ended RCA's. There are also two communication ports to enable the unit to talk to other Advantage products, in this case the power-amps where, for example the heatsink temperature can be displayed on the S-2. Call me an anorak, but I happen to think this is a useful feature, particularly when driving really difficult speakers at high levels, something I never do. And you've been at the whisky.

All other functions such as balance are accessed from the remote control, a nicely designed and extremely solid unit made from aluminium which serves other Advantage products such as their CD players. But there is more. Via the remote it is possible to change the sensitivity of each individual input, and also name it; both of which are nice practical touches. The controls have a nice feel to them, and are completely noise free in use – my only gripe is that the acceptance angle of the remote receiver is fairly narrow. This means that the remote would



▷ only work when you were in front of or in line with the pre-amp, which slightly defeated the object.

The S-250 power amps present a fairly subdued face to the world with only a small standby switch supplemented with the (by now ubiquitous) blue LED. They are distinctly heavy beasts, but somehow their visual appearance manages to belie this – perhaps the lack of external heatsinks helps in this respect. The standard blueprint for powerful amplifiers seems to be cast along the lines of lots of metal and large handles etc. I sometimes wonder how strong the correlation is between looks and sound. Connections at the back comprise switchable balanced and single ended inputs plus two sets of five way speaker terminals along with the communication ports. I haven't mentioned power output yet; there is no specification supplied with the instructions but I would guess that being designated S-250 implies a rating of 250 watts. No special mention is made of high current delivery or anything else for that matter.

Internally, construction is to a high standard, the majority of components being sited on a substantial PCB.



There is a large (and thankfully quiet) toroidal mains transformer flanked by two large heat-sinks either side, which are warm to the touch under quiescent conditions indicating a degree of biasing into class A. The output stage would seem to be bi-polar, but, and this is a wild guess, the layout would suggest two amplifiers running in a bridge arrange-

ment – I will be interested to get clarification from the manufacturers. One other point I noted was the absence of large reservoir capacitors, there being no less than fourteen smaller high quality components to do the job – in my experience this has a significant benefit on performance.

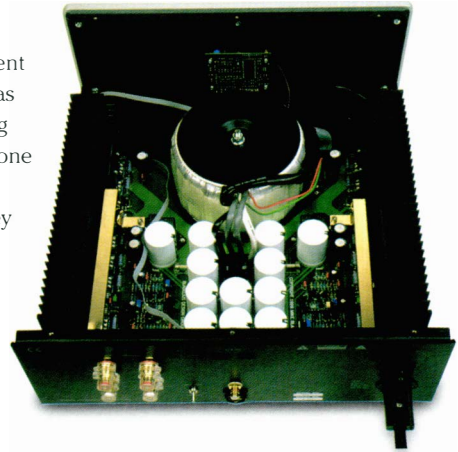
Both units have power switches at the back, obviously they are designed to be left powered up and operated from standby mode. I had been warned that the Advantage equipment took a long time to warm up, but was not expecting it to take quite so long ...like ten days. I kid you not – day one found them sounding very ordinary, and I expected that after a week they should be more or less up together. Had I judged them then (or, God forbid, had they been taken away after a week) this review would have read very differently. They sounded very nice, but utterly... boring. I have to admit to losing interest, and avoided listening to any music for a while and pursuing other interests (!).

Come the weekend, the whole situation had changed out of all order, but before I go into that, I must stress that the effect was not subtle, and more to the point, once powered down from the mains it was back to square one. Despite heroic efforts on the part of the editor and myself juggling mains leads during the photographic session, they can't have been without power for more than a minute, when I returned them into the system they reverted to sounding absolutely crap. But a good dealer will know this, won't he? You have been warned.

Once I had got this inconvenience out of the way, things settled down very nicely, thank you. Source components were the Einstein CD player and the totally awesome Tubaphon cartridge on the Linn, until, and this is the depressing side of hi-fi reviewing, the importer reclaimed both units, where upon it was back to the Meridian 508.

Loudspeakers were the Primary monitors, and subsequently the B&W 802's – also reviewed in this issue. Both these loudspeakers enjoy working with, shall we say, amplification of a more generous output, and neither present a particularly kind impedance load, so the S-250 had its work cut out.

First things first – the S250's did not sound like big power amplifiers.



Disconcerting to begin with, but the more I listened the less I heard the trademarks of muscle bound amplification. To be more specific, music flowed in a very natural fashion as opposed to the rather constipated delivery so common to amplifiers of this genre. A lot of powerful amplifiers can tend to sound earthbound in my experience; sure, they can go loud but the musical dynamics remain leaden and indistinguishable. In other words, you can pin the listener to the seat with high volume levels, but that is all you are doing, as the musical communication becomes lost, so it becomes a scientific demonstration rather than a musical experience.

The Advantage amplification is not like that. The music is allowed to breathe in a fashion that good small amplifiers seem to manage so well, but is underpinned by a hidden authority that can be quite frightening. More to the point, it seems to be able to achieve this at any volume level, ▷



PLINIUS  
16

SOURCE

PHONO  
CD  
TUNER  
VIDEO  
TAPE 1  
TAPE 2

RECORD

PHONO  
CD  
TUNER  
VIDEO  
TAPE 1  
TAPE 2

BALANCE

VOLUME

PHASE

STANDBY

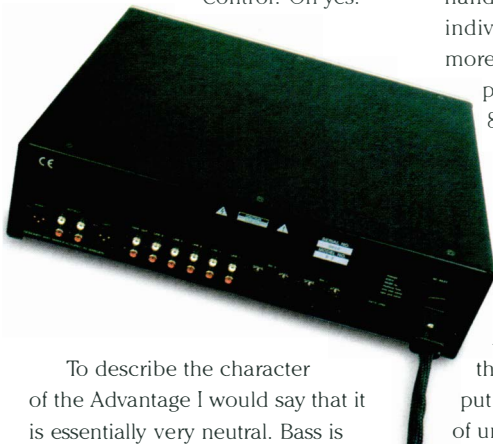
MUTE

PLINIUS  
SA-250

▶ so listening at low levels was highly satisfying. What was really scary was that there was no evidence of the character of the power amplifiers changing as the volume went up. There was no hardening up, or lack of steam as the level went up. And up. This could be dangerous....

The bottom end is both extended and extremely well controlled with no hint of being bloated or sluggish; with the Primary monitors I found that I was listening at higher levels than usual, as the Advantage was not allowing the bass to become muddy or confused. Indeed, it was only when the midrange units began to overheat and the room filled with the smell of burning enamel that I realised just what ridiculous levels I was listening at – normally the bass units would complain with over excursion long before this point.

Control? Oh yes.



To describe the character of the Advantage I would say that it is essentially very neutral. Bass is very well defined and reassuringly deep, but without overemphasising the weight, which is again a tendency with beefcake amplification. Because of this, the midrange and treble seem unrestricted and open. Delicate music such as Vaughan Williams' Sonata in A minor for violin and piano was convincingly portrayed, with realistic tone from both instruments, and a good sense of the acoustic environment in which they were recorded.

Larger orchestral works were similarly well portrayed, but with the added attraction of a sense of realism

in the bass – you only noticed it when the cellos and double basses come in and they take their correct place in the orchestra, not too overblown, but just there, underpinning the music. Nowhere was this more apparent than with the Shostakovich *Symphony no.5* – in the third movement the gentle beginning grows dramatically through-out; at no point did it become overbearing. Listeners used to traditional muscle-amps might feel that the S-250s lack "slam". It's exactly that artificial quality that I really dislike, as it has nothing to do with reality, and only serves to smother the immediacy so important to the midrange.

At the opposite end of the musical spectrum Moloko's third album, *Things to make and do* demonstrates how good modern technology can be when in the hands of intelligent and creative individuals, as opposed to the more normal pond life operators so prevalent today. Coupled with the 802's the Advantage combination produced some explosive results, with percussion and voice sounding both natural and exciting, with excellent timing and rhythm.

Amongst all of this, although the Advantage performed brilliantly, there was something I couldn't quite put my finger on; an occasional sense of unease particularly when listening to acoustic music. Hard to pin down, there was sometimes a slightly unreal quality to the music, as if the sound was almost too good to be true. Squeaky-clean? Polished beyond perfection? Maybe. But it was only a minor flaw in what was otherwise an excellent performance and at the end of the day, a change of partnering equipment or cables could alleviate the problem. Swapping my ultra-clean Nordost SPM for something warmer and more expansive like Yamamura-Churchill cables would probably be a step in the right direction.

In conclusion, the Advantage S-2 and S-250 are a great combination. Succeeding where others fail, this is a capable system that doesn't come with all the more usual traits of large amplification. It is genuinely powerful, but only flexes its muscles where musically necessary, unlike so many others that remind you of their strength by shamelessly parading it in front of you. Sensitivity and power has always been a more attractive proposition than plain brute force; just ask Hilary Clinton. If you must have this sort of power and don't want to sacrifice life and subtlety then the Advantage proves that point admirably. ➤

#### TECHNICAL SPECIFICATIONS

##### S – 2 Pre amplifier

Inputs:	5 Single-ended line 2 Balanced line All adjustable sensitivity
Input Impedance:	10 K ohms
Outputs:	2 Balanced output 2 Single-ended outputs 1 Tape output
Output Impedance:	100 ohms
Communication Ports:	2
Dimensions (WxHxD):	435 x 125 x 400mm
Weight:	14 Kg
Finish:	Brushed aluminium
Price:	£2750.00

##### S – 250 Mono-block Power-amp

Inputs:	1 Balanced 1 Single-ended
Input Impedance:	20 K ohms
Outputs:	2 pairs of binding posts
Rated Power Output:	250w/8 ohms
Communication Ports:	2
Dimensions (WxHxD):	435 x 180 x 475mm
Weight:	25 Kg
Finish:	Brushed aluminium
Price:	£5950.00 / pr

##### Distributor:

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# Plinius M16L Line-Stage and SA-250 Class A Power-Amp

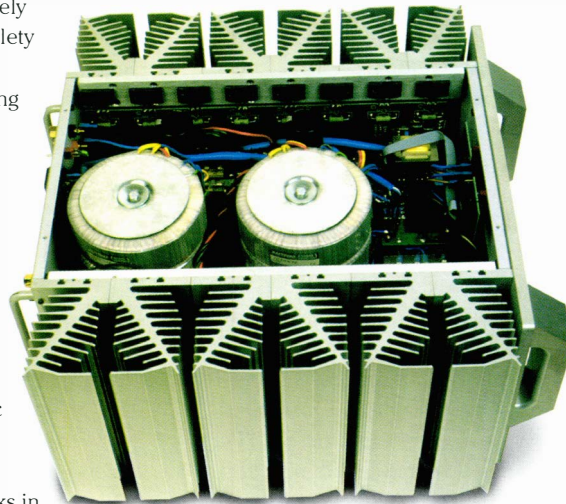
by Roy Gregory

The massive reverberent “womp” of the drum kit toppling onto the stage rang through the house, waking the sleeping tortoise and raising clouds of dust. Clouds of dust like the ones you can almost see, pushed out sideways on the cushion of air that shoots from beneath the falling drums. This isn't just about volume, although the results in that respect are extremely impressive, it's about subtlety too. Upright, the whole drum-kit becomes a shifting pattern of vibrating air and skin, vibrating planes that are angled precisely in space.

Beneath the calm, almost studied exterior of Keith Johnson lies a maniacal streak which litters his recordings with the kind of huge dynamic peaks which bring hi-fi systems to their knees. A similar maniacal urge lurks in the dark recesses of the average audiophile mind (note the term audiophile; this has absolutely nothing to do with music) compelling us, when confronted by a big amp, to reach for the loudest recorded sound we possess: wick up the volume, select track, try to look unconcerned. Such is the weight of expectation – big equals loud. Simple as that really.

The problem is that expectation is fuelled by many things, and second only to a row of foot high heat sinks comes price. If the Plinius amplifiers respond with gusto to excessive application of the volume control, then they play a more circumspect

game when it comes to pricing. Six grand is a great deal of money, but when it's buying you 250 Watts of predominantly Class A power, then it looks like a bargain. And bargains make people suspicious. After all, the US competition from the likes of Krell and Pass are much more expensive. Never mind, if it makes you feel any



better, the Plinius SA-250 sells for \$8495 plus sales tax in the US, a market where it competes quite happily with the other \$9000 designs. The same \$9000 designs that cost £9000 over here. So what's in a price? A lot of profit I hear you say, and whilst it isn't quite that simple, it's certainly a salutary lesson in the fact that the retail price of a product is no guarantee of that product's quality, with respect to its peers or the market as a whole. There is a tendency amongst hi-fi's conspicuous consumers to dismiss 'cheap' product and not take it seriously. And whilst the

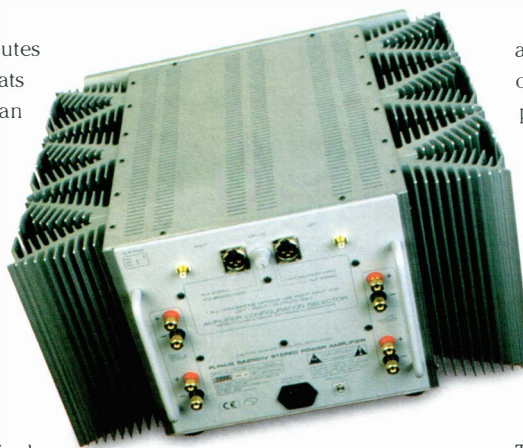
SA-250 can hardly be described as cheap, to underrate it would be a serious error.

The Plinius SA-250 is a big amp. Stop visitors in their tracks big if that's what turns you on. Ironically, it's physically relatively compact, but it has the kind of blocky, squat dimensions that leave you in no doubt as to its latent energy. The thick front panel and massive handles (thankfully front and back) fit everybody's notion of what a big amp should look like, whilst the massive protruding heat sinks give it the slightly hunched kind of self contained confidence that I associate with power lifters. At 145 lbs that's far from a coincidence.

Controls are minimal, but also extremely sensible. The front panel sees a pair of toggle switches, on the left a mute and on the right a bias mode selector. With any amp of this power a mute switch is a real benefit, both in allowing you to manipulate cables and connections without endangering your speakers or output stage, but also to prevent catastrophic reduction of those speakers by a mishap or failure upstream. Of course, that wouldn't be a problem if you turned the amp off between listening sessions, but you don't want to do that. I found that it sounded better and better over a week long warm-up period: which brings us to that second switch. This allows you to switch between Class A and Class A/B, meaning that you can leave the amp idling between listening sessions, drinking about as mush power as a light bulb, then flick it to high juice Class A just before you settle down ▶

▶ to play. It still takes about 20 minutes to really hit its stride, but that beats the hell out of seven days. You can of course listen in Class A/B (perhaps while you're doing the washing-up) but once you've experienced the Class A option, I can't see why you'd bother. Why go to all this trouble? Look at your electricity meter with the amp running in Class A and you'll soon get the picture.

Round the back you'll find single-ended and balanced XLR connections, along with a four position input mode switch. That's right, real megalomaniacs can bridge the SA-250. One kilowatt anybody? There's also four speaker binding posts a side, and a switch to float the chassis earth. Like I said, minimal but sensible. One small point of interest, perhaps related to the amp's easy sense of musical flow, is that it employs two transformers per channel, connected in parallel. The original thinking was to reduce mechanical noise (smaller transformers are less prone to hum) but Plinius soon discovered a sonic benefit out of all proportion with the cost of the modification. And they're not the only ones to move in this direction. Maybe it has to do with cancelling



mains borne problems, but whatever the reason it's a topology which seems to offer very real benefits.

The Plinius combination worked flawlessly all the time that I had it. I used Nordost cables to hook it up (Quattro-fil and SPM), for once preferring the balanced pre to power option. I also used a variety of speakers, but the bulk of the listening was done with the NHT 2.9s, exactly the kind of wide bandwidth, low-efficiency, awkward load that the SA-250 was built for. Main source was the Clearlight Recovery Turntable, armed with the excellent Incognito-ed RB300 and a variety of cartridges, amplified by the Pass Aleph-Ono.

We already know that the Plinius amps do the big-amp thing with aplomb. The thunderous crash from *Dafos* (Reference Recordings RR-12) is proof enough, as is the startled tortoise (Albert was a-kip upstairs in a back bedroom, and for those of you who don't major on wildlife documentaries, scientific opinion tends to the belief that the average tortoise is stone deaf!!). Given speakers with appropriate bass extension the SA-250 is capable of both high levels and massive dynamic swings. But there's nothing earth-bound

about this bass. The attack and texture of the individual drum beats is perfectly portrayed, as is the vibrance and decay of the skins.

It works on a grand scale too. The deep foreboding of the pulsing double basses that underpin the mournful tuba solo which opens the 4th movement 'Fears' of Shostakovich's *13th Symphony 'Babi Yar'* (EMI ASD 3911) hangs in the room, the instruments breathing in unison to their bow strokes.

The subterranean bass drum rumbles menacingly. The Plinius floats the soundstage convincingly, and it does so consistently, where the recording has captured it. The bass is powerful and warm, natural, not overblown. It's a warmth that carries through the mid-band but diminishes as you rise, leaving upper register percussion crisp and poorly recorded violins exposed in all their digital anaemia. The better the recording the better it sounds, and although the Plinius doesn't destroy recordings, it reveals their short-comings without necessarily highlighting them.

But it is at the opposite end of the scale that big amps so often stumble. The Steeplechase recording *Trouble In Mind* (SCS 1139) captures Archie Shepp's tenor sax in intimate, breathy close-up, and the Plinius delivers the goods. But what really impressed me was the easy way it opened out Horace Parlan's phrasing. He constantly stretches and massages the piano's contribution, lifting it away from the role of accompaniment and engaging Shepp's lead. The SA-250/M16L allowed the music to unroll in front of me, the timing of the sax's interjections perfect, the shifting patterns of the piano alternately filling in and making space.

The other thing that I really like about these amps is their generosity. They show no particular preference for LP or CD, classical jazz or rock. They simply get on with the job. Experimentation with the line-stage ▶





### The M16L line-stage

It's so easy to get carried away with the SA-250 that you overlook the matching line stage. Constructed on similar monolithic lines, the M16L also shares the power-amps common sense approach. It offers six line inputs, one of which can be selected for balanced operation, and another for an optional MM/MC phono-stage. Likewise the outputs are available as either balanced or single-ended.

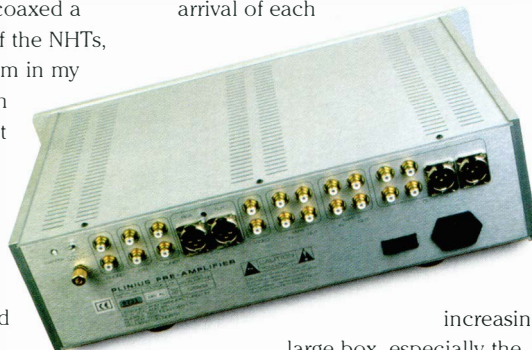
Internally, the line stage is configured as a balanced bridge, using sophisticated power supply regulation to help reject mains borne noise. Solidly built, the boards are littered with audiophile grade components, and whilst I remain to be convinced of the necessity of this, the brands chosen show a willingness to investigate rather than simply follow the crowd. Internal signal wiring is all Siltech, and for users who choose to employ a high quality external phono-stage (such as the Plinius M14) the phono input can be upgraded with even better wire and a shorter signal path, a £150 option that wasn't fitted to the review unit. You get a ground switch like the one on the power-amp, and a dinky little standby button which needs to be pressed to enable the unit after switch-on.

Round the front you'll find switching for the six inputs (including the two tape loops), tape monitoring, balance and volume control. The two toggle switches are for mute and absolute phase. The remote control is particularly nice; not too heavy, with large, clearly labelled buttons. An object lesson for other manufacturers.

proved it to be impressively unobtrusive, although for some reason it really didn't like the Jadis JA100s. The impedances look alright, so I can't explain that one. But used together they were unfailingly enjoyable and unflappable. They even coaxed a decent soundstage out of the NHTs, which has been a problem in my listening room. Used with the Ars Acoustica Divas it was positively huge, precise at the front and very wide, but a shade shallower and not quite as airy as I'm used to with the JA30s. Nor did music have the same immediacy and presence that the Jadis produce. But the Plinius amps got a lot closer than I expected them to, and are a world away from the sterile precision that I associate with so many of their competitors. Close enough to lead to more than one much later than intended listening session at a time when both Victoria and I could ill afford loss of sleep.

I've also been pulling rather louder music from the shelves, not because it particularly suits the amps, but just because I can. The effortlessly unobtrusive power delivery of this antipodean behemoth brings a sense of relaxed and uncongested grace to the likes of Rachmaninov symphonies and Puccini operas. Oh, okay, I admit

at times too. And the dance tracks, the ambient albums, the reggae, the Cure..... In fact, our neighbours are going to be glad to see the back of the Plinius (I see them cringe with the arrival of each



increasingly large box, especially the ones with loudspeaker stencilled on them. Mind you, their daughter is learning the recorder!)

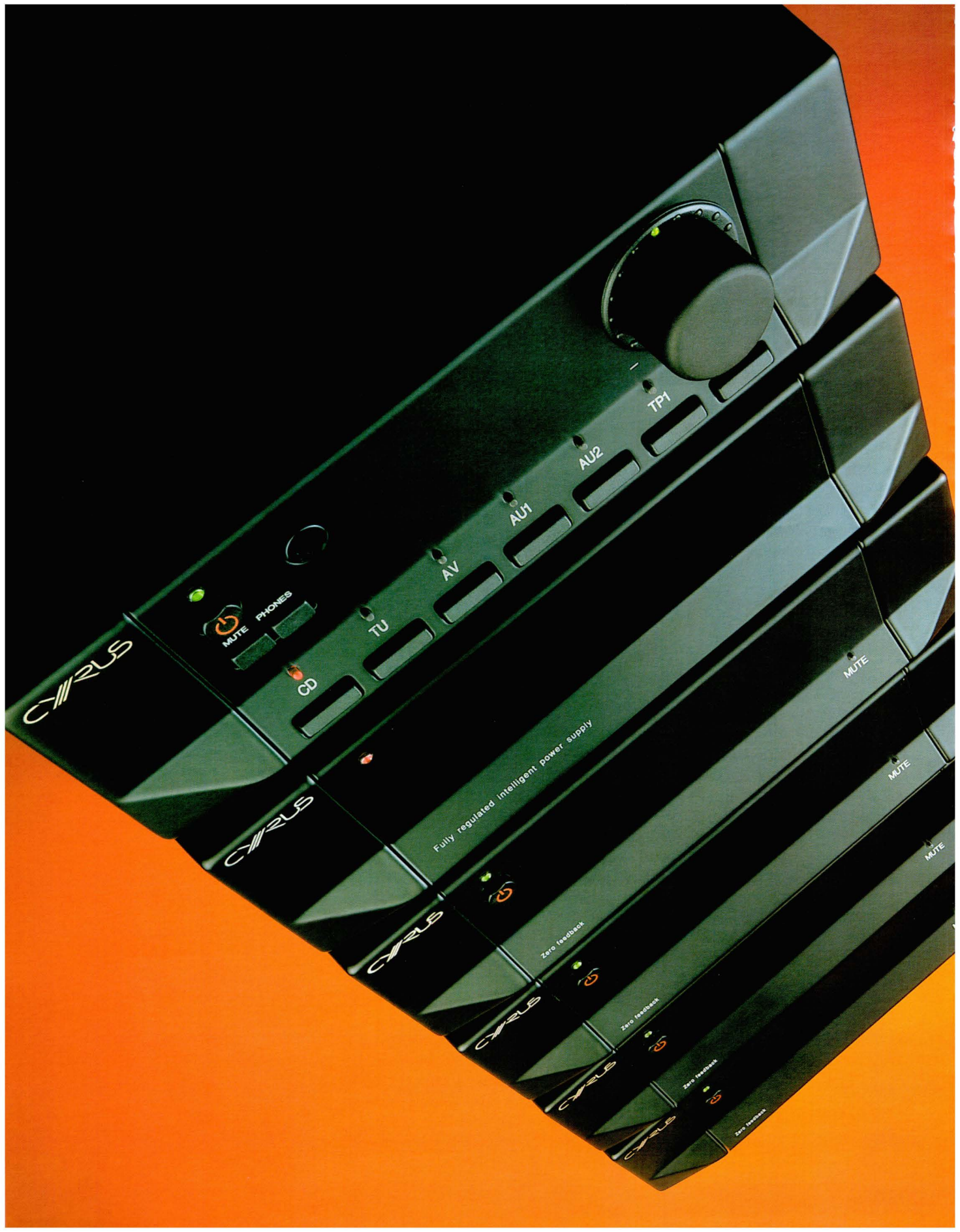
The Plinius SA-250 has made me reconsider my feelings toward heavy-weight solid-state amplification. It's refreshing to know that if I ever had to go this route then there's at least one relatively affordable contender waiting to entertain me. And that really is the bottom line. The Plinius pairing is without significant musical flaws, and gets the all important mid-range right. It brings a performance to life, it engages, it entertains and above all, it doesn't obstruct. If you favour the ultra precise, almost clinical presentation of some fashionable designs, you may feel the Plinius sounds rather, well,

dated. I think it sounds more like music and less like hi-fi. With the SA-250 in the system, it reminds you, just often enough, just how much power you've got on tap. It never lets that power intrude or dominate proceedings. Rather to my surprise, I shall be sad to see it go.

### TECHNICAL SPECIFICATIONS

<b>M16 Pre-amplifier</b>	
Inputs:	5 x Single-Ended Line 1 x Balanced MC/MM Phono (Optional)
Outputs:	2 x Single-Ended 1 x Balanced 2 x Tape
Input Sensitivity:	200mV
Input Impedance:	47K
Output Level:	1.5V Line 0.18V Tape
Finishes:	Silver or Black
Dimensions (HxWxD):	125 x 500 x340mm
Weight:	12Kg
Price:	£3350 Phono Bd. £300
<b>SA250 Power Amplifier</b>	
Inputs:	1 x Single-Ended 1 x Balanced
Outputs:	2 prs 4mm Binding-Posts/Ch.
Rated Output:	250W/Ch into 8 Ohms 500W/Ch into 4 Ohms 1KW/Ch into 8 Ohms Bridged
Current Delivery:	70 A Peak/Ch.
Input Sensitivity:	1.1V
Input Impedance:	100 K
Finishes:	Silver or Black
Dimensions (HxWxD):	275 x 500 x 540mm
Weight:	65Kg
Price:	£6350
<b>Distributor:</b>	
Absolute Analogue Tel/Fax: (44)(0)208-459-8113 E-mail. Absolute_Analogue@msn.com	
<b>Manufacturer:</b>	
Audible Technologies Ltd New Zealand Tel. 0064-6358-8583 Fax. 00646359-3829 E-mail. scott@pliniusaudio.com Net. www.pliniusaudio.com	





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# The Cyrus aCA7.5 Pre-amplifier and aPA7 Mono Power-amplifiers

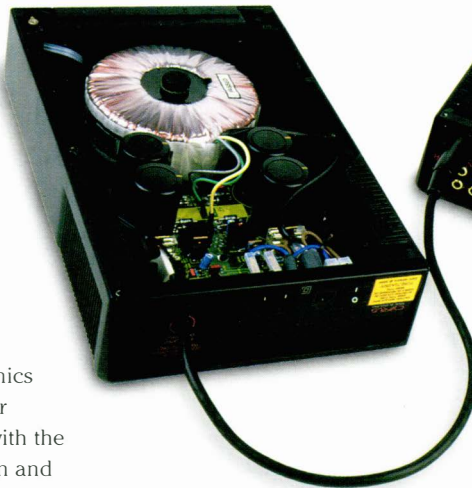
by Chris Binns

Is it something in the water? Or just some sort of gravitational pull that draws aspiring hi-fi designers to a part of Cambridgeshire called Huntingdon. Associated with the hi-fi industry longer than I care to remember, this particular corner of the world has been responsible for more hi fi design than almost anywhere else that I can think of. For the last twenty years or so it has been the base for Mission electronics who conceived the name Cyrus for their range of electronics, notably the amplifiers. Now a company in their own right, the heritage of the previous designs lives on, and these are unmistakably Cyrus products.

With a full range of electronics on offer, flexibility and value for money are key selling points, with the facility for the logical expansion and upgrading of any given system, be it to full surround sound configuration, or just more refined two channel reproduction. Beyond that, the aPA7 mono power amplifiers have been introduced as a serious stab at the high-end market, and as such exist in their own right rather than simply being the top of the Cyrus upgrade path. Being mono, five of them would of course be eminently suitable for a high end AV system.

One aspect carried over from the original Cyrus amplification is the shape; each unit is housed in a 'half width' box built into a non-magnetic alloy die casting of which the heat sink is an integral feature. Finished in a dark grey, almost black paint, these

diminutive units are beautifully finished and exude an air of clean and purposeful design, particularly when all lined up together. They represent one of the neater pre and power amp combinations that I have had in my living room, especially when compared to some of the other



monsters reviewed in this issue.

Originally designated just the aCA-7, the 7.5 is actually a complete re-design, although outwardly there is nothing to tell them apart. Essentially a straight-line device, it is well endowed with five line and two tape inputs, one of which will cater for off-tape monitoring. Outputs consist of two tape and two pairs of main outs, with a balanced option provided via XLR's. There is also a headphone output that conveniently mutes the power amps when in use. One slight drawback is that all this socketry makes for a densely populated back panel, and it did render the unit a little unstable with the weight of so many

leads. Further versatility is provided by having a user assignable gain for each input, so that sensitivity can be matched for different source components. The volume control is of the intelligent digital type, with increments of one dB available, but moving it swiftly

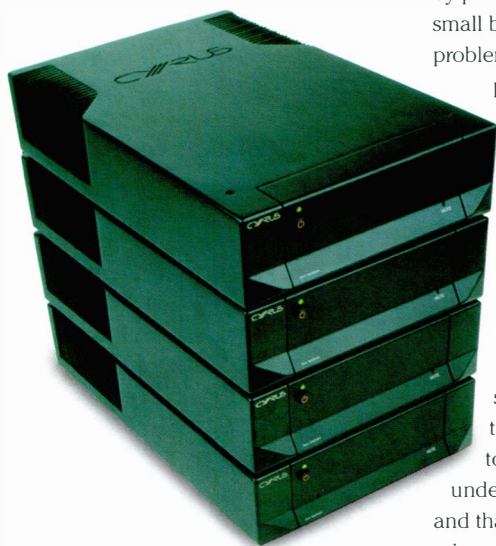
increases the 'gearing' to produce a rapid response. Level indication is provided by a neat circle of LED's surrounding the volume control; the centre one turning red

when the balance adjustment is selected via the remote. This unit covers all aspects of operation, and naturally it will command other Cyrus items, as well as any RC-5 encoded CD player. There are some nice touches in evidence here – for example hitting the mute button gently fades the sound down to zero rather than killing it dead. Hit it again and it gradually comes back up. Very civilised.

As an upgrade, you can add the PSX-R to the aCA-7.5, which automatically separates the digital control circuitry from the analogue stages, and routes its power to the latter, providing maximum isolation between the two, and better sound quality as a result. With the aCA-7 amplifiers it made sense to evaluate the pre amp solely with the PSX-R, as this would be a much more realistic combination.

Turning to the power amps, the ▶

▶ single control on the front panel brings the unit out of standby, after which the output is muted for a few seconds while the internal microprocessor runs a few checks to make sure that everything is ok; status is monitored by two bi-coloured LED's. Power on-off is provided at the rear, alongside switchable balanced and single ended inputs with a parallel output for daisy chaining other amplifiers. Two sets of loudspeaker outputs are provided which are of the BFA approved type – very politically correct, but quite frankly a pain in the neck when it comes to reviewing. Fortunately, the lightweight 'Z' plugs fitted to my Nordost SPM speaker cables will slip over these. Otherwise, be warned that you might be in for a spot of re-termination.



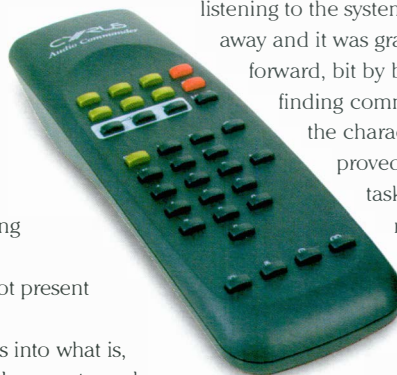
Internal construction is neat and well laid out, dominated by the large (and mechanically very quiet) toroidal mains transformer, the rest of the space being taken up by the main printed circuit board. High quality selected components are much in evidence, for example the use of four terminal T type reservoir capacitors promise lower power supply noise at mid and high frequencies with a better sonic performance as a result.

Advertised as zero feedback, the

sonic benefits of this have been argued for quite some time now, particularly with relatively simple designs such as single ended triodes. With transistors, this is a far more involved task, but designer Steve Sells has risen to the occasion with a groundbreaking circuit that does not require the usual global feedback loop to achieve a respectable performance. And with power? At 240 watts into four ohms, and backed up by some serious peak current capability, driving inefficient or awkward loudspeakers should not present a problem.

Packaging all of this into what is, by power amp standards, an extremely small box, does leave you with one problem – what to do with all the heat produced. The heat sinks will only dissipate so much, despite the thermal efficiency of the cast casework, so a fan has been added to exhaust internal air through the back panel and keep things cool. The actual fan speed is controlled by a microprocessor which takes into account music signal and thermal conditions; the result is that you are unlikely to ever hear it in operation, even under really arduous conditions – and that's a real blessing. The same microprocessor also runs the comprehensive protection system, which in the event of a fault condition puts the amplifier into standby mode, hopefully saving your speakers in the process.

I took the precaution of leaving everything powered up for a week prior to using it in my system. Then, with the usual source components and feeding the Primary monitors, I left it to settle down for a few days before doing any serious listening, poking my head round the door now and again to see how it was going.



On first hearing, the Cyrus system sounded gentle, with an almost laid back character, even somewhat lazy in its presentation of music. As time went on, I could hear the presentation tightening up, and simultaneously coming into focus. It was a strange phenomenon, almost as if you were listening to the system from fifty feet away and it was gradually edging forward, bit by bit. Once it arrived, finding comments to describe the character of the system proved to be a difficult task. Many systems reveal themselves straight away by giving you identifiable handles on their performance, but the

Cyrus combination was playing its cards very close to its chest, and much to its credit I found myself too involved with the music to go into hi-fi mode. However...

Essentially neutral in character, presentation of music was entirely seamless, with no particular area standing out. Bass was tuneful and rhythmically capable, with the right amount of control; neither constipated nor over played. The mid-range and top end were open with plenty of detail and female vocals had a liquid quality to them that made for compelling listening. The openness that pervaded the mid range made for a very eloquent and communicative sound, somewhat reminiscent of a good valve amplifier. The benefits of low feed-back? Quite possibly. Presentation of musical instruments was excellent with plenty of low level information coming through, backed up by the background detail so important to conveying an idea of the acoustic environment in which the recording was made. One Sunday afternoon for example, I was playing a recording of the *Debussy sonata for flute, viola and harp*, in an attempt to forget the incessant pouring rain of ▶

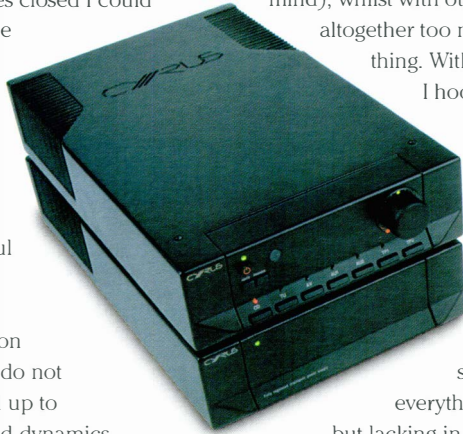
▶ an English spring. The Cyrus combination presented the acoustic of a well-defined room, with the players accurately located within it. More to the point, with my eyes closed I could almost imagine the French windows open and the sun shining in.

The aPA-7 power amplifiers, although genuinely powerful with high current capability, do not wear their badge on their sleeve. They do not need to be turned up to convey impact and dynamics, but when you do, the music gets louder, with wider dynamic range, as it should, rather than just playing at a higher volume. As an example, a friend of mine and I were able to satisfy a late night bout of nostalgic indulgence by playing Led Zeppelin albums, and although I don't deny it was great fun having it cranked up, the essence of the music was still intact at more reasonable levels.

Running at continuous high levels, the case did get warm, but at no point did they bottle out, and I was never aware of the fan operating – it's that inconspicuous. When the amps do clip, they do so gracefully, rounding off the sound rather than zapping you with sharp distortion. Again, more like a valve amp than solid state.

But whilst the Cyrus combination possesses certain valve-like qualities, its precision and controlled refinement mark it as unmistakably solid-state. Also absent are the vivid tonal colours of a good valve amp. The combination of those impeccable manners with a

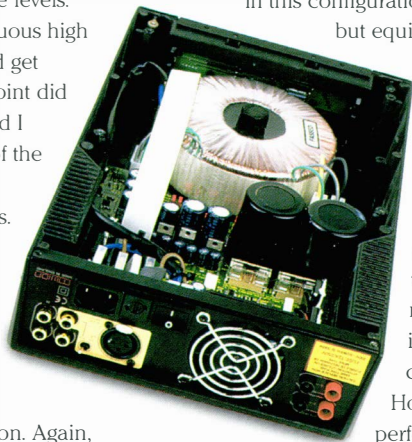
slightly bleached tonal palette can leave music lacking a little character. With some speakers this could prove a positive boon (Quad ESL 63s spring to mind), whilst with others it could be altogether too much of a good thing. With this in mind



I hooked the Cyrus amps up to the B&W Nautilus 802s. Fine with quieter music, playing more demanding material gave a rather flat sound, as if everything was there,

but lacking in body and colour.

The answer was to add another pair of aPA-7 power amps to the system and bi-amplify the loud-speakers. This proved to be the perfect solution, showing all the strengths of the Cyrus amplification but with greater substance and authority. More to the point, with a demanding and highly revealing loudspeaker such as the 802, there would seem to be many benefits in this configuration over a single larger but equivalently priced



amplifier, where the trade-offs between power and musical performance start to show. If forced I'd have to point an accusatory finger at the pre-amp, but this really is a case of suck it and see with your chosen speakers.

How to summarise the performance of the Cyrus amplifiers? The aCA-7.5

pre amp and aPA-7 power amps are not the kind of product that shout about their brilliance the first time you listen to them – theirs is a far more subtle approach. It is after more lengthy use that you realise, by having not really noticed any stand-out elements in their

performance, that they have in fact been quietly (or not so...) getting on with the job in hand; letting you listen to the music. Damning them with faint praise? I don't think so. Well thought out, flexible, and thoroughly engineered, I think that they offer good value for money, particularly the power amps. The combination of solid state virtues coupled with the fluidity and comm-unicative qualities of a valve amp is particularly attractive, and with some more demanding loudspeakers the use of two pairs for bi-amping could prove a desirable and better sounding alternative to larger amplification. ▶+

#### TECHNICAL SPECIFICATIONS

##### Cyrus aCA-7.5 Pre amp

Inputs:	5 line, two tape
Input sensitivity:	200 mV (adjustable)
Input impedance:	50 K ohms
Outputs:	Two unbalanced RCA type
	Two tape
	Balanced XLR Headphones
Dimensions (WxHxD):	215x75x365mm
Price:	£800

##### Cyrus PSX-R

Dimensions (WxHxD):	215x75x365mm
Price:	£350

##### Cyrus aPA7 Power amp

Inputs:	
Input sensitivity:	Unbalanced 660 mV
	Balanced 775 mV
Input impedance:	20 K ohms
Power output::	150 Watts into 8 ohms
Dimensions (WxHxD):	215x75x365mm
Price:	£950 EACH

##### Manufacturer:

Cyrus Electronics  
Tel. (44)(0)1480-451777  
Fax. (44)(0)1480-432777  
Net. www.mission-cyrus.com



# SimAudio

## Moon P5 Pre-Amp and W5 Stereo Power-Amp

by Roy Gregory

There are amplifiers out there that hide their light under a bushel, creeping up on you when you least suspect it. Others are adept performers of sleight of hand; you know what they're doing but it takes a while to work out exactly how. And some are just downright flashy; all teeth and trousers to start with, but their charm soon wears thin.

The SimAudio Moon Series amplification is a refreshing change. This is a combination that wears its heart well and truly on its sleeve. Mind you, it takes a while to emerge. The manufacturer recommends a 200 hour burn-in/warm-up period, and if anything I'd say that's conservative. The review set were company demonstrators with plenty of hard work under their belts, (and still wearing the original grey / gold livery, rather than the smart new black and aly shown in the news pages of Issue 6) but they still took a good ten days to really come on song.

Fortunately, prior experience with the Advantage amps as well as SimAudio's own little I-5 integrated amp (reviewed in Issue 5) meant that I was well prepared for the wait. However, the lesson is clear; don't rush to judgement or you could miss out on a bargain. Bargain? Yes, in their own way, the Moons represent a genuine bargain - as long as you are after what they're offering.

Simply because these amps are

so free of artifice it's easy to identify their shortcomings. Select a few of your preferred test discs and let them loose on whatever you use to spin them. Within a couple of tracks a practised ear will have identified a lack of top-end air and overall immediacy, and a hesitation in the jump of really sudden dynamics. Of course, this is in comparison to the kind of small amp and efficient speaker combination that excels in these areas, but whilst the Moons might not compete head to head on the mighty-mites' home turf, they're quick compared to most of the heavy-weight competition. What makes them so interesting is their own particular (and considerable) blend of strengths; or rather, what they bring to the party, not what they leave behind.

If you were going to sum the Moons up in just a couple of words, you could do worse than choose 'power' and 'drive'. They give music a sense of compact solidity and momentum that brings studio rock recordings to life. Their "what you hear is what you get" approach instils a system with a sense of uncomplicated directness and the music with a real sense of purpose.

You want solid? Listen to the

rhythm section on Rattlesnakes (Polydor LCLP1), especially the perfectly pitched and paced bass line on the track 'Speedboat'. Each note is a deep, satisfyingly tactile plop, like a rock dropping into a barrel of oil, placed against the drum beats, pacing them precisely, its pitch spaced clearly from its neighbour. Deep, deep and stable, the notes go down through the floor without ever feeling anchored to it. This is a bass line whose energy drives the song, full of life and vibrance, and that's exactly how the Sims deliver it.

The shockingly discordant opening of the DCC re-issue of the Stokowski / Everest *Uirapuru* (DCC LPZ 1003) is suitably impressive, as is the cavernous acoustic of this 1958 recording. Again, scale and low frequency power are abundantly obvious, but what is really special is the way that the Moons preserve the delicacy and fragility of the flute theme against the percussive cacophony of Villa-Lobos' orchestral jungle. This is



► difficult, shattered and discordant music, but the P5/W5 combination made perfect sense of it, sorting out the separate strands and weaving them into a coherent whole, full of the requisite beauty and menace.

Rhythmically the Moons excel, which is what prevents the solidity and stability weighing things down. The complex and convoluted rhythms of 'Crocodile Cryer' (Martin Stephenson and the Daintees *Boat to Bolivia* Kitchenware KWLP5) roll effortlessly forward, the punch emphasis and rests given real force and drama by the Sims' almost physical substance. And shifting onto 'Coleen', the almost whimsical delicacy of the playing survives intact. These amps tease out the rhythmic backbone of the music, and then they hang its structures, its melodies and layers, like the ribs of a gigantic beast. The P5/W5 lay out the music's form like it's been x-rayed; that clean and that clear. But don't for a moment think that they are dry and clinical.

These bones are there to give shape and substance to the flesh. Thea Gilmore's fantastic new album *The Lipstick Conspiracies* (Naim CD046) makes the point. These are songs with serious attitude, and the Moons put it all right in front of you, impossible to ignore. The recording might not be great, but it works for the music, giving it the poise and impact of an on-form Chrissie Hynde, which is pretty impressive for

a twenty year old.

Which brings me to what is arguably the Sims' greatest attribute.

There are some amps that send you



reaching for your best recordings, the ones off the audiophile wish lists. The let's see what this baby can do syndrome. The Moons send you in the opposite direction, dragging out long forgotten records, most of which have seen one party or charity shop too many. These amps propel you so directly into the music that the recordings simply get passed by.

To that extent, the average audiophile record can do more to highlight the amps' chosen



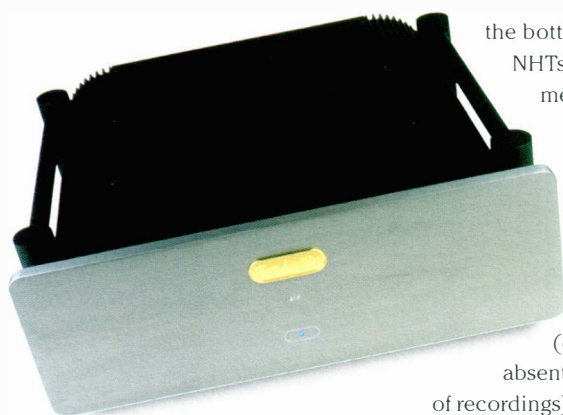
compromises than impress the hell out of your friends. These are tools for listening to music, not recordings. The chosen strengths and balances work for the music that's on the disc, not the aggrandisement of the engineer who put it there. That's

a design path that I can relate to!

Part of this open armed approach to different discs rests in the warm tonal balance the amps give them to bask in. Not the cloying warmth and stodgy bass that some people refer to as romance, but properly developed instrumental harmonics to fill out the cold crystal separation that infects so many big solid state amps, and its this, combined with the real power available that stops the dynamics jumping quite as quick as they should. Aha, I thought to myself, this could spell trouble on smaller scale music, and reached straight for the string quartets. Eventually I graduated to Violin sonatas, but the results were always the same. The Moons give you the all important structure and ensemble elements of the music, at the expense of the last ounce of intimacy and immediacy. Performances have a slightly distanced (not distant!) quality that spaces you from them, with the result that the amps decode the music perfectly without giving you the "you are there" feel that small scale acoustic recordings sometimes achieve. In this, and in other respects, they resemble the Naims, albeit with a warmer balance and prodigious bass performance.

Of course, you can affect the overall balance with ancillaries, and the ClearAudio Reference / TQI / Victory brought greater transparency and a little more air to proceedings, which was great on the Heifetz / Piatigorsky Concerts (RCA LSC 2985) but robbed the bass of drive and substance on the Thea Gilmore and the like. On balance I prefer to play to the amps' strengths, returning to the natural tonality and coherence of the Clearlight



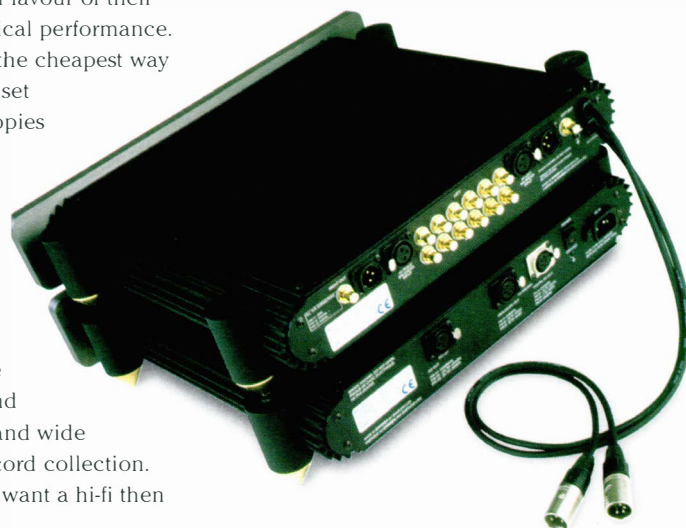


▶ Audio Recovery carrying the increasingly impressive (in that I'm more and more impressed with it) Incognito Rega RB300. Cartridges varied, but the Ortofon Jubilee was the mainstay. Likewise the speakers rotated, but time and again I returned to, and eventually settled on the NHT 2.9s, a speaker which shares so many of the amp's virtues, and whose difficult load was like water off a duck's back. Using the Ars Acoustica Divas played to the Sims' staging and excellent levels of detail, but in the end it all came down to

the bottom end, and there the NHTs are fully signed up members of the haves, while the Ars consort with the wannabes. With the SimAudio Moons you sacrifice the last vestige of transparency and dynamic agility (qualities regrettably absent from the vast majority of recordings), in favour of their compelling musical performance. These could be the cheapest way to really make a set of Watts and Puppies sing, and that's no small compliment. Combining solid sonic and build quality with a dash of Gallic flair, these amps should send you delving far and wide through your record collection. If that's why you want a hi-fi then

check them out. If you want them to impress your mates (probably without turning them on) then you'll probably look elsewhere, but then you'd be looking to spend more anyway.

As a confirmed lover of the small amp / efficient speaker approach you might assume I'd be glad to see the back of the SimAudio Moons. Far from it. These amps deliver musical satisfaction by the bucket load, and that's always top of my list. ➤+



#### TECHNICAL SPECIFICATIONS

##### Moon P5 Pre-amp

Inputs:	5 x Single-ended 1 x Balanced
Outputs:	1 x Single-ended 1 x Balanced 1 x Tape
Sensitivity:	130mV for 1V o/p Max i/p 6V
Gain:	17.5dB
Weight:	15.9Kg
Dimensions (HxWxD):	96x430x368mm each.
Price:	£3500

##### Moon W5 Stereo Power-amp

Inputs:	1 x Single-ended 1 x Balanced
Outputs:	1 x Single-ended Inverted 4mm Binding Posts
Output Power:	175 W into 8 Ohms 350 W into 4 Ohms 700 W into 2 Ohms
Peak Current:	55 amps
Sensitivity:	1100mV for full power.
Input Impedance:	50K
Damping Factor:	800
Weight:	32Kg
Dimensions (HxWxD):	192x486x486mm
Price:	£4200

##### Distributor:

Ultimate Sonics  
Tel. (44)(0)208-699-2446  
Fax. (44)(0)208-699-4232  
E-mail. [senanu@ultimate-sonics.com](mailto:senanu@ultimate-sonics.com)

##### Manufacturer:

SimAudio  
3275 First St  
Unit 1, St-Hubert  
Quebec J3Y-8Y6  
Canada  
Tel. (1)450-445-0032  
Fax. (1)450-445-6626  
E-mail. [info@simaudio.com](mailto:info@simaudio.com)  
Net. [www.simaudio.com](http://www.simaudio.com)



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# Lavardin PE Line-stage And MAP Mono-blocks

by Roy Gregory

With their two bulky boxes and separate line-stage, these Lavardin amps fit right into this group, visually if nothing else. But look a little closer and you'll find that despite their generous dimensions their rated output tips the scales at a mere 60 watts per channel. Not "valve watts" or "class A watts", imaginary articles of faith so beloved of the acolytes of those particular technologies (as if units of power are derived on a sliding scale dependant on where the power comes from). A watt is a watt, and whilst there are different ways to measure them, the unit remains the same, and the Lavardin mono-blocks offer 60 of them. Which isn't exactly high-power, so what are they doing here?

When I reviewed the Lavardin IT integrated amplifier in Issue 2, it offered an astonishing level of performance at the price. Its only significant sonic shortcomings were a slight lack of top-end air, and, when asked to drive awkward loads, a reduction in the maximum level available. Of course, the IT is a cut down racing snake of an amplifier, with nothing as superfluous as a tape output, and operational facilities



limited to source select and a volume control. With only four inputs it's aimed fair and square at the hair-shirt audiophile for whom sound quality is everything. And it succeeds handsomely.

But Lavardin are aware of both the IT's minor limitations, and the fact that there are plenty of people out there with awkward loudspeakers and the requirement for rather more than four inputs. Which brings us to the PE/MAP combination. The MAP mono-blocks are simply single channel versions of the IT, with the entire power supply given over to just one output stage. Hence the identical power-rating to the IT. And whilst this isn't exactly a new approach to the problem of extracting if not more juice, then a more concentrated pressing from a low-powered design (the Naim NAP135 was the first example I came across), it certainly offers a possible alternative to conventional high-powered approaches. Hence its inclusion here.

Both the line-stage and mono-blocks employ circuitry designed to minimise memory distortion and provide a stable working temperature for their solid-state devices. As recounted in the interview accompanying the IT review, Lavardin

have been engaged in a long term research project which has identified these as key factors in amplifier performance, and whilst thermal variation has long been recognised, memory distortion (the signal leaving a trace or echo in the devices it passes through) is an entirely new concept. I can't comment on the theoretical validity of their work, but their products sound notably clean and uncluttered, so the sonic evidence seems to support it.

The PE line-stage may be slightly less hair-shirt than the IT, but its outlook is still pretty Trappist. Offering six line inputs and single tape and main outputs, the facilities are adequate, but no more. There's no remote control, balance control or balanced circuitry, nothing but the basics. Having said that, the source switching is relay protected, the new input taking about 3 seconds to engage, indicated by the dimming and brightening of the red power LED. Input six seems to be routed directly to the board, offering the shortest signal path.

The MAP mono-blocks are as simple as can be. One phono input and a single set of five-way binding posts. Switch on is relay protected and that's about it, apart from pointing out that only one heat sink gets hot! And if the units themselves are simplicity personified, so is set-up, as long as you follow a few simple rules. All Lavardin electronics prefer a wooden support; glass is definitely to be avoided. I used the Clearlight Audio rack, which is ▶





► ideal in terms of both size and materials. Use the supplied power cords, plugged directly into the wall, and pay attention to mains polarity (the hot pin on the IEC input is indicated with a red blob).

Lavardin also produce their own cables (short interconnects and speaker cables at around 3.5m only). The speaker cables in particular are expensive, and only being available in one length will either fit or not, but the interconnects are more affordable and work better with the Lavardin electronics than anything else I've tried, regardless of price. Despite their plain Jane appearance they should be considered as essential elements of a Lavardin system. You'll also find that the 4mm sockets in the binding posts are blocked. This has nothing to do with EEC regulations, but merely reflects Lavardin's belief that the speaker connections should be made at right-angles to the post. Not surprisingly given the single set of posts, they also recommend single wiring. Experiment has shown that, as far as their own equipment goes, their recommendations are spot-on, so ignore them at your peril.

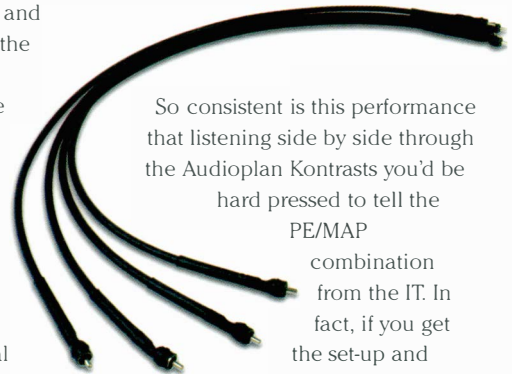
Along with the line-stage and mono-blocks, the PO phono-stage made a welcome reappearance, so with the Clearlight Recovery/Incognito Rega at one end and the NHT 2.9s at the other, I had a complete Lavardin electronics package. CD players were the Rega Jupiter/10 and Wadia 860x, the latter feeding the mono-blocks directly from its variable

analogue output.

Not surprisingly, the line-stage and mono-blocks sound almost indistinguishable from the IT when driving an easy load. They're not just cut from the same cloth, you can even match the patterns, especially across the broad mid-band where the PE/MAP combination retains all the considerable strengths of the IT. You could do worse than re-read the IT review in Issue 2; its description of what the Lavardin electronics do, and how they do it applies equally to the more expensive models. But for those of you who don't have Issue 2 (or don't have it to hand) here's a (very) brief precis.

Comparisons with a Lavardin amplifier make just about everything else sound cluttered and clumsy. The French amps sound clear and clean, but they manage not to sound clinical or sat-on. I described this in terms of transparency, but not just in the conventional hi-fi sense, although that certainly applies. The effect of the amplifiers' presentation is to allow you to see into the recording as a representation of a real event. In other words it gives you access to the nature of the recording itself, the elements that make up the music and their precise arrangement, the pattern of the music as a whole. They do this by not obscuring the micro dynamic shifts in level around and within notes, or their precise position in time, bringing the playing of individuals and the

chemistry of a group alive. But the really neat trick is the way that the Lavardins' offer insight into the minutiae of a recording without pulling it apart or distracting from your enjoyment of the whole. They'll extract full musical value from even the worst recordings, and what's is more, because of their outstanding musical and dynamic coherence, they are capable of remaining convincing even at low levels.



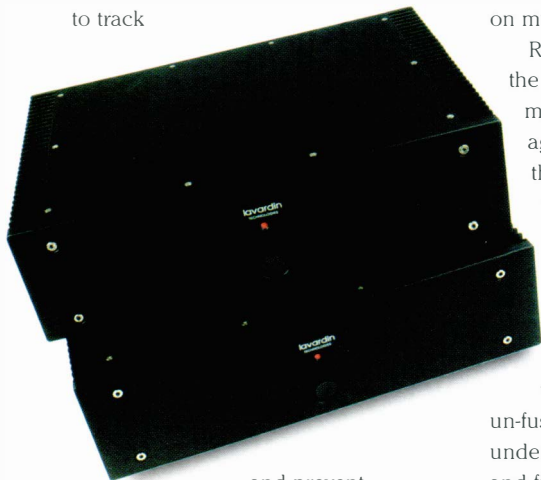
So consistent is this performance that listening side by side through the Audioplan Contrasts you'd be hard pressed to tell the PE/MAP combination from the IT. In fact, if you get the set-up and cabling on the more

expensive system wrong, then the IT shades in front because of the greater simplicity of its internal line-stage. Why bother with the separates at all, you might well ask. Because they are designed to overcome the IT's shortcomings, or more specifically, to offer greater potential with awkward loads. Wheel in the NHTs and the picture changes. Unlike most amplifiers of moderate power presented with an awkward load, the IT doesn't collapse at the frequency extremes. You get the full range, it just won't go as loud. This is less of a problem than it might be, given the amplifier's astonishing coherence at low levels, but there's no denying the occasional requirement for some serious wallop. That's exactly what the PE/MAP set-up provides - more headroom. Long and loud sessions with the likes of *Guitar Town*, *London Calling*, *Moloko* and *Thea Gilmore* all confirmed the unflappable and un-burstable performance of the mono-blocks. Okay, so



▶ I wouldn't recommend them for Apogee Scintillas, but they are a serious improvement over the IT in this respect, making short work of the power hungry B&W Nautilus 801's, a speaker that just has to be played loud.

But the benefits are not just limited to more volume and a couple of extra inputs. Along with the head-room you get a touch more authority in the bass, and even greater stability to the soundstage. This was especially obvious with the Wadia, which driving the MOs direct from its analogue outputs represents a marriage made in heaven for digital only audiophiles. The 860x simply exudes seemingly bottomless bass dynamics which the Lavardins' managed both to track



and prevent becoming earthbound.

Acoustic bass floats correctly, synthetic bass arrives in slabs - just how it should be. At the other end of the spectrum, the PE and MAP mono-blocks actually restore the air that's missing from the IT, bringing more readily defined space to the recorded acoustic.

What does all this mean in musical terms? Listening to the fascinating *Das Mikrofon* album from Tacet in Germany, a record which allows you to compare and contrast the performance of some 25 vintage microphones, the character and performance of the different transducers is immediately apparent. The space and life of the

RCA 77 DXs expansive soundstage contrasts with the slightly pinched and ascetic sound of the Neuman U67. The presence, weight and warmth of the U47 is instantly familiar from so many 'golden age' stereo recordings. And whilst these explicit differences aren't exactly surprising, the intelligibility of them, the ease with which the Lavardins let you identify them most certainly is. Now whilst listening to the same short piece on ten different mics isn't exactly normal listening behaviour, the conclusions hold good for all kinds of music. The Lavardins offer immediate and direct access to the recorded performance – or in other words, you get to understand what's going on much more readily.

Re-reading the final paragraph of the IT review I find it still sums up my feelings perfectly, so here it is again. The bottom line here is that the Lavardin electronics produce more music, more coherently and consistently than any other amplifiers I've had at home. They also represent the first serious challenge to the Jadis in something like ten years. They are effortlessly un-fussy, and if anything, sound rather understated. If you want spectacle and fireworks, or a comfort zone, look elsewhere. But if you value the natural presentation of the widest possible range of music, they should be top of your list. I'm in no position to assess the accuracy, or otherwise, of the technical claims made by Lavardin, but they certainly seem totally consistent with the way the amps sound, making a sort of intuitive sense. They really do let you have your cake and eat it. In the year or so since I first met the IT integrated amp, it, and now the PO phono stage, have become both essential tools and a source of constant pleasure. Do I like them? Could I live with them? Do I covet them?

Yes, yes and absolutely!

With a wider operating envelope and even fewer deficiencies the PE line-stage and MO mono-blocks offer Lavardin's exceptionally satisfying musical performance to a broader audience. As a reviewer, their versatility makes them even more attractive than their smaller brother. Despite the elevated price level they still represent excellent sonic value, which only goes to underline what an outstanding bargain you're getting with the IT. ➤

#### TECHNICAL SPECIFICATIONS

##### PE Line Stage

Inputs	6 x line Level
Outputs	Main and Tape
Input Impedance	10K
Overall Gain	12dB
Dimensions (HxWxD)	85x430x310mm
Finish	Black
Price	£2100

##### MAP Monoblocks

Inputs	Single RCA Phono
Outputs	1 pr Binding Posts
Input Impedance	10K
Output Power	60 W/Ch into 8 Ohms
Dimensions (HxWxD)	135x430x310
Finish	Black
Price	£6400 /pr
Interconnects	47cm £320 83cm £398
Speaker Cables	317cm £1080

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# Mark Levinson

## 380S Pre-amp and 335 Power-amp

by Chris Thomas

Great musical instruments like top class amplifiers speak with strong, yet infinitely subtle voices. They are capable, under the right circumstances, of far greater ranges of expression than their lesser counterparts. But both are rare and the finer aspects of their potential are not always immediately apparent. The Holy Grail of steel strung flat-top acoustic guitars are the pre-war Martin D-45's of which only 91 were produced between the years of 1933-42. The very first one was actually made for Gene Autry, the singing cowboy, and had his name inlaid in the neck. Some would say that these guitars bought together the elements of traditional craftsmanship and beautifully seasoned tonewoods (much more easily available in those days) as never seen before or since, to produce truly astonishing instruments. Whatever the truth of this, their rarity and age have given them an unrivalled exclusivity and this is reflected in the astronomical prices they command on the very, very rare occasions that they come on the market. When you play one for the first time the initial thing that strikes you is the sheer power of the thing. You simply must be positive with it or it will run away with you. If you are fortunate enough to spend time alone with it, confidence grows and a relationship between you and the instrument is slowly formed. It can shock you with its presence, sheer percussive power and prodigious bass or it can whisper sweet nothings in your ear with a liquid clarity. Every

small movement of you fingers seems to bring a choir of angels, singing sweet harmonics from the wood. You respect the instrument totally of course, but what makes the most indelible mark on your psyche is the truly wonderful range of tonal nuance and harmonic colour that it is capable of. These life-enhancing subtleties are just not possible from lesser instruments, excellently playable though they may be. I'm an average guitarist but in the hands of a master a D-45 is a



truly awesome thing. Similarly, at hi-fi's fickle high-end it is the less immediately obvious differences that can mark one amplifiers ultimate desirability over another and for the past several weeks I have been listening to an amplifier that I find very desirable indeed.

The name of Mark Levinson has long been synonymous with expensive audio electronics and as an ML user for the past three years I have great respect for their products, though I have only been using entry-level models. So the chance to try the S version of my own No.380 pre-amp and

a radically improved power amplifier in the shape of the No.335 bought a smile to my face to say the least. Madrigal, who design and manufacture these products have, for a while, offered a two-tier performance level in both their preamplifiers and digital processors. The S suffix when applied to the preamplifier refers to internal changes only; externally the No.380 is identical to its more salubrious brother. There are component changes but the most important difference has to be the use of Cyanate Ester circuit boards in the S model. These very expensive multi-layered boards offer a more stable and constant dielectric for the circuitry in much the same way as Teflon seems to do with speaker cables. Madrigal's claim is that other circuit board materials are more influential in their effects on the small A.C signals found in an amplifiers voltage gain stages.

Their dielectric constant is frequency dependent and therefore tends to "sing along with the music" as it constantly changes. The inclusion of these boards actually represents the most costly addition to this model over the No.380.

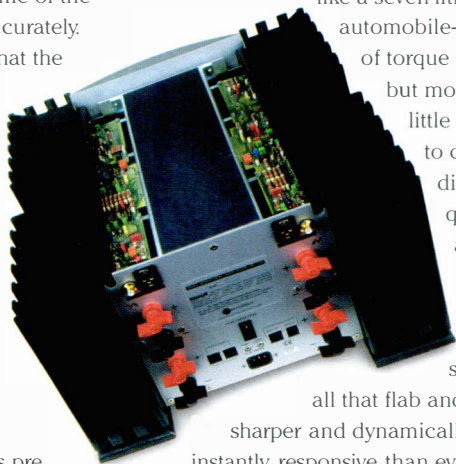
This is a remote operated line-level pre that offers six inputs, two of them balanced. Each input is individually configurable and can be assigned a name from the extensive on-board menu. It also offers the choice of single ended or balanced outputs to the power amplifier, and just about the most user-friendly volume control I have encountered. It is such a pleasure to use that you wonder why all

▶ pre-amplifiers don't feel this way. It controls the output level in 0.1dB increments giving over 4000 laser-trimmed steps. The result is that you can adjust the volume of the system precisely and accurately. Another object lesson that the No.380S hands out is the quality of its display. I find it really irritating when I can't read the information displays on preamplifiers or CD players because they are too small, too dull or presented in some bizarre colour in an attempt to make them somehow different. This pre shows how it should be done. It can be scrolled through three levels of brightness or switched off altogether but it is always legible, day or night and from some distance. It shows the number and name of the selected input and the level setting in clear red illumination. Simple but just about perfect.

When Madrigal released the latest incarnation of the 3 series amplifiers they took the decision to include Cyanate Ester circuit boards in all three models. And though they share the basic dual mono design and dedicated power supplies for each channel with the original Numbers 331, 332 and 333, the thinking behind them borrows heavily from the reference models No. 33 and No. 33H, both of which are mono-blocks. They also upped the power ratings slightly as well as the price. The No.335, that I have been enjoying, produces 250 watts into 8 ohms, 500 into 4 and a heady 1000 watts into a 2-ohm load, and is the middle of the three amplifiers that comprise the latest series. This is not a small item and makes a considerable visual statement when sat between a pair of speakers. It will also make quite an impression on your back should you choose to move it as it weighs

around 150lbs.

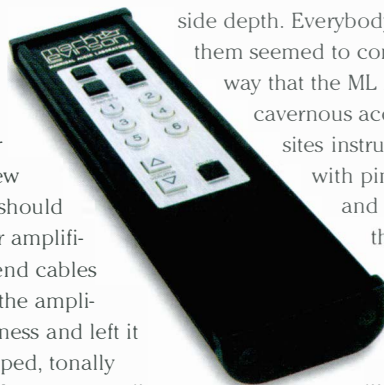
Time was when you could safely assume that an American amplifier with this sort of power would be rather like a seven-litre Yank V8 automobile— bundles of torque and power but more than a little reluctant to change direction quickly. Not any longer though. ML amplifiers have long since shed all that flab and are leaner, sharper and dynamically more instantly responsive than ever, but if you want to extract this sort of performance from them you are going to need to take a serious and brutally realistic look at the cabling you use. I spent a long time experimenting with interconnects and speaker cable and though I usually like to use cable looms from the same manufacturer in this case I ended up using a pair of Madrigals own CZ-Gel balanced interconnects between pre and power and Nordost SPM speaker cables. Don't even think of going single-ended as these amplifiers sound much, much better in balanced mode. This adds the best part of three and a half grand to the price of the system. But, take it from me, you must not skimp at this level and if you really cannot bring yourself to part with this kind of cash for what you may see as a few metres of wire then you should buy a cheaper and lesser amplifier. Other so-called high-end cables I tried over-accentuated the amplifiers remarkable smoothness and left it sounding slow, over-damped, tonally dull and a little "tubby". It was not until I obtained some SPM that I felt I was hearing the amplifier properly. Not



only did the speed, leanness and articulation of the system increase dramatically but the amp was now singing from the diaphragm and not from the back of the throat. This is one of those combinations that works superbly with both components allowing each other total freedom of expression.

This amplification system is all about smooth, but vibrant energy and at the heart of its performance lies both its great power and ability to drive any speaker load with an ease that borders on the nonchalant. Forget the notion that these sorts of power reserves are for pure volume. The great thing about this combo is that all those watts you've paid for make themselves felt whatever the listening level. The sheer weight and tonal warmth of this amplifier is fantastic. Every instrument or voice exists entirely independently and this allows a sense of individual dynamic freedom that is simply beyond most amplifiers. Low level listening does not cause the sound to collapse into the speakers at all and when the volume is advanced it retains the same perspectives of solidity and stability of image and an impressively full bandwidth.

If you consider a virtually holographic sound-staging essential then you are going to love these amplifiers as they have simply enormous front to back and side to side depth. Everybody who heard them seemed to comment on the way that the ML recreates a cavernous acoustic and then sites instruments within it with pinpoint accuracy and stability. Even those small, recorded details that are forever lurking way back in the mix are illuminated with power and precision. But this is not what I would call an analytical





► amplifier at all. True, it is brimming with detail both solid and ambient but it has a totally unflappable and unforced nature to it and never sounds remotely squeezed, pinched or artificial. The fact is that, like the Martin D-45, when you first hear the amp it does not shout, "Hey, I'm an extraordinarily expensive piece of kit!" But sit and listen to it go about its business and it will draw you into the performances like few others.

Rhythmically too it is excellent. This is not the fastest amplifier I have heard, that accolade must go to the Spectral, but one of the many things that the Nordost SPM cabling does is to allow the music a real sense of drive, momentum and note control. It seems to have the time and space at hand, regardless of how arduous the music, to let you beyond the note and into the character of the instrument or voice and this makes it just about the least fatiguing amplifier I have yet heard. Most importantly it is in time with itself. Music moves as a whole entity with an elastic sense of drive, tempo and dynamic freedom. Fourplay's *CD 4* (9WB 46921-2) and the track Rio Rush brings you face to face with the bands rhythm section. The complex high-hat/snare drum pattern drives the tune along relentlessly but the ML holds this completely separate from the bass drum, which is playing a very different figure. It acts as a musical pulse and you can feel the tension in the drum skin, but under that comes the bass guitar, which is so prodigiously strong and solid that it injects a delicious sense of anticipation and tautness to the composition. The

relationships between all these elements are so beautifully opened up that you can hear numerous multi-rhythms, forming, dying and bouncing of each other right the way through the track. *Turbulent Indigo* from Joni Mitchell (Reprise 45786-2) allows the ML to take the concept of instrumental separation to new heights. It

is no coincidence that one of Joni's paintings adorns the cover of this disc, because it mirrors the music so perfectly. The pure

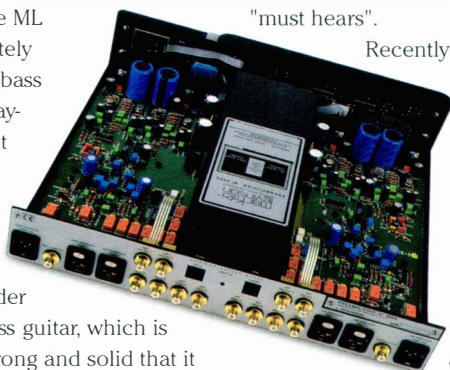
tonal colour and subtle harmonic shadings, the way each note rises, rings and then gently decays are all quite wonderfully reproduced. And Joni's voice, so nasal on most systems, and her pushed harmonies that normally grow harder and thinner with level, are simply rolled over with consummate ease.

So, is this the ultimate amplifier? It is certainly one of the best built and finished products available. But let's not forget that there are three power amplifiers above the No.335 in the ML catalogue plus the mouth-watering N0.32 preamplifier (£14,495, line-level). But, if you can afford to indulge yourself and have a system that can do it justice this combination should most definitely be on your list of "must hears".

Recently an American musician friend of mine was over from New York with some discs that his band had recorded. We listened to them through the afternoon and gradually

broadened our musical horizons as the session moved into the evening. He

was particularly taken with the system, which had the ML at its heart and this was obviously the best he had heard his own compositions sound (like most great musicians he has very little interest in Hi-fi). As we decided to go out and get some dinner he glanced at his watch and then over at the amp and said in a way that only Americans can "Man, if you're gonna start listening to that baby, you'd better make sure you ain't got nuthin' else to do". I know just what he means. ➤



#### TECHNICAL SPECIFICATIONS

##### Mark Levinson No 380S preamplifier.

Inputs:	2x balanced, 4 x single-ended
Outputs:	1 pair balanced, 1 pair single-ended
Input impedance:	100 Ohms shunted by 220pF
Output impedance:	Less than 6 Ohms
Dimensions (HxWxD):	3.84x15.75x14.5inches
Weight:	35lbs
Price:	£6495

##### Mark Levinson No.335 power amplifier

Power output	250 watts @ 8 Ohms 500 watts @ 4 Ohms 1000 watts @ 2 Ohms
Inputs	1 pair balanced, 1 pair single-ended
Speaker connections	4 custom binding posts per channel
Dimensions (H xWxD)	10.3x17.56x19.11 inches
Weight	150lbs
Price	£7495

##### Distributor:

Path Premier  
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##### Manufacturer:

Mark Levinson Audio Systems  
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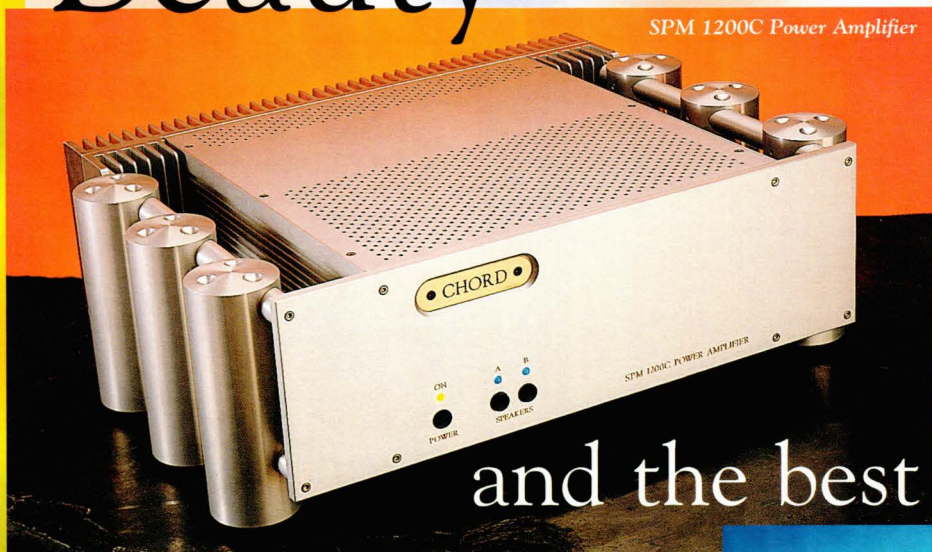
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# Experience Counts

## Building on Tradition at B&W

Once upon a time, British loud-speaker design set the technological standards and dominated the world markets for domestic hi-fi. But all that has changed. Names like Wharfdale and Goodmans have faded from the scene, while KEF and Celestion are going through a period of what could be termed reorganisation. The “BBC monitor” companies, Spendor and Rogers, have disappeared. Which only leaves the dark-horse, B&W, a company whose reputation and business are not only intact, but going from strength to strength.

The heart of the company can be found at the massive, recently modernised and extended factory in Worthing, but its creative brain lies some ten miles inland, hidden away down a tiny back alley in the sleepy town of Steyning. Behind the unassuming exterior, is a major investment in sound engineering, if you’ll excuse the pun. It is the clearest possible indication that B&W’s product development is the result of applied high technology, rather than any black art.

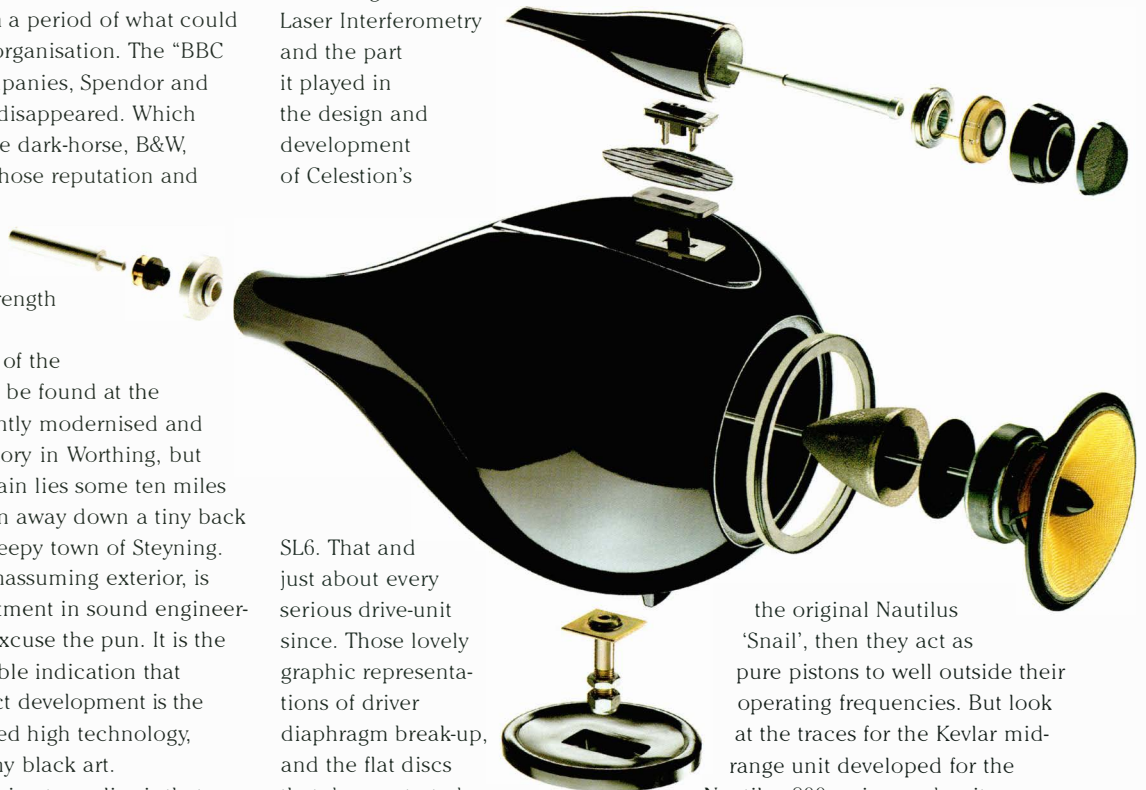
The first thing to realise is that B&W design and manufacture their own drive units. This puts them in a completely different category to smaller companies that create their designs using OEM drivers matched to their own choice of box. The vast majority of the work at Steyning is

concerned with driver development, and the first thing that touring the place brings home is the complexity of that task. Anybody who has been interested in hi-fi for the last twenty years will remember the emergence of Laser Interferometry and the part it played in the design and development of Celestion’s

SL6. That and just about every serious drive-unit since. Those lovely graphic representations of driver diaphragm break-up, and the flat discs that demonstrated pistic motion. But like everything else, simply having a laser is no guarantee of success. You need to understand what it is telling you, and what to do about it.

In fact, one of the most fascinating aspects of visiting Steyning was the

way it exposed your assumptions. After all, we all know that pistic motion is a desirable trait for a drive-unit. Well, actually that depends.... If you examine the motion of the aluminium dome drivers used in



the original Nautilus ‘Snail’, then they act as pure pistons as well outside their operating frequencies. But look at the traces for the Kevlar mid-range unit developed for the Nautilus 800 series, and quite a different picture emerges.

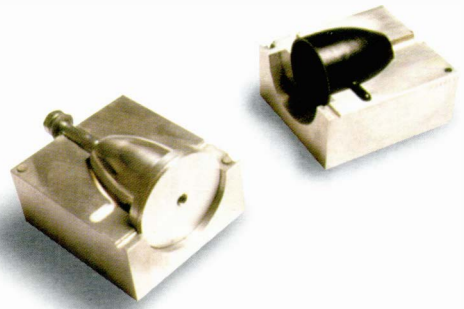
At first glance it seems that the cone starts to break up well within its operating band. But look closer and you realise that as the frequency rises what is happening is the development of four symmetrical ‘peaks’,



▶ equally disposed around the diaphragm. What is less obvious are the four corresponding dips between them. What this means is that the output from those areas of

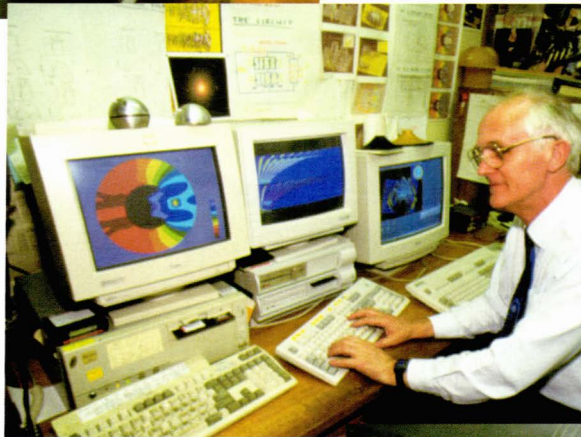
high frequency drivers, as well as the shaping and tuning of the bass enclosures. It can also be used to measure and thus minimise acoustic output from the cabinet itself.

The other major technological aid employed by B&W is Finite Element Analysis. This is a technique that evolved in the aerospace industry for calculating the resonant characteristics of aircraft structures, and



success. The secret is in developing experience and relating it to reality, in order to understand when the computer generated model reaches a sufficiently developed form to provide useful data. It's this body of knowledge that has made FEA such a powerful tool at Steyning.

the driver surface will actually cancel in the near-field. This is actually a highly desirable situation and one that is only possible through the careful arrangement of the Kevlar weave. The benefit is that this output pattern creates a driver with a radiating area that decreases with rising frequency, making for a far more even transition to the tweeter.

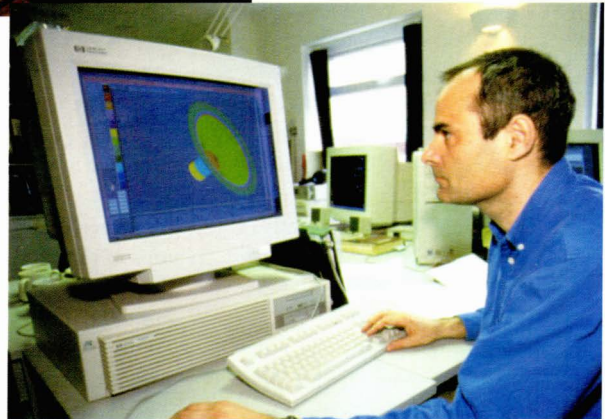


Obviously it can be employed to predict the resonant behaviour of complete drivers or systems, and help in the design of components such as driver baskets, so that their webbing can be reduced and shaped to reduce their reflection of the back wave without compromising rigidity. However, it can also be used to model airflow, and perhaps

But the laser is used to examine far more than just the behaviour of the cones themselves. Surrounds, baffles and even the behaviour of the box itself are all investigated using similar techniques, and the laser has played a vital role in the development of the spherical driver housings for the

basically involves the computer modelling of the component elements of a complete unit in order to examine its behaviour as a whole.

Simple in theory, it takes very little deviation of the model from reality to create totally meaningless results, which means that simply buying the programme is no guarantee of



the most obvious application of FEA is in the rear, horn terminations for the Nautilus 800 midrange and treble units. ▶



► The onion shaped rear enclosures were extensively modelled to optimise both the physical dimensions (rather more manageable than the ones on the original Nautilus) and the rear



termination of the driver. The final design is a combination chamber and tail which balances the virtues of both approaches to produce a hybrid solution. Trying to arrive at such a complex form by other means would have meant a massive amount of empirical

a final physical prototype for measurement and listening.

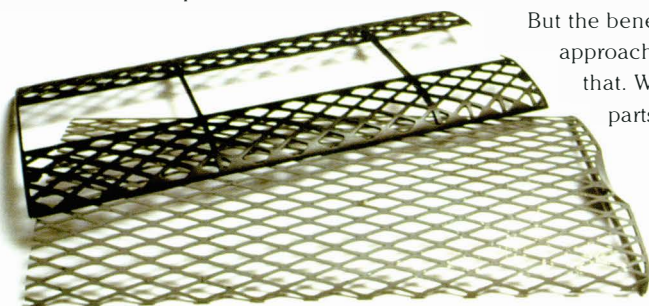
Unusually, Steyning has the facility to produce physical prototypes in house. A sophisticated three axis CNC machine is installed in the workshop, along with lathes and an injection moulding machine, and the whole process is overseen by an industrial modeller. Thus, an aluminium mould was machined in house, correct internally and externally, to create an injection moulded prototype of the tweeter housing. With the drive unit installed this could then be used to validate the results of the FEA model.

But the benefits of such an approach go further than that. When machined parts are required

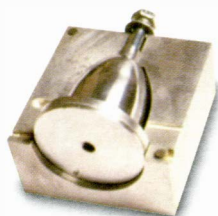
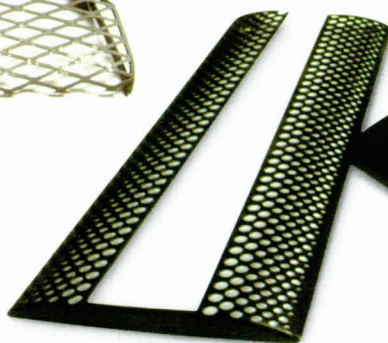


could be both listened to and measured, before the design had to be finalised, and the very expensive tool produced.

The Research and Development section at Steyning represents a unique concentration of design know-how, combined with the kind of formidable technological back-up which enables those designers to focus ever more minutely on the individual elements of loudspeaker design. Computers and lasers are far from the whole story; there are sophisticated anechoic chambers and measurement devices, as well as listening facilities on site, along with a range of partnering equipment including



research and the production and measurement of a host of prototypes. FEA meant that the prototyping could be done electronically. Once the dimensions were finalised the design could then go to



from outside contractors, the model shop at Steyning can actually produce the prototypes, check them for fit and finish, and then provide the machining programme to the supplier, minimising the potential for variations in fit, finish or tolerance. Even something as prosaic as the 601 grille benefited from the model shop's ability to produce prototypes that

the likes of Levinson No33 power amps. But at the end of the day it is the knowledge and imagination of the staff that produce innovative products as varied as the original Nautilus and the tiny Solids. Peter Fryer, head of R&D at Steyning started life at Wharfedale when that company was in its heyday. The real triumph at B&W is to recognise the value of that experience and harness technology to serve it.







# The B&W Nautilus 802 Loudspeaker

by Chris Binns

"What was that you were listening to last night?" Voiced in the form of an enquiry rather than a complaint, I still felt a small cold shiver of guilt run down my spine – had I been over doing it? Too late, too loud? The lodgers know what to expect as there is always the drum kit and various guitar amps lying around when they move in. But this was no lodger; it was a neighbour I was talking to. I know what you're thinking – thank God he doesn't live in my street...well, I don't live in a street. He lives at least two fields and a river away, and before you condemn me as being a complete megalomaniac, in my defence it was a warm summer evening and I had the French windows open, and the front door...

And the B&W Nautilus 802 loudspeakers in residence, officer.

So? Well, their big brother is the by now legendary 801, one of the few products that has found favour in both domestic and studio environments, and the flagship in the 800 series. The accompanying article profiles B&W the company, but it is worth looking back to see just how the present range has come into existence. B&W can claim to have had one foot firmly in the professional market for quite some

time, in the form of the original 801.

Launched in 1979, this large and extremely capable

loudspeaker found favour as a studio monitor in many recording environments, notably Abbey road studios where they were used extensively for classical recording. Genuinely state of the art for their time, they did not possess the ultimate loudness capability to make them suitable for high level monitoring with rock and pop. It was, never the less, in production for many years, with the mark two

and three versions incorporating a matrix cabinet, another B&W innovation which is still used in the present 800 series.

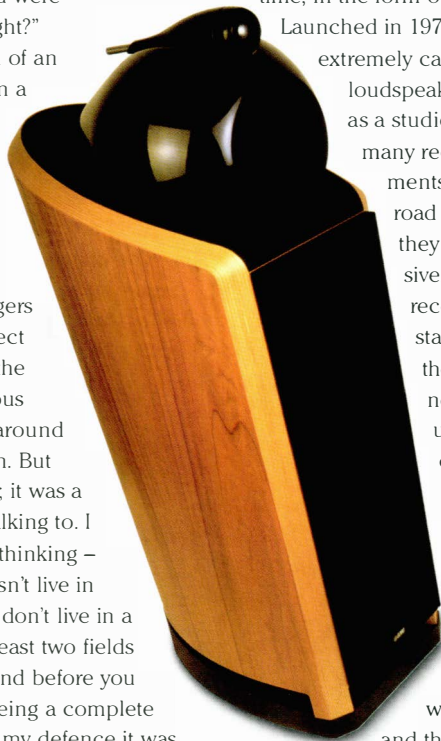
But the one loudspeaker that everyone remembers is undoubtedly the original Nautilus, if only because of its striking appearance, which was, shall we say, distinctly different. Very 'new age' or organic (who said anything about giant molluscs?) it in fact contained much innovative and groundbreaking technology which, with a price tag of £33,000, would remain out of reach for all but the very wealthy. As with all good design, form follows function, and the visual design

was much more than just the imagination of an overpaid industrial designer. Put simply, if a horn can be used to increase the efficiency of a loudspeaker, when used in reverse it will be very effective at attenuating sound waves from the rear of a drive unit, hence the tapering form of the Nautilus.

So when the time came to design a successor to the long standing 801, it was only natural to incorporate Nautilus technology. Looking to address some of the problems that existed with the original model, for example power handling, and bearing in mind that materials and manufacturing technology have improved considerably, the criteria for the design team were set in place. Budget's not too much of an issue, so off you go, boys, and see what you can come up with. The result is the Nautilus 801. Large and extremely capable, it represents the culmination of many years' research and development. It's also extremely large. Too large for most domestic situations.

The 802 is built on a slimmer scale, although it's still a large speaker by most standards. Gone is the 15" bass driver, replaced by two 8" units, and if this results in a slight loss of absolute extension, at least its low frequencies are likely to integrate better in the average living room.

The design is visually dominated by the mid and treble enclosures, which are very obviously Nautilus derived. The teardrop shape is unconventional to say the least. ▶



► Moulded from a mineral filled polyester resin called Marlan, with a beautiful deep lacquer-like finish, the two sections are de-coupled from one another, and from the bass section.

Looking from above, the bass cabinet is shaped like a horseshoe, and fabricated from a single piece of 30mm ply, an engineering feat in itself. The resultant structure is incredibly rigid, the addition of the internal matrix helping to push its resonance frequency even higher. The whole lot sits on a die cast alloy plinth, promising great structural rigidity, and comes out of the box supplied with ball rollers to facilitate positioning; these are then replaced with the adjustable milled cones.

The drive units are just as highly engineered as the cabinets. The H.F. unit comprises a 25mm aluminium alloy dome operating in a powerful magnet assembly, a composite of neodymium, boron and iron. This is hollowed out to allow rear radiation to pass through into the tapered chamber, thus offering near perfect damping, particularly around the fundamental resonance.

The mid range unit is certainly unusual; on first inspection it would seem to have no surround, or certainly not the usual half roll type that we have come to expect with such units. As this is specifically a mid range unit, the large cone is not being asked to move that much, and thus is terminated by a very narrow, energy absorbing foam polymer. This is what happens when you have laser interferometry at your disposal – the conventional surround was seen to be having a detrimental effect on the driver's performance, and so they started again. The cone itself is woven Kevlar, a material proprietary to Du Pont company and one with which B&W have had long experience. Once again, detailed analysis showed that a different geometric construction of the

weave would yield even lower distortion. The open die cast chassis is mechanically de-coupled from the enclosure by a special 'stabilised liquid polymer' to increase isolation from the rest of the system.

The two 8 inch bass units are relatively conventional with a heavy, stiff pulp cone and a large rigid carbon-fibre dome for reinforcement, energised by a 32mm voice coil and generous magnet assembly built on

to a cast chassis. Not obvious at first, but the 802 is actually a reflex enclosure; the port fires downward and low frequencies exit through slots between the base and the cabinet.

The port itself is flared and the surface micro contoured like a golf ball to minimise turbulence. The crossovers are well built using high quality components on substantial printed circuit boards

which are mounted inside the base plinth, providing good isolation from vibration produced by the drive units.

Setting up the 802's could have been a tortuous affair on two counts; they are bloody heavy, and a product of this refinement frequently requires a lot of messing about with positioning, so I was expecting to be on my hands and knees a lot.

I was wrong on both counts. Moving the loudspeakers was straightforward, courtesy of the B&W team and the castors, and plonking them down in the favoured position yielded good results straight away. Sure, there were minor adjustments to be made to toe-in, but by and large it seemed as if the 802 was tailor made for the room – or

the other way round. My only worry concerns the cones, which once installed failed to provide the desired stability. Narrower, carpet piercing versions please!

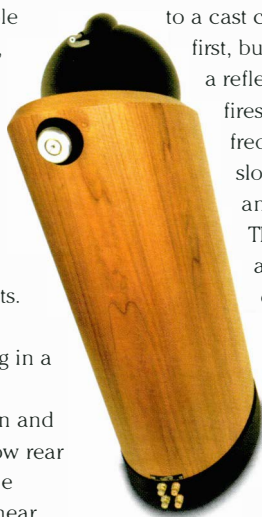
The 802's had come with something of a reputation for being a little awkward to drive, and although not bad enough to chew amplifiers to bits, they would certainly be ruthless in exposing any shortcomings when the going got tough. I started by using the Advantage S2/S250 amps, and it proved a happy match. Although the 802s had had some running in, there was a hardness and artificial 'in your face' sound that was not pleasant. Sure enough, after a few days of use this started to recede, the sound becoming more natural and easy on the ear, although they never became what I would describe as a 'shy' performer. First impressions were of a highly revealing loudspeaker that could, and would, lay bare exactly what was going on, for better or for worse. The Advantage power amplifiers rose to the occasion admirably, providing seemingly limitless drive and confirming that the 802's will go extremely loud without stress. More to the point, they did so without the slightest hint of distortion or hardening

up, and maintained their dignity without compromise.

Jeff Buckley's first album *Grace*, is a combination of extreme subtlety countered by

raucous Zeppinesque riffing. His voice is both delicate and sublime, and on quieter tracks the B&W's reproduced this with tremendous refinement and intimacy. On heavier tracks, the sound of drums and percussion was the most realistic I have had in my listening room - even at 'live' (read; silly) type levels; the sound was explosive and dynamic, no mean feat.

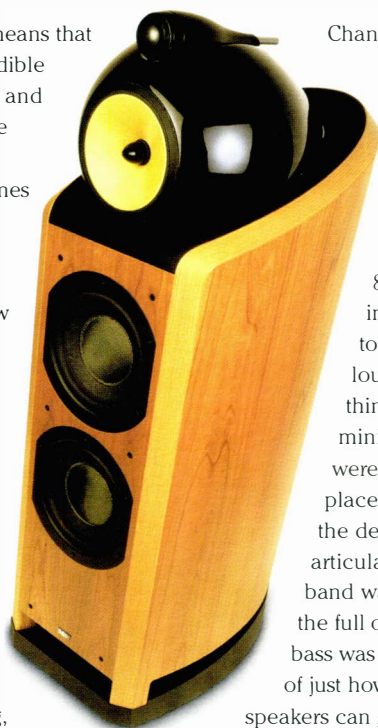
A combination of a very wide bandwidth, negligible distortion and ►



▶ very low coloration means that they offer quite incredible resolution and detail, and everything is laid bare for you to hear, be it good or bad. Sometimes disconcerting, I was able to hear into the mix of various recordings that I know well, and discover that what I assumed to be a virtuoso performance was in fact a number of overdubs strung together, something I was unaware of until the 802's came along. They will also ruthlessly reveal the technical quality of a recording, warts and all, and petulantly refuse to make the best of a bad job – there's no camouflage available here.

Considering their potential for studio monitoring, all of the above makes perfect sense, and the 802's positively encourage you to crank the volume up, but by doing so they are hiding a little secret. Listening to music quietly does not give the same satisfaction that it does at more elevated levels, almost as if the designers were so concerned with the high-level monitoring brief that they forgot that some people listen quietly. There is a quite distinct threshold beneath which the B&W's refuse to work; the sound just collapses and has no body to it at all.

There is a little part of me that hankers after the 801's with their 15-inch bass driver, but I think it's just a size thing. In my room, the bass seemed to be perfectly coupled, being both extended and powerful, with plenty of wallop for more modern music and good articulation with orchestral music. While listening to a



Chandos recording of Dyson's *violin concerto* (beautiful music – quintessentially English, and please, no puns about vacuum cleaners) the 802's gave me the impression of listening to a small, precision loudspeaker. All the things that a really good miniature can do well were there – image placement was good, and the definition and articulation in the mid – band was excellent. Yet when the full orchestra came in, the bass was there to remind me of just how very low these

speakers can go without clouding the issue and disturbing the equilibrium.

It was this combination of the 802's and the Advantage that gave one of the most impressive sounds that I have had in my living room, and in hi fi terms the precision and refinement was almost unbelievable. Music was delivered in such a fashion that you couldn't help but marvel at its competence, but it somehow seemed slightly unreal. There are people I know who would die for a system with this resolution and clarity, but for me it was all a little too academic and matter of fact.

Substituting the Primary valve amplifiers for the S-250's produced some interesting results. The sound, to my ears at least, was more fluid and musically enjoyable, but the 802's were quick to highlight other problems. It seemed as if they missed the control and snap that the Advantage system provided with such abundance, and actually sounded a bit ragged and unrefined – a weakness in my valve mono-blocks I'd been previously unaware of. This is a loudspeaker that

likes current and plenty of it.

In conclusion, the Nautilus 802 is a frighteningly good loudspeaker. It has succeeded in pushing the boundaries further in terms of technical competence, but by doing so has left itself vulnerable to sometimes missing the point. By exposing any weaknesses that are there from the source or recording onwards it can find delivering a musical performance difficult. To that end, the selection of partnering equipment is absolutely crucial; get it wrong and the 802's will let you know in no uncertain terms. But, with the right equipment and room, they offer unprecedented levels of low distortion, transparency and, coupled with the dynamic headroom available, offer a unique insight into what is going on. Not always comfortable, for some it will prove altogether too much. For others they could easily become an expensive but worthwhile addiction. ▶+

#### TECHNICAL SPECIFICATIONS

Type:	3-way ported cabinet.
Drive Units:	25mm metal dome hf. 150mm woven kevlar mf. 2 x 200mm paper/ Kevlar cone lf.
Bandwidth:	-3dB at 34Hz and 22kHz -6dB at 27Hz and 30kHz
Sensitivity:	91dB
Nominal Impedance:	8 Ohm (3 Ohm min.)
Recommended power:	50w - 500w
Dimensions (WxHxD):	385 x 1106 x 548mm
Weight:	70Kg each.
Finishes:	Black Ash, Cherry, Red Cherry, Black Grilles.
Price:	£6000

#### Manufacturer:

B&W Loudspeakers Ltd  
Tel. (44)(0)1903-524801  
Fax. (44)(0)1903524725  
Net. [www.bwspeakers.com](http://www.bwspeakers.com)

See page 98 for stockists.

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PLAY

PAUSE

STOP

TRACK

COMPACT DISC

# The Rotel RCD991 CD Player

by Pete Christie

Rotel: throughout all the years of my hi-fi life, they have been there. Never making loud, PR type noises, or pandering to the faddish whims of the designer set. Just getting on with it. If I use my imagination, I can visualise a thoroughly sensible set of Japanese blokes sitting around in a sensible room, paying sensible attention to sensible advice coming from the UK, designing sensible hi-fi products that would work sensibly at a sensible price. The current Rotel range of hi-fi equipment follows the same game plan. Logically progressive amplifiers throughout the “budget” range including the mighty little RA931 (see HiFi+ No. 3), pre/power combinations for the “next step” approach, one radio tuner, and, until now, a couple of slim, attractive and affordable CD players.

Someone at Rotel obviously decided to do something out of the ordinary. So they did it to a CD player, and they called it the RCD991. For a start, though visually this is obviously a Rotel product, any further similarities with the rest of the range end here! This is a BIG beast. Standing at almost 5" high, it presents you with a superbly finished, black satin slab-like front panel containing the centrally placed, attractively “bow-fronted” CD drawer, above which is located the precisely proportioned display panel. The small (but perfectly formed) control buttons sit in their own little red craters in a neat line (and are more fun to use than the rather boring remote

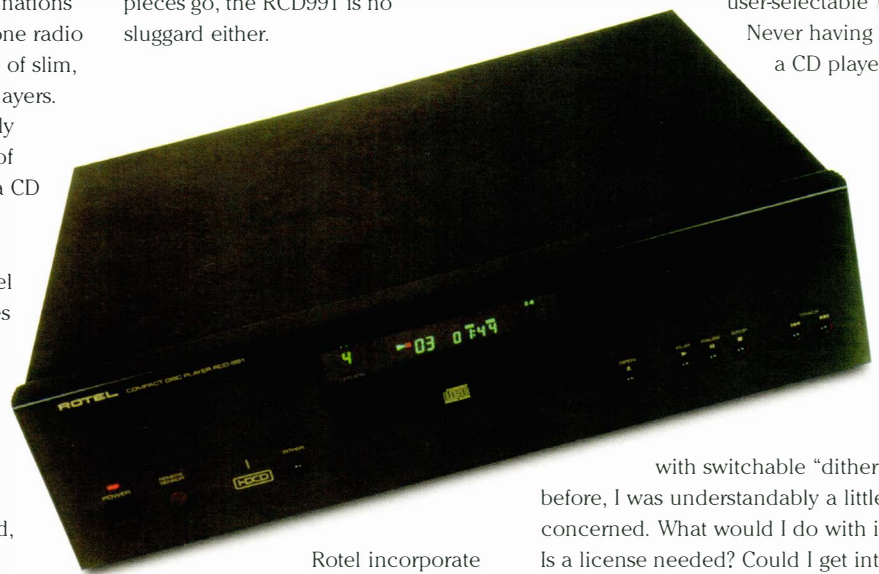
control that is supplied). The end result is, that whilst you know immediately that this is a Rotel product, it also looks altogether more serious than the rest of the one-box range.

The rear panel is no less sensible. Neatly laid out, the usual phono analogue output sockets are flanked by a suitably serious pair of balanced line XLRs, with gleaming gold plated pins. The option of digital is provided by both optical and coaxial output terminals, which, sensibly, are activated by a separate switch, located alongside. The overall build quality is magnificent. It looks solid, and it is solid.

As far as the internal bits and pieces go, the RCD991 is no sluggard either.

is claimed, “effortlessly scans even non-standard CDs” (more on that later!). The whole lot is also isolated to minimise low-level vibrations. The substantial 5-segment power supply uses a custom made toroidal transformer, and overall impression of the inside of the box is that it has been as carefully designed and laid out as the outside. Using high-quality components in symmetrical signal trace array on a totally separate FR-4 circuit board, it is claimed that the analogue stage is raised to “beyond reference standard”. Hmmm?

If that lot isn't enough, it's got “dither”. Not only has it got it, but it's “user-selectable”! Never having had a CD player



Rotel incorporate a Pacific Microsonics PMD-100 digital filter/HCDC decoder IC which is custom-configured for the PCM-63 dual Burr-Brown 20 bit D/A converters. There is a centre-mounted “wide-read” linear motor disc mechanism which, it

with switchable “dither” before, I was understandably a little concerned. What would I do with it? Is a license needed? Could I get into trouble if I was seen to be using it?

“the defendant was seen to be using an inappropriate amount of dither in a built-up area m'lud.”

I looked it up. According to my mate the Oxford Dictionary, dither

► is described as “Dither: to tremble, quiver, or hesitate”.

I have been known to tremble, quiver - and hesitate, though not necessarily all at the same time (though I suppose there's still a possibility!), and, as you can imagine, I was quite interested in seeing how a CD player would exhibit these characteristics.

I turned my attention to the handbook to educate myself further in the subtle art of “dithering”, and was comforted with the explanation that “Dither is a very small amount of digital noise added to a signal to improve a CD players overall sound quality”.

Right.

It also says that “proper types and amounts of dither improves the D to A converter's linearity, particularly during very soft musical passages”.

Right.

It also says that; not only do I get dither, I also get different types and levels of it, and that careful listening will reveal which dither is best for my system and musical taste.

Oh, good.

Just how many types of dither do I get then? Eight, well seven (0 - 6), and one more (7), which is “minimum amplitude triangular PDF dither, which is intended to correct quantization errors only. It has a similar effect as the “0” setting, but with a different type of noise”. And all I have to do is sequentially press the “dither button”.

Well, that's a relief, I can tell you.

Handbooks are dodgy things. I quickly put this one down, as I was in danger of becoming either very confused, or worse still, dangerously

under-informed.

I decided that I should dither no longer, and that the point of the exercise was to see what the RCD991 actually sounds like. So bright and early (11:00) on a May morning, using my normal starting set-up of Shearne Audio Phase 2 amplifier and Rogers LS3/5a loudspeakers, connected with van den Hul CS122 speaker cable, plugged in the RCD991 using a pair of Chord Chameleon interconnects.

I've run into problems in the past with CD players “changing” after prolonged use, and I have now adopted the method of switching them on, putting in a disc, and leaving

Cassidy, so I don't intend going into chapter and verse on the subject. All I'll add is that in my opinion, she was one of the greatest singers I've EVER had the enormous pleasure to listen to. This, for me, is one of my favourite songs in the entire world (ever), and consistently provides a shiver-up-the-back-of-me-neck factor, of ten measurable on the Richter scale. The RCD991 didn't fail me. Bearing in mind that this is a live recording,

I perceived a particular “naturalness” in the song which I hadn't noticed before, and I eventually changed the album after only listening to it twice: all the way through.



them on “repeat” for a few days before any serious listening is undertaken. So his I'd done.

With a suitably bracing cup of coffee in my hand, I selected a piece of music that wouldn't upset my neighbours, or my fragile head. ‘Fields of Gold’, not Sting, but Eva Cassidy, from the album *Live at Blues Alley* (Blix Street Records G2-10046). Many far more erudite and eminent people have extolled the vocal virtuosity of the sadly deceased Eva

I then selected ‘Secret World’ by Peter Gabriel from the album *Us* (Realworld PGCD 7), for no other reason than I had heard it the night before on the excellent Bob Harris Saturday night show on BBC Radio 2. I was immediately impressed with the ease and comfort with which the machine seemed to handle what I have always considered a difficult “mix”. In a somewhat reticent song, the vocals gave me a very real sense of resignation that I had not noticed previously. Renowned for using “interesting” bass lines, again I could not fail to be impressed with the depth and real “clout” that seemed to be flowing out of my miniscule LS3/5a's. ►



► So I zapped back a few tracks to the beautifully haunting 'Blood of Eden', and once again the tonal balance and separation were well defined without being in any way "segmented". A definite "blend" of sound was very obviously apparent. I liked it so much I played it again, and again .

So I tried something that I had never been overly fond of; 'Can't Let Go' by Lucinda Williams from the album *Car Wheels On A Gravel Road* (Mercury 558 338 2). To my surprise, the RCD991 made a subtle "click", and the HDCD light came on. "Blow me!" I mused, "this will be interesting!" Sure enough, an album I had always considered a tad "scratchy", suddenly began making sense - a lot of sense. What had always been an undeniably "ballsy" near live production (if a little painful at the top edges) became bigger, wider, deeper, and a lot more fun. The syncopated rhythm drove along like a demented steam train, and the seriously slinky guitars and Dobro slid around and behind the vocals without once threatening to drown anything out. The sound-stage was, in a word, stunning! In a few more words, it was stunningly accurate but in a smooth, natural and relaxed way. How a song can be relaxed and totally dynamic at the same time beats the hell out of me. I felt perfectly happy whether just sitting listening, or jumping round the room singing along!

So I ended up playing the whole album - twice, and silently thanking those nice, sensible blokes at Rotel for helping me to discover that I had bought such a gem of an album!

By now, for the rest of the country, lunch had come and gone. Not in my house! I was now easing my way through a vast and varied selection of material as diverse and fragmented as you could ever imagine. Ry Cooder to Bob Dylan, to Rachmaninoff, to Yes, to Django Rheinhardt, to Jussi

Bjorling, to the Beatles, to Debussy, to Tchaikovsky, to The Venga Boys (but not for too long), and then back again.

It was whilst giving an airing to the adagio from Beethoven's *5th Piano Concerto* (Claudio Arrau and the Staatskapelle, Dresden conducted by Sir Colin Davis on Philips 416 215 2) that I thought I'd give this dither business a try. I drew the curtains (as we have some pretty stiff bye-laws round here about dithering in public), and fiddled about. Not having too much success in determining which dither was right for me, I decided to be a bit scientific. I closed my eyes, and repeatedly pressed the dither button until I was totally unaware of which setting I had selected. I then (still with my eyes closed) pressed the button at regular intervals, opening my eyes when I felt (rather than heard) that the sound was "right". These tests were not exactly conclusive, but after the tenth try, I found that the "0" setting had come up five times, and that the other five results were all different. It appears that I'm the sort of bloke who likes a zero amount of dither. Suits me!

By now, it was approaching midnight, and (with a short break for food) I had been at it for the best part of twelve hours. Yes, I was in a caffeine-induced state of hypertension, and yes, I was driving the rest of the street mad. But the most interesting aspect of this marathon session was that the RCD991 still sounded as fresh and relaxed as it had when I started.

So I returned to where I started - Eva Cassidy. I found that my ears were still working, and that I was totally enjoying the songs. No headache, no "listening fatigue", and no intention of going to bed.

That's the point. The RCD991 does that to you. It looks good, it's built superbly well, and when you press its button, and the drawer glides out

seductively urging you to feed it another CD, you can't resist. It does nothing dramatic. I have tinkered with lots of CD Players, and most prove themselves to have "something different from the others". OK, nothing wrong with that, innovation in hi-fi should be encouraged - shouldn't it? On the other hand, using the good old "Cars" analogy, the RCD991 is a bit like one of those Mercedes Benz jobs; you know, the ones that don't have anything "flash" or sporty about them. Old, rich blokes drive them. They are built superbly, they are comfortable, and there are no unnecessary frills. They do everything they're supposed to do, and after driving a few hundred miles, you can't wait to jump in and drive a few hundred more - yes, just like the Rotel RCD991. ➤

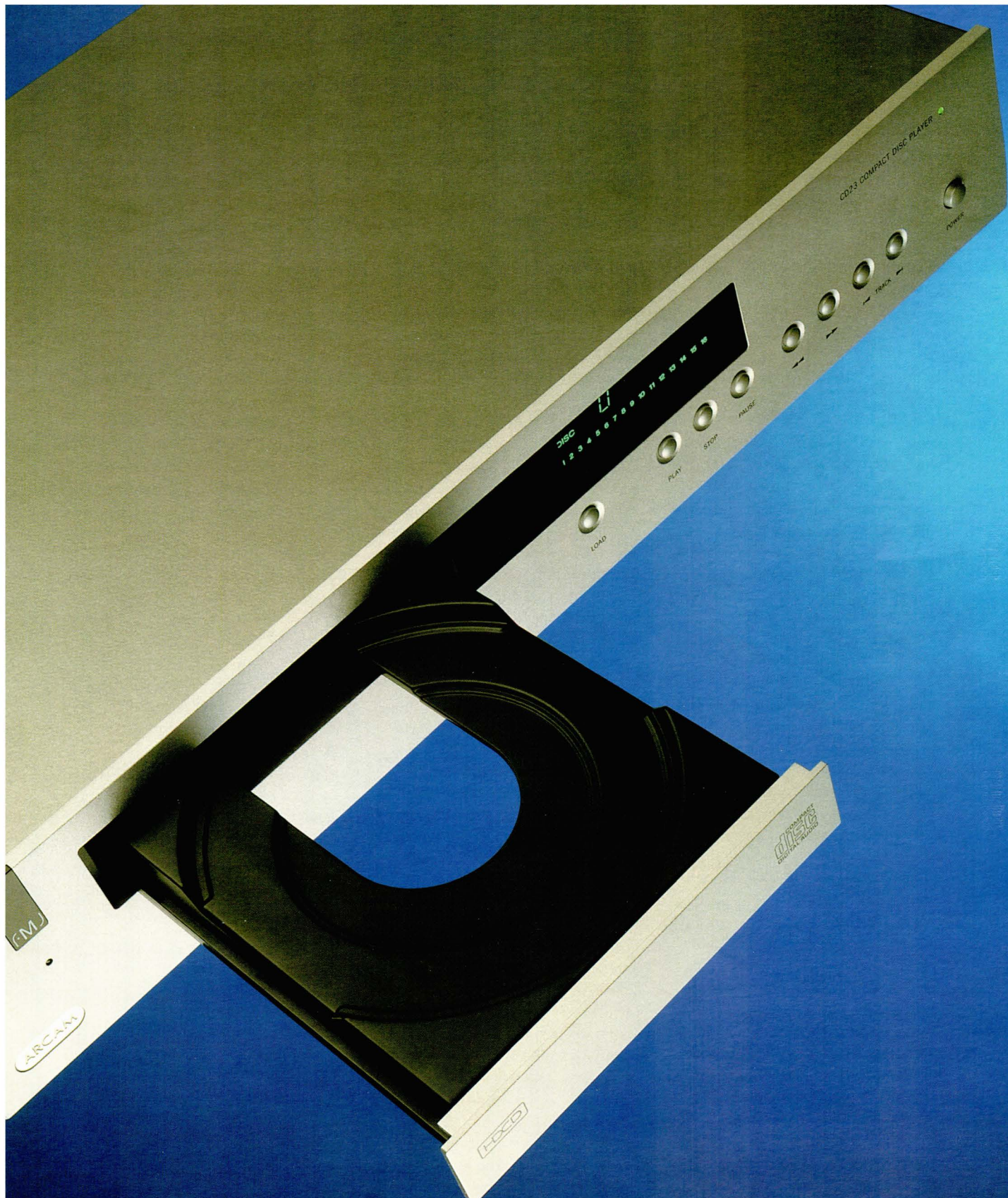
#### TECHNICAL SPECIFICATIONS

##### Outputs

Analogue:	Single-ended RCA/phono Balanced XLR
Digital:	RCA/phono Toslink Optical
DACs:	Dual 20 Bit
Digital Filter:	20 Bit, 8 x oversampling
Analogue Output Level:	2 Volts
Digital Output Level:	0.5 Volt (peak to peak)
Power Consumption:	20 Watts
Dimensions (WxHxD):	440x122x363mm
Weight:	7.7 kg
Price:	£750.00

##### Distributor:

Gamepath Ltd  
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DISC  
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PAUSE

SKIP

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# Arcam FM-J CD-23 CDPlayer

by Jimmy Hughes

It's been a while since a truly up to date CD player passed through my hands. My own regular CD player is a rather sad and sorry combination; a much modified Pioneer PD-75 transport going into a Meridian 518 digital processing box and a plethora of de-jittering devices, finally reaching a Cambridge Audio DACMAGIC 1 used via it's balanced analogue outputs into a line matching transformer.

For all that, it's actually a good combination that certainly works well enough. But it's a bit like the Arsenal back four; solid, but rapidly approaching its sell-by date. So, when the prospect of reviewing Arcam's FMJ CD-23 was mooted, I gasped an emphatic Yes! FMJ? Half seriously, Arcam tell me FMJ stands for Full Metal Jacket - a reference to the extensive use of metal in the player's construction, and with only a nod and a wink in Stanley Kubrick's direction.

The FMJ design has its roots in the Arcam Alpha 9, and uses the special patented 24bit Ring DAC jointly developed by Arcam and the Cambridge based company dCS. But the FMJ has several technical refinements over the Alpha 9, including a revised power supply

with two power transformers, and a completely new motherboard.

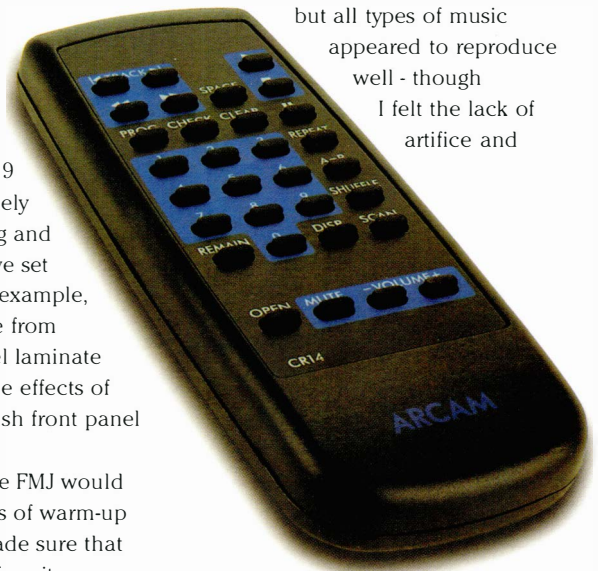
Mindful that superior technical and sonic performance has to be married to comparable mechanics and appearance, (apparently some markets felt the Alpha 9 didn't quite look the part, even if it sounded it) Arcam have improved styling and build quality. The 9 is also disproportionately sensitive to positioning and support, so Arcam have set out to rectify this. For example, the FMJ's case is made from a special damped steel laminate sandwich to reduce the effects of vibration, and the stylish front panel is some 8mm thick.

RG warned that the FMJ would need copious amounts of warm-up and running-in. He made sure that it got plenty of use before it even reached me, and more or less delivered it fully run in. It was left switched on at all times - even while awaiting photography. Of course, it had to be unplugged to be sent over to me, but I let it warm-up for a day or two before playing any music.

First impressions were of a clear,

open, clean-sounding player that was well-balanced and natural; nothing particularly earth-shattering or spectacular, but very listenable.

Tonal balance seemed very neutral, if just a shade on the cool side, but all types of music appeared to reproduce well - though I felt the lack of artifice and



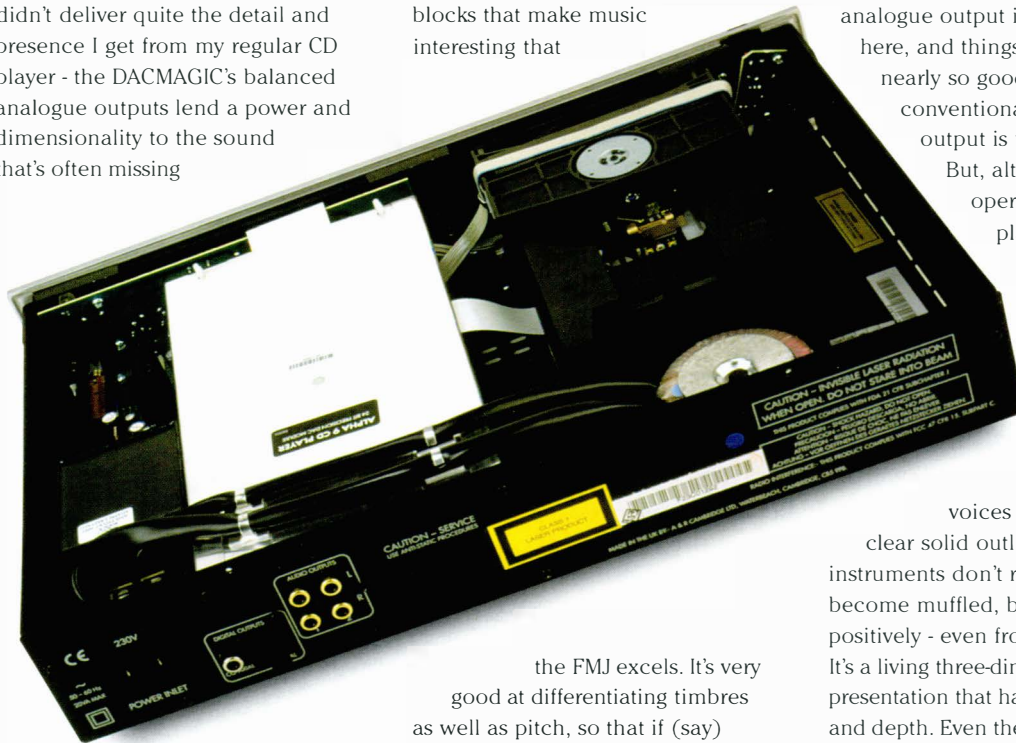
drama perhaps suited acoustic music best.

That said, it also impressed on compressed pop and rock, lending space and depth to recordings that could easily sound opaque and congested. Trying David Bowie's



▶ Aladdin Sane, I was favourably taken with the way the FMJ sorted out the difficult highly compressed first track - 'Watch That Man'. It clarified detail and prevented the very busy mix from sounding like a complete jumble.

Initially, I had the feeling the FMJ didn't deliver quite the detail and presence I get from my regular CD player - the DACMAGIC's balanced analogue outputs lend a power and dimensionality to the sound that's often missing



from CD - but overall the results were certainly good. Indeed, as the days turned into weeks, the sound seemed to get better and better; to the point where eventually my old player was eclipsed.

It's hard to say how or when the transformation occurred. But it was after about ten or so days use that the qualities of the FMJ really began to tell. Although I'd liked it from the word go, it took time for all its attributes to show - initially I didn't fully appreciate just how good it was.

As previously mentioned, it's a very neutral-sounding player. The tonal balance is beautifully open and natural, while pitch definition is excellent too. There's plenty of

space around voices and instruments even though the presentation is tactile and immediate. At the same time there's something understated about the player's musical presentation - it doesn't go out of its way to impress you.

It's in the subtle building blocks that make music interesting that

the FMJ excels. It's very good at differentiating timbres as well as pitch, so that if (say) a flute and oboe combine, you hear the individual tone qualities of each instrument distinctly, not just the note values. Massed violins sound clean and unclogged, but impressively trenchant and detailed. As I write this, the opening movement of Mahler's ninth symphony (Guilini/DG) plays, and it's gratifying to hear this complex multi-layered score so lucidly presented.

There's a welcome absence of graininess at the top end, a lack of that unpleasant edgy congestion that can make CD sound grubby and messy. At the same time the treble has a nice textured quality. It's smooth and clean, but not without immediacy or bite. Playing choral music, one registers the throaty

brilliance of massed voices, with excellent differentiation of tone quality.

Old though it is, I feel my regular player/DAC combination still rates highly in terms of its ability to create a sense of three dimensionality and separation; the DAC's balanced analogue output is a big plus factor here, and things don't sound nearly so good when the conventional, unbalanced output is used.

But, although balanced operation gives my player something of an unfair advantage over standard CD players, I fear it has to yield to the FMJ. I liked the way the Arcam gave

voices and instruments clear solid outlines. Quiet instruments don't recede and become muffled, but stand out positively - even from busy textures. It's a living three-dimensional presentation that has tangible width and depth. Even the added presence one gets with balanced analogue outputs seemed to be there; just increase the amplifier volume a notch or two to compensate and it's hard to say anything's missing - the sound has plenty of drive. It also has uncanny stability; the images don't wander the way they often do with other players. And whilst this isn't an obvious trait, you certainly notice when it isn't happening.

Dynamics are excellent, and the FMJ recreates the scale and presence of large forces impressively. At the same time the terracing of dynamics from soft to loud is convincing, with excellent presence at low levels and firm solid weighty climaxes. But perhaps most important of all, ▶

▶ the presentation is wholly natural; I very quickly 'forgot' the FMJ, and only appreciated how good it was when comparisons were made.

This is very important; it means you notice the music and not the hi-fi. The FMJ sounds impressive in all the right hi-fi ways, but not obtrusively so - it's vivid and informative, but not in a garish sensational sense. In this respect it has many of the qualities one associates with good analogue. It's vivid and detailed, but at the same time natural and unforced.

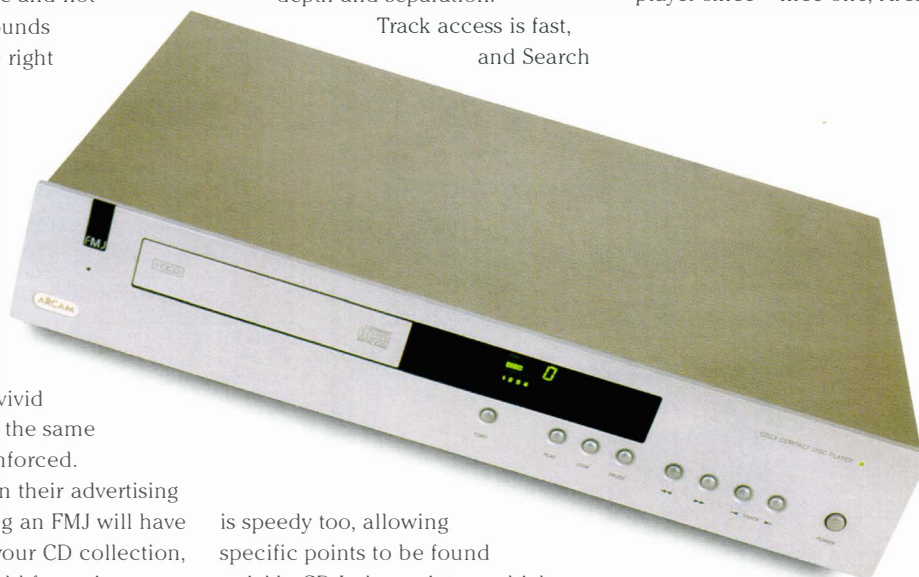
Arcam suggest in their advertising brochure that buying an FMJ will have you going through your CD collection, finding new life in old favourites. Well, that's certainly what happened to me. The FMJ seems to open up the top-end so that you get a nice crisp treble, but not at the expense of smoothness and integration. Early digital recordings seem to lose their graininess, while analogue productions have the tonal body and solidity you remember from the original LPs.

In terms of functionality, the FMJ has been kept fairly simple with only the basic controls on the front panel. However, other facilities can be accessed from the remote handset, including display off. Unlike some older Arcam players, the display comes back on again temporarily if you press Pause, select another track, or use Fast Search - a considerable benefit, operationally.

I felt that listening with the display switched off marginally improved sound quality, subjectively reducing congestion levels even further. The difference wasn't huge,

but voices and instruments seemed to have slightly more space around them and the 'background' seemed quieter and blacker, enhancing the FMJ's already good sense of depth and separation.

Track access is fast,  
and Search



is speedy too, allowing specific points to be found quickly. CD Index points are highlighted by the player's display, but the remote handset does not allow direct access - not perhaps a serious omission since very few CDs nowadays bother with Index points. During use, the player is pretty quiet mechanically, with only a gentle swish apparent with the ear up-close. Even sat nearby it's hard to tell the player's operating. The physical integrity and solidity of the FMJ are certainly reassuring.

This is a very good player; one that deserves serious consideration. In terms of uncluttered natural presentation and clarity it sets a standard which was beyond even the most expensive machines a few years ago. But beware of rushing to judgement. If your experiences tally with mine, you'll find the FMJ a machine that impresses the more you listen to it - partly because of the need to give it plenty of warming-up time, but also because its tonal balance and musical coherence are so

natural and unexaggerated. It impresses by not being overly impressive - if you see what I mean. I really liked it, and haven't been back to my own player since - nice one, Arcam! ▶+

#### TECHNICAL SPECIFICATIONS

Chipset:	Custom 24bit dCS Ring-dac
Outputs:	2prs Single-ended analogue 1 coaxial digital 1 Toslink optical
Output Level:	2.3V
Dimensions (WxHxD):	430x85x290mm
Weight:	6.5Kg
Finish:	Silver/Grey
Price:	£1100.00

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# Beauhorn Virtuoso Loudspeaker

by Paul Messenger

The Heineken ads used to tell us about “refreshing the parts that others do not reach”, which might be so much advertising baloney when applied to beer, but does get very close to what I feel about high sensitivity horn loudspeakers. In short, I have a soft spot for them, and was very much looking forward to reviewing this \$5,000 variation on the Beauhorn Virtuoso theme.

Over the years I’ve reviewed literally hundreds of speakers, but can count the full range horns on the fingers of one hand, a ratio of well below one per cent. They might be few and far between, but they also linger longest in my memory, and not only because they’re big, awkward and usually heavy beasts. The pity is that horns are such a rarity in today’s ‘small is beautiful’ world, very few enthusiasts ever get the chance to experience what they can really do.

It wasn’t always that way. In the earliest days of hi-fi, when mono was the only game in town, and feedback free, single-ended valve amps offered only a handful of watts, horn speakers ruled the roost. The move to stereo really was as damaging to horn loudspeakers as the arrival of transistors was to the valve amplifiers.

The advent of much more powerful transistor amps meant that speaker conversion efficiency (in

effect sensitivity) became much less important, so the big horn speakers rapidly gave way to the smaller so-

called ‘direct radiator’ models which dominate the market today.

Amplifiers might have gone transistorised en masse, but the valve amp never quite died out (though you’d have had a hard time finding one in the early 1970s). They’ve spent the last twenty years staging quite a comeback, simply because a lot of enthusiasts prefer their sound quality to the solid state alternatives. The reasons why are difficult to pin down because it’s impossible to compare like with like, and are

in any case irrelevant to this preamble. In my opinion, horn speakers deserve the same sort of respect as valve amps, and for somewhat similar reasons. Again it’s difficult to compare horns and dynamic speakers in a meaningful like-for-like way, though there are some pretty dramatic pros and cons on both sides (see sidebar!).

Sheer bulk has always been the main enemy of full range horn speakers, but this Virtuoso actually doesn’t look that much bigger than a lot of the floorstanders that come

my way. From the front view at least, it’s just over a foot wide and stands just over three feet off the ground, which is not too dramatic. Most of the bulk comes from being uncommonly (26 inches) deep, but even that is little handicap, as the rear is designed to be placed right into a corner, so that the angle between floor and walls provides a natural extension to the horn’s mouth.

The Virtuoso is a full range horn, but it also belongs to an important sub-species of the genre, in that it uses just a solitary full-range driver, of the Lowther variety. Said driver is actually loaded by three separate horns, broadly speaking for the bass, midrange and treble respectively. Whatever path the soundwaves take to reach your ears, therefore, they all departed the same voice coil at exactly the same time, which has got to be a good starting point.

The bass horn is the big one. It loads the back of the driver, first with a pressure chamber, and then a long and expanding horn shaped a little like a swan’s neck, which eventually exhausts through the two large triangular cutouts at the bottom rear corners either side of the enclosure. Take off the small grille and you’ll see the other two horns: the midrange horn is formed by the recessed flared box which surrounds the driver as a whole, while the separate paper ring loads the treble.

The wooden ‘mushroom’ is a phase plug.

Some neat styling embellishments add a nice touch of character and help reinforce the



▶ retro nature of the package, the top half of the front baffle slightly tilted backwards. The good quality real wood veneer looks very good from a distance, though on our samples the joins between the veneer strips covering the sides were a little too visible.

A single pair of pair of terminals are all that are needed for a single-driver speaker system – this cross-over-less approach is, of course, in truth an ‘active’ loudspeaker. The Virtuoso is available in four versions, priced between £4068 and £4946, depending upon the chosen drive unit and central plug. Our review samples were to the top Reference spec, with the DX4 driver and the large (130mm diameter) mushroom-shaped plug.

Internal wiring is DNM’s spaced single-strand, and hefty 8mm spikes are supplied for carpet-piercing floor-coupling. A single cross-brace stiffens those large side panels, and as is the way with horns, the enclosure is essentially undamped, though the bass horn is partly lined by thick expanded polystyrene panels.

Because the Virtuoso is relatively compact (by horn standards), it’s bound to have limited bass weight and extension. And because it uses a quite small driver (designed to operate right up into the treble), the bass will again be limited. It’s therefore entirely predictable that lack of bass is the Virtuoso’s most obvious limitation.

My room is not ideal for corner horns, so my room measurements might not be entirely typical. They show adequate bass down to around 100Hz, but a fairly rapid rolloff below that point, so that output is already –

10dB at 50Hz. The vital midband octaves, 200Hz-1kHz, are impressively even and flat, however, and at a staggeringly high 104dB sensitivity. The balance above 1kHz is much less smooth, though still well ordered in overall terms.

Add in the fact that the impedance stays comfortably above 8 Ohms through-out, and this speaker is going to be exceptionally easy to drive, even for a low power valve amp.

Beauhorn has its own matching amp, the £1,697 Obligato, a single-ended, non-feedback valve design, with an input sensitivity appropriate for the speakers. It actually makes an excellent subjective partner for the speakers, although I found the solitary line input fitted a little too restrictive.

I started listening to the Virtuoso before carrying out the room measurements, so was well

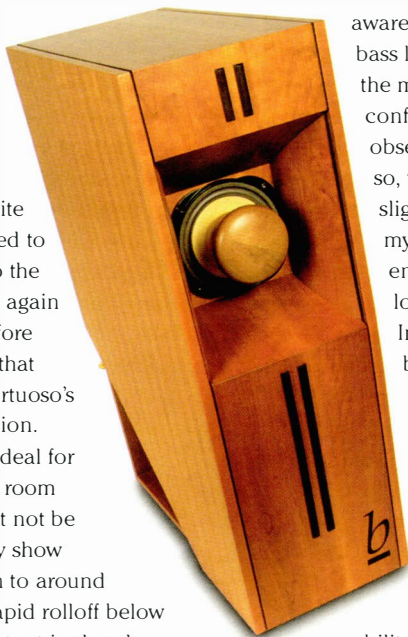
aware of the lack of bass long before the measurements confirmed the observation. Even so, this factor only slightly marred my considerable enjoyment of this loudspeaker. Indeed what the bottom end might lack in quantity, it more than makes up for in quality. Horn bass is quite remarkable. It has an extraordinary stop/start-ability which simply

sounds more natural and ‘right’ than the quality of bass reproduction generated by conventional box

(or panel) speakers. One might fairly question whether at least part of this effect is actually a consequence of a bottom end which in this case inevitably favours harmonics over fundamentals. That might play a part, but this Beauhorn is really only repeating the experience I’ve

found with other horn systems, in that the bass is uncommonly quick and light on its feet, with superior dynamic tracking. As a result, the intentions of the musicians seem to flow through, unencumbered by resonant effects, thickened textures and ponderous overhang. There’s obviously a case for trying to reinforce the Virtuosi with some sort of supplementary subwoofery. Depending on your musical tastes it’s worth a try, but must be used with discretion, and there’s no denying there are significant difficulties in achieving good integration between a dynamic subwoofer and a horn.

If the bass is something of a mixed bag, strong on quality but weak on quantity, the real reason for this speaker’s existence is its absolutely glorious midrange. This sounds so ‘big’, full of life and vibrancy, you’ll wonder how you ever put up with ‘ordinary’ loudspeakers. It’s got to be good, mind you, because it’s also decidedly exposed. The midband is what you notice straight away here, and even though there’s good detail well into the treble, the combination of excellent mid balance and perspectives alongside quite startling ▶



**HORNS DO IT DIFFERENTLY**

Let's start with the conventional speaker drive unit. It has a diaphragm of some sort (usually a cone or dome) which moves to and fro to create sound waves by exciting corresponding vibrations in the adjacent air molecules. Even the lightest diaphragm, however, is a lot heavier than an air molecule, which means there's a serious mechanical mis-match in transferring energy from one to the other.

To illustrate this, take a club hammer, and use it to hit a table tennis ball, and a cricket ball. The table tennis ball is by far the lightest, but it will actually travel the least distance. Because it's so much lighter than the hammer head (a mechanical impedance mis-match), little energy is actually transferred in the collision, and the ball doesn't move far.

The same is true with a speaker cone and an air molecule – except when that molecule is part of a horn system. When properly coupled to a horn, the diaphragm is coupled to the entire mass of all the molecules inside the horn, which gives a much more efficient transfer of power between drive unit and air. That's one reason why horn speakers have inherently much higher efficiency/sensitivity than their conventional dynamic rivals (though they do tend to be more directional too, which contributes).

A crucial by-product of loading that diaphragm with a heavy horn full of air is that any diaphragm movement is exceptionally well damped, evenly across its whole surface. And because of the high conversion efficiency and good damping, only tiny cone excursions are necessary, which in turn allows for a short voice coil which improves the potential efficiency of the coil/magnet motor.

► dynamic tension and realism, is what makes the Virtuoso something rather special. Conventional speakers tend to take a rather matter-of-fact approach to music-making, with little capacity to shock or surprise the listener. The Virtuoso is exactly the opposite. Its weaknesses lie in the conventional domain, but its ability to deliver the 'shock of the real' can be quite extraordinary.

I was working away one afternoon, Radio 3 burbling on in the background, not paying a lot of attention to a familiar Beethoven symphony, when someone in the audience coughed. I looked up with a start, shocked by the sheer realism of this isolated interjection. I'm not suggesting we actually 'want' our audience interruptions to be that realistic, but what applies to the realism of unwanted 'noises off' is equally true for the low level musical information. The ability to make real sense of subtle and dense orchestral textures completely won over my partner (who also thought they looked great). Although the bandwidth is inevitably better suited to acoustic material – Bob Dylan's 'Mr Tambourine Man' will linger long in the memory – I often found the speakers bringing an extra dimension to much heavier modern material, thanks to the superb timing and righteous dynamics.

This speaker has quite magnificent dynamics. A lack of serious bass is the normal hallmark of a small loud-speaker, but the Virtuoso doesn't sound in the least 'small'. Its impressive level tracking somehow seems to provide compensation, creating a realistically 'big' sound. The dynamic range isn't just wide, it's also both stable and effortless, and all the more natural as a result.

I enjoyed these Beauhorns with my regular Naim amplification, and several alternatives, valve and transistor, plus various different sources and cable arrangements. These speakers had a strong tendency to highlight and exaggerate differences in both hard-ware and software, which is always a good sign, but it does mean that extra care is needed in choosing other components to get the best end result. At one point I found myself confronting the age-old dilemma of preferring transistors for the bass and valves in the midband, but have to admit Beauhorn's own amplifier proved an excellent partner.

Forget any experience you have of conventional two/three-way box loudspeakers, a horn-loaded single full range driver system delivers a totally different kind of listening experience. The levels of coloration and lack of bass extension are significant flaws by conventional standards, but give the

ear/brain a chance to adjust to these limitations and you should start to appreciate the marvellous musical communication skills provided by the dynamic realism and pin-point time coherence. The bottom line is the way they encourage you to forget about the hi-fi and re-explore your music collection, getting into all sorts of new stuff along the way - I found myself spending much more time on Radio 3 than usual. The Beauhorn Virtuosos simply manage to make music of all kinds more interesting and involving than conventional speakers. ►+

**TECHNICAL SPECIFICATIONS**

Type:	Folded horn enclosure
Drive Unit:	Lowther DX38 Ohms
Efficiency:	106dB
Bandwidth:	-3dB at 50Hz depending on placement and room. -3dB at 15KHz
Dimensions (WxHxD)	336 x 1045 x 672mm
Weight:	35Kg each
Finishes:	Cherry, Maple
Price:	£4946-00

**Manufacturer:**

Thomas Transducers  
Tel. (44)(0)1424-813888  
Fax. (44)(0)1424-812755  
E-mail. ThomTrans@beauhorn.u-net.com  
Net. www.beauhorn.u-net.com



# Smooth Operator

## Samuel Johnson Audio pca100 and ppa100 pre/power amp

by Dave Davies

'No compromise – just music', or so it says on the ads. A tall order which should perhaps be the goal of every hi-fi company but sadly, is attained by very few. What chance for complete newcomers?

That Samuel Johnson Audio is a credible business and likely to be serious about its goals was evident from the moment I opened the packaging. Quashing forever any lingering thoughts of the old 'built in a shed' British enthusiasts product, here were units, that in terms of fit, finish and presentation are easily the equal of their best British peers. A product that would not be disgraced when set against much more expensive international offerings, however far up the 'high end' route you'd care to go! The accompanying photo's will give you the clearest indication of the external design but can't convey the satin smoothness of the casework, both metal and woodwork, the latter I'm informed sourced from the same supplier as Rolls Royce dashboards. No raucous logos ruin the fascia; instead the discreet 'SJ' logo is engraved on the power button which in turn sits in an elliptical recess.

The pca 100 and ppa 100 are the first in a family of new products from SJ. Shortly to be launched and quite possibly available by the time this article is in print are a 100 W power amp, a DAC and a CD transport.

The pre-amp is designed with easy of use in mind, so remote operation is key. The remote, the flattened egg

shape of which also echoes the elliptical logo, is a solid and weighty sculpted aluminium chunk. It sits invitingly in the palm of the hand allowing 'single handed' operation of source selection, volume and mute functions.

Like the Michell Orca remote, it is a pleasing break with the norm, enhancing rather than compromising functionality.

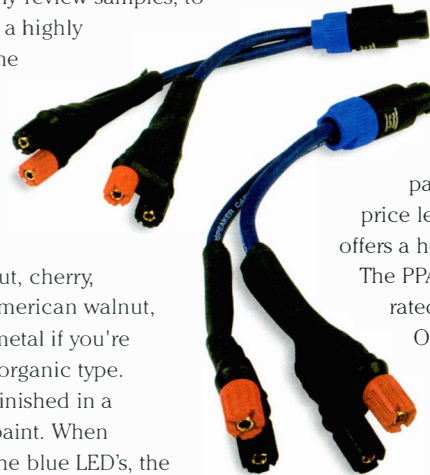
A huge range of finish options are available, from the champagne and light wood of my review samples, to black metal, to a highly polished chrome aluminium. These metal finishes can be matched with real wood from a choice of walnut, cherry, rosewood or American walnut, or even more metal if you're not the earthy, organic type. The cases are finished in a matt textured paint. When coupled with the blue LED's, the whole effect is both distinctive and discreetly understated, and I can see these designs sitting equally well in either contemporary or traditional environments. I've banged on at unusual length about the exterior design and build quality of the amp, but with good reason since it really is exceptional. However, looks are

of course but a small part of the story.

The attention to detail clearly carries through to the internals. The pre-amp features an unusually high count of 6 independent power supplies, each with its own transformer, covering the left and right inputs/ outputs, control logic circuits and channel switching relays. Maintaining signal purity and minimising noise (hardly mutually exclusive) are priorities. An EMC filter is incorporated to minimise mains-borne interference. High quality relays are used and each input channel features a filtered line stage to buffer the source signal.

An elaborate 4 layer PCB is used, and signal paths are minimised throughout with the appropriate circuitry located as close as possible to the rear panel. Unusually at this price level, the pre-amp also offers a headphone output.

The PPA 100 power amp rated at 50 Watts into 8 Ohms, doubling into 4 Ohms, is no less elaborate. Four independent power supplies cover the left and right audio supplies and protection circuits. Two hefty 300VA toroidal mains transformers are shoehorned into the slim-line box along with identical circuits for each channel. Star grounding is employed and like the pre-amp, the mains input is EMC filtered. Unusually the back panel features



► Speakon connectors. These locking plugs are more normally seen in professional applications where they provide a more reliable and tighter connection than standard plugs. They do indeed provide a highly secure connection, and experience informs me that they sound good too. It meant that I had to use adapters for my bi-wired Audioplan Musicable throughout the review, and I wouldn't fancy trying to re-terminate some of the heavier cables on the market. But that's the dealer's job anyway!

Coupled to my Copland CDA289 and Ruark Paladins and wired throughout with Audioplan musicable, my initial reaction was mild disappointment.

A big soundstage was evident and there was no lack of fine detail, timing too was excellent, but somehow there was a slight sense of constraint, of the system holding back. After some experimentation, the cables were ruled out and the finger of suspicion pointed at the Ruarks. These were removed and substituted with a pair of Ars Acoustica Divas. These, at 89dB/W and around 4ohms, present more of a load than the easily driven Paladin's, and it was immediately apparent that the SJ's were much happier.

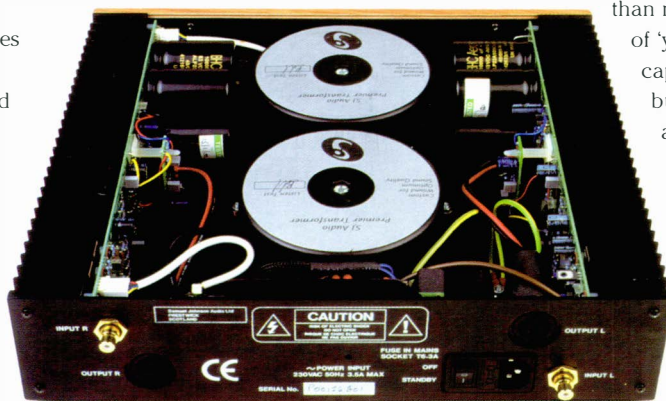
Bunging the latest Joni Mitchell CD (*Both Sides Now* Reprise 9362 47620-2) into the Copland, her 'Holiday like' vocals were nicely captured, with every nuance clearly conveyed. The swell of the backing orchestra as it rose to each climax was conveyed with real ease and refinement. Imaging was excellent,

solid, three-dimensional and very precisely positioned, although stage depth was a little shallower than with my Michell amps.

Moving to Lloyd Cole's splendid *Don't Get Weird On Me Babe* (Polydor



511093-2), there was no lack of slam or scale as the band kicked in on the opening track, 'Butterfly', and having recently seen Cole in a small venue acoustic gig, I can vouch for the



accuracy of the vocal reproduction. The very girly breathy backing vocals from 'Beti' in the lovely 'Margo's Waltz' were particularly sexy, the silky smooth performance of the SJ making them so much more real. Bass was deep and taught throughout and the percussion had real snap and impact. The SJ proving itself capable of resolving

layers of fine detail that brought a whole new perspective to a recording which I thought I already knew pretty well.

On the altogether more delicate but no less lovely Fone sampler CD (*Catalogo Sonoro 2 – CD Sampler 95 F16 CD*), the opening track features Salvatore Accardo from the Violins of Cremona disc, performing the Kreisler 'Melodie'.

The character and natural scale of the instrument, along with every delicate aspect of Accardo's playing, was really convincingly re-created, along with a great sense of the recording acoustic. Another favourite track from this sampler that also happens to be a great test piece, is the Mascagni intermezzo

from 'L'Amico Fritz'. At first hearing this live recording can sound a little warm and top-end curtailed until it dawns on you that it's actually much, much closer to the real thing than most recordings. The sense of 'you are there' is absolutely captivating, right through to the burst of applause and 'bravo's' at the close. This piece has never sounded less than good on a variety of systems. But the SJ's made things that vital bit more real, making the whole experience even more enjoyable. From the layering of the strings right through to the sheer naturalness of the applause, the SJ made this performance totally captivating.

From the sublime to the well, sublime in a quite different way. Sadly, the SJ phono stage wasn't ready by the time of review, so plugging in my trusty if very long in the tooth Michell ISO I lined up *Rockin' Jimmy and the Brother's of the Night* (Sonet SNTF 857) on the Gyrodek. ►

▶ For those of you unlucky enough not to know this album, it's a compelling blend of the tightness and funk of Little Feet with a twist of Mac Rebennack and a light sprinkling of Booker T. Mostly though it's great straight ahead good time rock. Superbly recorded it demands lots of punch to re-create the right funky experience. This proved absolutely no problem for the SJ. Moving swiftly from the delicacy of the Fone CD there was now plenty of deep, impactful bass and overall clout. Jimmy's vocals were clearly conveyed and the band laid out across a convincing stage. Guitar lines had just the right feel with plenty of attack when required and importantly although lots of fine detail was evident across the spectrum it wasn't allowed to get in the way of the music. The overall sound was now hard driving and raunchy. Just like it should be, and thoroughly involving.

The SJ also excelled in simple acoustic music. The Eric Bibb track 'Saucer 'n' Cup' (from Eric Bibb and Needed Time *Good Stuff* Opus 19603), is a laid back treat with soulful vocals from Bibb and some nicely plucked National guitar. Bibb's vocals were solid, three-dimensional and in the room. And the attack on the harder plucked notes was convincing. Importantly, the whole thing stayed in scale. I never got the sense of a seven foot wide guitar being played by an eight foot high musician that some systems insist on suggesting, but was presented with a naturally proportioned and voiced instrument played by a 'real' person. Good stuff indeed!

You'll have gathered by now that

I like the SJ. It consistently demonstrated excellent pace and timing, delivering a big, powerful sound that belied its compact dimensions and offering a correct sense of the scale of each performance. It proved totally unfussy, coping equally well with whatever was thrown at it – rock, jazz, classical, whatever. It sounded in many respects like a much bigger beast, but unlike many such critters it also offered a level of ease and refinement, of delicacy, along with the ballsy stuff. The overall sound had a natural sense of warmth with detail just 'there'. I suspect that on demonstration the SJ would not necessarily be the most immediately engaging – it's clearly not out to impress with hifi pyrotechnics and it takes time to warm to it's more subtle and refined approach. The amp is likely to appeal to those



who appreciate excellent sound quality, who like good design and don't want their listening room filled with boxes. It offers the combination of luxury feel and effortless power that you expect from a big saloon car (without the soggy suspension you normally get too!). There's a sense of ease and effortlessness in its performance that draws no attention to itself but allows you to focus on and experience the music. My only slight quibble is the total lack of any volume indication. Coming back to

the system after a bit of a head bang can be an interesting event.

Here is a new company, which from day one has produced a truly world-class product. It should prove a godsend to music loving would-be audiophiles who also have an eye for design and want to keep things uncluttered and simple.

Whilst it clearly requires a good source to give of its best, and if my experience with the Paladins is any measure, prefers something to get its teeth into, it is inherently unfussy and undemanding. Fit, forget (if you can ignore its slinky contours) and enjoy the music. I wish Samuel Johnson every success - they deserve it! ➤+

#### TECHNICAL SPECIFICATIONS

##### pca 100 Control Amplifier

Inputs:	6 line inputs (phono input imminent)
Outputs:	4 line and 2 tape
Input Impedance:	47k ohm impedance
Input Sensitivity:	360mV/1V rms @ maximum gain
Dimensions (WxHxD):	360 x 92 x 360mm
Weight:	7kgs
Finishes:	See Text
Price:	£2115

##### pca 100 Power Amplifier

Rated Power Output:	50 Watts/ 8 Ohms 100 Watts/ 4 Ohms
Inputs:	RCA/phono
Outputs:	Neutrik Speakon
Dimensions (WxHxD):	360 x 92 x 315mm
Weight:	10.5kg
Finishes:	See Text.
Price:	£2585

##### Manufacturer:

Samuel Johnson Audio  
Ladykirk Business Centre  
Skye Road, Prestwick, Scotland KA9 2TA  
Tel. +44(0) 1292 470000  
Fax. +44(0) 1292 479999  
E-mail. sales@sjaudio.com  
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# V E R I T A S

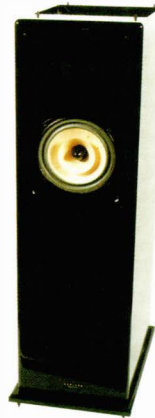
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Hi Fi Choice



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# First Family -

## Up-market Moving Coil Cartridges From Ortofon

by Roy Gregory

Ortofon have been producing phono pick-up cartridges since 1948, in which year they produced the first commercially available moving-coil. As the analogue era draws to a close, at least as far as big business is concerned, it seems somehow appropriate that for many vinyl devotees, Ortofon cartridges remain the most readily available option when it comes to stylus replacement time. There are plenty of other people still making cartridges, but with analogue sales dwindling many dealers are reluctant to invest heavily in a varied demonstration stock of fragile moving-coils, relying instead on a single manufacturer for all their needs, depending on loan stock for the more expensive models. More often than not they turn to Ortofon, one of the few companies with the size and range to support their needs.

Likewise, the thousand pound mark has always been a critical price point. For the lucky few, it's where real cartridges start. For the rest of us it's as much as we could justify on something which does, after all, wear out. Dominating the market are Ortofon and Lyra, whose Clavis DC is due for replacement, so we'll get to the new model in due course. Meanwhile, just to confuse you, Ortofon offer two models, the Rohmann and the newer Jubilee, so it seemed like a good idea to help sort them out. Henley Designs, the Ortofon importer, were only too happy to help out, but slipped in a low blow with the top of the range MC7500, "just to show what you get if you spend a bit more".

Listening was based around my normal Clearlight Recovery and ClearAudio Reference turntables, the

former fitted with the Incognito RB300 and SME 309 tonearms, the latter with its own Souther linear tracker.

Amplification was courtesy of the Pass Aleph-Ono and the scarily good £400 Micro-Groove from Acoustic Precision. Hovland and Audioplan provided the arm leads, with the Cartridge Man's digital stylus balance ensuring repeatable down force settings.

### The Rohmann

The Rohmann shares the same snub nosed, milled from solid metal body that first appeared on the MC7500, itself derived from the ceramic bodies of the two, three and five thousand. However in the Rohmann's case the metal is aluminium rather than the costly and difficult to machine titanium of the flagship model. And the similarities go more than skin deep, the blue cartridge sharing the tapered aluminium tube cantilever and Orto-Line stylus of the 7500, as well as many of its electrical characteristics. Thankfully, the latter's cripplingly low output isn't among them, the Rohmann delivering a far more manageable 0.25mV, very much the norm for a modern cartridge, and an awful lot easier on the phono-stage. Overall weight is rather more manageable too, at 9g it again matches the current norm. The square body and nicely visible cantilever help with alignment, while the tapped lugs and well spaced and colour coded pins make installation a doddle. There's

even an excellent stylus guard, something of a rarity given the current fashion for nude cartridge bodies.

The Rohmann is what I'd describe as a classic Ortofon, in the mould of the MC70 and 2000. Detailed, open and extremely even top to bottom, it majors on finesse and control. Heinz Hollinger's recording of Vivaldi *Concertoes for Oboe Strings and Continuo* with I Musici (Philips 9500 044) works beautifully. A wide but slightly shallow soundstage offers excellent instrumental separation

and focus, while the Harpsichord, so often reduced to a distant jangle, is held stage front, rich, vibrant and complex. The tonal qualities are spot on, especially the Oboe, and harmonic development and

decay is very good. Musically it's smooth and refined, with good timing and overall coherence. A slight overall coolness and a reticence in the bass (related? I think they might be) are also evident, adding to the sense of clarity and focus, but the Rohmann avoids the over analytical dryness of the MC5000. It might be slightly cool compared to the competition, but it positively gushes warmth relative to some of its predecessors. All of which suits the Vivaldi down to the ground.

Change the music, and you change the picture. The infamous Massenet *Le Cid* (Fremaux and the Birmingham S.O. Klavier KS522) finds the Rohmann feeling altogether less comfortable. Whilst it offers a tremendous sense



► of air and space, positioning the orchestra precisely across the speaker arc, behind and beyond the cabinets themselves, the huge opening crescendo lacks weight and impact. It's extremely detailed, a whole collection of different instruments and tones rather than the homogenous crash produced by many cartridges, but the effect lacks the necessary and intended drama. It should make you jump, and the Rohmann doesn't. Likewise the castinets that punctuate the opening movement are placed with enormous accuracy, but lack the satisfying woody clack and presence they should possess. The result is to render their contribution musically (as opposed to geographically) distant and insubstantial.

The jazz piano of Ahmad Jamal (*Alhambra Alto AA 005*) shows the same tendencies but once again alters the overall cost/benefit analysis. On the plus side, the harmonic insight and smoothness of the Rohmann bring a sonorous quality to the piano, and a graceful flow to the melodic line. On the downside it lacks the stabbing attack and emphasis of Jamal's playing, again robbing the music of drama in favour of comfort.

The Rohmann is a tonally and positionally sophisticated performer. But whilst it unravels the harmonic structure of instruments, and gives them their correct contrasting colours (despite a little overall bleaching to the palette), it lacks dynamic range which robs the music of jump and impact. On dynamic and demanding material it can sound a little tame and polite. On the other hand, it sounds sensational with chamber music and much acoustic pop. It was certainly happiest in the SME, an arm which adds a little low end substance of its own.

### The Jubilee

More recent than the Rohmann (it only appeared two years ago) the Jubilee marks both 80 years of Ortofon

production, and a radical departure from earlier designs, externally at least. Rather than the blocky, sensible shape of the other Ortofon high-end offerings, this one comes in a diminutive and rather exotic cylindrical form. The composite body is constructed from aluminium and stainless steel in a pressed construction devoid of glue or fixings. Cut on the slant, it pushes its nose forward in a purposeful way, the resulting 'wings' providing an element of protection for the steeply projecting cantilever. Size and shape force you to use the cantilever when aligning the Jubilee, which is no bad thing, eliminating the lazy man's option of simply aligning the body. However, it does make getting things into the ball-park slightly more difficult. The recessed pins are somewhat confusingly colour coded, and the whole cartridge needs to set sharply tail up (at the headshell) to achieve correct VTA. This can make things tight with some arms, particularly the SMEs, where the nose down attitude of the arm-tube risks fouling the lift-lower pad. With its myriad complications, installation is probably best left to the professionals.

Cantilever appears to be a boron rod, whilst the stylus profile is slightly less extreme than the Orto-Line used on both the Rohmann and the MC7500. The Jubilee also uses silver coils. Output is 0.34 mV, but both weight (10.5g) and compliance are slightly higher than the Rohmann. Once again you get tapped holes for mounting, along with a range of different screw lengths because the holes are blind. You also get a stylus guard.

Sonically, the Jubilee sounds as different to the Rohmann as it looks. This is a far more vivid and direct performer, and if it lacks a little of its brother's instrumental insight, it more

than makes up for it with power and drama. The Jubilee's soundstage is narrower but deeper than the Rohmann's, and instruments are much more immediate. Le Cid thundered forward in impressive fashion, towering crescendos and staccato castinets to the fore. Ahmad Jamal playing was full of purpose and emphasis as he teased and prodded the musical line, the accompanying snare was taught and crisp. Having said that, the cymbals lacked the fabulous shimmer that they had with the Rohmann, and the players and their playing took on a compact, almost hunched feel.

Perhaps the best example of the contrast between these two cartridges was the Christian Ferras performance of the Tchaikovsky *Violin Concerto* (Silvestri and the Philharmonia, ASD 278). The Rohmann offered an expansive view, its smoothness lending Ferras' playing a wonderful lyrical quality, but portraying the music as a whole in an altogether too delicate fashion. The Jubilee was far more dramatic and intimate, making far more of the sudden shifts in orchestral texture that underpin the life and vivacity of the third movement. However, it is in the presentation of Ferras' violin that the clues really lie. The greater dynamic insight of the newer cartridge strips away some of the smoothness overlaid by the Rohmann, and as a result, the playing is spikier and more jagged. In fact, in the 309 it became slightly clumsy, and the Jubilee always felt happier in the Incognito RB300, with its lower effective mass. The relatively high compliance is marginal with the SME arms, and if you want to use this combination then I'd strongly recommend a touch of fluid damping.

### The MC7500

Released in 1993, the MC7500 celebrated the company's 75th



► anniversary by elevating the performance of its pick-ups to a new level of performance (and price). The milled from solid titanium body was a first for the company, a safer and much simpler option than the brittle ceramic bodies of its predecessors. Packaging was suitably sumptuous, if a little bizarre, taking the form of a miniature leather briefcase which arrived in a wooden packing crate, and the reviewers of the time fell over themselves to get hold of a sample.

Physical, apart from the dull bronze colour, the MC7500 looks exactly like the Rohmann. Not surprising as the cheaper cartridge is a direct derivation of the flagship. What sets it apart is its extremely low output - just 0.13mV! Even the best active moving-coil stages will struggle with this, and transformers become a serious consideration, if only from the point of view of practicality. Fortunately, the Pass is super quiet, and just about did the business, but amplifying this tiny signal will be a serious consideration for any prospective purchaser. Finally, at 11g, the 7500 is no lightweight, so you need to consider this when it comes to arm matching. The RB300 was completely out of the question, for all kinds of reasons.

Listening to the MC7500 it was immediately and obviously in a different class to the other two cartridges here. As it should be at around twice the price. The soundstage is even wider than the Rohmann's and as deep as the Jubilee's, but far more transparent and focused than either. At the same time its spatial perspective is more natural and believable. The tonal coolness of the Rohmann has gone too, and if it can't quite match the fiery dynamics of the Jubilee, its speed and finesse leaves it for dead. Listening to Ahmad Jamal the playing is full of poise and attack as he paces his contribution, resting on sprays

of treble notes before the stabbing prompts that propel the music. The dimensionality and texture of the drums and cymbals is superb, but it's the absolutely natural intrusion of extraneous sounds, the chink of cups, the distinct ring of a teaspoon,



that really demonstrates just how much more low-level information the cartridge is extracting. And how much more convincing that makes the musical whole. Ferras' violin takes on its proper lilting quality as the 7500 strips away the smoothness of the Rohmann. Comparison of his Mendelssohn with the recent Heifetz re-issue on classic records (LSC 2314) is fascinating. Heifetz's legendary technique and flow are captured intact, but his playing is hurried by Munch's overly quick tempo, leaving Silvestri's more measured pace to extract far greater depth and moment from the music. The MC7500 has no favourites, it simply tells it the way it is.

I've only scratched the surface of the

flagship's capabilities, having concentrated on the more accessible models. That's easily rectified. I'll just have to use it a lot more, which means that Ortofon won't be seeing this one for a while. More later, methinks.

## Conclusions

Both the Rohmann and the Jubilee offer a valid solution to the problem of choosing a £1000 pick-up. Their reliability and the company's longevity are both proven, and the importer offers flexible trade-in and trade-up arrangements, all of which makes dropping a grand on something that wears out altogether easier and less painful. That they are so different is both interesting and something of a relief. The Rohmann's smooth and ultra-refined approach is in stark contrast to the Jubilee's fiery dynamics and vivid colours. Which you prefer will depend on the value you place on drama at the expense of controlled detail (as well as the balance and particulars of your system). Either one makes thoroughly enjoyable music, but the nature of the contrast means you'll almost certainly plump for one over the other. The choice as they say, is yours.



## TECHNICAL SPECIFICATIONS

	Rohmann	Jubilee	MC7500
Year of release	1996	1998	1993
O/P at 5cm/s	0.25mV	0.34mV	0.13mV
Channel separation (1K)	>25dB	>27dB	>25dB
Channel separation (15K)	>15dB	>20dB	>18dB
Channel balance (1K)	<1.5dB	<1dB	<1dB
Compliance	12cu	16cu	12cu
Cantilever	Tapered Al	Boron Rod	Tapered Al
Stylus type	Orto-Line	Nude Shibata	Orto-Line
Tracking force	2.5g	2.3g	2.5g
Body Material	Aluminium	Aluminium/ Stainless Steel	Titanium
Weight	9g	10.5g	11g
Internal impedance	6 ohm	5 ohm	6 ohm
Load impedance	10-100 ohm	>10 ohm	>70 ohm
Price	£1050	£1250	£2000

Distributor: Henley Designs Ltd.

Tel. (44)(0)1491-834700, Fax. (44)(0)1491-834722, E-mail. henleydesigns@aol.com

# The Reson Lexe Moving-coil Cartridge

by Chris Binns

Reviewing cartridges can be both a frustrating and rewarding business. On the one hand they can be oh so fiddly to set up; and with the numerous mechanical and electrical adjustments it can be a time consuming business, but the rewards... are nearly always worth the effort. Despite learning to live with CD, I still find that vinyl, when it's good is really good, and listening to music from records can be highly addictive.

The Reson Lexe is a moving coil cartridge of low output and manufactured for the company by Goldring, a company who have had considerable experience in this area. Built to a specification supplied by DNM, who are renowned for, amongst other things, distinctive amplification, they have more recently turned their attention to turntable design, this leading to the requirement for a bespoke cartridge, and hence the Lexe. The compliance would suggest compatibility with medium mass arms, and the DNM turntable is supplied with a Rega sourced (but much modified) arm if that is an indication

Burning in a cartridge as opposed to, say a CD player is a painful business. It would seem that for best results a modulated groove is required, i.e. you can't just leave it



playing the run off groove of an album, so the process requires considerable attention. Like, every twenty minutes. So if you really want to know what is right at the very bottom of your record collection,

start delegating discs for the job now. I used the Pet Shop Boys.....

In complete contrast to the Tubaphon cartridge that I reviewed in the last Issue, the Lexe went through a long and complicated process of evolution whilst running in. To say that it changed character would be an understatement, but what really surprised me was the way that it started to develop

in one direction, only to switch and go completely the opposite way – much to my annoyance. Initially the cartridge started off by sounding brittle and edgy, which is to be expected, but after twenty hours or so of use it warmed up; to the extent that at this stage I felt the sound became rather thick and glutinous. It remained this way for long enough to convince me that it had completely settled down. Consequently, I thought that maybe in my system it could benefit from a higher loading impedance, say, 470 ohms. As my phono stage is actually inside the turntable, altering the load impedance is not an easy task, although it does provide fairly

► regular opportunities to check the set up of the Linn. With the higher loading impedance set, I felt that the Lexe sounded more open and somewhat lighter footed in the bass. But only for a while. It then became what I would call wild and raucous overall, missing the authority in the bass that had been there before. Back to square one? So it seemed. Out came the soldering iron again, and I reverted to the original figure of 100 Ohms.

Tracking weight is specified at 1.65 grams, plus or minus 5%. Somewhat tightly specified, small adjustments either side of this figure yielded little discernible difference and it seemed to be tracking quite securely in my Mission Mechanic arm. However, experimentation with VTA affected performance quite considerably, notably with the top end response; best overall results were obtained with the arm inclined towards the base by a few degrees.

By now I was hoping that the Reson had run in, and shed its schizophrenic tendencies in favour of a more stable performance. Fortunately, this proved to be the case, and there was no discernible change in character for the rest of the review period.

On first impression it was evident that the Lexe possessed the fundamental qualities which can make vinyl replay so worthwhile. Playing many different types of music revealed a character that was of a full-bodied nature, quite warm tonally, and with good rhythmic capabilities. Remember the Supex 900 and the Linn Asak? I was very much reminded of those when listening to the Lexe. Bass end was well defined, but with a 'fruity' character that propelled music along, but could occasionally become a little bit intrusive. Mid range was rich and colourful with plenty of detail and progressed seamlessly to the top end which,

although not the most extended or refined that I have heard, was perfectly in keeping with everything else.

Orchestral music was reproduced with plenty of authority, and a very three-dimensional quality to the soundstage, although instrument placement was not that precise. The Shostakovich *Violin Concerto* with David Oistrakh has a well-defined orchestra, while the soloist has his own space, and the Lexe did not project this arrangement as well as some cartridges that I have used. There was also a tendency for the slightly overblown cello's to rise up and cloud the melody of the violin, but I suspect that this was high-lighted by the use of the Linn turntable, which also has a tendency in this direction.

Joni Mitchell – *the hissing of summer lawns* is a recording that I missed first time round and ended up buying on CD; the transfer is frankly, appalling so I was extremely happy to find a good second hand copy in the local Oxfam shop. Playing this with the Lexe was a revelation – the sound was solid and very dynamic with her voice soaring above the rhythm section, but everything held firmly in place with great precision. After all, these were the backing musicians who's next project was with Steely Dan, in the form of the legendary *Aja*. If you know the record you'll know what I mean.

At the other extreme, Throwing Muses – *The Real Ramona* is a highly undisciplined and in places, savage record that the Lexe picked up and threw in your face, with the kind of dynamic control which made for really exciting listening. This is exactly how it should be; too often I have heard this recording sound limp and simply uninteresting.

I hope I am not doing the Lexe a disservice when I say that, for the many listeners who owned one of

the classic Linn based record playing systems, and find the current options rather less appealing, this is a cartridge that will bring a smile to their face. Perhaps slightly less successful with orchestral music, there are others that offer more refinement and a less coloured sound, but at what price? How about a clinical, musically strangled approach. With CD technology as the mainstream for music reproduction, it is tempting to use it as a technical benchmark and there are record playing systems around that can and often do sound like a CD player. The Lexe doesn't. It trades some of that clinical refinement to offer a highly involving and never less than enjoyable performance, and will never let you forget that you are listening to music, not the hardware. ➤

#### TECHNICAL SPECIFICATIONS

O/P at 5cm/s	0.5mV
Compliance	16cu
Stylus type	Fritz Gyger S
Tracking force	1.65g ±5%
Body Material	Pocan
Weight	7.8g
Load impedance	100 ohms
Price	£1300
	£350 trade-in allowance for Lexe
	£250 for any other cartridge

#### Distributor:

Virtual Reality Audio Systems  
Tel. (44)(0)1277-227355  
Fax. (44)(0)1277-224103  
E-mail. [info@virtualr.demon.co.uk](mailto:info@virtualr.demon.co.uk)

#### Manufacturer:

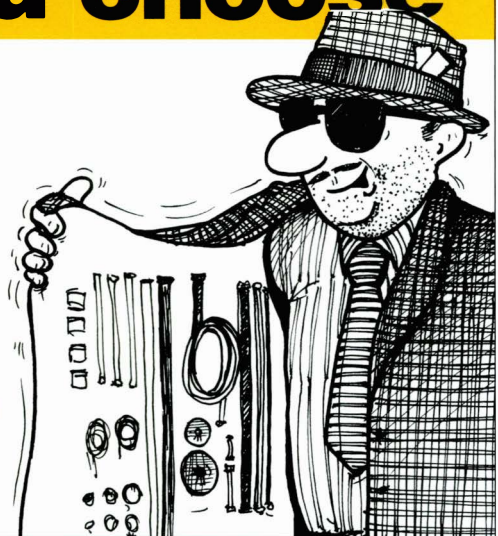
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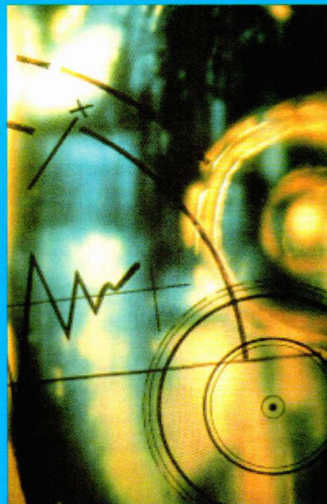


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A silver Sugden Audio HeadMaster pre-amplifier is shown from a top-down perspective. The device features a volume knob, a balance knob, and a headphone jack. The top panel has a headphone icon and the text "A. B. Sugden Class A HeadMaster Pre-amplifier".

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A silver Sugden Audio HeadMaster pre-amplifier is shown from a front perspective. It features a headphone jack, a volume knob, and a balance knob.



The Trichord Research logo is displayed in white text on an orange background. Below the logo is a close-up image of a black, cylindrical component, likely a speaker driver or a part of a speaker system, set against a green background.

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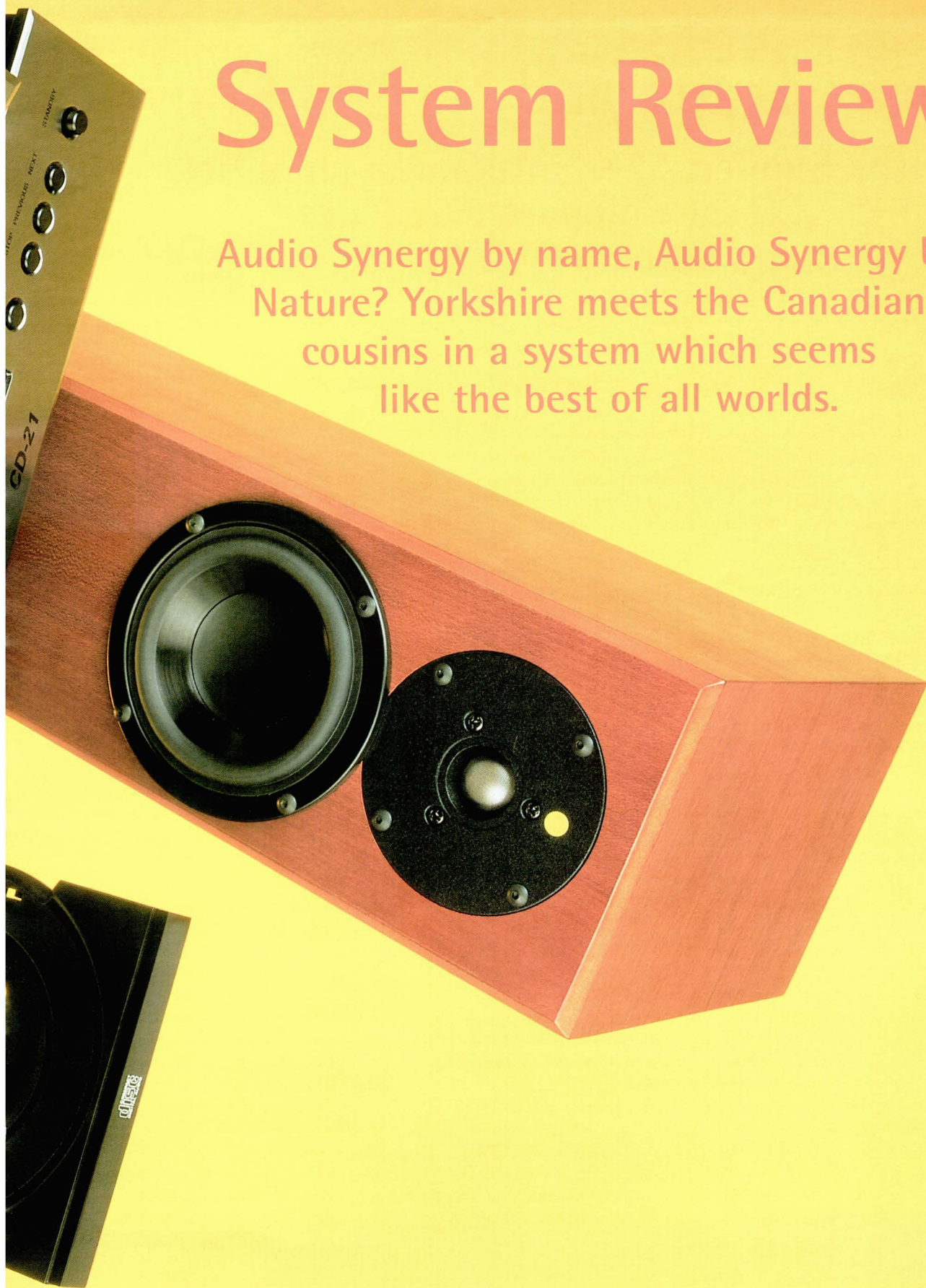
COMPACT

SUGDEN



# System Review

Audio Synergy by name, Audio Synergy by Nature? Yorkshire meets the Canadian cousins in a system which seems like the best of all worlds.



# Neat, Petite and Nice to Know

## The Sugden A21a integrated amplifier, CD-21 Compact Disc Player and Totem ARRO Speakers.

by Dave Davies

25 Watts and 4.5" woofers...The word 'compromise' springs readily to mind at the very notion. Fortunately appearances can be deceptive so read on.

The Sugden A21 Class A amp has a heritage stretching back over 30 years. In '67 it followed the project 'si402' later known as the A41 which had been introduced as the worlds first commercially available solid state pure class A amp. The price of the original A21 was a then princely £56.

Calculated at today's prices that is equivalent to £632.80. The current model, which offers much greater refinement and flexibility, now retails at \$819, a paltry increase of \$16 when factored back to a '67 equivalent of \$72! Add the nicer casework and improved aesthetics, and you can see that the A21 design might have evolved, but it has also stayed close to its roots. The original A21 was for many long-in-the-tooth audiophiles their first ear opening experience, their first hint of what a fine product can achieve in recreating music in the home. The last of the old A21's were produced in '76, the amp by then being effectively replaced by the more powerful (and musically less satisfying) A48, although the petite class A A28 soldiered on for a while.

The new A21a has been designed

with this musical legacy in mind. This is a product with a heritage to match the original Quad electrostatic, and nothing lasts that long unless it's something special. Clearly Sugden wanted to build on the strengths of the original but needed to address issues of power output, headroom, load tolerance and bandwidth which would all require improvement in a modern product.



The new design retains a single voltage rail and push/pull load sharing output transistors but now has a much healthier output of 25 watts per channel compared to the original amp's 10 watts.

The power stage is effectively a dual mono pair sharing a single transformer. Output devices are multi-emitter bi-polar devices with low internal resistance, high gain and speed characteristics. Gain stages

throughout use high speed transistors in a cascode configuration.

The amp offers four line level inputs and a mm/mc phono stage. Whilst it would be stretching the point to call it beautiful to look at, it's nicely understated and functional. Eschewing the usual black or silver the amp is clothed in a pleasing metallic grey. Three large knobs are ranged left on the fascia covering source selection, balance and volume. The source and balance selectors are separated by tape monitor and mono buttons and an on/off button and green LED sit on the right.

The CD-21 finished in the same metallic grey is equally understated. The disc drawer is on the left of the fascia with an open/close button to its right. The display panel sits right of centre followed by a row 5 buttons covering play, stop, previous, next, and standby functions. The CD-21 is a development of the original Sugden 'Audition' series CD, the prime improvements over that earlier model being a more sophisticated current feedback class A output stage along with a heavily modified digital output.

The Totem ARRO's, the babies in the Totem floorstanding range, are summed up in a single word, cute! They look just like large floorstanders that have experienced an Alice like diminution. They're about half the

► size you expect them to be. At just 133mm wide and 850mm high, they're none too deep either at 175mm. The bass/ midrange driver is equally tiny at 4 1/2" diameter along with a more conventionally sized 21mm impregnated textile dome tweeter. Very nicely finished with a high quality real wood veneer on all surfaces, believe me, domestic acceptability is not going to be a problem with these babies. The biggest problem I'm going to have is persuading my wife that they have to go at the end of the review period. And that was before the system was fired up! The speakers are reflex loaded with a small port to the rear and four angled chunky binding posts grace the rear panel accepting spades or banana plugs and just crying out for bi-wiring. My one quibble with the rear panel is that it's sited mid way up the cabinet and this results, at least with my hefty Audioplan cables, in a bad case of 'cable droop' somewhat marring the otherwise neat appearance of the speakers. The tiny footprint of the speakers would normally lead to instability and pose a threat from passing pets, but Totem have thought of that and supply the speakers with small platforms. These are spiked to the floor using imperial threaded spikes (for God's sake don't lose one) which are de-coupled with rubber washers, and the speakers attached by small blobs of highly adhesive yellow tack. This results in a good stable foundation, even on Hampshire's most uneven floor, and the yellow tack adhesion proved strong enough to convince me that there's absolutely no risk of an accidental parting of speaker from platform.

The quoted impedance is 4 ohms and they're relatively inefficient at 86dB. Cabinet construction is of variable density fibreboard and in place of conventional damping materials, a borosilicate (a substance apparently not unlike anaglypta

wallpaper) coating is applied to the internal walls. A small port on the rear panel gives access to the bottom chamber which can be filled with sand, lead shot, or whatever damping



compound you choose. I chose air since the speakers proved to work very well with no extra help. The crossovers eschew PCB's and are hand assembled using very high quality components and wired with silver plated, Teflon coated oxygen free copper wire. The words 'attention to detail' spring to mind.

Setting up the system was simplicity itself. Bung the Sudgden amp and CD on my racks, cable up the CD and my record deck, fix the well machined spikes to the speaker platforms and roughly site in position. Attach the speakers with the 'oh so tacky' yellow tack, hook-up the speaker cables, switch on and listen. A total of about

10 fuss-free minutes. The speakers were initially sited about 2 1/2 feet from the rear wall with very minimal toe-in. I quickly found that in my room they preferred to be a tad closer to the wall at 2 feet with a touch more toe-in, enough to just conceal their inward facing panels from the listening position. This made the best of the bass response without compromising imaging in any way. This took a further two minutes to set up and after that the system stayed put and I never felt the need for additional tweaking: An entirely painless and straight forward process. I almost started looking for some tedious and uncomfortable necessity that I'd overlooked!

And so to the listening: Popping a current favourite CD, Eric Bibb & Needed Time *Good Stuff* (Opus 19603), in the drawer it was clear from the first notes of the title track that this little system was a bit special. From the barroom piano intro, to the rolling guitar lines, the 'back to basics' percussion, to Bibb's vocals, it felt like an entirely natural, 'real' musical experience. There was perhaps a touch too much bite to the percussion, but this didn't really matter since there was a integrity to the whole performance which made the music the overwhelming factor. Hi-fi considerations trailed in a very poor second. Bass from the little ARRO's was remarkable given their diminutive size. And though it didn't plumb the depths like larger systems can do, it's really hard to credit how much grunt the titchy 4 1/2 drivers were delivering. Dynamics too didn't seem obviously constrained. Lateral and height imaging were exceptional, the ARRO's just disappeared (which I suppose is not so remarkable given their lack of width) with Bibb's vocals presented well forward of the speakers. Stage depth was very good if not exceptional, certainly good enough for it not to be an issue. The system ►

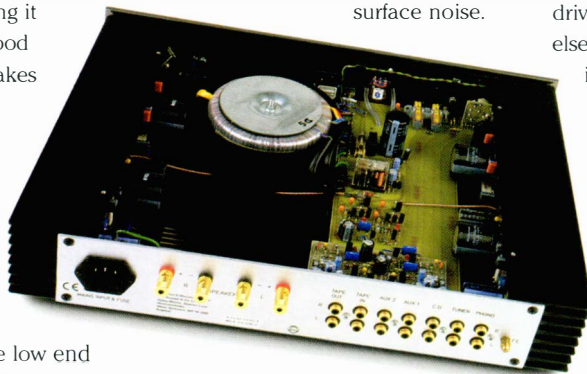
▶ also did a great job on the driving, bluesy track 'Don't Ever Let Nobody Drag Your Spirit Down' the harmonica sounding particularly real and in the room. If I was getting really picky I'd say that this track could have benefited for a bit more low end grunt and drive, but again the musical enjoyment overrode any serious concern. On the other hand, the great track 'New World Comin' Through' really came to life. This features a gospel backing from the Deacons, and the midrange integrity of the system wrought every drop of feeling from their fine vocal performance. Terrific stuff.

On Joni Mitchell's new CD, *Both Sides Now* (Reprise 9362-47620-2), the full swell of the orchestra as 'You're My Thrill' opens is nicely captured, and there's good definition between the character of each section of the orchestra, even each instrument in the mix, again without compromising the overall performance by pulling it apart. This is a particularly good recording, and the system makes no obvious compromises in conveying the sweep and power of the musical whole, or the distinctive character of Mitchell's truest jazz interpretation yet. If I (reluctantly) search for flaws, it would again be a very slight lack of grunt at the low end on percussion, and a very, very slight stridency in the extreme top end. I should stress that at the price level of this system I don't consider these points to be any sort of problem at all. They are, in fact, musically benign trade-offs that are far less intrusive than the compromises chosen by many designers.

Moving to LP with Ben Webster's *Duke's In Bed* (Black Lion 2460 190), a fine '65 recording, the Sugden and Arros proved themselves fully up to the mark, sounding perfectly at ease whether they were delivering all out blasts of sound in 'Stompy Jones', or

in more relaxed material like 'Nancy, With The Laughing Face', or 'I Got It Bad (And That Aint Good)', where the unmistakable breathy yet dynamic character of Webster's tenor was caught to perfection.

On the Peggy Lee LP *The Best of Peggy Lee Volume 1* (Coral CPS25), her famous and arguably best number, 'Black Coffee', showed just how good this little system is at conveying vocals. Projecting a good three feet in front of the speakers and a couple of feet above their tops, the imaging was excellent and the languorous quality of her performance was well captured. And this LP made me recognise another welcome quality possessed by this unassuming little system. Without any noticeable lack of resolution, it's very forgiving of surface noise.



Much more so than my usual system, making a number of cherished but slightly knackered LP's playable, and more enjoyable than I've been used to of late. A very real and valuable fringe benefit! The moving-coil stage is also something of a surprise in an amp at this price level. Quiet and lively, it had no problem at all with the lowish output of my Wilson-Benesch cartridge.

Operational niggles? None really; the amp runs hot just as you'd expect with class A. Hot enough to make the volume control very warm and the casing too hot to touch for long, so

ensure you have lots of space around and above it. The CD can be a touch slow switching between functions, between 'load' and 'play' for example, but frankly a couple of seconds make no significant difference. Perhaps it's

Sugden's way of reminding us all that we used to live life

at a slower pace. All the controls feel nice and positive, and the supplied multi-function remote works well.

Essentially fuss-free, and one of the most well-matched and domestically acceptable systems I've had the pleasure to review. Having said that, even this musically seductive set-up won't be all things to all men (although it would undoubtedly make most of their wives happy). If you listen to an exclusive diet of dance music or thrash metal, then you'll definitely be looking elsewhere, on the basis of the bass drivers' physical dimensions if nothing else. However if your goal is musical insight and enjoyment, at reasonable (and sometimes unreasonable) levels, and assuming you don't live in an aircraft hanger, this is a system that could really surprise (and satisfy) you. I've enjoyed a very wide range of music from full-scale classical and big band jazz, to small-scale acoustic numbers and R&B, and the Sugden electronics and Totem speakers have lapped it all up without complaint. Imaging is extraordinarily good, resolution good and the bass performance given the Lillipution size of the ARRO's is excellent.

My wife will be very sorry to see it go, and hell, so will I. I haven't missed my 'big' system once. And although that does have greater powers of resolution, plays louder, has more bass (and is much more expensive), the Sugden and Totems have been an unobtrusive treat throughout. A well thought out, well-matched system that deserves every success.



# Icing The Cake

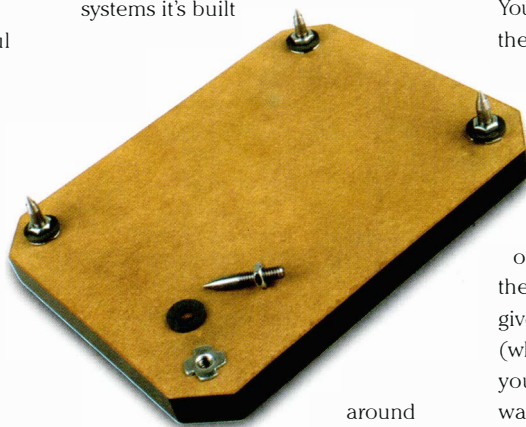
by Roy Gregory

Last year's Novotel show was remarkable mainly for the awful sound produced in the vast majority of its tiny bedrooms - with one notable, and slightly surprising exception. Audio Synergy were playing a small Sugden/Totem system that, in the words of one of our more colourful local musicians, "grooved like a bastard". I was forced to agree, making regular pilgrimages for a few moments of rest and relaxation before plunging back into the four day cacophony that blights September. It's hardly surprising therefore, to find that very same system gracing the pages of this magazine. My only regret is how long it took to arrive.

Dave Speirs of Audio Synergy calls this his plonk and play system, because you simply throw it together and it never fails to produce music. Real, engaging, worth listening to music. (He supports this claim by pointing out that he's always first in the bar at hi-fi shows, a fact I find it hard to dispute.) Certainly, our experiences at DD's, followed by the shift to my own listening room bear this out. Even cold and straight out of the car, the Sugden/Totem combination just seemed to click. In fact, it works so well that the normal urge to start shifting speakers, swapping cables and fiddling with supports simply doesn't occur. You actually have to make a serious effort to find your reviewer's hat, and even then you have to remind yourself to put it on.

So, is this the system that proves the exception to the 'proper set-up'

rule. Not exactly, but I'll get to that. It's just that the basic elements are fundamentally so well matched and well behaved that you've got to get it monumentally wrong to really disturb the equilibrium. Like all the best systems it's built



around solid midband performance, the music extending naturally towards the frequency extremes. This coherence is what holds the whole thing together, and it's a quality that is sadly lacking from an awful lot of very much more expensive 'systems'.

You'll note that DD's response to set-up was similar to mine. This system has an immediately inviting and engaging sound, but my brief was to see how much extra you can wring out of it with careful attention to detail. The electronics are, as I quickly discovered, pretty imperturbable. Fiddling with supports and isolation tended to change the sound rather than improve it. Pulsar Points made it crisper and more dynamic, but this was mainly the result of a leaner overall balance and more obvious detail, rather than more information

per se. Better mains leads were an obvious bonus, but then when aren't they? On the whole, given a half decent support and some space around the amp (which runs seriously hot!) you can't go far wrong with these. You can shift the balance if you feel the need, but these are not the sort

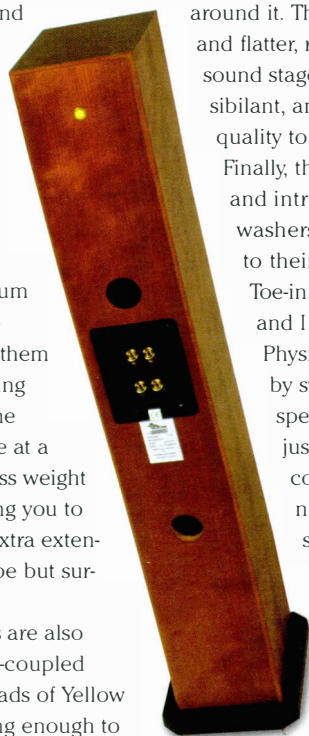
of electronics that undergo a Cinderella transformation as soon as you show them half a dozen spiky cones and a good time.

The Totem ARROs on the other hand, are a very different kettle of fish. You'll be going some to make them sound really gruesome, but given decent matching electronics (which this system has) the worst you'll manage is a thuddy and over-warm balance. However, if you really start to work at it, they can sound spectacular. Starting point has to be distance to the back wall; I finally settled on 20 inches. The trade off is between bass weight and speed, but the effects are actually heard in the midrange. Despite their genuinely diminutive dimensions, the ARROs are capable of impressive low frequency extension and impact (something of a Totem trade mark), and therein lies the problem. It's all too easy to get carried away with churning out gobs of bass from these tiny towers, only to discover that the music has fallen to pieces. Back off the bass pedal and you'll hear the midrange snap into life and focus, free from the muddying effects of an overblown bass.

Generally, people start with speakers close to a wall and move them away to balance the bass output. With the ARROs I recommend the

▶ opposite approach, starting well clear of the wall and easing them back until the bass fills out and underpins the mid-band without starting to clog or slur its clarity and timing. Small (one inch) sideways shifts of one speaker only can really help in getting the combination of maximum extension without overdoing the weight. Ease them back until they're working nicely and then shift one speaker sideways a little at a time. You'll hear the bass weight drop off slightly, allowing you to creep back for a little extra extension. It's hard to describe but surprisingly easy to hear.

The speaker plinths are also somewhat different. De-coupled from the cabinets by wads of Yellow Tack (a substance strong enough to strip veneer - you have been warned) they are further de-coupled from the floor by soft washers that prevent the spike nuts being locked rigid. These two measures, combined with the careful damping of the cabinet are major contributors to the ARRO's incredibly even and natural balance. The theory is to prevent the emergence of single, dominant spikes in the energy spectrum. Exactly the kind of spikes that can happen when you clamp things really tight. Of course, depending on design and materials, that can work too, but recent success with floppy speaker mounts from the likes of Max Townshend suggest that this neglected approach warrants considerable extra attention. By way of experiment I removed the soft washers and clamped the spikes down tight. Using the track '84000 different delusions' (Shawn Colvin *A Few Small Repairs*) the impact was obvious. The opening guitar sounded harder and locked into the left hand



speaker, with exaggerated fingering details and a loss of warmth and space around it. The lead vocal was harder and flatter, recessed into a shallower sound stage. It was also much more sibilant, and there was a metallic quality to the entire tonal palette. Finally, the bass became lumpy and intrusive. The eight rubber washers were quickly returned to their proper place!

Toe-in needs careful attention, and I found that the Audio Physic approach of fine tuning by swivelling only a single speaker pays dividends. And just because the speakers are compliantly mounted, don't neglect their levelling. With such a narrow base and high aspect ratio, even a tiny deviation from level at the base moves the drivers significantly. Get it right and the image locks in and the speakers really will

disappear. Back to '84,000 different delusions' and the guitars step back and beyond the speakers while the voice floats slightly above and in front. Drums and accompaniment swing in a nicely differentiated arc behind. You can get a more explicitly transparent sound-stage from a speaker like the Audio Physic Virgo (at over three times the price and four times the size!) but the Totems share that speaker's impressive and all too rare combination of spatial and rhythmic integrity.

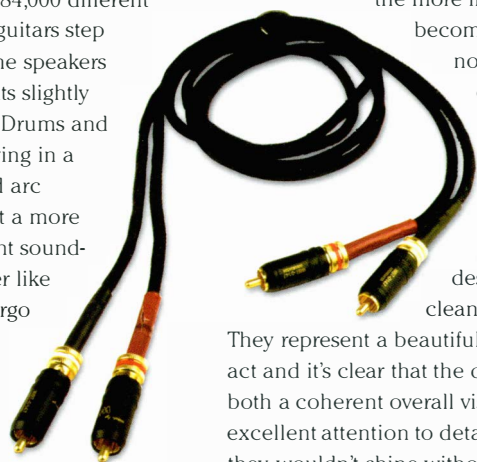
Final touch was the Totem interconnects and speaker cables. These slotted straight into the system, and like the supports, changes to other brands simply altered the balance, and often disturbed the musical integrity.

Once again Audio Synergy seem to have lived up to their name. The interconnects appear to be a silver cable with a fabric outer, fitted with WBT 0147 locking phonos. At around £160 for a meter pair they offer pretty good value, especially in the context of this system. If you are considering buying this equipment then you should definitely allow for these or a pair of the Chord Company's Chorus interconnects in the budget. Why Chorus? Because the Totem speaker cable bears a striking resemblance (sonic and physical) to the old, unjacketed Rumour speaker cable.

And as a final touch, there's always the Totem Beaks, cones for the top of your speakers. Reviewed in Issue 6, I'm a convert to these strange devices, and was only too happy to enjoy the benefits. However, those of a more empiricist bent might want to avoid something as "unscientific", and probably sensibly, the system arrived without them.

The more I play with the ARRO's the more impressed I

become. Their novel disposal of the design budget makes them anything but me too products, despite their clean good looks.



They represent a beautiful balancing act and it's clear that the designer has both a coherent overall vision and excellent attention to detail. Of course, they wouldn't shine without the solid, unflappable performance of the Sugden electronics providing such able support. They are so fuss-free that it's easy to overlook their considerable contribution. If you doubt it, just try substituting something else. And believe me, you will hear the difference. The ARROs are an extremely effective magnifier of

▶ everything that happens upstream - just look at the differences that the rubber washers make on their spikes. The impressive thing is that they let you know what's going on without ever dismantling the music.

The Audio Synergy experience has been a highly enjoyable one. Like DD, I could spend a lot of time



feeling quite contented with this little system.

Its shortcomings are minor, given the cost. It doesn't have the weight and power to be really convincing on something like a Shostakovich symphony. The extreme top-end lacks some of the air and delicacy that comes from the best tweeters driven by the best electronics. The speakers demand space and are none too stable. (You could improve matters by weighting the lower chamber, but this could actually upset the speaker's bass-mid continuity. Suck it and see - at least it's reversible.) The amp also gets extremely hot, a necessary condition of the way it sounds, which combined with the speakers' propensity to topple, makes this a less than child friendly system.

However, the pluses are major. Visually the speakers are amongst the most domestically acceptable ever, even though they arrive without grilles. They're just so darn cute. The electronics are neat and understated, although just unusual enough for people to realise that they're not exactly run of the mill, and their indifference to support means that scaffolding and angle iron needn't feature in your décor if you don't want it to. Sonically it all revolves around that wide open midrange and its natural tonality. Rhythmic integrity is

good, with plenty of life and bounce, but it's the presence and fluidity that comes from small class A amplifiers that really makes the difference. The result is music that manages to separate itself from the system - spatially from the speakers, and mechanically from the electronics (in the sense that you don't hear

them working). There may be systems with more slam or attack, more detail or obvious speed, but few at this price will make as much musical sense as this one, or allow fatigue-free listening for so long. Few will communicate as easily either. It all sounds so..... human. Vocals are really believable, not in the you are there sense, but it actually sounds like a person who cares about what they're singing. It's that ability to get at the substance of the music that makes this system so immediately listenable. That and the lack of nasty or a-musical intrusions. It doesn't try to do too much, but take a bit of care and it doesn't half do what it does well. All it needs now is a few dealers South of Yorkshire. If I was scratching a living in retail I'd be on the phone right now.



## TECHNICAL SPECIFICATIONS

### Sugden A21a

Inputs:	
Outputs:	
Power Output:	25 watts/ch into 8ohms
Frequency Response	(-1dB) 6Hz to 30Hz
Noise	-93dB
Separation	65dB
Remote Control:	No
Dimensions (WxHxD)	430x72x360mm
Weight	
Price:	£849.00 (line amp) £949.00 (with user switchable mm/mc phono stage)

### Sugden CD-21

Outputs:	1 x analogue (RCA) 1 x digital (RCA)
Chipset:	
Dimensions (WxHxD)	430x72x360mm
Weight:	
Price:	£899.00

### Totem ARRO

Type:	2 Way Floor-stander
Bass Loading:	Rear reflex port
Frequency Response	40Hz - 20kHz ± 3dB
Tweeter:	21mm Impregnated textile dome
Woofer:	4.5" Sandwich with double voice-coil
Crossover:	2.4kHz / 2nd order Linkwitz-Riley (optimised)
Sensitivity:	85.5 dB/W/m
Impedance:	4 Ohm
Dimensions (WxHxD)	133x850x175mm
Finishes:	Cherry, Mahogany, Black
Price:	£959.00

### Audio Synergy Ltd.

Tel: (44)(0)1924-406016  
Fax: (44)(0)1924-410069  
Web: [www.jesugden.co.uk](http://www.jesugden.co.uk)

### Totem Acoustic

4665 Bonavista Ave.  
Montreal  
Quebec H3W 2C6, Canada  
Tel: (514) 259 1062  
Web: [www.totemacoustic.com](http://www.totemacoustic.com)



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CLOCKING

BASS  
TONE  
DEFEAT  
TREBLE  
BALANCE  
VOLUME



# The Real Deal

## NAD C340 Integrated Amplifier

by Pete Christie

Way back in the dim, distant past, I accidentally stumbled into a vague sort of employment in a hi-fi shop. As with all the best things that have occurred in my life, it all started with a chance remark made in a recording studio somewhere in the south-west at an impossibly late hour of the night whilst waiting for my “bit” of the session to happen. Anyway, it seemed like a good idea at the time (it was that or the dole), and I accepted the offer. So, despite a few interesting diversions along the way, here I am, still “at it”, and still having fun with hi-fi the best part of twenty years later. If any one had prophesied this at the time, I certainly wouldn't have believed them. Neither would I have been able to comprehend the eventuality that I would actually be writing about the stuff!

What is slightly more interesting, is that all those years ago, one of the more popular-selling items in the amplifier market was, in

my opinion, decidedly “oddball”, and would never be a “long-term” player. The company was obviously destined to go out of business as one of those “interesting but quickly dating” designs that seem to come and go in this industry. I refer to the now legendary NAD 3020. What is even more interesting (apart from me being wrong - again!), is that not only are NAD still there, but that they have done it by defiantly sticking to their principles and not bowing to the mainstream belief that hi-fi had to be black. OK, they did have a brief flirtation with “charcoal, but that aside, they have zealously maintained their own, instantly recognisable image and identity.

Now at the time I was first involved with their products, the colour was a brownish sort of green. Then it went definitely greener, a few bits (as mentioned) came out in

black, then it went green again, until the new stuff arrived, which is grey.

Not a hint of green in there at all.

I have a theory on this. (I thought you might. Ed.)

I reckon that someone in the NAD Empire had done a dodgy deal with a black

market spiv, and had secured a job lot of British Army surplus WW2 camouflage paint. Possibly all that was left. Having paid

twenty quid for it, they were determined to use it. This was obviously achieved in time for the launch of this range of equipment, and when they went back for more paint, I can visualise a conversation along the lines of:

**NAD Bloke:** “I've come for some more paint”.

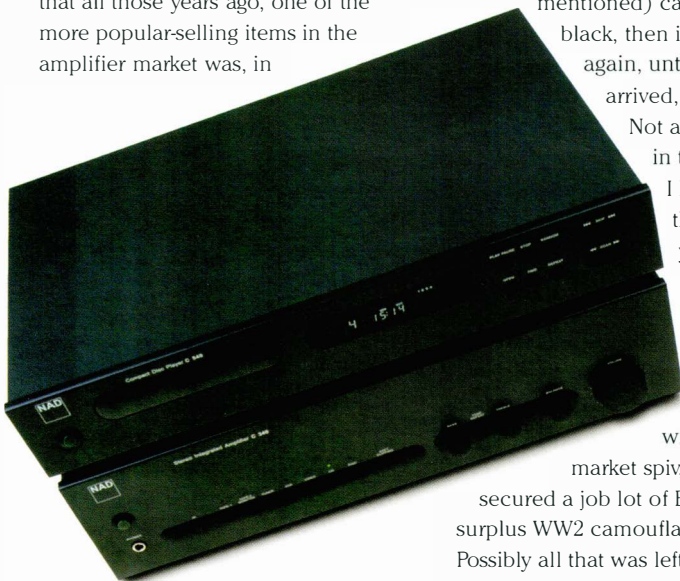
**Spiv:** “Sorry guv', I've had a look out the back, and we're right out of khaki - however, we do have some Royal Navy battleship grey; beautiful coverage!”

**NAD Bloke:** “Is it quick-drying?”

**Spiv:** “Er. yeah!”

**NAD Bloke:** “Right! I'll have it!”

Colour co-ordination aside, there was always another factor that made NAD amplifiers stand out from the crowd - incredibly good sound quality. In fact, one of the very first hi-fi systems I ever sold included one of those curious, brownish-green NAD 3020's, and, if I remember correctly, the price was in the region of a mere hundred quid! In terms of actual sonic cosmetics, it was no better or worse than its rivals, but where it did score, and score heavily, was in the sheer generosity of sound it managed to put out with a minuscule twenty watts per channel. It also managed to make any of the then available loudspeakers positively “sing” with a full-bodied and rich, tonality. In fact, bolted to a pair of (old) Tannoy Mercury's, and hooked up to a Pioneer PL12 turntable, you had a system well worth the three hundred or so pounds it cost, and as much at home with Bach's Brandenbergs as it was with

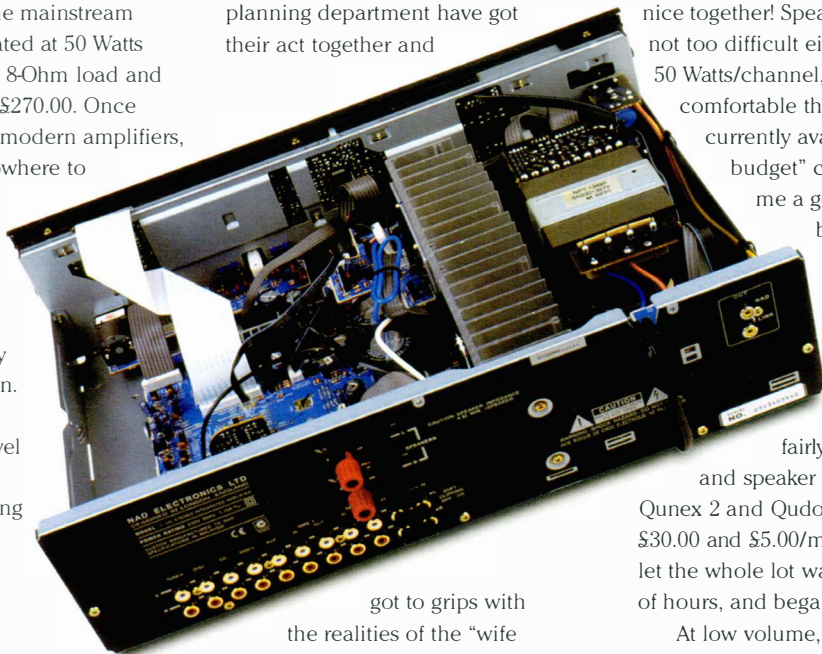


## ▶ Be Bop DeLuxe!

Things have changed. And the current range of amplifiers contains the reason for all my previous ramblings: the NAD C340 remote control integrated amplifier. This is one of the more powerful amps in the mainstream NAD range, being rated at 50 Watts per channel into an 8-Ohm load and available at around £270.00. Once again, as with most modern amplifiers, although there is nowhere to plug in a turntable, there is no shortage of holes in the back to enable just about every other hi-fi component you may own to be plugged in. In fact, it creditably boasts seven line level inputs. NAD have addressed the growing trend of having two recording mediums (cassette tape and minidisc) by supplying two tape in/outputs with dubbing facilities. I was also pleased to note that they have continued giving the C340 the useful facility of pre/power amp separation, thus easily facilitating the addition of a power amplifier. Tone controls are provided, but if you don't need them, they are easily turned off using the bypass switch. There is also the added advantage of switchable "soft clipping", which has been available on several generations of NAD amps, and should stop you destroying anything should the volume level creep into the "meltdown" area.

With all these facilities, you would be forgiven for thinking that the front panel would be a bit on the crowded side. You'd be wrong! Somehow, someone in the design team has managed to squeeze seventeen assorted knobs, buttons and switches, plus a headphone socket onto the front panel, and maintained an

aesthetically minimalist look. In fact the finish is surprisingly good indeed. The age-old, traditional NAD high quality build is still there, but the "new look" is somewhat more sophisticated and shows that the people in the planning department have got their act together and



got to grips with the realities of the "wife compatibility factor!"

The back is, dare I say it, as attractive as the front, with a neat and business-like array of eleven pairs of gold plated phono sockets. There is provision for a single pair of loudspeakers by way of traditional 4mm "banana" socket/binding posts, a switch to enable "soft clipping", a couple of phono sockets for linking the remote control system to other NAD components, a mains lead, and that's it.

The "450" remote control unit has obviously been designed for use throughout the NAD range of equipment, as there are several extraneous buttons which pertain to non-existent functions of the C340 amplifier, but I don't consider this a problem. It is a fairly attractive, interestingly shaped, small, grey box, which serves its purpose, and would, if it were mine, soon find its way down the back of the sofa to mingle with

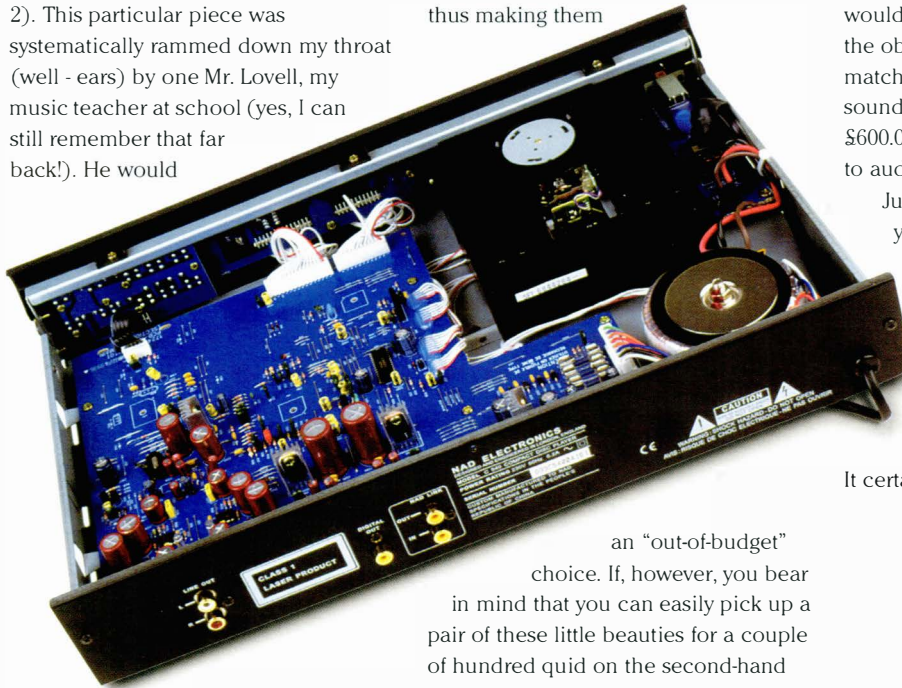
all the other remote controls which lurk there.

For the purpose of the review I coupled it with the C540 CD player, which, retailing at £330.00, seemed the obvious choice. And anyway, they look nice together! Speaker selection was not too difficult either. With a rating of 50 Watts/channel, I felt reasonably comfortable that any of the currently available "better than budget" choices would give me a good idea of the beast's capabilities, and I began with the now legendary B&W DM601's. Coupling the whole lot up using a standard, fairly neutral interconnect and speaker cable choice of QED Qunex 2 and Qudos Bi-wire retailing at £30.00 and \$5.00/metre respectively, I let the whole lot warm up for a couple of hours, and began listening.

At low volume, the song *Break Your Heart* by Natalie Merchant (Elektra 7559-62196-2) was best described as "pleasant". The C340 was warm enough, but did not drag me into the track. Until I turned it up a tad. And I don't mean by much at all. In fact, as soon as I approached nine o'clock on the volume control I was suitably impressed with a satisfyingly big, rich, and comfortable expansion of the soundstage. Imaging was also somewhat better than I had expected with the solo trumpet of Chris Botti falling precisely into the sonic spectrum - not too loud and "spiky", and not skulking indistinctly in either of the bottom corners either. In fact it nestled nicely just behind the beautifully presented vocal tracks. This is a vocal album. The lyrics are important, and it's important that you should be allowed to actually hear them. No problem here! When the solo guitar meets the trumpet at about 3 minutes 10 seconds, the blend is superb, and although I was used to ▶

listening to this song on far more expensive equipment, It was obvious that the C340 delivered in a way that belied its budget.

I selected something with a lot more available musical information - *Smetana's Die Moldau* performed by the Vienna Philharmonic Orchestra conducted by Herbert von Karajan (Deutsche Grammophon DG 439 009-2). This particular piece was systematically rammed down my throat (well - ears) by one Mr. Lovell, my music teacher at school (yes, I can still remember that far back!). He would



literally "thunder" up and down the aisles of the assembled bored, snotty oiks, trying, with limited success, to make us aware of the existence of imagery in music. Well, in my case, he must have planted a few seeds, for although I was far more concerned with who was leaving or joining John Mayall's *Bluesbreakers* rather than the progress of some river or other in eastern Europe, I can now understand exactly why he got so animated. The piece begins as a trickling stream in the Bohemian forests, passes through various villages and towns, on to Prague and finally merges with the River Elbe. Therefore, the music must flow. Happily, the C340 manages this rather well, and although I didn't

actually get wet, I did perceive a definite feeling of dampness - must be the old problem again!

I took the amp and CD player home to continue in my own environment, and more importantly, to see how the amp would cope with the more difficult load of my old Rogers LS3/5a's. OK, so at their final price-point, the LS3/5a's were retailing at £700.00, thus making them

an "out-of-budget" choice. If, however, you bear in mind that you can easily pick up a pair of these little beauties for a couple of hundred quid on the second-hand market, the pairing is not beyond the realms of possibility.

Back to the river Moldau - and the moistness was even more apparent. In fact, the C340 didn't seem to mind the loading of the LS3/5a's in the least. Quite the opposite actually. It was fairly obvious that the amp had more to give than the cheaper option of B&W DM601's could accurately deliver. This impressed me.

I continued with various types and styles of music, in a vain attempt to "trip it up", and found that the only criticism I can level at the C340, is that it isn't as involving or quite as subtle as my Shearman Audio Phase 2 amplifier. Neither does it have the upper register clarity. It doesn't have the bottom-end clout either. But then again, it won't

set you back £700.00. But it does have the same, and all important, musical integrity.

In the "better than budget" price area, the hi-fi market is stuffed with suitable alternatives. If you are looking for a "pick & mix" hi-fi system with various components chosen on their sound quality alone, the NAD C340 makes a very good "engine". If you would prefer system compatibility and the obvious aesthetic quality of visual matching, but still demand a serious sound quality, the C340/C540 pairing at £600.00 is one you should take the time to audition.

Just think, when we get to the year 2020, you could be reading yet another review on the latest NAD range where the reviewer waxes lyrical about how good a certain combination of odd, grey NAD equipment sounded all those years ago. It certainly wouldn't surprise me. ➕

#### TECHNICAL SPECIFICATIONS

Line Level Inputs	7
Input Impedance	20kOhm/500pF
Sensitivity (ref. 0.5V)	165mV
Line Level Outputs	Pre-out + 2 tape
Tone Controls	Treble 5dB @ 10kHz Bass 7dB @ 100Hz
Output Power	50W/8 ohms
Dimensions (WxHxD)	435 x 110 x 290mm
Net Weight	7.6kg
Price	£270.00

#### Distribution:

Audio Club  
Tel. (44)(0)1296-482017  
E-mail. sales@nad.co.uk  
Net. www.nad.co.uk

## WHERE TO BUY IT – DEALER LIST

### Mark Levinson

Radlett Audio	9 Holywell Hill, St Albans, Herts AL1 EU	Tel. 01727 855 577	Ad. Pg. 48
The Cornflake Shop	37 Windmill Street, London W1P 1HH	Tel. 0207 631 0472	Ad. Pg. 31
Audio Salon	5 Crown Terrace, Hyndland, Glasgow G12 9HA	Tel. 0141 357 5700	
The Powerplant	66-67 Upper North Street, Brighton, East Sussex BN1 3FL	Tel. 01273 775 978	
Heatherdale Audio	202 Findon Rd, Worthing, Sussex BN14 0ES	Tel. 01903 872 288	Ad. Pg. 26
Midland Audio Exchange	181 Franche Rd, Kidderminster, Worcs DY11 5AD	Tel. 01562 822 236	Ad. Pg. 20

### Nautilus

Doug Brady Hi-Fi	Kingsway Studios, Kingsway North, Warrington WA1 3NU	Tel. 01925 828 009	Ad. Pg. 39
Grahams Hi-Fi Ltd	190a New North Rd, Islington, London N1 7BS	Tel. 0207 226 5500	
Infidelity	9 High St, Kingston upon Thames, Surrey KT1 4DA	Tel. 0208 943 3530	Ad. Pg. 28
Martin Kleiser	109 Chiswick High Road, Chiswick, London W4 2ED	Tel. 0208 400 5555	Ad. Pg. 37
Phase 3 Hi-Fi	215 Tarring Rd, Worthing, West Sussex BN11 4HN	Tel. 01903 245577	
Robert Ritchie Hi-Fi	102-106 Murrey St, Montrose, Angus, Scotland DD10 8SG	Tel. 01674 673 765	Ad. Pg. 39
Sound Academy	152a High St, Bloxwich, Walsall WS3 3JT	Tel. 01922 493 499	Ad. Pg. 25
Leicester Hi-Fi Company	6 Silver Walk, St Martins Square, Leicester LE1 5EW	Tel. 0116 253 9753	Ad. Pg. 39
Cloney Audio	55 Main St, Blackrock, Co. Dublin, Eire	Tel. 00353 12889449	Ad. Pg. 48
Audio Excellence	134-136 Crwys Rd, Cardiff, S. Wales CF24 4NR	Tel. 02920 228 565	Ad. Pg. 39

### Arcam FMJ

Holburn Hi-Fi	441 Holburn Street, Aberdeen, Scotland AB10 7GU	Tel. 01224 585 713	Ad. Pg. 44
Soundcraft	40 High Street, Ashford, Kent TN26 8TE	Tel. 01233 624 441	Ad. Pg. 45
Richards Audio Visual	4 Greyfriars, Bedford MK40 11HP	Tel. 01234 365 165	
Music Matters	363 Hagley Rd, Edgbaston, Birmingham B17 8DL	Tel. 0121 429 2811	Ad. Pg. 69 & 39
Music Matters	93-95 Hobs Moat Rd, Solihull, West Midlands B92 8JL	Tel. 0121 742 0254	Ad. Pg. 69 & 39
Music Matters	9 Market St, Stourbridge, West Midlands DY8 1AB	Tel. 01384 444 184	Ad. Pg. 69 & 39
Music Matters	10 Boldmere Rd, Sutton Coldfield B73 5TD	Tel. 0121 354 2311	Ad. Pg. 69 & 39
Audio File	41 Victoria Rd, Cambridge CB4 3BW	Tel. 01223 368 305	
Rayleigh Hi-Fi	216 Moulsham St, Chelmsford, Essex CM2 0LR	Tel. 01245 265 245	
Lintone Audio	7-11 Park Lane, Gateshead, Tyne & Wear NE8 3JW	Tel. 0191 477 4167	
The Audio File	27 Hockerill St, Bishops Stortford, Herts CM23 2DH	Tel. 01279 506 576	
P J Hi-Fi	3 Bridge St, Guildford, Surrey GU1 4RY	Tel. 01483 504 801	
David Orton Audio Visual	6 Bancroft, Hitchin, Herts SG16	Tel. 01462 452 248	
Infidelity	9 High St, Kingston upon Thames, Surrey KT1 4DA	Tel. 0208 943 3530	Ad. Pg. 28
Listening Rooms	161 Old Brompton Rd, London SW5 0LJ	Tel. 0207 244 7750	
Oranges and Lemons	61 - 63 Webbs Rd, London SW11 6RX	Tel. 0207 924 2040	Ad. Pg. 32
Nottingham Hi-Fi Centre	120-122 Alfreton Rd, Alfreton, Nottingham N67 3NR	Tel. 0115 978 6919	
Chew & Osbourne	26 King St, Saffron Waldon, Essex CB10 1ES	Tel. 01799 523 728	
Moorgate Acoustics	184 Fitzwilliam St, Sheffield, South Yorkshire S1 4JR	Tel. 0114 275 6048	
Stratford Hi-Fi	10a Chapel St, Stratford upon Avon, Warwickshire CV37 6EP	Tel. 01789 414 533	
Stratford Hi-Fi	23a Regent St, Lemington Spa, Warwickshire CV32 5EJ	Tel. 01926 888 644	
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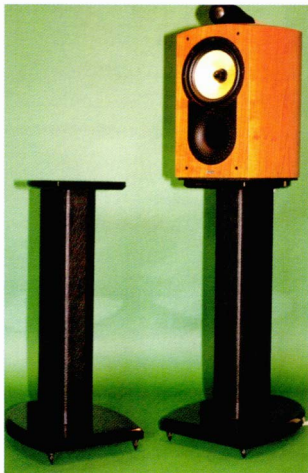
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# Avid Isoschelf Rack

by Roy Gregory

Given the growing reputation of the various air suspended racks and platforms on offer, and my own experience with the excellent Townshend Seismic Stand, a product which amazes me (sonically) and frustrates me (practically) in equal measure, I was intrigued by an alternative approach from turntable manufacturer Avid. My problem with the Townshend is that every time you move or change a piece of equipment, the whole thing needs to be re-optimised and re-levelled. Whilst that's not a huge problem for a home listener, it's a monumental pain in the butt for a reviewer. It's also alarmingly imprecise. The best sound comes with the cushions only just floating their load, and it's not that easy to get things right. Nor is there any indication of settling should the air leak or temperature change. What I want is something that delivers the outstanding performance of the Seismic Stand, and minimises the chores.

Enter the Avid Isoschelf rack, a suspended system in which the spring medium is, well, springs. You know, those little metal spirals. What appealed to me was the fact



that the sprung shelves are independent of each other, and infinitely adjustable for spacing within the rack's exoskeletal frame, making for an extremely sturdy and versatile structure.

The basic frame consists of top and bottom boards, finished in piano black, and separated by four polished stainless steel pillars (in the more expensive 'Export' finish supplied). These are held in place by large caps, the bottom ones screwing in, the top ones held in place by Allen bolts. The bottom caps are threaded to take seriously large spikes.

The whole thing, mainly due to the diameter of the tubes and fixings, is surprisingly rigid, especially given that it arrives flat packed.

The sprung shelves are self-contained slabs that simply bolt to the uprights with C-shaped clamps, torqued down with substantial nuts. It may not be the most elegant solution from a visual point of view, but it's certainly simple and effective, allowing you to space the shelves in any way you choose. And if you buy more equipment you can simply ►

► add extra shelves, or even longer uprights, meaning that the rack will grow with you, rather than having to be replaced with each round of upgrades.

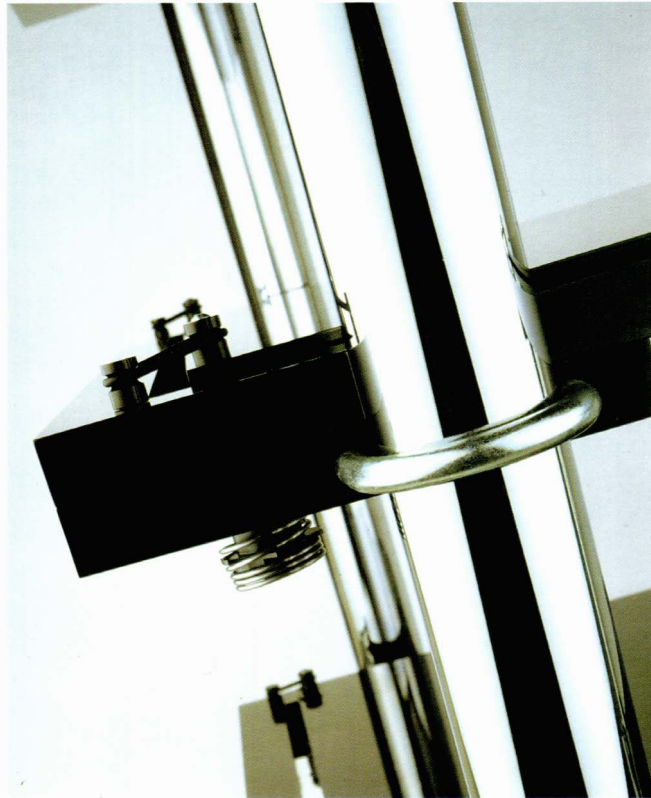
The sprung section of each shelf sits on four posts, the bottom flanges of which are screwed up the coils of the springs. The springs in turn have an extended 'tail' at the top, which passes through a horizontal hole in the shelf's outer frame, where it's anchored by Allen grub screws. To increase stability, rubber O rings pass round the tops of the posts and studs mounted in each corner of the frame. It's the frame which is bolted via angle brackets to the uprights. Adjustment is as simple as winding the posts up and down the coils with an Allen key inserted in the top.

Various spring weights are available, and even if you have to change springs, set-up is a doddle because you can see exactly what you have to do, and when you've got it right. The only real complication comes with severely lop-sided equipment, like the Pioneer A400, which means mixing and matching springs, but even that is pretty straight forward. And before you ask, a sprung top shelf is on the way. The rigid version is intended for use with turntables or energy sink CD transports that might be upset by the suspension.

The Isosshelf is a generous rack, with 530mm between its front pillars, a suspended area of 483 x 383mm, and a maximum equipment depth of 440mm. Be aware that the rear posts are inset slightly, which prevents any rear overhang, and might interfere with cabling, which needs to be

dressed to prevent interference with the suspension action. This shouldn't be too big a deal unless you use something unfeasibly heavy and stiff like Linn LK400.

Comparing the Avid to a conventional rigid rack is pretty pointless. Sonically it's absolutely streets ahead. Music with the system suspended is clearer, with much better stereo and



acoustic information. Instruments are much more natural, which is particularly noticeable on voices. Dynamics are freer without the harshness that can creep into loud passages, and bass is far cleaner and more tuneful. But the really impressive thing is the way the music hangs together, locked in, with much better timing and structural integrity. In fact, all the things that the Seismic Stand does. Is the Avid as good as the Townshend. Difficult to say because I don't have them side by side, but

I don't hear the uncanny quiet and startling transparency of the Seismic Stand with the Isosshelf. Mind you, I don't hear the image wandering either, which is a telltale symptom of an over-inflated Townshend rack. Until I can do a straight comparison I'm going to call this one as swings and roundabouts.

Any suspended shelf involves you in a bit of extra work when it comes to setting up equipment (you should be dressing your cables anyway!). Given the ease of adjustment and its versatility, I have no hesitation in recommending the Avid Isosshelf rack. In the context of a system costing several thousand pounds, it more than justifies its not inconsiderable price. The five shelf (three sprung) unit supplied would cost £1500, with additional shelves at £360 each. Or you can save a fair bit by opting for the less impressive standard finish at £1100 and £300 respectively. You can also buy smaller versions. The Isosshelf is yet another example of the huge benefits that can

be had from supporting your system properly, and which have seen such huge recent advances. Listen to this, or something like it, before you spend money on new equipment. You might be surprised how good your existing system can sound. ►+

**Manufacturer:**

Avid

Tel/Fax. (44)(0)1525-717487

E-mail. [info@avidhifi.freewire.co.uk](mailto:info@avidhifi.freewire.co.uk)

# Cable Toaster!

## The Nordost CBID 1

by Roy Gregory

There are few people who now dispute that equipment needs to run-in from new before it achieves either its best or a consistent performance. However, most people seriously underestimate both the magnitude of the problem or the time taken to iron out the bumps. Manufacturers are now starting to specify burn-in periods in hundreds of hours, and the problem is also more complex than it at first seems. Running-in isn't necessarily a simple linear progression, and mechanical transducers in particular often have a roller coaster ride of alternate progress and regression on the road to sonic civility. With electronics it often goes in a series of discrete steps, and as for cables, well that's anybody's guess.

In fact, cables are a particular problem, not only because they take an incredibly long time to reach optimum performance, but they need to settle back every time you move them or disconnect them. (The same is true of many speakers, and it's more than just a temperature effect.) How susceptible they are to settling and how long they take to burn in varies from one cable to the next, but in my experience plated conductors and teflon insulation are particularly hard nuts to crack, and as one or other seems to feature in virtually every cable on the market, you need to consider this seriously if you are reviewing or auditioning cables.

Some years ago, I reviewed an excellent little device called the Duo-Tech Cable Enhancer, which

used a synthetic signal to burn-in cables more quickly than everyday use with music. This small plastic box may have looked like an Action Man accessory, but boy was it effective. Unfortunately it was also ahead of its time, and despite its readily audible benefits (sonic performance never has been a guarantee of market success) it soon disappeared from view, the last



few units jealously guarded by their owners. Which is how Nordost got to see, and play with, the Duo-Tech.

In case you don't know, Nordost cables rely almost exclusively on silver plated copper conductors enclosed in extruded teflon insulation. They suffer particularly long burn-in times, so the idea of a burn-in device was extremely attractive. All attempts to reactivate Duo-Tech production failed, and eventually they bit the bullet and developed a device of their own, the unimaginatively named CBID 1 (I wouldn't want to be one of these guys' children!), quickly nick-named

the Cable Toaster.

Accelerated burn-in isn't exactly new. There's been an equipment burn-in track on the excellent XLO Test and Burn-In CD for the last seven years. At \$25 from Wollaton Audio, it's always been a top recommendation, and readers of Hi-Fi+ can save a fiver by clipping the coupon at the bottom of the page, just to get you started on the burn-in road. But if you build a machine that will only ever be

connected to a totally passive device like a cable, rather than to delicate electronics and loudspeaker drive units, then you can make it far more effective. After all, nobody has got to listen to it (the high frequencies on the XLO disc can drive dogs wild - you have been warned).

That's exactly what Nordost have done, creating an updated and enhanced version of the Duo-Tech, allowing for modern niceties such as bi-wiring. They even provide phono extenders so that you can daisy chain interconnects together, running any number at one time (XLRs will end-to-end anyway). The Cable Toaster is built into a standard instrument case, with a start button and status indicators on the front, and an array of sockets on the back. You use it by hooking up the cables you want to burn-in to the appropriate connections (inputs and outputs for four phono leads, two XLR leads and a pair of speaker leads) and connecting the plugtop power supply. There's no



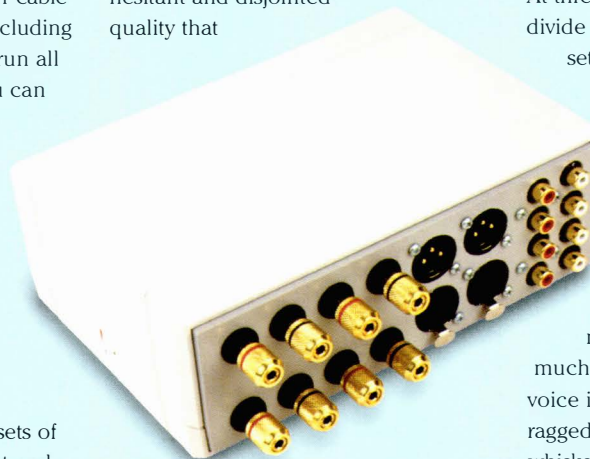
▶ on/off switch so you use the one at the wall socket. Then you press the start button for two seconds and the red LEDs on the front panel start to flicker to confirm which sockets are in use. The cycle runs for 24 hours, and to repeat you simply switch it off at the wall and re-start it.

Operationally the Toaster is spot on, the socketry allowing you to connect just about any common cable configuration or termination, including bi-wires and 'Y' leads. You can run all outputs simultaneously, and you can connect as many interconnects as you like (daisy chaining speaker cable is possible but not recommended). The only thing to watch out for is that the LEDs run from the left channel connections only, so always use these if you are burning a single lead such as a digital interconnect.

I had Nordost supply three sets of virgin Blue Heaven interconnect and Flatline speaker cable along with the Toaster. One set I kept pristine, one set I hooked up to a system set on repeat, and the other I connected to the Toaster. I left them for three days, had a quick listen, and then left them for another five. That's a total of nearly 200 hours running time. In fact, the extra night probably took them over the 200 mark. Although the Toaster runs in 24 hour cycles, this is a safety feature rather than a recommendation. Nordost actually suggest a minimum of 48 hours, and continued but diminishing benefits thereafter. The final part of the process was to take the still virgin cables and run them on the system, using the XLO disc rather than the Shostakovich symphony I'd previously been using, but I'll roll the results together to make the whole thing more coherent.

The differences between the toasted cables and the virgin ones was absolutely enormous. I used the Slaid Cleaves track 'Broke Down'

(from the superb album *Broke Down* PHILO 1225), chosen for its natural vocals, upright bass and combination of electric and acoustic guitar. Using the virgin cables, the natural warmth and coherence of the recording and performance were dissolved into a bright, edgy and forward balance. But what was more noticeable, and more musically destructive, was the hesitant and disjointed quality that



infected the playing. It was almost like everybody had cold fingers; clumsy and poorly integrated.

Swapping to the toasted cables not only reintroduced proper weight, warmth and tonality, but the track started to swing, the rhythmic inconsistencies resolved into phrasing and musical expression; a hung note here, a little dynamic push there. Low level detail and dynamic discrimination were excellent where they'd been previously non-existent. But the real difference was the way in which the whole thing now hung together and made sense. This was a really great song, performed by talented musicians and a singer with a great voice, given a sympathetic recording. This was doing what a hi-fi should. Producing great music at home. The Virgin cables were like a wax crayon version of events, devoid of definition, spatial perspective and tonal subtlety. At the end of the day, it doesn't matter

whether you are looking at a Rembrandt or the Van Gogh Sunflowers, they're both a world away from a paint by numbers version of the same picture. That's the level of difference we're talking about here. A version of events robbed of insight and shading, texture and humanity.

The cable set run-in with music was an interesting comparison. At three days, there was a yawning divide between it and the toasted

set, a gap which narrowed somewhat after eight days.

The music had managed to inject some of the warmth and weight into the performance, but overall it still lagged significantly in terms of rhythmic integrity and momentum. It also lacked much of the subtlety, leaving the voice in particular rather rough and ragged. A sort of mild form of the whiskey and cigarette effect which, whilst it's appropriate to some singers, doesn't apply to Mr Cleaves. The end result was much better than the virgin cables, but still rather mechanical.

Bearing in mind that we're talking about identical products here, and a process that seems to be a continuum, this is one of the rare occasions on which some form of numerical scoring might actually be useful. So if we rate the virgin cable set at zero and the 200 hour toasted set at 100%, then the 200 hour 'music' set would rate at about 35%. At the three day mark the scores would have been 70% for the toasted set and around 15% for the ones burnt in with music. The conclusion would have to be that the cable toaster is extremely effective, but that as you go beyond the five day point, there's less of an improvement left to be made, and the music starts to catch up a little.

Using the XLO disc in place of music would render an eight day score of around 50%, with noticeably ▶

▶ better rhythmic integrity and low level detail than the cables burnt with music, if not quite their weight.

Given the results of the listening, there is absolutely no doubt that the majority of people are seriously underestimating the magnitude of the cable burn-in effect, and that the Cable Toaster is a powerful response to the problem. Its effect will vary from one cable to another, as will the specifics of the burn-in period. I'd also add that whilst the Toaster is far more effective than music, toasted cables still gain a modicum of sweetness and warmth once you feed them the real thing. 24 hours of music after the Toaster seems to polish things off nicely.

The problem with the Cable Toaster is price. You build something from scratch, in small numbers, in the USA, and it works out expensive. £650 expensive, to a member of the public. Which means that unless you are some

kind of cable fiend it will never be cost effective. After all, how often do you buy new cables? But for dealers it's another matter. Not only do they buy it for a fair bit less, they are selling brand new cable almost every day. For any dealer who wants to demonstrate and sell expensive cables, or provide the sort of service which might persuade his customers not to shop on the internet, then the Cable Toaster is an essential tool. As a customer, now that the Toaster is available, I'd certainly be reluctant to buy a pricey cable loom from a dealer who didn't offer me a burn-in facility. After all, when you've just dropped big dosh on a new toy, it's so much better if you get full value from day one. Just think how long it takes you to accumulate 200 hours of listening in the normal run of things. And for reviewers of course, it's an absolute God-send.

Cable burn-in is a little considered

but extremely limiting factor in maximising your system's performance, especially given that we tend to underestimate cabling's contribution anyway. You'll get there in the end of course, but you'll miss out on a lot of music along the way. The Nordost CBID 1 offers both an elegant and a practical solution. It is the Jackie Chan of system set-up tools; it may not look impressive, but wait until you hear what it can do! ▶+

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# The Dynavector XV1 Cartridge and Well-Tempered Reference Record Player

by Paul Messenger

A couple of months back, Pear Audio's John Burns dropped round, to play me a very interesting and unconventional record player. So interesting, I asked whether I could borrow it for a while, but so unconventional I still haven't fully got to grips with it. We're talking work-in-progress here, not fully formed opinions, but the kit is too interesting not to publish some first impressions.

The Well Tempered Reference turntable and tone-arm are themselves

unique and peculiar devices, and those same adjectives are equally applicable to Dynavector's XV-1 cartridge and PHA-100 head amp, the whole package retailing for around ten grand, so even a brief description makes interesting reading.

Visually, the most unusual bit has to be the tone-arm, which literally hangs by a thread (well, two to be precise). The moving arm assembly, based around a slim carbon-fibre/

epoxy tube, is attached to the stalk of an inverted nylon "mushroom", which is in turn, hung from an aluminium Gallows. The disc or cap of the mushroom is immersed in a bath of silicon fluid which ensures 'zero play' at audio frequencies.

As a result of the heavy pivot damping, there's no need for a cue mechanism - just release the arm and it drops very gently down onto the record. Above the gallows is a ▶

▶ thumb wheel which moves the upper fixings of the threads apart, applying a twisting moment for bias compensation, an incredibly simple solution whose cleverness typifies the lateral thinking embodied in the entire turntable.

In other words, the WT arm is as much a joy to use as it must be a pain to set up - I left it to JB, and have so far resisted to temptation to enter into an emotional relationship with the device or its very extensive instruction manual. This arm's incredible flexibility allows adjustment of every single set-up parameter, from azimuth to cueing speed. I gather it's easy enough when you know how, but I prefer playing records.

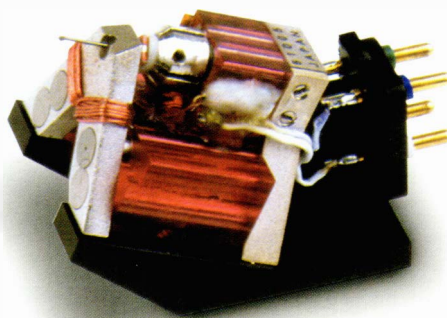
WT's turntable has a similarly oddball main bearing, which runs in a silicon bath and is located by five Teflon points. These are arranged as a thrust pad and two opposing 'V's, one pulley side at the top and the other opposite it at the bottom. The belt tension pulls the shaft against the upper notch, while its base fits against the lower notch and the thrust pad. The whole thing sits in another bath of silicon, designed to provide smooth, silent running. But be warned; remove the belt and the whole platter can topple over, which takes some getting used to.

The massive plinth is a granite composite with constrained layer damping, and needs large and solid support. A hefty motor stands separately, located somewhat imprecisely within a cut-out hole through the plinth, while the hard composite (damped from below) platter is used with a substantial screw-down clamp.

Dynavector's XV-1 is the company's new top model, a bulky low-output moving-coil with a scary-looking protruding cantilever (and no stylus guard), whose main claim to fame and uniqueness is the use of eight Alnico (rather than ferrite or rare earth) magnets. Alnico alloys were the

original material used for permanent magnets, and are still highly regarded by serious audiophiles, and found in a handful of esoteric drive-units such as Lowthers. Just why this material should sound superior remains mysterious, but that's broadly true of the whole field of magnetics.

Even the PHA-100 head amp is unconventional. It's purely a step up device, making no attempt to provide the RIAA equalisation which is an essential part of any phono stage.



The idea is to use it between the cartridge and a normal moving magnet input, and its key feature is that it presents the cartridge with a virtual short. It operates as a current amplifier which also provides strong electro-mechanical damping to the generator assembly itself.

Damping is a common thread which runs right through this record player, so it's hardly surprising that the sound produced by the combination is also exceptionally well damped and controlled, especially towards the frequency extremes. That in turn inevitably highlights and focuses attention on the midband - and what a superb midband it is, with minimal coloration and wonderfully precise dynamic tracking across a very wide range, bringing exceptional detail and information retrieval, particularly to voice reproduction.

I went through loads of familiar records, and kept hearing new details,

like figuring out lyrics which had previously been obscure on a number of old favourites such as Elvis Costello's *Imperial Bedroom*, and Tom Waits' *Swordfishtrombones*. This record player's tidy and unflappable sound is quite unvinyl-like in its security and stability. In some ways its natural, unforced sound is more reminiscent of master-tape than disc, as is the absence of background noise.

It doesn't seem to have the obvious sparkle or bounce of my normal Linn/Naim vinyl spinner, but the extra midband info seems a very fair exchange, especially given its inviting nature. What at first seems like a lack of air might well be a cleaning up of the high-frequency hash that one has come to associate with (and accept with) so many moving-coils. You may think that the WTR is losing information, and indeed the WTR/XV1 combination sounds a little sparse at first hearing, but it's not actually glossing over anything, it's just that colouration levels are remarkably low. So much so that comparison with other turntables leaves them sounding tonally exaggerated and obvious.

So far I've only used this record player as a complete unit, and haven't tried substituting bits to try and figure out which is responsible for what. However, I was surprised to find how well it worked with the *Beauhorn Virtuoso/Obligato* combo (reviewed elsewhere in this issue), which does itself emphasise midband virtues at the expense of the extremes, which only goes to prove how good the midband of this source really is. Coming to terms with a product which is both mechanically and sonically, diametrically opposed to my usual record player is something of a challenge. At least this contest is shaping up to be a highly enjoyable as well as an informative one. More later, when I've actually reached some conclusions.



# PS Audio Power Plant 300

by Roy Gregory

Back in Issue 4, I got very excited about the performance of the Accuphase PS500 clean power supply, a high quality mains regeneration unit. You may also remember that I got less excited by the price; something over £3000 for a unit which will only support source components and a pre-amp (assuming it isn't some current hungry valve monster)! Alternatively you can get away with a small integrated amp but then the expenditure takes on a ludicrous list to starboard.

All of which makes the arrival of PS Audio's Power Plant 300 especially interesting. The smallest in a range of four units that increase in power all the way up to the three-phase 1800, it is designed to do a broadly similar job to the Accuphase, and with roughly equivalent power and current capabilities, it costs around a third of the price. Okay, so you don't get the sumptuous finish of the Accuphase, or its beautiful and handy metering, but on paper at least, you should get the considerable sonic benefits. What you do get is a long, thin and surprisingly heavy unit, graced by a thick aluminium front panel with what I can only describe as wavy sides. The black casework is heavily ribbed and acts as a very necessary heat-sink (this is, in essence, a 300 Watt amplifier). Around the back is an IEC mains input and four 13 amp sockets, an arrangement which is seriously cramped, to the extent that you'll need to choose your plugs with care if you want to use all the available outputs. The other option would be to use an extension yet

another (possibly costly) variable into the equation, and risks undoing some of the good you've just done with the Power Plant. If you have to take this route, make sure that the block is a good one, definitely devoid of filtering of any sort, and preferably devoid of LEDs too.

The front panel carries the necessary controls and a status display. This allows you to monitor the total load applied by the equipment connected, and also gives you access to the Power Plant's secret weapon, what PS Audio refer to as adjustable power factor. Like all regeneration units (the Accuphase, the ClearAudio Accurate Power Generator, the Tron Disc Drive) the PS Audio takes mains power, converts it to DC and uses this to run a power amplifier that outputs a single frequency and voltage. In the UK that means 230 Volts at 50Hz. Turntable power supplies like the ClearAudio and Tron have long used a system of varying the output frequency to adjust the turntable's speed, and people have also long known that feeding power to electronics at higher frequencies improves the sound. ClearAudio actively encourage the use of their APG supply with CD players. However, the PS Audio is the first supply I've come across that applies this approach to an entire system - just don't try it with your turntable, at least not without seeking advice first. The benefits will also depend on the quality of the power



supplies already built into your equipment. Taken to extremes, MLAS actually build a high frequency supply into their No32 Reference pre-amp, so don't expect a massive upgrade there.

Using the Power Plant 300 at 50 Hz to start with, I was surprised how load tolerant it was. Even modest power amps were accommodated, although I need a bit more listening before I'm prepared to recommend this. What is clear is that whereas with the Accuphase I felt like I was in constant danger of overload and shut-down, you can load the PS Audio with abandon, as long as you keep an eye on the front-panel readout. I ran both the (class A) Sugden A21 and a Densen Beat along with a CD (Sugden or Rega Jupiter /Io)player, turntable(ClearAudio Reference without the APG, and only at 50 Hz) and phono stage, without causing the 300 apparent stress, and with nothing but

▶ positive sonic benefits.

So what exactly are those benefits. To discover exactly what the PS Audio achieves I used the system above, connected up with Nordost El Dorado mains leads, either straight into the wall, or via the Power Plant 300. Initially I held the mains frequency to 50Hz.

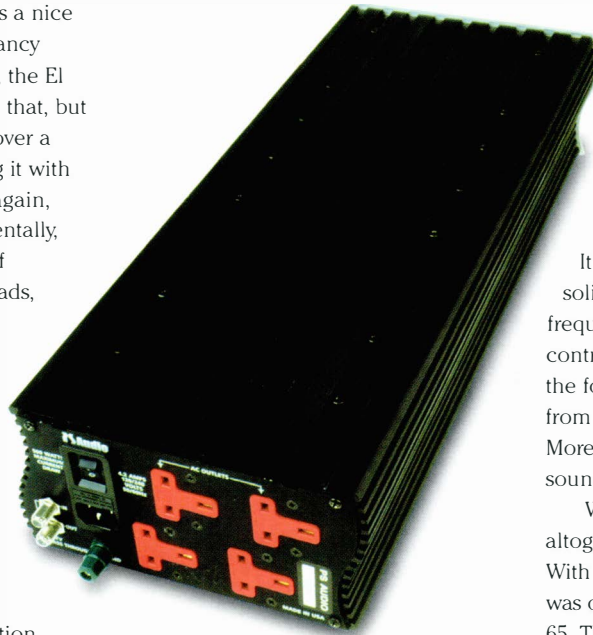
Driving either the Totem ARRO's or the Ars Acoustica Divas, this is a nice little system, even without a fancy mains re-generator. Of course, the El Dorados have a bit to do with that, but I don't see anyone spending over a grand on the PF300 and using it with standard mains leads. There again, maybe I'm an optimist. Incidentally, PS Audio are in the process of launching their own mains leads, and I'm hoping to get a set in time for the next issue.

Having got used to the system I inserted the Power Plant 300. As with the Accuphase the difference was both immediately apparent and musically important. Perhaps most obvious was the increase in bass depth, power and resolution, along with an overall increase in transparency. Images were more solid and dimensional, and better placed, with more obvious space between them. *On Take love Easy* (Ella and Joe Pass, JVC XR-0031-2) Ella's voice is far more solid and focused, but it's the explicit separation of her voice from the seated Pass's guitar that is the real ear opener. It makes the whole track much more intimate and believable.

It's all a function of much better resolution of low level information. But not only is there more to go on, it's arranged more accurately as well, making each bit of the picture that more effective in creating the whole. Ensemble playing locks into step, and the pitch variation between the notes of a melodic line become much more-explicit. As a result you get a much

greater sense of Ella and Pass playing off of each other, the chemistry of the performance, if you like. Removing the Power Plant and going back to good old SEB saw the music collapse into a muddled sprawl. And that's with only two instruments!

There are plenty of other examples. The deeper bass and wider tonal



palette on 'Ahmad's Blues' (*Workin' With The Miles Davis Quintet* VICJ-60126) made much more sense of this mono recording, as well as adding power, precision and drama to the playing. The unravelling and separation of the multi-layered vocals on the fabulous 'And She Dreams' (*Swan Dive* Compass Records 7 4285 2) revealing a previously unnoticed female vocalist.

Which all sounds rather hi-fi, when that couldn't be further from the truth. These are not mere cosmetics; the 'ooh, I didn't hear that before!' wow factor of high definition hi-fi. This is more a case of 'that didn't sound like that before!' as the Power Plant transforms the credibility of your system. The musicians simply sound more human, with far more presence and impact.

In fact, all the benefits provided by the Accuphase, without that unit's absolute, almost pristine clarity. If memory serves I'd place the Japanese product ahead of the PS Audio for absolute quality, but the differences are far from huge, unlike the difference in price! Which brings us to the question of the variable power factor. What happens when you increase the mains frequency?

It's a bit like turning a focusing screw. Everything becomes more focused and clearer, while the soundstage actually seems to grow slightly (more than likely a result of better definition at the stage extremes).

It's a little like having a variable solid-state control; the higher the frequency, the crisper and more controlled the sound, the more like the focus and stability that comes from a big solid-state power amp. More like the tight, heavily damped sound too.

Which means that you can get altogether too much of a good thing. With the A21 I reckoned around 75Hz was optimum, whilst the Beat preferred 65. This variability is another factor in favour of the PS, and shouldn't be under-estimated. Once you add this into the equation it creeps even closer to the exotic Accuphase.

So, am I going to splash out on a Power Plant 300? No, but only because I'm awaiting the arrival of a Power Plant 600, which I reckon should run my whole system at a cost of £2200. Meanwhile, the 300 isn't going anywhere, and at £1200 represents a serious bargain. Try one?

I should co-co!



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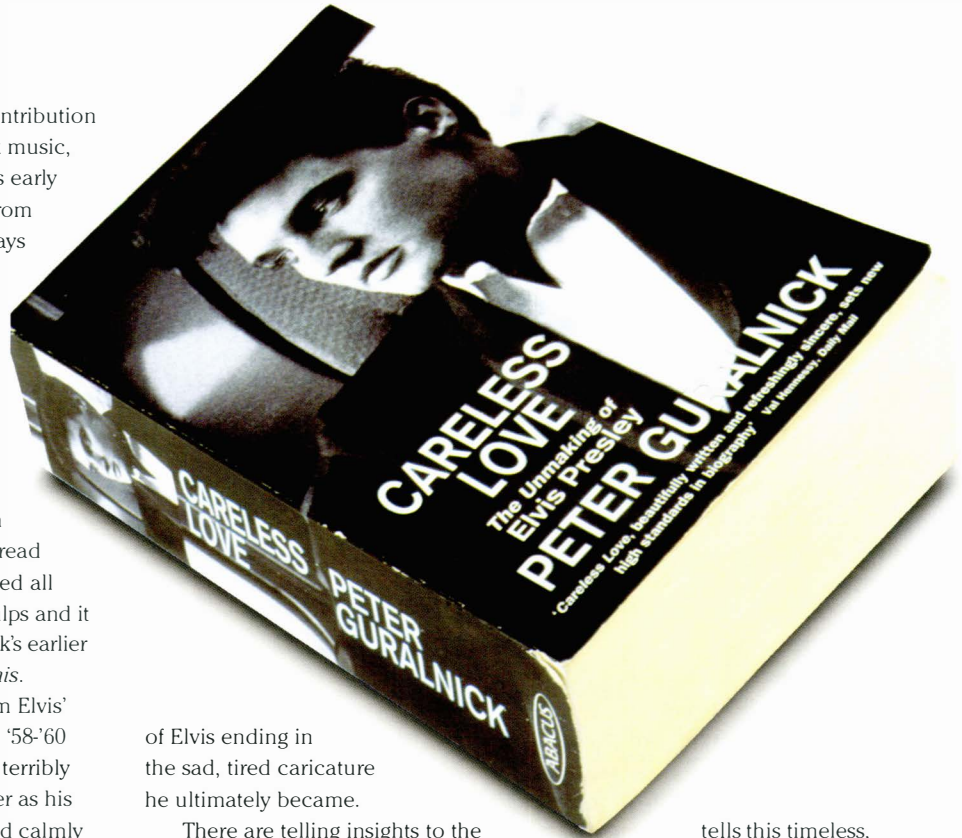
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# Careless Love

## – The Unmaking of Elvis Presley

Whilst I respect Presley's contribution as a founding father of rock music, and whilst I love most of his early Sun stuff, I'm no great fan from then on. But as Guralnick says in his introduction, 'You don't have to like Elvis Presley – but it's impossible, if you listen to his music, not to recognise both his achievement and his originality.' True and Guralnick proves this point throughout the book, which is an absolutely fascinating read from start to finish. I devoured all 661 pages of it in two vast gulps and it has left me seeking Guralnick's earlier volume *Last Train to Memphis*.

Covering the period from Elvis' army days in Germany from '58-'60 to his demise in '77 this is a terribly sad story that just gets sadder as his gradual dissolution is tracked calmly and dispassionately - what a contrast to Albert Goldman's sleazy *Elvis*. The depth of research is extraordinary; Guralnick seems to have spoken to just about anyone still surviving who ever had anything to do with Elvis, interviewing hundreds of people, and trawling through every available archive for supporting material. This would count for nothing if he didn't demonstrate such a great sympathy and understanding of his subject. A fan of Elvis from his teenage years, he tells the story as closely as possible from Elvis' point of view charting what he terms the 'vanishing'



of Elvis ending in the sad, tired caricature he ultimately became.

There are telling insights to the close circle of Elvis associates, friends and hangers on, in particular on the life and influence of 'The Colonel' who it turns out was much more like his client than history has hitherto allowed. Dr George Nichopoulos, 'Dr Nick' the prime medical consultant to Elvis (for which read supplier of opiates), also comes across as a much more rounded and somewhat less menacing figure than has previously been assumed.

The key strengths of this book are its foundation of solid research and the way that Guralnick manages to distance his own emotions as he

tells this timeless, gripping story. It is the best rock biography I have read, opening my mind to a different world and I can't recommend it too strongly.

DD



'Careless Love –  
The Unmaking  
of ElvisPresley'

By Peter Guralnick

Abacus

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# The Digital Pipeline-

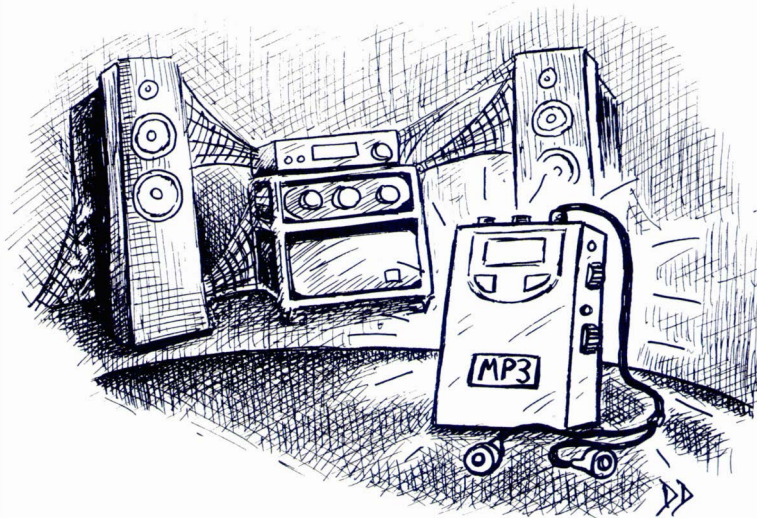
## Does MP3 Represent a Toll Free Entertainment Highway, or the Advent of a Deluge of Sonic Sewage?

by Peter Guthrie

My real job, the one that actually pays me money, is as an IT consultant and journalist. It's a field in which there's a genuine thirst for new technology, and a real fear of being left behind. It's also acquisitive, constantly looking for new markets and applications for existing technology. It is vibrant, aggressive and expanding; what we are witnessing is technological colonialism on a scale to match anything geographical from the 18th Century, but far faster, and with even less regard for national or cultural borders.

The hi-fi industry, and its supporters the buying public, have always been an insular and inward looking group. Indeed, it's verging on the wondrous when a company sees fit to actually import technology from another field. Just look at the SL600 and its Aerolam cabinet. Front page of every magazine in the land, but the material itself had been in existence for years. We've had CD for nearly twenty years and it has only just achieved respectability. Suddenly, the entire industry is threatened by the looming shadow of MP3, and the

response, frankly, verges on panic. Not only are MP3 recorders spreading like a rash, all promising "CD quality sound", but we are constantly being told by the media in general that IT is taking over the world, and music



reproduction in particular. It seems like a good time to step back and examine what exactly MP3 is, and what, if anything, it offers the hi-fi buyer.

So let's start by setting the record straight: MP3 isn't a hi-fi technology, not now, not ever.

The simple fact is that MP3 is, more or less, a compression standard. It reformulates sounds into data, picks out frequencies that you 'can't hear' and deletes them from the track. Unfortunately, hi-fi equipment is a little too sophisticated for this compression

technique and what results is a loss of quality. It uses the same compression standard as the audio channel in DVD-Video, which is good enough for video, but not really suitable for hi-fi. We are constantly striving to make our sonic reproduction better, not worse, so MP3 simply cannot be a practical hi-fi technology.

### The Technology

My apologies if this is a little over simplified, but the newer formats all use digital storage methods, meaning they convert analogue wave forms to data. Data is essentially a collection of 0s and 1s; it is binary.

All digital devices are essentially glorified switches, two state devices largely powered by transistors (for example, an Intel Pentium III CPU contains no less than 25 million transistors!). Each Binary digit is referred to as a 'bit' of data.

It soon became apparent to those designing computers way back in the 1970s that bits weren't enough to perform more complex calculations, so they started grouping them in clumps called bytes, which are made up of eight bits. Computers still



## Using MP3

While it's not inherently a hi-fi technology, there's nothing as portable as an MP3 player. They are based on flash ROM (Read Only Memory) technology, which is the same as found in the Smart Card's that most people seem to have as debit and credit cards nowadays. The gold cells that are found on a debit card, store card or mobile phone SIM card can actually store a scary amount of data, and by combining a number of cells, an MP3 player can store about a CD's worth of music.

All you need is a computer with a sound card and an MP3 player and/or encoder to use MP3, naturally you'll need a portable player if you want to take it with you (you can connect the two using a 9-pin serial cable. You can get music from a large variety of sources, downloaded from the Internet, taken from your CD player or any other variety of sources.

► work on the same principles today, 8 bits make up a byte, though we have slightly more of them nowadays.

Explaining how a CD stores data gives you an insight into how data storage actually works, so I'll start there. A CD stores music as digital information, a collection of 'bits' of data in an uncompressed format. Music is sampled at 44,100 times every second, with each sample being 2 bytes (or sixteen bits) long. If sampling is done in stereo, separate samples are taken for left and right channels.

This translates to about 1.4 million bits per second (or 176,000 bytes per second) that are sampled for a CD. Due to the transmission speed constraints of the Internet, that quantity of data isn't practical, so MP3 is used to compress the music to a manageable size.

MP3 was developed by MPEG (the

Motion Picture Experts Group) as the audio layer for the MPEG compression systems (as used in DVD Video) and is known as MPEG audio layer 3 (or MP3 for short). It was designed to reduce the physical size of music by 10 to 14 times without noticeably losing quality. If a typical song recorded at CD levels takes up about 35 megabytes, an MP3 compressed song is about 3 megabytes.

MP3 works by using a compression algorithm based on perceptual noise shaping (ok, so that probably whistled by at about 40,000 ft...), which is less complicated than it sounds and something that actually makes a lot of sense. By studying our hearing characteristics, MPEG was able to eliminate certain sounds from each sample. For example, there are certain frequencies that the human ear cannot hear (as we all know), but there are also sounds that are heard better than

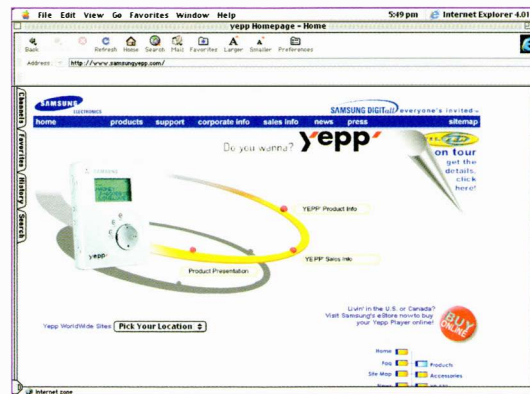
reproduction equipment (especially computers) and MP3 isn't suited to that level of sophistication. Real hi-fi exposes the gaps, and this results in a very audible loss in quality.

Another problem is the quality of the ancillaries involved. While connecting a portable MP3 player to your amp or CD player results in an almost respectable sound for on the move, a computer (even with an expensive sound card) just isn't remotely near hi-fi quality.

Apparently my Playstation is capable of 'CD quality sound', though what comes out of it is appalling and certainly can't be classed as a hi-fi source. MP3 tracks will usually have been 'ripped' from a CD-ROM drive, which produce music as badly as the Playstation.

It's all a question of data.

While MP3 can theoretically supply almost CD quality sound, would any of us actually want almost CD quality sound delivered to our systems? I think not. We constantly seek better levels of reproduction, so



others, and if weaker sounds are played at the same time as stronger sounds, the stronger sound is heard and the softer ignored by the brain.

Following these theories, means that certain parts of a track can be disposed of without affecting the listener and as a result the overall size is much smaller.

Part of the problem is that hi-fi equipment 'separates' sound far more accurately than other sound



something which offers something close to what we have isn't good enough. Even if we can get our music by pressing a button on the TV remote, it will still have to be as good as CD for us to take it seriously.

DVD and SACD offer the

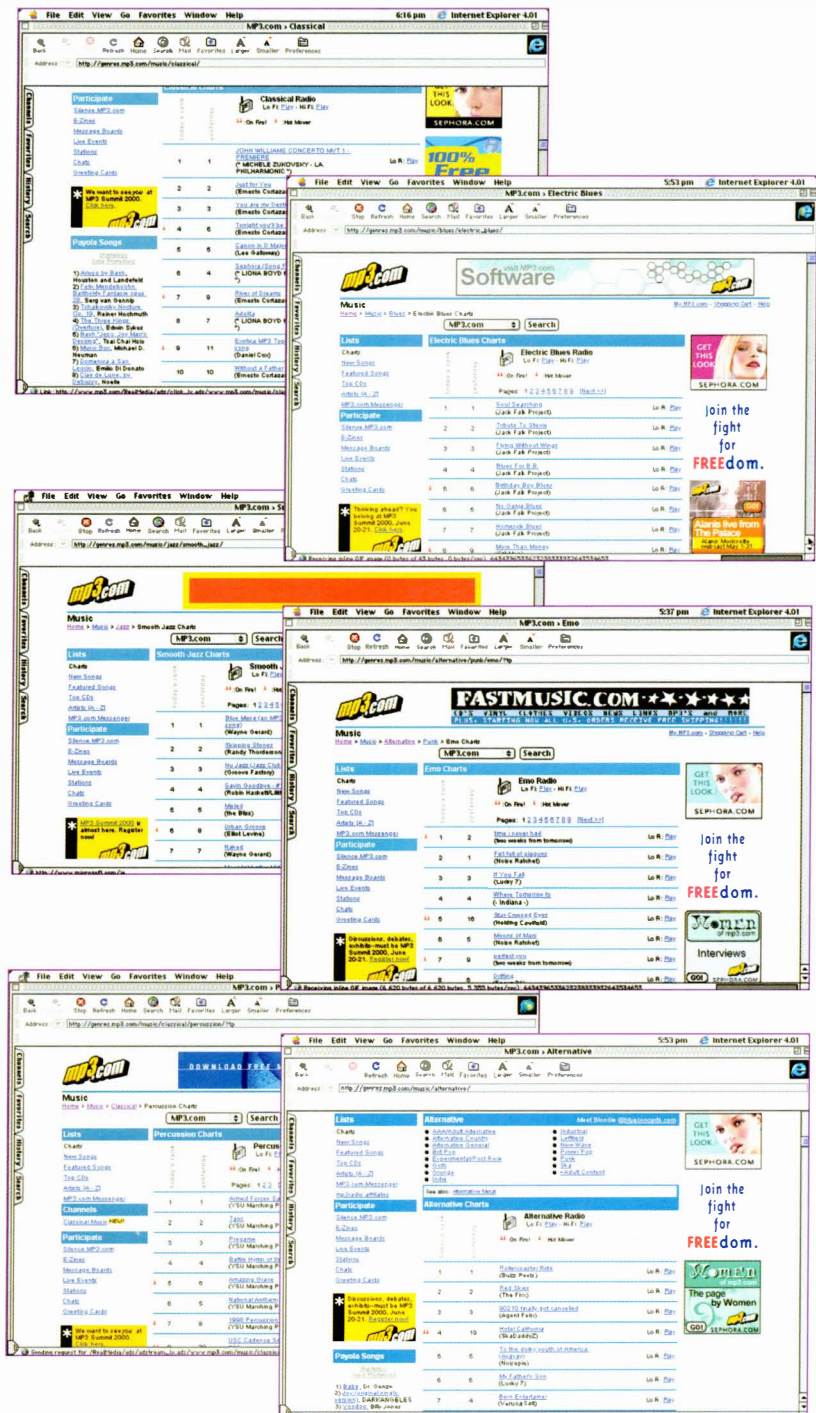
▶ opportunity of far greater disc capacity, where DVD can store approximate 4.7GB of data (or 640 minutes of music at CD sampling rates).

The amount of data that can be stored on a DVD disc for example enables sampling to be performed at a far greater rates, while still offering increased playing time over a CD. The current proposed standards for DVD-Audio use approximately 192KHz sampling rates that will provide far greater amounts of data than a CD.

These new technologies promise to eclipse CD in a way that MP3 never could, and the reason is sheer data capacity. DVD-Audio and SACD can hold a lot more data on their discs, and more data means more information. While getting that information onto and off the disc is far from mastered yet, they already offer tangibly superior alternatives to CD, and promise the leap in quality that we've all been striving for since silver discs arrived in the mass market.

Sound quality aside, the other major issue is getting data from the MP3 owner to the player. This is generally done through the Internet, but the current modem standard transfers data at a maximum rate of 56kbps, that is 56,000 bits per second, or 7 kilobytes per second. Even at that full rate (more realistic is 4 or 5 Kb per second), it would take a few hours to download just one track without compression. With MP3 it takes a good deal less, but it still took me several hours to download enough music to fill a 60 minute player.

Bandwidth into the home promises to grow vastly over the next year or two, mainly thanks to ntl's cable modem service, a system that provides transfer speeds at least ten times that of an analogue modem. Another key technology will be ADSL (Asynchronous Digital Subscriber Line), which is capable of speeds up to 8 megabits per second (or 1 megabyte per second), though limited by BT to



512Kbps in its small business service offering.

Cable companies, ntl and Telewest, are planning to offer ADSL services at a rate of about 2Mbps in the next year or so, but they will be aimed at

business rather than domestic customers. The bottom line is that the technological infrastructure simply doesn't exist to provide the quality and ease of use suggested by MP3's proponents. Yet!

## ► E-distribution

So why, you ask yourself, are the record companies even thinking about bothering with this MP3 rubbish? It's insecure, sounds pants and seems to be ripped off by everyone and their dog right now. The answer lies from whence MP3 came: the Internet.

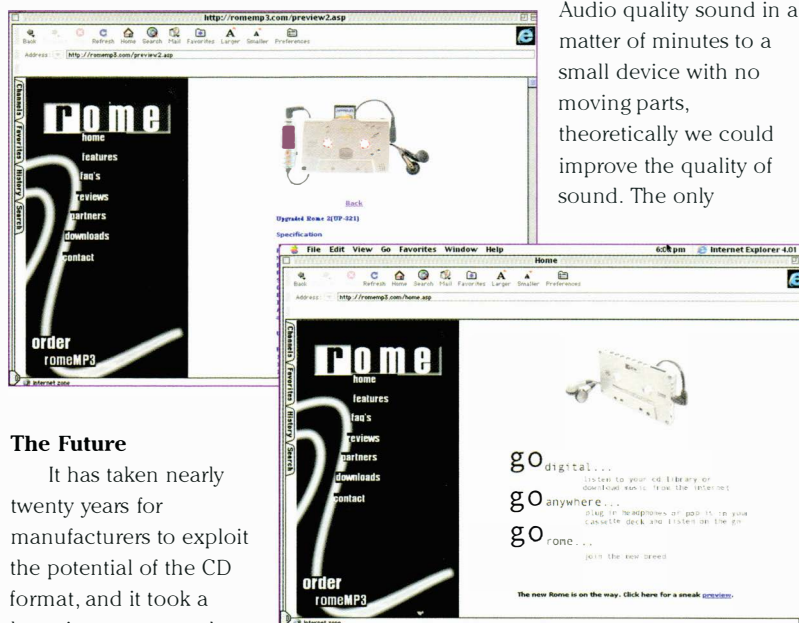
The Internet is currently experiencing a paradigm shift from the delivery of simple information to more complex content, generally geared around entertainment. Changing consumer buying patterns aside, this is due to the plethora of mass market Internet devices that are rolling into millions of homes right now. Devices such as Digital satellite and cable enable mid-high speed Internet access (right now they use the phone line to connect, but there's actually a great deal more bandwidth available through the main channels, so it's only a matter of time), and other machines like Sega's Dreamcast and Sony's forthcoming Playstation 2 offer built in, modular, modems that can be exchanged for higher bandwidth communications devices as they hit the market.

This means the number of people actually on the net will skyrocket over the next two years, particularly since the advent of free calls, opening up a mass of new routes to many millions of consumers.

e-distribution is, surprisingly enough, electronic distribution (no prizes for guessing that one) and, properly implemented, promises to enable a lot of companies to eliminate the high-cost elements of their business. When you buy a CD, you are not just buying the music on it, you are buying the production of the CD, packaging, marketing, and distribution. This chain can involve many stages, for example Sony Music to UK distributor, to regional distributor, to local record shop. E-distribution can remove all of these cost elements in the chain making the copyright owner

a lot more money.

Hopefully, cost savings will be passed on the consumer, at least in part, though plans are afoot to completely change the way we buy music to a pay-per-listen model. It means that rather than selling you a CD once, they can charge you for each time you listen to a track. By using very sophisticated encryption techniques, music can be encyphered so that you need a different code each time to unlock it. Each time you want to listen to a track, you need to insert you smart card into the source component and the appropriate fee is debited from your account).



## The Future

It has taken nearly twenty years for manufacturers to exploit the potential of the CD format, and it took a long time to get used to replaying music in a digital rather than analogue format, and to assimilate the engineering complications it created. There is going to be a similar time lag before the new digital formats really hit their stride and win widespread acceptance in the hi-fi community.

MP3 has even greater problems in that it uses CD class technology to store music, and while it's a useful technology for portable use, it's not really practical for hi-fi usage,

irrespective of how music companies wish to distribute their titles.

That said, in the future the MP3 model may be a reality as Internet bandwidth develops. Once it becomes practical to download several hundred megabytes in a few minutes, then its potential could be realised. Storing the data is relatively simple, and flash-ROM technology eliminates the moving parts involved, and as we all know that is one of the major problems faced by hi-fi manufacturers.

As the storage technology develops, so does the possibility of eliminating the disc altogether and gaining music from altogether different sources. If we could download DVD-

Audio quality sound in a matter of minutes to a small device with no moving parts, theoretically we could improve the quality of sound. The only

question there lies in the source of the files to be downloaded the integrity of the download pipe.

There are certainly possibilities surrounding some of the technology around MP3, though MP3 itself inherently isn't suitable for hi-fi. When we have higher download speeds and greater storage capacities, there is no reason why the same codec's cannot be used to create a similar format at a higher quality that could influence the path of hi-fi.



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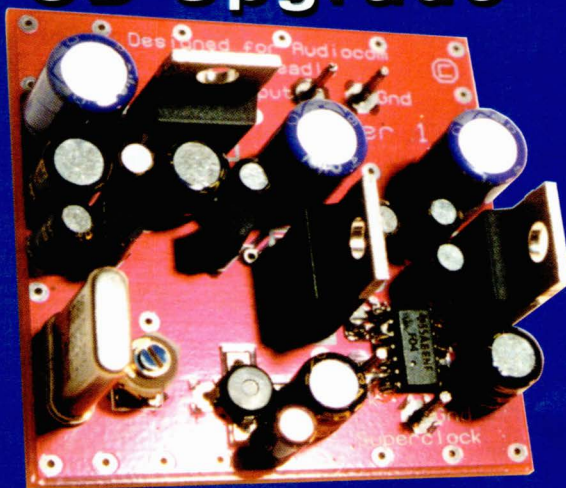
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# Record Reviews

## How To Read Them












The information contained in the record reviews is presented in the following way. Albums are identified by label and serial number. Beneath this you will find one or more icons which denote the available formats for the recording. The first icon refers to the format reviewed.

The ratings at the bottom of each review reflect the reviewer's opinion of the recording quality, and musical merits of the album. You'll soon realise that a great many musically significant albums offer less than wonderful sound. Don't let it put you off! For your information the scale rates a standard, good quality pop recording as slightly below average.

The reviewers are identified by their initials.

They are:- Chris Binns, Pete Christie, Dave Davies, Roy Gregory, Jason Hector, James Michael Hughes, Jon Maple, Reuben Parry, Dave Ayers, Andrew Hobbs, Chris Thomas.

### Key to Icons

-  CD
-  Gold CD
-  HDCD
-  XRCD
-  Double Disc
-  MD
-  120g LP
-  150g LP
-  180g LP
-  Availability As S/H LP
-  Vinyl Double Album



Beverley Craven

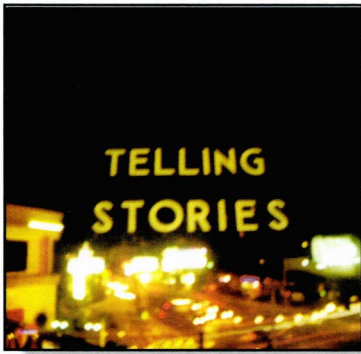
### Mixed Emotions

EPIC/SONY 494150-2 

Nice eyes. Nice smile. Nice voice. Nice sentiments? Bev Craven's *Mixed Emotions* are relentlessly nice! But do I care about the individuals who populate all those terribly nice songs? I really think, not. They have at their core an uncomfortable grain of selfishness which is, to my mind, little more than suburban carping heard around Hampstead dinner party tables. Take the career girl who is "poor dear" so dreadfully haunted by a steady countdown of her biological clock. Well, love, welcome to emancipation. You've made your choices. Stop the envious glances and, for goodness sake, deal with it and move on. Then there are those songs devoted to a mythical generation of women who seem unable to function outside of a relationship. Surely they don't exist? 'I Miss You', 'Afraid of Letting go' and 'Come to Me', possess these moments of unredeemable banality. Give me pithy issues that matter - Cervical Cancer, drugs, or even that old stalwart: a descent into prostitution - I'll empathise. But please, please, please just cut out all that shallow, middle-class, flannel. So why review it? People actually play this at shows, and I keep getting asked for audiophile versions! Go figure.


RP





Tracy Chapman

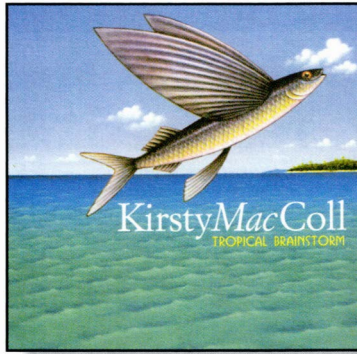
### Telling Stories

ELEKTRA 7559-62478-2 

Endless airplay of the eponymously titled debut LP eventually caused a degree of listener fatigue which dramatically contributed to a spiralling free-fall in popularity almost the equal of that meteoric rise in fortunes following Chapman's appearance at Wembley for the satellite-linked Nelson Mandela 70th Birthday Concert of 1988.


It's now five years since the last record, *New Beginnings*, her fourth, and for many this self-imposed career intermission could have continued indefinitely. An unkind aside, but one not without substance. The pedestrian, coolly considered, folk-pop rhythms, minus that tiresomely exaggerated "whoop" that characterised her delivery in many of those early songs, are still present and correct, but gone is that restless search for another flashy hit single to rival 'Fast Car' or 'Talkin' Bout A Revolution'. Instead, this is a belt'n'braces album, content to relay its themes of love, (spiritual and corporeal), through eleven devotional tales in tracks like 'Unsung Psalm', 'Wedding Song' and 'The Only One'. Reunited in this joint venture with the producer of her first album, David Kershenbaum, *Telling Stories* is far from sedentary as arrangements, mixes and Duane Baron's awesome sonics enliven the doleful queen of guitar-playing singer-songwriters. An antidote to early over exposure, if you feel up to it.

RP



Kirsty MacColl

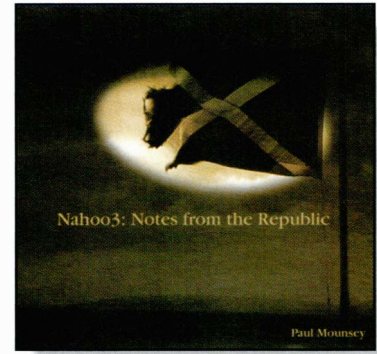
### Tropical Brainstorm

V2-VVR1009872 

Fashionably late to the Latin party? Kirsty MacColl's unlikely voice, dry sense of irony and intelligent lyrics contrast (sometimes uncomfortably) with a deluge of hot tempered rhythms found in *Tropical Brainstorm*. It's an album title that might, just like her marvellously penned *Electric Landlady*, stimulate a few remaining grey cells left after another heavy night down the local Salsa bar. Easing into the idiom 'Mambo De La Luna' and 'In These Shoes?' gently raises the spectre of feminism with colloquial choruses and a Cuban beat that are, in their own way, as resonant as her stirring 1984 single, 'A New England'. The high-heels of 'In These Shoes?' is a wonderful image and metaphor for Western European foot binding that a quick-witted MacColl, coolly and amusingly, turns in upon itself through a strong message of sexual determination.

Hard edged and humorous, she tackles "ladism" and old fashioned infidelity on 'England 2 Columbia 0', while an ever topical 'Here Comes That Man Again', dispels that cosy "Tom Hanks/Meg Ryan" e-mail myth. "And through the cyberspace I watch the rapture on his face / Yes while his girl is sleeping / His sexuality's peaking". Full of these disparaging innuendoes, it continues with "He says it's something he needs / He can't stop spilling his seeds" which is sure to crack a few smiles.

RP



Paul Mounsey

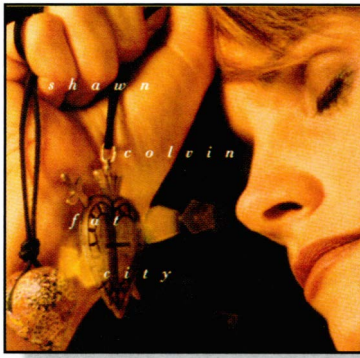
### Nahoo3: Notes from the Republic

Iona Records IRCD 068 

Ambient blues from an expatriate Scot living in Brazil; somebody's having a laugh! Paul Mounsey, the exile in question, is actually a successful composer for film and advertising with more than a few writing credits for major pop hits in Latin America. Nahoo is his own project, personal output from someone who spends most of his time writing for other people, and this is the third album. Combining blues based rock, ambient electronic programming, Brazilian percussion and the melodies of Scotland and South America, you're unlikely to have heard anything quite like this before. Beautifully put together, as you'd expect, this is music of evolving patterns, rather like the soundscapes of Jocelyn Pook, but drawing on a wider and more vivid palette of sounds and influences. Over it all, he lays the familiar, repeating, shifting themes of his Celtic roots. This can be a bit of a culture shock at first; shades of Kenneth McKellar tripping on e. But the simple evolutionary patterns that define the repetitive strands of Scottish and Irish pipe music fit the trance mode like a glove, while guitar and myriad percussion provide the necessary texture and relief. I still can't decide whether I'm fascinated by the music or the structural symmetry, but I keep playing it so it must be doing something right.

RG





Shawn Colvin

Fat City

COLUMBIA 467961-2 

Once the New York drug culture and alcoholism were put firmly behind her, Shawn Colvin's song writing blossomed. Critical acclaim for *Steady On* culminated in the 1989 Grammy awarded for best folk album and, perhaps unsurprisingly at thirty three, and with success coming this late in her career, she aimed for a "banker" on the follow up release, *Fat City*. Recorded under the auspices of Joni Mitchell's husband, Larry Klein, it strikes a far more sophisticated pose, not least through a notable array of talented guests - Mary Chapin Carpenter, Bruce Hornsby, Bela Fleck are all featured - Joni, too, even lends a percussive hand in 'Object Of My Affection'. Great, profile raising, publicity for Colvin who, by the inclusion of several crossover songs like 'Tennessee' and 'Round of Blues', showed that she had the versatility to quicken the tempo in persuasive light rock numbers as well.

Over produced? Possibly, in that Klein (a great advocate for the female voice) instrumentally supports Colvin to such startlingly good effect that it's easy to forget there's a rootsy folksinger's message about family, childhood, desire and suicide buried beneath electric, slide, pedal, acoustic and bass riffs. But in the end, like everything else she's done, this is "must have" music.

RP



Terry Hall

Home

ANXIOUS RECORDS 4509-97269-2 

Spearheading 2-Tone's political activities. Adopting that wry sense of social observation and irony with the Fun Boy Three. Through Colour Field days to a born-again romanticism as a solo artist: Terry Hall's languid delivery and smart lyrics have always entertained. *Home*, released in 1994, was intelligent Eighties pop crafted for the Nineties. Ten love songs co-written with Nick Heywood, Ian Broudie (Lightning Seeds) Andy Partridge (XTC) and Craig Gannon (Colour Field/Smiths) reach out and twist deeply their double-edged blades through the immediacy of lines like "Uncertain, coy and hard to please / she kisses me through gritted teeth" (FOREVER J). Or, with a jarringly impersonal image of a lover: "it's got a name / but I prefer to call it nameless / it comes and goes / and leaves me on a bed of splinters" (SENSE). Yet, often, you are intimately drawn amongst these scenes by the very simplicity of an acoustic guitar intro, or Hall's dead-pan voice, to be held there by a double embrace - an imaginative marriage of words and sweet female backing harmonies, the Hall/Gannon collaboration, 'No No No', with its platitudes and hesitancy, being a real highlight.

RP



Tiny Island

Tiny Island

Opus 3 CD 19804 

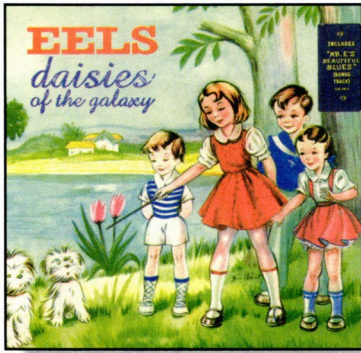
Tiny Island were formed in 1989, but were only known to me by the name "Needed Time" which they took for their 1993 recording, with Eric Bibb. This is an album that is difficult to pigeonhole. On the whole it is acoustic world music or folk, but there is so much more, with a hint of the blues or even music reminiscent of the 17th century composer, Kapsberger. The group composed all ten instrumental tracks, bar one, and play, among others, guitars, mandolin, bouzouki, accordion, and double bass. Relaxing, yet certainly not boring, the performance always keeps your mind focused on the music. The production is exemplary. The players seem to appear in front of you, spaced within the natural acoustic of the stone church where the recording was made. Tonally it is right, and the CD does not sound harsh or etched. As with the all recent Opus 3 releases the HDCD process is utilised, adding extra resolution to the sound, even on my non-HDCD player. One of the outstanding sounding discs I have heard. When first hearing this album, the opening track, Le Valse Petit, a solo effort by Goran Wennerbrandt on Weissenborn Hawaiian guitar, almost moved me to tears with its beauty. Perhaps this album should be classified under soul.

SG

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Eels

Daisies of the Galaxy

450 218-2 (CD)

The Eels, an interesting band who have now produced their third and probably best album to date.

The second album, *Electro-Shock Blues*, was very hard to get into. This wasn't due to second album syndrome but the lead singer/songwriter's understandable desolation at his sister's suicide and his mother's death. This series of events was such a strong influence that the second album was often unfathomably bleak and dark, despite the obvious genius which can flow from great upset. I hope the album proved to be cathartic.

This album is a return to the sort of material which so impressed me from the debut, *Beautiful Freak*; tunes and melody to die for, great depth and understanding in song construction, and clever, well observed, emotional lyrics. Often minimalist, where complexity and synthesizers are added it is for the good of the song.

The Eels will never be a great commercial success. They are, frankly, far too good for that!

Their songs still deal with the odd side of life and are wistful, observant and frequently display large slabs of tongue-in-cheek irony, while counter-pointing cheerful tunes with very powerful lyrics. Along with the first album this is a must buy.

JH



Bap Kennedy

Lonely Street

BMG/LSD712 (CD)

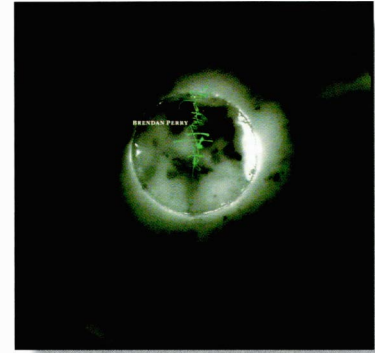
When an album attributes its inspiration to Hank Williams and Elvis Presley then you know that either the artist who produced it is deeply pretentious, or you're onto a good thing. In the case of Bap Kennedy it is well and truly the latter.

Best known for his earlier output with the sadly defunct Energy Orchard, now older and far more thoughtful, he ploughs an impressive furrow in this, his third solo outing.

Mr Kennedy lists some pretty high profile fans amongst his following (Steve Earle and Nanci Griffiths to name but two) and that's reflected by the quality of the musicians he's gathered around him here, especially Herbie Flowers on Double bass and Tuba!! The band is tight, and it needs to be, because this is some weird hybrid of country and early rock and roll as only the Irish can. It's a strange amalgam of upbeat tempi and downbeat lyrics, gentle melody and languid playing. The compositions are so loose that if the playing wasn't so good the whole thing could collapse into a shambolic heap. Instead it flies, alternating hope and poignance as the songs rush helter skelter, or glide, perfectly paced, to their conclusions. Great voice, great songs, great playing and a pretty darn good recording.

Recommended? At least once daily until I can get the other albums.

RG



Brendon Perry

Eye of the Hunter

4AD cad9015 (CD)

Dead can dance mixed medieval, Indian, African and eastern musical influences with modern western song construction, producing a sound that evolved from album to album. This led to a large number of very enjoyable and very different albums. So what has this got to do with Brendon Perry? Well he was the one, that with Lisa Gerrard, wrote all of these fine albums.

So is this solo effort any good? Simply put, the answer is yes, and it is also obvious who it is. Brendon Perry has one of those voices you can always spot a mile off; sonorous, with great depth and capable of delivering loads of emotion without any fuss. On several tracks he sounds not dissimilar to Leonard Cohen, albeit a bit more expansive, but keeping that melancholy delivery and pace.

The music behind this voice is strongly orchestral, not necessarily in terms of instruments but in construction, and not a little gothic. Never less than large scale, which is just what is needed to back this voice, with sweeping tunes and a certain majesty creating a rich and darkly layered tapestry of sound, even with the simplest of tracks.

This album is a great success and delivers whenever I play it, sweeping me away with the music, magical.

JH





Yes

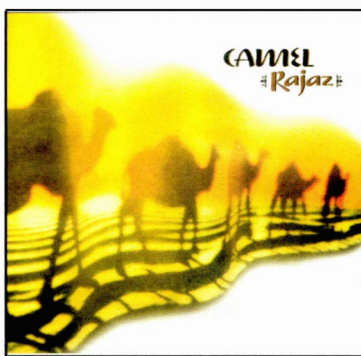
### The Ladder



For this album Bruce Fairburn, the producer, told the gang 'make the best Yes album you can' and to be fair they've had a pretty good stab. In doing so I can hear distinct echoes of Tormato, especially in tracks such as 'Homeworld' and the excellent 'Face to Face'. Now Tormato may not be The Yes Album or Fragile, but it marks the end of their most productive period, and is pretty good, all things considered.

'If Only You Knew' is one of those lighter-aloft ballads that could have been produced by any of the big-haired bands from the USA, whereas 'To Be Alive' (Hep Yadda) has some really nice Relyer style guitar from Mr. Howe. All in all there's some excellent moments to be found here but, and here's the rub, although Fairburn wanted the band to produce their best album, he seems singularly incapable of sensitive production. Take 'Lightening Strikes', a track that starts with a distinct Latin American feel. Once the drums come in, the blunderbuss production batters the listener into submission. What should have been light and frothy instead becomes relentless, losing all subtlety in the process. Throughout the album it's difficult to separate all the musical strands which I suspect are hiding in the morass. Frankly, with another producer The Ladder could have been so much more. Despite all this criticism I still quite liked it, but definitely not an essential purchase.

DA



Camel

### Rajaz



In days of yore, Camel albums would appear on the market with full record company backing. Nowadays their independently produced albums sort of slide unheralded into the few shops that decide to stock them. Camel main man Andy Latimer seems happy to produce what he wants, when he wants, and sod the rest.

The Camel trademark consists of soaring guitar sustain laid over a joyous rhythm, but the last couple of albums have been pastoral in extremis, with little to set the pulse racing. Despite some beautiful moments, it wasn't exactly what the fans were looking for. Maybe Andy has been listening to his audience, I don't know, but Rajaz is exactly what I want to hear from Camel: lots of liquid guitar, a full rhythm section on every track, and a general sense that the band are happy doing what they do. The opening instrumental 'Three Wishes' sets the scene, jogging along to an uneven beat with some synth sounds that I haven't heard since the seventies. Rajaz celebrates the music written by poets to help the weary traveller cross vast deserts, and lopes along like a fully laden camel. Further Arabian visions are to be found throughout, and the whole musical landscape drawn out by the band is huge and open, smooth and undulating, like the name-checked 'Sahara'. More like this please Mr. Latimer.

DA



Violent Femmes

### Freak Magnet



What a cracking album this is! An American band who have produced a few LP's, this is the first I have heard, but I am definitely going to check out their back catalogue. Punk influenced, they are lyrically very strong, humorous and sometimes a little disturbing, observant and cynical. Perfect! With a guitar driven sound which can switch with alarming speed from a dreamy, almost background effect on one track, to a full on hard driving sound with loads of pace and attack on the next, this is perhaps not the best album to play in the car! But overall, the pace of the delivery, fast or slow, seems to unerringly suit each song. Always full of good melody, with the odd acoustic section adding variety, one track sounds almost oriental in places. Most of the songs are less than 3 minutes long and this helps to keep all that energy in place. You will never get bored listening to this album, and each playing draws you deeper.

The recording is OK with little arsing about, just loads of energy and excitement. So if you are after a good wake up call this could be just the thing.


JH





Catfish Keith

"Twist it Babe!"

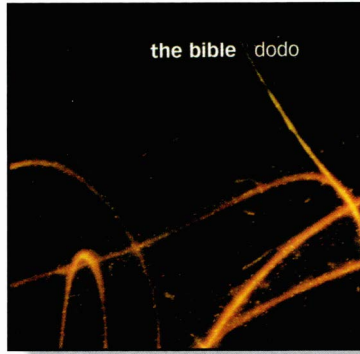
Fish Tail Records FTBCD005 

Catfish Keith is one of those performers who come along once in a while, grab your attention, and never let go. I cannot really say why I love his strange mixture of delta slide guitar, hill country blues, Hawaiian rhythms, and scat jazz, but I do. So does everybody else I know who has come across Catfish's music.

This is his fifth and most accessible recording to date. Catfish does his own arrangements. He plays guitar, stamps his feet, and sings an infectious mix of growls and falsettos. On a few tracks Marty Christensen accompanies him on stand-up bass. The Catfish guitar style is outstanding, with every noise made by the instrument a pre-planned and rehearsed sound. He stretches and plucks at the strings to such an extent that, when performing live his instrument quite often requires re-tuning after each song. The recording is very good. Being simply recorded, this CD has a very natural sound, vivid and detailed enough without sounding harsh. Exactly the kind of demanding and rewarding disc that should be played at hi-fi shows, but which so many manufacturers steer clear of. A great place to start listening to Catfish's zany blend of the blues. Give it a try. I did, and I am still tapping my foot.


SG

Pentacore - Tel/Fax: 01924 445039



The Bible

Dodo

havend 11 

The Bible produced a couple of albums in the eighties which were well received but failed to become a great success. They split, and then reformed to produce this album in 1994. Only recently released, it hasn't really aged, but then it harks back further.

Purveyors of good rock music are two-a-penny, so what do The Bible bring to the party? Well not a lot that is terribly new it has to be said. In fact at times you can almost play guess the band here with shades of U2 and REM, although Lloyd Cole would be the most similar performer in both lyrical sentiment and vocal sound, which is no bad thing in my opinion.

This album contains 10 well crafted, enjoyable songs which use the usual suspects instrument wise: guitars, acoustic and electric, drums and some synth input create songs that are tuneful and simple with plenty of melody. They have been produced rather than just recorded.

The songs are very clean and structured, but at the same time they can lack a little in excitement: a live sound this isn't.


Unfortunately like the name of the album The Bible are now extinct, but this album isn't a fossil, and is well worth a look.

JH



Joni Mitchell

Both Sides Now

Reprise 9362 47620 2 

Whilst Mitchell's work has increasingly taken a strong jazz tinge, this is only her second attempt at an all out jazz album, the first being the enjoyable but slightly patchy 'Mingus' recorded back in '79. This time she's got it dead right. Her voice has matured beautifully, it's much more husky (a couple of decades of fags perhaps?) than her earlier album, but much more expressive and much more capable of doing justice to the standards she tackles. Joined by a stellar band including Wayne Shorter and Herbie Hancock, along with full orchestral accompaniment, it's a lush ride from start to finish. Along with the standards she throws in new interpretations of two of her own numbers, the title track and 'A Case of You'. Current favourite track is 'At Last' which opens with a particularly silky orchestral theme, which is then backed by the simplest of piano triplets accompanying particularly heartfelt vocals. 'A Case of You' bears the faintest trace of its folk origins, but is lifted by delicate soprano fills from Shorter.

The recording quality is outstanding, weighty and expansive, better still on an HDCD equipped player. Whilst I wouldn't pretend to rank Mitchell with the jazz greats (she's no Holiday, Simone or Fitzgerald), her enjoyment and passion come across clearly, making this one of her very best albums.

DD



# Sheffield Synths

## Heaven 17's Earthbound Electro-Pop

by Reuben Parry

While glancing through the forthcoming tour dates I came over all misty-eyed with nostalgia for an outfit whose blend of social observation and creativity never wavered during what I've always felt was one of the most deeply divisive periods in our recent history.

Remodelled after the original Human League split of 1980, Heaven 17 (Martyn Ware, Ian Craig Marsh and Glen Gregory) enjoyed a notable spell of success, that in the process challenged music business recidivism and political dogma in almost equal amounts, all without selling out.

Earning their "Godfather's of British Electro-Pop" tag, they first, having distanced themselves from that prescriptive notion of a four-man group prevalent since the Beatles, formed their own Sheffield-based production Company, BEF (British Electric Foundation). Then, in a coolly calculated step, used Heaven 17 (the name was taken from Martyn's favourite film, *Clockwork Orange*) as a kind of free-market Trojan Horse which stylistically wooed its



audiences while landing some hefty roundhouse lefts with themes that mirrored those unrestrained excesses of Eighties hedonism.

But not all the blows lacked subtlety. For every thumping '(We Don't Need This) Fascist Groove Thang' or 'Let's All Make A Bomb' there was the smart glove-work of an allegorical 'Geisha Boys And Temple Girls'. Attractive, ironic and razor-sharp, their best-selling debut album featuring these tracks had a cutting edge that, on its release in

1981, appealed to a frustrated and increasingly disenfranchised generation. *Penthouse And Pavement* became for us a more effective dissenting voice than a torpid and fragmented political opposition of the day. It was needed. Redundancies (in their thousands) announced with metronomic regularity ripped the guts from out of British Industry. Race and social deprivation spilled over into inner city riots of scorching ferocity. A mounting butcher's bill as each tread-wheel-turning rotation of the Thatcher

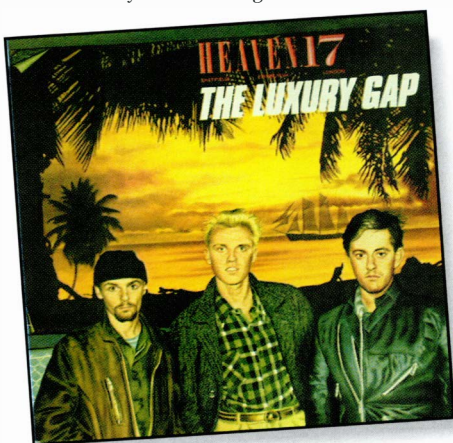
experiment ground on. In the pop world only beacons like Billy Bragg, the Specials and Heaven 17 resisted this deconstruction.

Wearing their Party rosettes on their sleeves, the early LPs *Penthouse And Pavement*, *The Luxury Gap* (1982) and *How Men Are* (1984) air their views without allowing the music to become bogged down in dialectic. This has much to do with the way tracks were penned. Rhythmic and tuneful, when a dance-orientated sound from Marsh and Ware's



► synthesizers kicks in, it's obvious that these songs were conceived as instrumentals, though Martyn Ware has himself been especially careful to stress the importance of the words. "Lyrics always come out last ..... But its never random. I think we actually put an inordinate amount of effort into the lyrics. To the extent that you wouldn't be embarrassed to sit down and listen to them." It is very much a case of first getting the hips to sway before attending to more spiritual needs. A popular format, if ever I heard one.

The highlight of *The Luxury Gap* will forever be an electrifying side-two opener, 'Temptation'. Featuring guest vocalist Carol Kenyon alongside our usual suspects, it comfortably climbed up the singles charts and settled into a Top Ten spot - helping the album to successfully Chart as high as No. 4 in



the U.K. Creatively, this is another strong recording but I personally favour the fresh, unselfconscious electrofunk of Penthouse (not the magazine) ahead of it. Here there is simply an allusive, ethereal presence in those old analogue synths that, by degrees, flirts with all those truths and myths which imaginatively snake through the tracks on this LP. Characteristically, these records differ markedly from, say, the bleak, disjointed and minimalist approach so enjoyed by Kraftwerk, whose 'Model' (taken from the 1978 album, *The Man-Machine*) did so well as a single re-release around this time. To my mind Heaven 17 (like a raft of new-wave bands) owe an inspirational debt to the German band, but did advance the cause with a more wordy and melodic style.

Dividing time between Heaven 17, the British Electric Foundation and appearances with members of Cabaret Voltaire and Clock DVA, the Ware - Marsh - Gregory triumvirate generously spread their combined talents. The most important and influential of these projects was a compilation LP, *Music Of Quality And Distinction V2219*. From November 1981 to February 1982 they produced, recorded, mixed and cut ten memorable tracks. Yet it's the unusual marriage of songs to performers that remains the real eye-opener. Bernie Nolan fronting 'You Keep Me Hanging On', Lou Reed's 'Perfect Day' given a Glen Gregory treatment and Sandie Shaw working the Burt Bacharach number, 'Anyone Who Had A Heart', all have their moments. But it's cover versions of 'These Boots Are Made For Walking', 'Suspicious Minds' and 'Ball Of Confusion' which are truly jaw-dropping. Paula Yates (not doing anything like a Nancy Sinatra) attacks

those famous descending bass lines of 'These Boots...' with her squeaky vocals - believe me, its brilliant! Although his personal life is questionable, Gary Glitter's rendition of the Mark James classic, 'Suspicious Minds', is outrageously good. But the crucial cut has to be a suitably raucous performance by Tina Turner. The old Temptations number, 'Ball Of Confusion', rejuvenated her career. A full blown recording contract with Capitol Records followed its release and the attendant album, *Private Dancer*, went massive - winning Grammys for both Record of the Year and Best Female Pop Vocalist. Finally, Tina Turner had established



the solo career that remained so elusive since the big split with Ike back in the mid-70s.

Over the years Heaven 17 have themselves recorded only intermittently. Their first new album of the 90's, *Bigger Than America*, for example, didn't appear until 1996. However, as producers their services have, since the Tina Turner days, been highly sought after. Credits for Ware include a commercially and critically acclaimed, *The Hardline According To Terence Trent D'Arby*. But its for their funky 80s electro-pop and many ambitious BEF projects for which they are best and most fondly remembered.





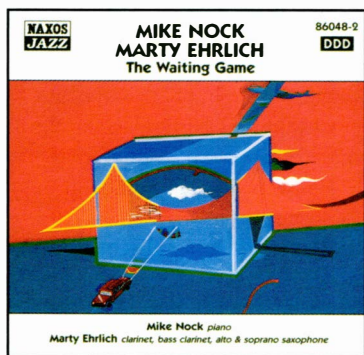
The Shirley Horn Trio

Violets For Your Furs

Steeplechase SCS-1164 **120g**

Recorded back in '81 at the Northsea Jazz Festival in Holland, this is one of those 'you are there' live recordings I treasure. Accompanied by Charles Ables on bass and Billy Hart on drums, this is an involving set right from the first notes. Opening with a fast-paced 'Our Love Is Here To Stay' the trio is clearly laid out between the speakers. Horn's vocals are well-projected centre stage and her piano work is crisply defined. For once, something like the proper weight and definition is captured in the double bass and this solid underpinning adds to the sense of realism. The drums are set out well back in the stage, and whilst they lack a little weight, cymbal work is nicely caught without any undue splashiness. Standout tracks include a sly and sexy 'Gee Baby Ain't I Good To You' and the sensuous title number. There's just a touch of hardness to the recording, and a low level hum, which hold it back from a top rating, but musically this is as good an example as any of why I snap up every Steeplechase LP I find.

DD



Mike Nock, Marty Ehrlich

The Waiting Game

Naxos Jazz 86048-2 **CD**

I've long respected Naxos for the way they've revolutionised accessibility to a truly affordable, diverse and interesting selection of well recorded, sometimes superbly recorded classical music. They are well positioned to have a similar effect on the jazz scene if this and the accompanying recordings I've received are any measure. Providing the opportunity for lesser known names (I'd never previously hear of either Nock or Ehrlich and my trusty MusicHound Guide also let me down) to gain a substantial audience, and enriching the range of jazz available. Mike Nock it seems has been around the scene for 25 years and has lived in Australia since '85. He's known Ehrlich since the seventies when they first started playing together in the States. This is their first recording together and it's a peach. The all-digital recording sounds surprisingly analogue-like, with a very natural warmth and spaciousness and no loss of detail. Every note of Nock's piano playing is crisply captured, and his Glen Gould like (but much less intrusive), 'singing' along just adds to the realism. Accompanied in this series of 'conversations' by Ehrlich on variously clarinet, bass clarinet, alto and soprano sax, the standard of musicianship and shared joy in their music making is totally convincing. A fine recording and at the price, an absolute steal!

DD



Los Angeles Jazz Quartet

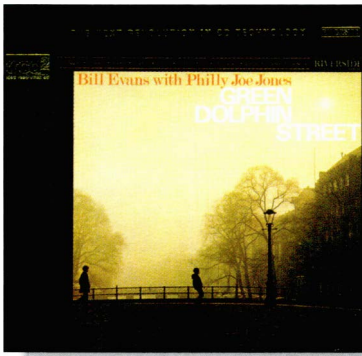
Conversation Piece

Naxos Jazz 86045-2 **CD**

Formed 6 years ago, the Los Angeles Jazz Quartet, as their name might hint, play mostly around their hometown, although they ventured out of the States and toured France in '98. Each member has an independent musical career, their drummer regularly working with Art Pepper's sometime partner, Milcho Leviev, and the band is about solid interplay rather than virtuoso pyrotechnics. Running through a selection of self-penned compositions along with their interpretations of a few standards including 'Round Midnight', and a particularly crafty take on Kern's 'All The Things You Are' entitled 'All Things Waltz', this is an unflashy but thoroughly enjoyable set. The latter number is a sly re-working of this hoary chestnut, and the more than well-known tune only really begins to emerge along with the solo's some way into the number, and after a time change from 4/4 to 3/4. The recording quality is crisp clear and spacious. Not quite in the league of the Nock, Ehrlich release reviewed elsewhere, but good nonetheless. My one tiny criticism of this very enjoyable set is that it's a little lacking in character, but at the bargain price you'd be right to call me churlish.


DD





### Bill Evans with Philly Joe Jones

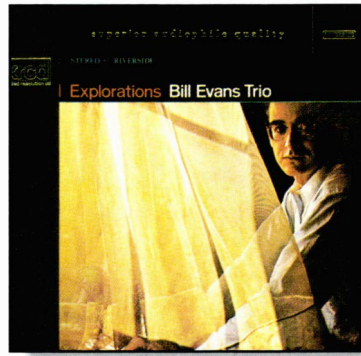
#### Green Dolphin Street

Riverside/ JVC VICJ-60372 

Recorded in New York '59, this is another great set from Evans along with Paul Chambers and Philly Joe Jones – take care though, I'm unreasonably biased when it comes to his music making. It may not be amongst his finest recordings, but this is a relaxed set that moves seamlessly through a selection of standards. Taking in 'You and the Night and the Music', 'My Heart Stood Still' and two takes on Gillespie's 'Woody'n You' before closing with Evan's own composition 'Loose Bloose' (sic). The latter track makes a fine closer since it also features Jim Hall and Zoot Sims in a thoroughly laid back approach to the blues. Opening with descending bass lines (from Ron Carter this time) and fluttering tenor from Sims, the track takes off with fine soloing from all concerned. Evans takes more of a back seat this time content to be a part of a stellar band that even when it was cruising as it does in this set, was in a different league from most of the competition. The recording quality is fine, a little warm with cymbals lacking a touch of bite and bass notes a tad soft, but generally clean with Evan's piano coming over well. Recommended if like me you're a convicted Evans nut. If not, start elsewhere (*Everybody Digs* or *Explorations* for example) and sooner or later you'll want to own this too!


DD

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



### Bill Evans Trio

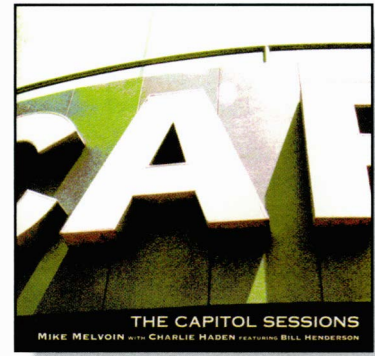
#### 'Explorations

Riverside/JVC VICJ-60140 

This is one of Evan's very best albums and a welcome issue on XRCD. Recorded in '61 with his classic trio, the outstanding bassist, Scott LaFaro and the fine drummer, Paul Motion, they had then been together for a year and were rapidly becoming one of the world's greatest bands. There's not the merest hint of a weak number on the album, the standard is uniformly excellent and it seems almost unnecessary to single out a particular track, but why should that stop me? 'Haunted Heart' is a delicate and beautifully played ballad that brings the best from Evan's tender side, supported by delicately brushed cymbals and the gentlest bass lines. This is lovely stuff that guarantees you'll chuck the cares of the day away within the first few bars. Musical bars that is. Just listen to the complexity of Evan's playing in 'Sweet and Lovely', and marvel at the complexity of his playing and of the incredible integrity of the band, locked together like a precision instrument but losing not a jot of emotional force. The recording is fine spacious and open doing justice to this wonderful music making.

DD

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### Mike Melvoin with Charlie Haden, featuring Bill Henderson

#### The Capitol Sessions

Naim cd025 

Mike Melvoin? Never heard of him was my, and will probably be your immediate reaction. But he's certainly paid his dues, playing organ on Pet Sounds, piano on Lennon's 'Stand by Me' and even on 'ABC' by the Jackson 5' (now whatever became of them?). Although Melvoin knew Charlie Haden, he had moved from New York to LA in '62 and hadn't played with him 'til this session.

Essentially the old friends jammed in the studio, recording some 25 tracks in all, 13 of which made it to the final album. Their friend Bill Henderson, who stopped by the session, is featured on vocals on three tracks. It's a measure of how good this recording is that some way into the instrumental introduction to the second number 'I Think I Know', as Henderson's voice enters, I jump. Time and time again, even though I know it's coming this entry gets me. It's so tangible, so real and in the room, the shock value doesn't diminish. The set is expansive and easy going, the few rough edges just add to the easy atmosphere. The two standout tracks for me are the slightly showbizzy aforementioned 'I think I Know', and the gorgeous walking bass backed 'Blues for Leroy: 9 minutes 15 seconds of sheer pleasure. What more could you ask?

DD

Supplier: Naim Audio





Mahler; Symphony No. 9  
Schubert; Symphony No 8  
'Unfinished'

Carlo Maria Guilini, CSO

DG The Originals 463 609-2 (rec 1976/78)



Over the years there have been so many great recordings of Mahler 9, it's perhaps reckless to claim that one in particular stands above all others. But, for me, Guilini's is just that; the very finest account of this work ever recorded. I've known it for over twenty years, on LP and CD, and have listened to it many many times. It's a performance of searing intensity and painstaking attention to detail, with orchestral playing both beautiful yet unflinchingly stark and uncompromising. Tempi are slow, giving the conductor ample time to shape and phrase the music. Yet for all the care over detail, there's nothing self-conscious or mannered about the playing, which has an engrossing ebb and flow. Truthful, honest, moving, deeply sincere; it's a performance faithful to the spirit of Mahler's vision in all its bitter-sweet nihilistic glory. This new remastering sounds cleaner and more vividly focused than DG's old Galleria edition, and the curious throbbing 'tremolo' effect on the strings (very noticeable on the original LPs) has virtually been eliminated. The Chicago brass remain forwardly balanced, and climaxes have considerable impact. The coupling, Schubert's *'Unfinished'* recorded two years later, is equally impressive; a dark glowering reading, all pathos and suffering. Like his Mahler, Guilini's Schubert offers no easy ride but a rich deeply-fulfilling journey.

JMH

RECORDING  
MUSIC



Tchaikovsky, Symphony No 1  
'Winter Daydreams'  
Debussy; Images pour orchestre

Michael Tilson Thomas, BSO

DG The Originals 463 615-2 (rec 1970/71)



These were among the first recordings Michael Tilson Thomas made as a conductor, as well as some of the earliest made by DG in Boston. Engineer Gunter Hermanns captured Boston Symphony Hall's beautifully sweet spacious acoustic more successfully than anyone past or present, and the LP of Tchaikovsky's *Winter Dreams* has long been a treasure. It's nice to welcome the performance to CD at last, and the transfer is a good one that maintains the LP's ambience and depth - listen to the way the tamps excite the hall reverberation at the close of the scherzo. The performance is fine too, mixing youthful exuberance with a sensitive feel for atmosphere. Debussy's *Images* is (for a DG/Boston) quite closely balanced, and the sound is highly detailed. Clarity is excellent, and you'll hear things in this recording that even modern digital versions obscure - a tribute to Tilson Thomas' immaculate sense of orchestral balance, and the DG recording team. The close sound suits the performance, which is brilliantly executed and phrased with great panache - almost jazzy in places - but there's atmosphere too in the sultry languid *Les parfums de la nuit* section of *Iberia*. *Images* has been issued on CD before, but the new transfer sounds more vivid and detailed than the earlier one. At nearly 81 minutes the disc offers good value too!

JMH

RECORDING  
MUSIC



Mahler, Des Knaben Wunderhorn  
Anne Sofie von Otter  
Thomas Quasthoff

Claudio Abbado, BPO

DG 459 646-2



The key to these songs is atmosphere - Mahler's evocation in sound of a fantasy world, half fairy tale, half folk legend, that recreates the strange, simple, commonplace, sometimes disturbing, characters that populate its shifting twilight landscape. Abbado is certainly sensitive to the detail in Mahler's score, and the Berliners play beautifully. Yet there's a curious facelessness about the whole thing despite some good singing and playing. Abbado begins with 'Revelge' - a macabre tale of ghostly soldiers - but there's little sense of menace or foreboding here, nothing of the night. Phrasing is supple and articulate, but there's no atmosphere. The distant trumpet fanfares that punctuate 'Der Schidwache Nachtlied' can (in the right hands) evoke a bitter-sweet sadness and regret; ditto the magical shift from major to minor that seem to say - all is not well; all is not as it seems. Here the effect is bland and matter of fact, and Mahler's scoring goes for nothing. The playing is clean and tidily executed, but one never feels drawn into the world of make-believe created by the composer. Bernstein (DG) or Barenboim (Sony) are each vastly more successful, with Bernstein especially catching the mood of each song in ways that Abbado doesn't even hint at. The sound is nothing to rave over, though it is very natural

JMH

RECORDING  
MUSIC





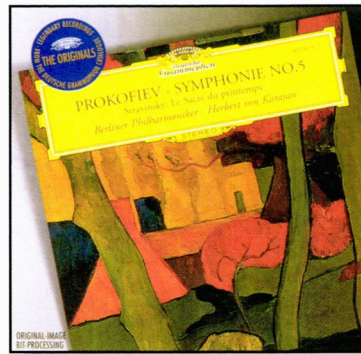


**Romantic Russia**  
 Music by Glinka, Borodin,  
 Mussorgsky, and Tchaikovsky\*  
 Sir Georg Solti  
 LSO/Paris Conservatoire\*


Decca Legends 460 977-2 (rec 1956\* and 1966) 

God knows what Solti was on when he made his famous *Romantic Russia* LP in London's Kingsway Hall in 1966, but he certainly succeeded in lifting the LSO out of their chairs. To this day there has never been a performance of the Russlan and Ludmilla overture like Solti's; it bristles with raw nervous energy. It's not just that tempi are fast; it's the crackling pace and manic tension of the playing. Mussorgsky's *Night on a Bare Mountain*, and the Overture and Polovtsian dances (with chorus) from Borodin's *Prince Igor* get similar treatment. Not everyone will respond positively to such driven playing, but it's undeniably exciting in a rough physical sense. Hearing it, you understand why some orchestral players said it took months to get the 'Solti sound' out of their fingers after they'd played under Sir Georg. *Romantic Russia* was a favourite hi-fi demonstration LP in its day, and the recording still sounds vivid today. The Tchaikovsky *second symphony* was taped in 1956 in genuine stereo, though I'm not certain it ever reached LP in this guise. Drawbacks include whinnying horns, but the playing and conducting are vivid, and the recording wears its years surprisingly lightly. It must've been one of the first uncut performances ever recorded, and sounds well in Decca's new 96kHz/24bit remastered transfer.

JMH



**Prokofiev; Symphony No 5**  
 Stravinsky; *Le Sacre du Printemps*  
 Herbert von Karajan, BPO

DG The originals 463 613-2 (Rec 1968/1975-77) 

Even those not particularly attuned to Karajan's style of music-making have to admit that his recording of Prokofiev's *fifth symphony* is particularly fine. A trenchant yet beautifully paced performance of refined passion, it demonstrates Karajan's gift for building inexorable climaxes, and his superb rhythmic control. A famous much-prized LP in its day (lovely cover art, reproduced for the CD booklet), the recording was technically among the best DGs from the late '60s. True, the tonal balance is rather bright, and the sound is not especially rich or warm. But detail abounds, and the massive tam-tam strokes near the end of the first movement exude ear-lacerating presence! The new coupling is Karajan's impressive 1977 interpretation of Stravinsky's *Rite of Spring*; a meticulous refined performance of considerable power and agility. The orchestral playing is very precise, and even the most cataclysmic sections never descend into noise - poise and control are never sacrificed for cheap excitement. Rhythms are crisply defined, with dynamics scrupulously terraced to ensure excellent clarity. The remastered recording sounds slightly cleaner and more detailed than DG's previous CD issue, and wears its years lightly.

JMH



**J S Bach**  
 Sonatas and Partitas for solo violin  
 Nathan Milstein, violin

DG The Originals 457 701-2 (rec 1973) 

Over the past twenty-five years or so, performances of baroque music have become highly specialised; often the domain of scholar-musicians playing on original instruments or authentic copies. As a consequence, the great works of Bach and Handel have almost become something of a no-go area for non-specialists - though there are signs the pendulum is starting to swing back the other way. Among the few exceptions to this rule are the *Sonatas and Partitas for solo violin* by Bach; the yardstick for performances of this music remain with greats of the past like Heifetz, Grumiaux, and of course Nathan Milstein. His 1975 set for DG has long been regarded as a classic. He brings secure technique and artistic maturity to a strongly focussed interpretation of the music. The playing is sensitive yet muscular, with rhythms strongly portrayed and a supple yet virile tone. He's equal to the artistic and spiritual challenges of these great works, and the playing carries great conviction. In 1975, DG's recording was state-of-the-art technically, and it still sounds well - rich, powerful, clean - with the violin set at middle distance in a bright spacious acoustic. Many regard this set as Milstein's crowning glory, and it's a great pity that he recorded so little after it was released.

JMH



# VINYLL HOLD-OUT

by Roy Gregory and Reuben Parry

## Dynasty

### Acoustic Sounds and Analogue Productions

Most of the more recent audiophile re-issue labels are built on the basis of a single core product: Speakers Corner are synonymous with the Decca SXLs, Classic Records with RCA Living Stereos, Testament with the golden age of EMI. Given the nature of licensing deals, it's not hard to work out why. Having jumped through the many and various hoops required by a major record company before it's prepared to allow access to its precious master tapes, it seems only logical to mine the (hopefully) rich seam revealed. Certainly, when it comes to established audiophile favourites like the SXL 2000s or Living Stereos, then the choice on offer must seem so dazzlingly wide that the notion of looking elsewhere probably doesn't even occur.

But this is clearly not the case with Analogue Productions, who seem to have drawn their recordings from the four corners of the known universe. And not only do they re-issue records, they make their own recordings too.

Perhaps the easiest way to

understand the differences in the Analogue Productions approach is to look at the company's roots. Owner Chad Kassem's involvement with audiophile vinyl started when he saw an advert remaindering the entire stock of Mobile Fidelity Sound Labs audiophile pressings (the first time around in 1986). Seeing opportunity he bought the lot and advertised them mail order in the specialist audio press, packing and despatching at night while he carried on the day job. The demand was astonishing, soon outstripping his fledgling operation, and so Acoustic Sounds was born as a full time occupation, a company which in turn gave birth to its own re-issue label, Analogue Productions in 1991. Nobody, least of all Chad, could predict the size of the iceberg associated with that modest tip.

Acoustic Sounds got into vinyl just as everyone else was bailing out. From Mo-Fi the company graduated to importing and selling audiophile recordings and re-issues from all over the world. To a company intent on

drawing fine recordings to the attention of discerning customers, its own re-issue programme was a logical extension of these activities. And given the model of Mobile Fidelity, it was hardly surprising that Chad simply went after choice recordings, wherever they came from. Of course, you don't get everything you ask for, but the Analogue Productions' catalogue is testament to the range and quality of the tapes he did get hold of. Indeed, such is the obsession with pressing quality that Acoustic Sounds runs its own mastering facility, Acoustic Mastering, in association with RTI, and based at their premises.

Never one to let the grass grow under his feet, Chad's next project was the 'budget audiophile' Revival series. At two-thirds of the weight and half the price of \$30, 180g pressings, the light-weights gave little away in sound quality, and made a lot of friends, introducing an awful lot of sceptics to the benefits of well turned out re-issues. But the re-issue

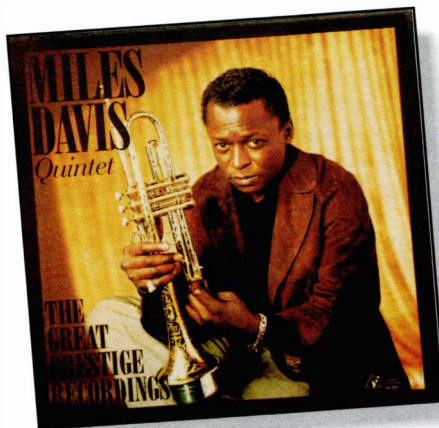
► programme really came to a climax with the appearance of the Miles Davis and Thelonius Monk box sets. These beautifully packaged, multi-180g pressings set new standards for presentation and ambition in the realm of vinyl re-issues. Real music on great records, with informative and elegant full-size booklets, these are a far cry from the scandalous Mercury episode in which the limited number of titles re-issued by Classic Records were selected for audiophile credibility rather than musical merit. *Balalaika Favourites* anyone?

The purchase of a disused church heralded the next step forward. Originally intended as additional storage space, some bright spark suggested that it would make a great studio. The rest, as they say is history, with Analogue Productions applying its considerable expertise in pressing records to new recordings of some of the legendary names in Blues. Latest addition to the array of professional and audiophile equipment gracing the control and listening rooms? A cutting lathe allowing experiments with direct to disc recordings. That might seem like analogue purism gone mad, but Acoustic Sounds are nothing if not commercially aware. Look at their listings for recent releases on 180g vinyl, and you'll see that they're available on DVD releases too. That's 24 bit / 96KHz sound, with realtime pictures too. The video teams work around the recording to bring you 'live' footage. Now that represents a sensible application of DVD technology!

The Analogue Productions catalogue is too vast to do justice to in a single column, or arguably with a single reviewer. In this Issue we'll take a look at the full-price 180g re-issues; we'll save the Revival series and the original recordings for the next column, and at the same time we'll take a closer look at the church.

## The Recordings

One of the great things about the Analogue Productions catalogue is the way it draws from such disparate sources. Although there are

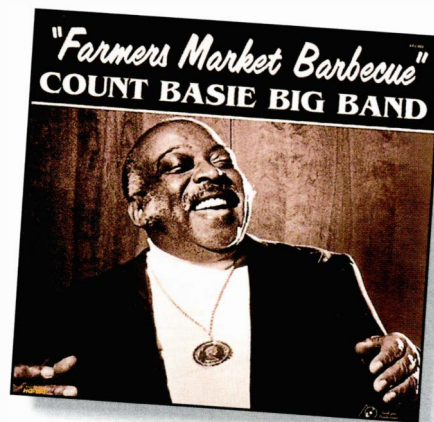


audiophile favourites amongst the titles, they are heavily out-numbered by less recognisable recordings. Time too, presents no barrier, with recordings from the fifties rubbing shoulders with albums recorded in the last few years. Music is the thing here, and "hi-fi spectacular for the hell of it" recordings are refreshingly few and far between. By way of a brief tour through some of the many and various recordings, and types of recordings on offer, here's a selection of our favourites.

I make no apologies for starting with a record that we've reviewed before, and that seems to crop up constantly in the equipment reviews as well. Count Basie's *Farmers Market Barbeque* (APJ 023) was recorded in 1982, well outside the golden years, and if it lacks the absolute spatial coherence of a minimally miked recording, it more than makes up for it with the tight musical coherence and dynamic impact of a great band on top form. The brass playing, solo and en masse, makes the most of this shop window, and the Count's easy, unforced playing creates the perfect

opportunity. Think of this as small group jazz with the option of extra scale and you'll get the picture. Basie directs his forces with care, which makes their impact that much greater when he wants it.

The fabulous solos of 'St Louis Blues' will give you the idea, as will the enthusiastic ensemble playing of 'Way Out Basie', built over the Count's insistent right hand. But for me, the brilliantly contrived fractured rhythm of 'Beaver Junction' encapsulates the musical brilliance of this recording. To take something so apparently clumsy and awkward that it sounds like a mistake, and weave it into something so musically satisfying is wonderful indeed. And if your record player rounds the edges on the opening phrase, smoothing and reshaping its jagged staccato line, then look to the dynamic tracking limitations of your front end. There's



an awful lot of players that do just that. And a lot of listeners who are losing their music in the process.

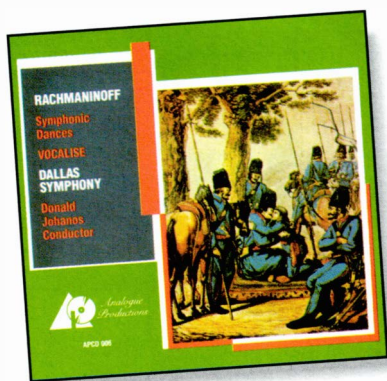
Janis Ian is hardly unknown to the audiophile community, and her gentle melodies and simple arrangements have always suited systems well. *Breaking Silence* (APP 027) was recorded in 1992, and a glance at the sleeve notes tells you that sonically this should be something special. ►

▶ About as purist as studio recordings get, the cast list is a who's who of audiophile record labels, which means you get the deep, taut bass and crisp, quick percussion you might expect. The beauty of the whole thing is



that you also get a harder edge to the songs. Ian's wistful vocals, so familiar from *Aftertones* and *Between the Lines* take on a world that's a cold and nasty place, making warmth that much more valuable.

The precise and beautifully recorded rhythm patterns leave plenty of space for the vocals (recorded direct to two track) and instrumentation comes and goes as required. There's greater



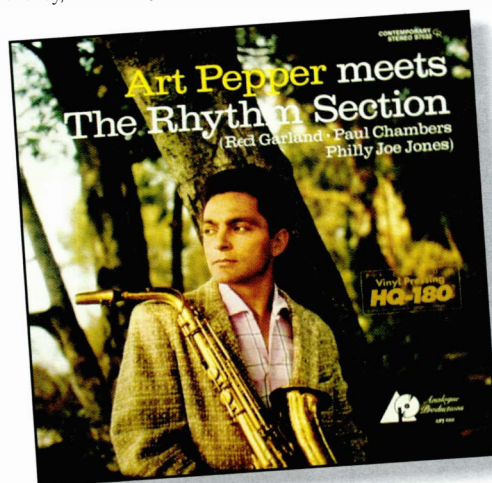
musical dimension here, with the bluesy glide of 'His Hands' accompanied by the solo piano of 'Some People's Lives' and the almost Suzanne Vega pop-beat of 'Walking on Sacred Ground'. Above it all soars

that wonderful, wry voice, bruised like a peach, and treated with equal care. The recording allows the music space and air to breath, the result is a great pop record.

Which brings us to *Art Pepper Meets The Rhythm Section* (APJ 010), an audiophile standard if ever there was one. Recorded in 1957, the sound is distinctly left and right - Pepper on the left and everyone else on the right. Mind you, the everyone else in question is Red Garland, Paul Chambers and Philly Joe Jones, a scant couple of years after their time with the Miles Davis Quintet. Their combination with Pepper's easy, extended lines is intuitive, and the soloist (perhaps a little in awe?) leaves them plenty of space. The results are outstanding; just listen to the phrasing on 'Red Pepper Blues'. The bass is secure but nicely rounded, the drums are crisp and Garland's piano alternates between its laid back supporting role and a more insistent, stabbing style when he pushes the pace and direction. Over it all floats Pepper's effortless blowing, isolated by the recording, but wonderfully real. Purists may prefer something a little more challenging, but this record's success as a demo piece is ensured by that sax and the tunes it's playing. Jazz with tunes? Now there's a thing.

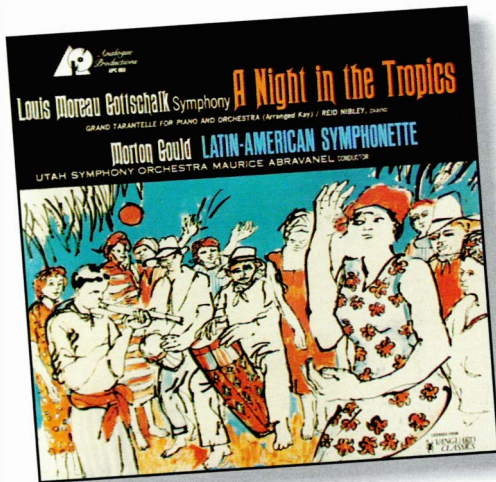
The Analogue Productions 180g pressing easily betters both an early edition and a later re-issue in my collection. The sax comes up at once sweeter and more immediate, and pitch definition on bass solos is also better. Garlands piano loses some of the 'plinky' quality from the original, sounding a lot less like an upright, more like a baby grand. As usual, AP's surfaces are exemplary, and this is a welcome re-issue of an old favourite.

Drawn primarily from the Turnabout and Vanguard back catalogues, Chad Kassem's selection of classical titles understandably reflects the vibrant and diverse nature of his Country's classical heritage. Populist works by Anderson, Copland, Gottschalk, Gould, Ives, Menotti and Thomson are, however, supplemented and even eclipsed by French and Russian pieces. At least two of these releases earn a "must own" epithet. They are, of course, an incomparable *Songs of the Auvergne* APC 002 and the sparkling Johanos/Dallas recording of Rachmaninov's *Symphonic Dances* APCD 006.



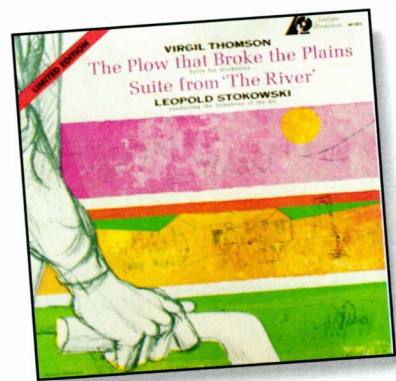
Canteloube's arrangement of these French folk tunes (reviewed in issue 3 of Hi-Fi +) as sung by Netania Davrath has an authenticity, tonal purity and old-fashioned loveliness that never ceases to amaze me with its many unsurpassed exquisite moments.

Cowboys from the Dallas Symphony excelling at Eastern European repertoire would to many appear incongruous but, in this reissue of their famous 1967 Turnabout performance, they bring a vitality to proceedings that is sometimes forgotten during more recent, over sophisticated, approaches. For those wanting the poetry of Sergei Rachmaninov look no further than a decent set of the Piano Concertos. ▶



Depression is the most intriguing. *The River* and *Plow That Broke The Plains* AP001 were written as an accompaniment to U.S. Government Documentaries. Pruning them into orchestral suites and engaging the renown interpretative abilities of Leopold Stokowski was a masterstroke that fully realises the colourful melodic and rhythmic potential found in themes

representing the Mississippi Valley and Mid-West Dust Bowls. A contrapuntal interplay of folk tunes, Civil War flag wavers like 'Dixie' and 'Rose of Alabama', and the kind of introspective mood associated with the music of Satie and Ravel, gives these Suites an incredible sense of poignancy. Again, the transfer of these early Sixties Vanguard Manhattan Center tapes is a real joy. Detailed and



transparent. Accurate and tonally neutral. This LP speaks volumes for Analogue Productions' long held remastering skills.

Serious consideration should also be given to Morton Gould's *Latin-American Symphonette* APC 003. An imaginative and now topical swing through New World dance forms wittily mimics within its four movements the Rhumba, Conga, Guaracha and seductive Tango. Maurice Abravanel and his Utah Symphony players embellish these exaggerated rhythms with a torrent of Spanish-sounding effects where the instrumental separation is so fine that none of those more subtle touches, like a brush of the tambourine or fading chimes, escapes the listener. Sometimes it's this simple act of doing the small things well that makes a recording truly memorable - Chad and Doug Sax never lose sight of the minutiae no matter how big their orchestral canvas.

▶ The rough-and-tumble of the *Symphonic Dances* is a much freer experience, where perfect orchestral technique and precise interpretations are not necessarily the final word. Exacting conductors seem to constrict the musical flow. Contrastingly, this is a CD brimming over with excitement and enthusiasm that just happens to be a great advert for orchestral recording dynamics. The quiet prelude to the big climaxes is impressive enough, yet even a familiarity with this work does not quite prepare you for the gut-wrenching and ear-popping detonations originally engineered at McFarlin Auditorium by David Hancock. His *Vocalise OP34* is an acceptable filler, but its not as good as the Previn/LSO account re-released by Alto, ASD 3284.

Of the American music, Virgil Thomson's depiction of those turbulent times around the Great



### Count Basic

Farmers Market Barbeque



2

### Art Pepper

Art Pepper Meets The Rhythm Section



4

### Thomson

The River, The Plough That Broke The Plains



1

### Janis Ian

Breaking Silence



### Rachmaninov

Symphonic Dances



5

### Gould

Latin American Symphonette



2

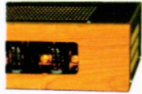


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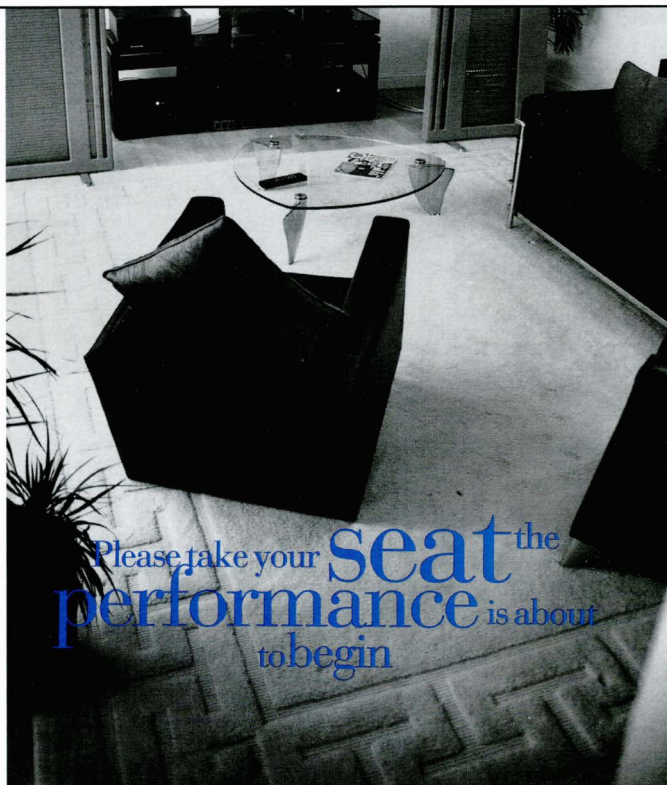
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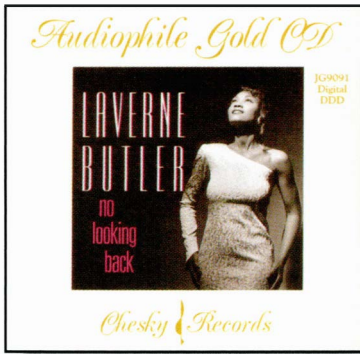


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Laverne Butler

No Looking Back

CHESKY JD 91 

As she caressed, 'I Cover The Waterfront', I just knew I wanted this woman to gently whisper to me "I've been very naughty and I want to be spanked" in that same rich, rhythmic and completely seductive night club style of hers. In spontaneously teasing out such thoughts through an easy, unforced, vocal simplicity she goes on to prove that Laverne Butler and jazz were made for one another. Their bodies intertwine with an intimacy of old lovers and Mike Renzi's sympathetic arrangements touchingly enhance that sense of sexual chemistry that has always existed between this medium and its divas.

The Bosa Nova of 'Speak Low', swinging renditions of 'Make Me A Rainbow' and 'Come Fly With Me', and of course that sultry sway of the hips along 'The Waterfront', shows off her versatility as a singer. Plenty of attractive improvisation and imaginative scats reveal what a fine ear Laverne possesses for ensemble work. Tracks with Renzi on piano and Joe Henderson, drawing deep from his tenor sax, deliver classic moments of interaction as Butler's phrasing accentuates the beautiful melodies of these songs. This, and the warmth and hour-glass accuracy of Bob Katz's recording are good reasons not to let this CD slip through your fingers.



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RECORDING	
MUSIC	



Tchaikovsky  
Symphony No. 4

George Szell/LSO

King Super Analogue KJJC 9170  

Availability of King LPs is the Achilles' heel. Frustratingly, demand often outstrips supply, but this should not be used as an excuse to neglect releases of immense musical significance. An electrifying reading of the *F Minor Symphony* is a case in point. Though taped for DECCA in 1962, it was only released some nine years later after Szell's death. Generally, the clarinet error of the First Movement is thought responsible for this hiatus. No, it is more an instance of pique and the power of the conductor coming to the fore.


Performed in concert the previous evening, this scheduled Walthamstow recording was dominated by a furious George Szell, who discovered that because of the deputy system many of those LSO musicians were replaced by session players. His humour was not improved as a mischievous John Culshaw kept the controls modestly low at the first playback. A lacklustre sound propelled him to the podium. His unflinching control, in this now highly-charged atmosphere, is remarkable. It certainly transmitted itself to an orchestra whose virtuosity and sheer dynamism reveals a delicacy of touch and degree of beauty rarely developed in an interpretation with this momentum. Excellent production values complement a record full of personality.

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RECORDING	
MUSIC	



Die Rohre - The Tube  
Works by Corelli, Vivaldi,  
Boccherini etc.  
Stuttgarter Kammerorchester

Tacet L74 

This is the second of the Tacet LPs (see *Das Mikrophon*) and is subtitled "No conductor, no semi-conductor". As a collection of chamber music, the lack of a conductor needs little explanation, however, the absence of semi-conductors is extremely unusual. What Tacet have done is assembled an entire purist recording and cutting chain which relies exclusively on valve technology. To this end they enlisted the aid of our old friend Wilfried Zahn, responsible for cutting the fabulous Analogue Audio Association records (see Issue 2). The results this time round exceed even his earlier efforts, presumably helped by Tacet's insistence on a single layer plating process in production (most stampers are plated with three layers).

Of course all this would be irrelevant if the record was musically worthless, but that couldn't be further from the truth. Stuttgarter Kammerorchester's performance is fantastic; lively and full of colour. The Corelli and Boccherini are particular highlights, and whilst I'm pre-disposed to chamber music, I can't see anybody being anything but spellbound by this recording. Whether you are a tube advocate or not, you should certainly hear this, if only to come to the sobering realisation of just how abysmal most recordings really are. Buy it while you still can.

RG  
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RECORDING	
MUSIC	



Coleman Hawkins & Clark Terry

'Back in Bean's Bag'

Columbia/ Classic CS8791 **180g**

Pairing these two greats of the tenor and trumpet was pretty much bound to result in a fine session, and this 'six-eye' re-pressing by Classic was well worth the effort. Supported by Tommy Flanagan, Dave Bailey and Major Holley this is a fine well-recorded session. Nobody's trying too hard, just relaxing into the music and having a great time. Although the two headliners dominate, with fine playing throughout, the support is equally strong. In the first number 'A Tune For The Tutor' Flanagan's piano work really drives the number ahead. A bonus for me is Holley's 'sing-along' bass playing on 'Just Squeeze Me (But Don't Tease Me)' where he mirrors his fast plucked notes with what I can only describe as nasal humming. Distinctive is probably the right description, or perhaps weird, but it gets me every time! Most of the 6 numbers are fast paced, but there are a couple of ballads, with 'Michelle' (no, not that one), standing out as a solo set for Hawkins, emphasising his fine, breathy tones. Recording quality is excellent, just a little soft in the low end, with good staging, real character coming across from each well-defined player, and plenty of attack. The pressing quality is up to Classics best standards.

DD

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Johanna Martzy/Jean Antonietti

Favourite Short Works

Coup d'Archet COUP 006 **180g**

Another disc of previously unreleased material from the fabulous Johanna Martzy. Like the previous issues from Coup d'Archet, this is culled from live broadcast tapes discovered at European radio stations, dating in this instance from 1966, '62, '55 and '51. Despite the varied recording dates, sound is surprisingly consistent within the two sides, although for me side one (from Deutschland Radio, Berlin) shades it in terms of overall sound and programme. The Handel *Sonata in A Major, op.1 no.3* is supported by short pieces from Falla, Beethoven/Kreisler, Fiocco and Ravel. The standout is Falla's *Danza Espagnola*, but the repertoire is varied enough to catch anybody's attention. The playing is classical Martzy; direct, purposeful and beautifully poised, yet always putting the music first. The whole performance is refreshingly devoid of obvious pyrotechnics, and long time accompanist Antonietti provides a nicely weighted and balanced foundation. With side two providing another Handel *Sonata* alongside works from Martinu, Milhaud and Bartok/Szigeti in a closer and more immediate recording style, this disc serves as the perfect introduction to both Martzy and Coup d'Archet. Brilliant stuff, but where next for our intrepid archaeologist?

RG

Coup d'Archet: (44)(0)121-440-8616



Jimmy Smith

'The Cat'

Speakers Corner Verve V6-8587 **180g**

Welcome to the '60's. Forget Austin Powers, this album absolutely reeks of authentic (US) '60's atmosphere. Why it doesn't feature James Coburn or maybe George Peppard on the sleeve escapes me 'cos it sounds an awful lot like their kind of soundtrack. In fact the album does include two authentic movie numbers: the title track which is from 'Joy House' (remember that anyone?), and the main theme from 'The Carpetbaggers' which will be immediately familiar to anyone who knows *The Money Programme*. That said, and assuming you're into lounge rather than jazz, the playing can't be faulted. Backed by 'swingin' arrangements, which are, it has to be admitted, great examples of their kind, Smith's Hammond dominates, and boy can he play it well! It's just that it's enjoyable but it 'aint jazz and I prefer my Jimmy Smith a bit earthier. Try *Back at the Chicken Shack* for instance. The recording quality is good, given proper emphasis to the rounded tones and percussive keystrokes of Smith's organ, and with plenty of headroom for the frequent brass crescendos. Don't let my jazz snobbery put you off, if you're as old as me, get those flares out and settle down for 33 minutes of cheesy nostalgia.

DD

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# The Master's Voice

## - finding your way round the EMI ASDs

by Simon Groome

Along with Decca, HMV/EMI have long been associated with the pinnacle of British classical record production. And like Decca, with their SXLs, their best achievements were grouped into a single series of recordings, spanning about 25 years.

EMI's ASD series of recordings started with the advent of stereo back in 1958, with Beecham's Scheherazade ASD 251, and continued well into the 1980's, and the digital era. This longevity, combined with extremely popular performers like Beecham, Barbirolli, Du Pre, Menuhin and Previn, make some of these among the most accessible and affordable of audiophile pressings. Walk into any charity shop or second-hand record dealer and you will soon find an ASD pressing. The problem lies in identifying exactly what you have found. With a roster of major recording stars, some of these recordings remained in EMI's catalogue for many years, and it is essential to identify early pressings of a recording if you want the best sound quality. Fortunately, like any long running series, the label of the ASD series evolved over time, and with a little knowledge and the record's catalogue number you can easily establish how your particular example appeared in the production cycle.

The ASDs can be broken down

into two numerical series, four chronological periods, and six labels. The "three digit" series runs from ASD 251 to ASD 655. This was followed by the "four digit" series that ran from ASD 2251 to mid 4000s. How these numerical series relate to the different and sometimes subtle variations of the labels, and fit into the broad chronological periods, is laid out in the diagram below. But to start, it is best to cast a beady eye over and get familiar with the six different labels.

### 1st Label:

"White and Gold" - This label, as implied, is white with a gold outer circular band, and lettering of gold and red. This is the first label for issues up to ASD 575. I have seen this label on later issues but have found them to be New Zealand pressings.

### 2nd Label:

"Black and Red Dog" or "Dog in Semicircle" - This is a predominately red label with black lettering and a large semicircular picture of 'Nipper' with "His Masters Voice" in white around the upper perimeter. This is the first label for issues after ASD 575 up until around ASD 2480.

### 3rd Label:

The 3rd, 4th, and 5th labels are all similar featuring a picture of 'Nipper'

in a small rectangle. On the 3rd label this picture is coloured, while round the circumference of the label there is copyright lettering but no solid white band, as on the later labels. This is the first label after around ASD 2480 to approximately ASD 2780, and is commonly referred to as "Coloured dog".

### 4th Label:

On the 4th label the picture of 'Nipper' is black and white and there is a white band around the circumference of the label. This label is usually called "Grey Dog" and is the first label from approximately ASD 2780 to around 3800.

### 5th Label:

The 5th label returns to the coloured rectangle of the 3rd label, but the picture has nothing like the same definition as the earlier label. This time there is a solid white band around the circumference. The "Coloured Dog with Border" label is the first issue for recordings from around ASD 3800 to around ASD 4000.

### 6th Label:

This was introduced in the 1980's and is a revised style of the 2nd label, although the semicircle containing 'Nipper' is larger and fills the whole upper half of the label. The words

Label 6  
Label 5  
Label 4  
Label 3  
Label 2  
Label 1

4th ERA  
3rd ERA  
2nd ERA  
1st ERA

985



1980



975

1970



965

1960



1955

▶ “His Masters Voice” are now printed inside the picture area. This label is usually referred to as “Large Dog” and is the first label for the very latest ASD releases.

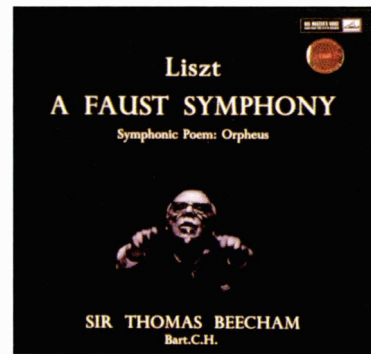
As I suggested earlier, the real beauty of the ASD recordings lies in the wonderful array of performers, conductors and great orchestras that were signed to EMI at the time. The company acknowledged this itself and printed lists on their inner sleeves in the 1960’s, to advertise the fact. With artists of the calibre of Janet Baker, Barenboim, Fischer-Dieskau, Pollini, Richter, and Tortelier appearing on their recordings, EMI had a right to be proud. But unlike most records released during the same period by some of their competitors, the EMI issues were consistently well recorded. Rarely do these recordings disappoint, and in amongst them are plenty of absolute gems, discs that appear regularly on various lists of audiophile collectibles and “super discs”. The catalogue is particularly strong in English music, especially the Vaughan Williams *Symphonies* and Choral Music by Boult and Willcocks. Other strong cycles come from David Munrow and the Early Music Consort of London, Berglund and the Bournemouth Symphony Orchestra (Sibelius and Shostakovich), Fremaux’s Birmingham recordings, and Previn’s great readings of Rachmaninov and Shostakovich, all of which combine excellent sound quality with superb performances. There are also recordings with orchestras such as the great Philharmonia of the late 1950s and early 1960s, the BPO, LSO, RPO and VPO, conducted by such greats as Karajan, Kempe, Kletzki, and Schuricht. There is much in this series to tempt even the most jaded collector.

Naturally, EMI’s sound evolved across the 25 years of the ASD series, but for simplicity we can break it down into four basic periods.

## 1. The Early Stereo Era

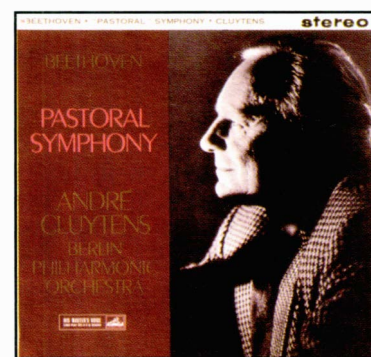
This consists of the recordings with three-digit catalogue numbers, dating from the period 1958 to 1964. These recordings vary between fair and superb. They could be described as the vinyl equivalent of the Quad ESL63 - with a wonderful, lucid and natural mid-band, but a shade lacking at the extremes. These recordings used simple microphone techniques, which are responsible for a warm balance and plenty of hall ambience, with little details, like music stands being knocked, adding to the atmosphere of a live performance. Some recordings were made in the Kingsway Hall and you can occasionally hear the Central Line’s subterranean rumblings in the background. Most pressings exhibit a slight lack of dynamic range, compared to those of Decca or RCA, due to HMV’s decision to cut at a lower level in order to assist the cartridge tracking. However, a sure indication that a record is well produced is its ability to reveal more information each time that the cartridge or another component is upgraded, as has happened with my collection of these pressings over the years. Many of these recordings were performed in a style that may never be repeated - there was no such thing as authentic performances at this time – with recordings such as Beecham’s tremendous Haydn *Symphonies 99-104* ASD 339-41 sounding more like Beethoven than the Haydn that many readers will know today. Some of these records are very rare and therefore sought-after, with prices varying between around £15 up to the cost of ASD 429, the famous De Vito recording of Bach/Mozart. This item is so rare that copies change hands for about £2000.

## Recommended recordings:



ASD 317/8 - Liszt: A Faust Symphony/Orpheus - RPO, Beecham

Recorded at the Kingsway Hall in 1958, this is one of the great performances of the early years of stereo. The playing of the RPO is beautiful, with an opulent string quality making the tones wonderfully natural. There is a large soundstage; deep and wide, with the individual instruments well defined and placed realistically within. Every time I hear this performance, I am astonished by the quality of the recording - even the dynamic range is pretty good for its age. Fairly rare but certainly a “must buy” if you see a copy.



ASD 433 - Beethoven: “Pastoral” Symphony - BPO, Cluytens

This warm and atmospheric reading is one of the two outstanding performances committed to record. But the sound quality is much

▶ better than Boehm's on DG, with a kind of luminosity that is warm, yet clear. Cluytens produces a spontaneity that makes you feel you are listening to a live performance, and it is both joyous and compelling. This is a delightful album that you will play again and again. Kubelik and the RPO also recorded a "Pastoral" (on ASD 349) that represents such a fast trip through the countryside that most of nature is missed. It is wonderfully exciting but not a first choice, and very hard to find.



ASD 468 - Sibelius: Symphony No. 7/Pelleas & Melisande/Oceanides - RPO, Beecham

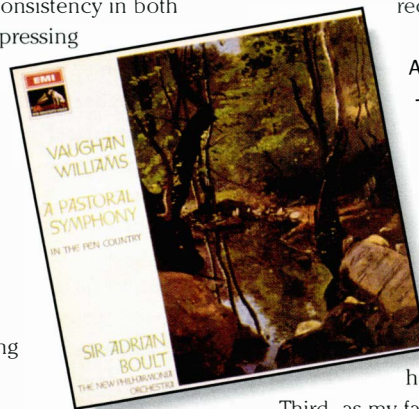
This was the first recorded performance of The Oceanides - recorded by Beecham at the request of the composer - and is still the one to beat. It is a wonderful performance and worth the cost of the LP alone. Along with an outstanding Pelleas & Melisande, and an excellent 7th Symphony, it is a superb record that should be owned by one and all. The sound is very good, without being exceptional - detailed with plenty of nuances, but lacking in dynamic range.

## 2. The Late 1960's - 1964 to 1970

The catalogue numbers for this era are from ASD 2251 to around ASD 2650. The records produced by EMI during this period had better pressings than had previously been produced, with the recordings have a more vivid sound and are more dynamic. Due to the use of more microphones, and more recordings being made in the Abbey Road studios, there is slightly less hall ambience on some of the

records. Generally these records are up there with the best issued at the time, including those of Decca. There are some wonderful recordings to be found here, including those performed by great conductors such as Barbirolli and Boult. The co-operation between HMV and Melodiya, of the USSR, released a large number of British pressings of records by performers like Kondrashin, Kogan, Maxim Shostakovich, Svetlanov, and the Oistrakhs, and there

are also some reissues of many of Klemperer's Columbia recordings. Apart from one or two rarities, prices are less than the first issues, and are usually in the £10 to £40 region. Due to better consistency in both recording and pressing quality, plus the easier availability and better value of the records, it is for these releases that I recommend you start looking before you embark on a collection of the earlier recordings.



ASD 2393 - Vaughan Williams: A Pastoral Symphony/ In the Fen Country - Philharmonia, Boult, Price

## Recommended recordings:



ASD 2315 - Stravinsky:

The Rite of Spring/Prokofiev: "Classical" Symphony - New Philharmonia, Fruhbeck de Burgos

A performance of the Rite that is vivid and exciting, with big, atmospheric sound to match. There is a monolithic quality to the reading, which is authoritative and uniquely compelling among the *Rites* in my collection, with a relentless rhythmic urgency. With an imaginative and sparkling reading of Prokofiev's *1st Symphony*, this record should be snapped up when seen, although it is not one of the easiest to find. There is also a great performance by Markevitch and the Philharmonia of the *Rite* - ASD 313 - but it is generally too rare and expensive to be a first recommendation.

I love Boult's Vaughan Williams *Symphonies* but have chosen this, the Third, as my favourite. All recordings in the series have outstanding sound. Boult manages a blend of restraint ▶

▶ and intensity while Margaret Price's wordless singing is excellently blended into the whole. All of these Vaughan Williams *Symphonies* should be collected for both sound and performance, and are fairly easy to find.



ASD 2518/9 - Mahler: Symphony No.5/5 Ruckert Lieder - New Philharmonia O, Barbirolli, Baker

This recording is one of the outstanding performances of the gramophone. It is way ahead of any other *Mahler 5th*, with the dramatic thrills of a live performance, and the bonus of great sound. Barbirolli was always a great Mahlerian, and you should also look out for the earlier and rarer *6th* ASD2376/7 and *9th* ASD 596/7, yet this is his supreme achievement. His tempi seem just right and the whole recording has the power that is required of the piece. *The Rückert Lieder*, with Janet Baker, are a beautiful and poetic bonus. A "must have" for any serious collector.

### 3.1970 to 1983

The recordings from around ASD 2650 to about ASD 4300 are the place to start for an audiophile collector. Generally these recordings are superb, and are at least the equivalent of

anything else being produced at the time. EMI were now producing faultless pressings (at least until about 1980 when the vinyl started to get a bit thin) and the sounds the producers and engineers captured are detailed and dynamic, with big soundstages. In fact many are very true to the actual sound of a live orchestra. Listening to Dukas' *The Sorcerer's Apprentice* from Andre Previn's Music Night ASD 3131, is the closest I can get to hearing the wonderful LSO in full flight without visiting

the Barbican Hall. Many releases of this period have appeared over the years on Harry Pearson's "Super Disc List", and deservedly so. But this has caused a problem. Even though very few of these recordings are rare, the audiophile market has pushed up prices, especially those that have appeared on audiophile lists. As a result, I have found that prices vary more with these records than with those from other periods, but if you shop around carefully there are also some wonderful bargains to be found. Prices go from around £5 to £25, with some dealers charging double or more for the "Super Disc" listed recordings. Even if the sound quality steals the show with many of these recordings, there are also many good performances. Look out for those featuring conductors like Berglund, Fremaux, Groves, Martinon, Previn, and the occasional performance by Muti.

### Recommendations include:



ASD 2782 - Paganini: Violin Concerto No. 1/Sarasate: Carmen Fantasy - Perlman, RPO, Foster

Playing of panache, and a wonderful and assured technique make this a "must have" recording for any serious record collector. This record is one of the most compelling I have ever heard. It will delight all, and with a splendid, well-balanced recording, should appeal to the audiophile also.



ASD 2917 - Shostakovich: Symphony No. 8 - LSO, Previn

A dark, intense work inspired by the sufferings of the Russian people during the Second World War. Previn guides the LSO to brilliant and intense playing that matches the mood perfectly. The recording is outstanding - as were most produced by Christopher Bishop and Christopher Parker - being vivid and rich. ▶



- All the Previn's Shostakovich releases are worth exploring and are easy to find at low prices.



ASD 3002 - Holst: *The Planets*  
- LSO, Previn

This recording has become an audiophile "must have". The performance is *The Planets* to have, with superb playing by the LSO. Previn produces a kind of freshness to a well-known composition, and is leagues ahead of the other "TAS List" *Planets* from Decca, which I find very disappointing. The sound, by Bishop and Parker, is clear and vivid, with all the subtleties and detail required of the piece. Excellent all round and fairly easy to find, but do not pay too much.



ASD 3763 - Mendelssohn:  
*Symphony No. 4/The Hebrides/Ruy Blas/A Midsummer Night's Dream* - LSO, Previn

Previn is excellent on all the Mendelssohn I have heard and nowhere more so than here. The "*Italian*". *Symphony* is Mendelssohn's best loved and Previn gives it an affectionate performance. As usual, the LSO playing is superb. The sound is excellent, being another Bishop/Parker collaboration.

#### 4. The digital age

I am not a great fan of digital recordings and still feel that analogue records sound truer to the original performance. The early EMI efforts sound harsh and brittle compared to earlier releases. I do not purchase digital recordings for their sound quality, but I recommend you look for records issued during this period with conductors such as Previn and Tennstedt, for their top quality performances. It is still better to have a great performance on a digital recording than not have it at all. Prices run from £5 to about £15.

#### Angels in Boxes

The prices I have quoted are representative of those found in dealers in and around London. Some dealers charge more in the centre of London where many collectors visit from Europe, the Far East or USA, so it is unfortunate that these are the dealers where you may find it easiest to get hold of the rarest records. You may be lucky and find good pressings in charity shops or at car boot sales, but I am finding this increasingly rare, as dealers now have good contacts with such sources.

There are also a few other EMI classical releases outside the ASD series that should be investigated. These include the CSD series, which were issued by EMI for material that was regarded as being of a lighter nature, the SAN (HMV Angel Series) for vocal performances, and the SLS

(Stereo Library Series) which were the classical boxed sets issued by EMI, and including many of the earlier sets of ASD recordings, with some being given both ASD and SLS catalogue numbers. The SLS box sets are particularly worthwhile as they often contain some records that have been barely played, as well as covering some of EMI's most successful cycles. The quality among the other series is again very good in both performance and sound, and there are some very collectable records to be found. But the story of these recordings is a whole item in itself and will have to wait for a future issue

Many of these recordings have been reissued on EMI's Concert Classics or Classics for Pleasure labels. If investigating these records my advice would be to go for the label of royal blue with white writing, for the Concert Classics, and the black with a white square label for the Classics for Pleasure. These are the two first labels, and the pressings should be closer to those of the original release. The World Record Club also reissued some EMI recordings. Any of these would keep costs down. I rarely find a reissue that sounds as good as the original, but there are exceptions. As an example I will point out that a World Record Club reissue and a "White and Gold" original of the very rare, and wonderful ASD 379, Kempe, BPO *Tchaikovsky 5th* I owned, had almost identical stamper numbers, with no marked loss in sound quality. So many of these reissues can hold true bargains, especially when pressed from EMI's original stampers.

The ASD records are a great series of classical recordings and include some absolute treasures – in both sound and performance. For those who have not come across them before, I urge you to go, discover and enjoy. I know that my collection would have far less essence and soul without these records.





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