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Remembering: Big John Patton's Let 'Em Roll Blue Note 4239

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Design

Creative Byte Poole, Dorset Tel. 01202 690990 E-mail. info@creativebyte.co.uk

Printed By Stones The Printers, Banbury

Hi-Fi+ is published six times a year by; Absolute Multimedia (UK) Ltd

ISSN 1465 5950

Editorial

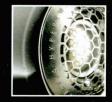
One of the hardest bits of being a hi-fi reviewer is turning over your house, and worse your system, to any visit manufacturer with a pet product and an axe to grind. Ask any member of staff on the magazine and they'll have a horror story of some thick-skinned individual who eventually had to be manually removed from the premises. There are those for whom experience tells you to set strict dead lines and arrange prior engagements to curtail their activities. There are those you swear never to allow across the threshold again.

That's the downside, but there's also a considerable upside: the discs they bring with them to set-up or demonstrate their wares. Of course, these too can be a double-edged sword and there are those misguided souls who seek to influence affairs with the likes of Michael Jackson or Celine Dion. But there are also those who constantly amaze with a string of previously undiscovered musical gems that have you scrabbling for the notebook and making feverish lists. Who do you think gets the better review? Who do you think gets invited back?

So, consider this: next time you have the opportunity to seriously invade a reviewer's privacy (and it's something that happens to manufacturers and public alike); do the decent thing, be honourable and soften the blow with some small, votive offering. Rest assured it will be well received and warm your welcome.

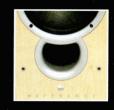
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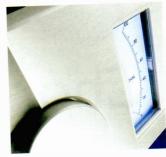
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Dear Sir,

I read Alan Sircom's piece on iPods with interest. In fact it was the last straw, but before I wrote an angry letter on how much your magazine has cost me over the years, I decided to order myself a Stax portable set-up. AS calls this a left-field option. It's not. Search around and you'll find someone has made a prototype portable valve headphone amp. From what I can gather it didn't make it past the prototype stage though.

This sort of hi-fi can be divided into two areas - portable and transportable. The Stax rig sits in between the two. Something like the Ray Samuels Audio Hornet, with its two unit battery powered headphone amp would probably count as transportable. This sort of thing can drive pretty much anything (high-end Grados, Sennheisers etc. – I haven't heard it, but reviews seem to be good).

I would also take issue with the 'older iPods are better' statement which seems to be current in the hi-fi press (and shame on you for being a sheep). A stock iPod with stock earbuds is not hi-fi and shouldn't really be in the hi-fi press: just because they come in the same box doesn't mean you have to consider them as a whole. An iPod with a line-out connection to a decent set of headphones is another matter and the later models sound better than the earlier ones this way, to my ears.

There are various line-outs available, such as the Sendstation Pocketdock and custom cables. I have a 6" custom silver line-out to gold plated 1/8 jack which takes the signal from the docking output to my energiser. It's better than a Pocketdock, but only just. I think there is only so much you can do given all the sludgy electronics between the Wolfson dac and the line-out. If you've got a spare 7" of Valhalla I'm perfectly prepared to test this theory though.

My suggested solution is getting towards left-field: get a Redwine iMod. (I haven't auditioned this, I'm afraid). This is only available on the 4G iPods, which have the best sounding dac (apparently - I'm not sure my ears can detect this) and takes a line out from the dac via two Black Gates to the headphone out. This may well be high-fidelity: a battery powered digital source (no mains agro), only two caps and a headphone socket in the signal path. It's getting close to a straight wire..

Of course you can't use the built-in volume control (ever) and will always have to carry an off-board amp. I'm thinking one of those EAR jobs and a portable generator. Perfect for a caravan.

As members of the Hifi press you have a certain responsibility to members of the public: in this case it happens to be a comparative review of the iMod and a good \$1,000 CD player. I look forward to reading about it in the near future.

Of course this isn't really that left-field... You could always take the digital signal out of your iPod to an off-board dac plus power supply to an off-board amp plus power supply to your Ergo Model Twos (I do actually have a pair of these: the Stax set-up makes them sound a century old). You just need a bigger suitcase when you go on holiday. And shares in Duracell. And a divorce maybe.

Yours

David Watkins,

London and Alresford, Hants

PS: Your article on headphones has been extensively discussed on www.head-fi.org

For your information:

Signal path of iMod:

DAC chip > Black Gate NX Hi-Q caps > output jack (1/8") Signal path for stock 5G line-out:

DAC chip > stock SMD coupling caps > op-amp stage (with resistors in the signal path to set the gain) > stock coupling caps (again), ribbon cable connector, ribbon cable, ribbon cable connector (again), tiny board traces to run down towards the dock connector > series SMD inductors > series resistors > dock connector pins > dock connector adapter.

Ah, the iPod generation; how to harness their enthusiasm to ensure the continued health and well-being of high-quality recorded music? More than Blu-ray, SACD, LCD and all other emergent technological solutions, this is the burning question facing the hi-fi community (those interested in hi-fi and those who make their living from it). It's a field in which the US is considerably further advanced than Europe. With far higher levels of internet access and use, and a far greater acceptance of the home integration concept, it should come as no surprise that the US leads the way when it comes to maximising portable music performance (as well as DVD, PSP etc.) and that the plethora of really quite sophisticated head-phone amp and portable headphone options are predominantly marketed via the web. It is after-all a natural extension of the downloadable music phenomenon.

Well, it's not something to ignore. So saying, JH will shortly be embracing a range of such devices as part of his ongoing headphone survey, including another bite at the Stax in-ear cherry. In this task he'll be aided and abetted by Atul Kanagat, head honcho at Plus Towers and dedicated portable listening aficionado (like I said, it's an American thing). The other issue of course surrounds up-sampling of compressed data files. It's an area we'll be looking into, so watch this space. Ed.

Greetings RSE

Regarding your review of Martzy's Dvorak *Violin Concerto*, I checked my copy of the original UK release and couldn't find the recording date on the sleeve. Mine is a UK Heliodor, stitched sleeve pressing and not the stitched German pressing that you mentioned in your review and I couldn't find recording or issue date on it. On the record itself, the dead marks read "21 9 53". There are also pressing numbers of 081866 & 081867 STS. The Gramophone didn't review it until September 1955. I would ignore whatever it says on the sleeve of your repro-copy and see if the dead marks on your original match mine, which I suspect they do. I also suspect that the original UK Heliodor pressings used the same metal as the German pressings.

I enjoy all your contributions to hi-fi+ very much. I have a substantial, private, classical LP collection here, so if ever you are looking for something, I might have a spare copy. I'm not a dealer. I don't do money.

All good wishes, **Michael Wilcox** Via e-mail.

Dear Sir,

I was reading your article about bi-amping in issue 42. I have two questions :

1: I have two Denon power amps rated at 200w and 160w. I know that you mentioned the use of two identical power amps, but this is all I have to drive my B&W 802s. Can I try them?

2: How can I connect the RCA cables from the pre-amp to two power amps ?

Mamoon Shareef.

Kingdom of Bahrain Via e-mail.

This isn't an ideal situation, but given the drive requirements of the 802s (especially the original version as

opposed to the more recent 802D) it should be well worth experimenting. The first thing that you need to check is that the input sensitivity of both amps is identical. If so, they'll produce identical levels from a shared input and you are in business. Also, because the power output of the amps is not the same you'll need to bi-amp horizontally, rather than vertically as described in the article. This is the procedure:

Assuming that your pre-amp has a single pair of main outputs, you'll need to obtain a 'Y' adaptor that enables you to connect two interconnects into a single socket. There are many available but the easiest source is probably Radio Shack, whose cheap and cheerful version will be perfectly sufficient for experimentation. If you like the results, then you can indulge in something fancier, or have pairs of interconnects re-terminated into a single plug at the send/pre-amp end feeding two plugs at the other.

Switch everything off!

Remove any bridging connections between the terminals on the speakers.

Using your adaptors and two pairs of identical interconnects (type and length) arrange the system as follows:

Connect the left output from the pre-amp to the leftchannel inputs of the two power amps. Now repeat for the right channel.

Next, and again using two pairs of identical speaker cable, connect the left channel output of the 160 Watt amp to the mid/treble terminals of the left-hand speaker. Now connect the left channel output of the 200 Watt amp to the bass terminals on the left-hand speaker.

Repeat for the right-hand channels and speaker. Turn on the pre-amp.

Turn on the 200 Watt power amp and play some music. Check that you are getting only bass from both speakers.

Turn off the 200 Watt amp, turn on the 160 Watt one and again check that the mid and treble of both speakers is working. If so, turn the 200 Watt amp back on and you are ready to play.

That's the basic set-up. Keeping the interconnect and speaker cables identical for all runs is essential to getting proper performance. However, it's entirely possible, depending on the impedance characteristic of the 802s, that the 200 Watt amp might be preferred on the mid and treble, with the 160 on the bass. I'd strongly suggest further experimentation in this regard. This is simply a case of swapping the connections top and bottom at the speaker end. Once again, switch off the amps and repeat the test procedure, as the last thing you want to do is connect the output of one amp to the output of another. Believe me, I've seen it done and it wasn't pretty! Ed.

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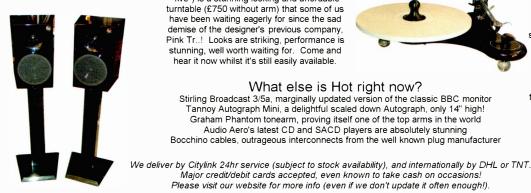
Hørning

The Hørning SATI Ultimate Transference turntable, only just available in the UK shows what can be achieved by a dedicated specialist manufacturer when not constrained by price. As well as being highly exclusive (it is only possible to make very small numbers) this turntable is one of the finest we have ever heard, having a neutrality coupled with incredible detail retrieval which has to be heard to be believed.



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Bocchino cables, outrageous interconnects from the well known plug manufacturer

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The Hørning Sati 300B amplifier (one chassis is the amp, the other the power supply) is equally impressive. Even jaded cynics (like ourselves) will be hugely impressed by the refreshing neutrality (a Hørning trademark) together with the insight available into the performance. We really are very pleased to be able to demonstrate these superb products!





Funk Firm

The new Funk V (V means Vector, not "five") is a stunning looking and affordable turntable (£750 without arm) that some of us have been waiting eagerly for since the sad demise of the designer's previous company, Pink Tr ..! Looks are striking, performance is stunning, well worth waiting for. Come and hear it now whilst it's still easily available.



11 New Quebec St, London W1

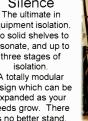
Solid Tech

Radius It looks like other smart modern stands do, until you realise that virtually concealed between shelves and frame is a cunning and flexible adjustable suspension system which really does isolate individual components from each other, and from the outside world!

Solid Tech

What we really don't need is another brand of equipment stand! Agreed, unless it's very special as we believe Swedish made Solid Tech to be.

Solid Tech Rack of





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Review!!'

by Roy Gregory

Hi-fi mags in the UK seem to be becoming increasingly prone to "Scoop Fever". If it's not a World Exclusive then it's the first review in the UK; that makes it an Exclusive too. If everyone else has had a go then hey, make it an Exclusive First Technical Review. Who cares just so long as you can put some natty little eye-catching logo on the cover or the contents page? And whilst you might consider that question rhetorical, think again; I mean it! Who actually cares?

I could be wrong about this but I reckon most readers buy a magazine like Plus (or the competition) because of a general interest in the subject. Do they really buy a mag just because of some Exclusive First Review? A few maybe, but not so that you'd notice. In fact, those brightly coloured Exclusive banners and splashes have got more to do with editorial machismo and the internal industry pecking order than anything else. It's all about saying, "Look at us, aren't we important!" rather than contributing anything to the knowledge base.

Okay, so where's the harm in the odd editorial pissing contest? Well on the face of it it's nothing more than a cause for a little wry amusement, especially when exaggerated claims result in egg on the editorial face. Unfortunately, think about the process and it soon becomes apparent that there's a potentially damaging side to it. Magazines run on extremely rigid schedules; product development doesn't. So what happens when a company misses its delivery date on its latest, greatest product? That's right, the one that's supposed to be gracing the cover of the May issue (or whichever month it happens to be). Suddenly the Editor has a problem; with a hole in his comic as well as on the cover he's under pressure. And what do people do when they're under pressure? Accept things that aren't necessarily sensible. So, suddenly you're into a rush review scenario. You'll only have the product for three days? Fine, just so long as it arrives by Friday. A prototype okay? No problem, just as long as you don't shoot the insides - oh, or the rear panel. But it is representative of production? Yes, yes (as long

as you don't look too closely at a few of the parts). Exaggeration? How about the magazine that wanted a reviewer to produce copy in three days on a company's brand new preamp, a product that doubled the price of their previous top model – and from a brand with notoriously long burn-in and warm-up times. So let me ask you this; you're waiting with baited breath, dying to drop the wrong side of \$10K on this new piece of kit but you'd like a little reassurance in the shape of a review. Under those circumstances would you rather the magazine got it quick or got it right? Because believe

/ me, it's awfully hard to do both...

But besides the temptations and risks inherent in the process of rushing reviews there's another, even more insidious side to this. Consider for a moment the implications

of the reviewer (or editor)

who adopts the "If I can't have it first then I'm not touching it" attitude (last bastion of the seriously crumbling ego). Either the manufacturer surrenders to this barely disguised blackmail, or foregoes a review from that reviewer (which either means

foregoing a review in that magazine, or seriously annoying said prima donna). Consider too the implications if the manufacturer does deliver the product to the reviewer or publication in question. What obligation does that now place on that reviewer or magazine? Assuming they adopt the same attitude with all manufacturers, how does that affect their objectivity and ultimately therefore, their usefulness? After all, how long can each new product continually be the next big thing? Just how many products really warrant such hoopla and hype?

Of course, manufacturers and distributors who indulge in these games ultimately deserve exactly what they inevitably get. Sooner or later the product they've engineered onto the front cover isn't up to scratch and the wheel comes off. Either it gets a mediocre review (they're probably safe from a real panning just because the editor/reviewer wants to save their own face) or the deal falls apart: bruised egos and dark mutterings all round. When they run off to an alternative title with their sob-story you can imagine how much sympathy they receive. And that doesn't help either. The attention paid to and credibility of products gets bent all out of shape. The quality of judgment suffers and ultimately that can only undermine the credibility and usefulness of the magazines and the industry as a whole.

If you think I'm overstating the case, explain to me how all this behind the scenes maneuvering does anything for the reader whatsoever. Building products beyond their capabilities just creates problems for dealers and disappointed purchasers.

Just out of interest (and partly for my own amusement) I counted up how many of the reviews in this issue of Hi-Fi Plus could claim some sort of national or international exclusivity. Of the 15 or so products considered, I reckon that at least nine of them of them qualify for the Exclusive tag. Mind you, that's only a guess, because although I have some idea what's been reviewed elsewhere, I'm far from omnipotent and I've not a clue what will appear between me putting fingers to keyboard and this piece appearing in print. All of which makes sticking Exclusive banners all over the place something of a high-risk strategy on two counts. Not only is it akin to playing editorial Russian Roulette with the magazine's credibility, but anybody who has actually thought about this issue should probably interpret them as reading Avoid Like The Plague.

As an editor, shuffling reviews is a necessary evil. But the situation becomes far more flexible if certain products aren't tied to particular issues or placement. If it arrives late, hold it over for the next issue. If you have unforeseen problems, hold it over. If you need more time, hold it over. Of course, you can't hold over an entire issue, but then, if you aren't under the kind of pressure that exclusivity and a monthly publishing schedule creates, then there are going to be fewer problems anyway. I'd rather wait and get it right rather than rush to judgment – especially given that retractions never carry the same weight as the original statements they seek to correct. A little extra time can go a long, long way... Even then, you can't get it right all the time, but as a reader I'm sure you'd rather have us set that as the goal and then try everything possible to achieve it.

And as to covers? Generally speaking they should pick themselves. Either there's a product whose cover credentials are self-evident, or there's one that'll take a great photograph. Indeed, as far as Plus is concerned it's more often been the latter than the former. Does a product deserve a front-cover just because this is its first review? Personally I think the cover of a magazine needs to say more than that: it needs to tell more people than just those in the know how important the publication is. It needs to say something about the desirability, interest and attraction of hi-fi as a whole and this magazine in particular. It should speak to those in the know, but also to those whose eye it happens to catch. After all, the more people we can attract to the pursuit of audio excellence the better for all of us. Do those chance readers care about Exclusives? Is that a message we want to send? Like I said, better to get it right than get it quick. Life becomes so much easier (and worthwhile) once you treat exclusivity with the contempt ⊳₄₽ it deserves.



by Paul Messenger

Settling down to endure 12 hours in that aging torture chamber, the Boeing 747, I started chatting to a friendly Swede in the next seat. I'd been travelling for three weeks, and he asked me what I was most looking forward to doing when I got home. "Making myself a decent cup of coffee", I surprised myself by replying.

True, I'm as obsessive and pernickety about my coffee as I am over my hi-fi system and music, and do go to extreme lengths in the quest for the ultimate cup, including freshly roasting the green beans, roasting and grinding them. It's also true that travellers today are much better able to get a decent cup of coffee than was the case a decade ago, as today's cafes and bars nearly always have an espresso machine on hand, and these can usually be relied upon to do a pretty decent job. I did therefore enjoy some acceptable coffee on my travels, even if the experience never quite matched what I enjoy at home. And at least the watery and/or stewed-tooblivion concoctions I remember only too well from the 1970s and '80s seem to have disappeared at last: even the cup that finishes off a meal in a good restaurant no longer has to be avoided (even though the accompanying cigar appears doomed). That said, the DIY kettle'n'instant tray provided

 $A \gamma$ e V

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t: 01727 865488 e: info@symmetry-systems.co.uk w: www.symmetry-systems.co.uk even in costly and pretentious hotels remains a blot on our veneer of civilisation – my solution is to slip a carton of Rombouts filters into my luggage, which does at least taste (and smell) bearable before breakfast. No match for the real thing, but bearable under the circumstances.

However, this column is not about coffee. That's just one illustration of a more general observation about critical faculties. Another example came with a bottle of sparkling water from a different brand than the S. Pellegrino that I generally drink at home. I took said bottle with me on a weekend away from home, and found it perfectly drinkable. When I got home and tried to finish it while sitting in my usual comfy chair, I found it surprisingly unpalatable, and wasn't happy until I got back to the familiar taste of my usual brand.

The key point I'm making is that one's judgement and critical faculties are substantially modified by the environmental conditions, and this is even more true where the hi-fi system is concerned. I like going to hi-fi shows and meeting the many fine people that work in our industry. I even quite enjoy trudging down the crowded corridors, in order to visit the various rooms and find out what the manufacturers and distributors are up to – PR people notwithstanding, putting in the legwork is the only way to winkle out much of the interesting stuff in my experience.

But I don't enjoy being dragged into rooms and sat down by an enthusiastic exhibitor, who then plays me a brief snatch of Dire Straits and expects me to pass some kind of judgement on his/her latest widget. Not only will the system be totally different from what I use at home, so will the music being played, the usually unpleasant acoustic of the cramped and inadequately insulated (and ventilated) hotel room, and even the quality of the mains feed (which has probably been polluted by most of the other rooms on the same floor).

Any one of those factors is quite sufficient to derail a value judgement: put them all together and it's simply not possible to come up with any meaningful assessment on a given component. The best that one can really expect to do is decide whether any given exhibitor is capable of putting on a good demonstration. And while it's certainly true that that

...and then of course there are my twelve lovely daughters... ability is a tough test for any exhibitor, it tends to say more about his or her skill and experience than the quality of the equipment.

> A hi-fi show might be an entertaining and mostly enjoyable event, but it's never going to be the best place to form any sort of definitive judgement regarding the equipment on display.

It can provide all sorts of information, but absolute quality isn't amongst it. Relative quality, now that's another matter. What's being played compared to something else in the same system, now that's a worthwhile proposition. And let's not forget just how central it is to the whole notion of spending money on a quality hi-fi system. If it all sounds the same then you can choose on the basis of shape, size, colour or any other criterion you happen to value. But once someone shows you how easy it is to hear a difference, and how important those differences can be, suddenly

sound quality is well and truly on the agenda. All of which makes me wonder, given the widely acknowledged limitations of the show situation, why more manufacturers don't concentrate on this all-important first step.

A good dealer with decent demonstration facilities and skills remains the best starting point for making valid and useful comparisons between the alternative brands and flavours of specific components, especially electronics, sources and ancillaries. But in this day and age shouldn't manufacturers be doing more to get

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▶ people through their dealer's doors in the first place. The ideal place, at least for making those vital final decisions, is unquestionably in the home where the equipment will actually be used, and that's particularly true for loudspeakers and mains devices, whose performance is particularly environmentally dependent. But where, apart from hi-fi shows, does the industry get to engage a whole crowd of sympathetically predisposed potential punters? Perhaps we should refocus our efforts accordingly. After all, if a practised listener refuses to make isolated, qualitative judgements in a show situation, what chance have the general public?

Music Matters

by Alan Sircom

NXT isn't a name you'd associate with legitimate shifts in high-end audio. The company – essentially a laboratory with a licensing department attached – makes no products, but develops technology that essentially creates sound from almost anything. So, you see NXT logos appearing on paper thin speakers, across the front of laptop screens and soon as an alternative to the tiny little speaker drivers built into mobile phones. All very clever, but all very far removed from the sort of high fidelity requirements an audiophile demands.

But think outside the box. The company has a distant background in hi-fi; NXT's original boss Farad Azima was better known as Mr. Mission until he got interested in distributed-mode loudspeaker designs, and the company has included high-end luminaries like Martin Colloms in its extended design team family. Although the original DML transducer technology was destined to appear on distinctly non-hi-fi sources, there was no reason why NXT wouldn't apply the same paradigm-shifting, blue-sky thinking to 'proper' audio.

The problem with DML was that it worked wonderfully for some panels, it was not appropriate for the sort of long, thin ribbons and round drive units that commonly form the bulk of audio transducers.

It's here that NXT's new Balanced Mode Radiator technology kicks in. Looking similar to a conventional mid/bass drive unit (in fact, it looks like a small circular version of the flat race-track shaped KEF B139 bass driver used in the Linn Isobarik), the unit has the low-end frequency response of a similarly sized conventional driver, but has high frequencies reaching up to SACD-chummy territory. In fact, looks can be deceptive; the 'surround' on this unit is actually its exciter, while the centre of the drive unit is essentially made of passive components. Essentially, the unit combines the good points of Distributed Mode style NXT, with the advantages of conventional cone drive units, delivering a far more uniform, audiophile-friendly sound than previous NXT iterations and a more unforced, NXT-like presentation that no normal loudspeaker can produce. All of which means effectively a full-range point source speaker unit that can fit into a conventional hi-fi cabinet.

Of course, it's not as simple as that. The mathematics involved to develop a BMR speaker unit are incredibly complex and – although it's entirely possible the drivers could be built on conventional production lines – require a hefty amount of computing power to develop the formula for each model of drive unit. Simply changing from one material to another and experimenting with the sound quality appears not to be an option; instead, it's back to the physical laboratory to determine the characteristics of the new component.

A big part of the problem here is explaining the bloody thing. We are all so immersed in the concepts developed by Rice and Kellogg nigh on 80 years ago, that we take their concepts as inherently correct. Anything that challenges that received wisdom is immediately considered not sensible, logical or practical. In fact, the Rice/Kellogg way of doing things is nothing of the sort; it was merely the best 'fit' for the task, given the materials science and the electronics on hand in the 1920s. But, that's of little help, here; we are like physicists in 1905, dipped in generations of Newtonian physics and trying to parse a Relativistic universe. You know it's right,

Serenity

by ARGENTO AUDIO



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you hear and understand the explanation, then you try to pass that info on to others, only to discover how little you really know about this.

Ignore all the physics, concentrate on the sound quality. Suddenly, it's here when you realise that the NXT guys are really on to something. This is one of those epiphany moments, like the first time you heard electrostatics working well, that point when you changed gear without thinking on a driving lesson, or the moment you realised you had just climbed on top of the Reichstag and had finally come to the end of *Call Of Duty*.

I heard a set of prototypes; a pair of single-driver speakers, set in a small 1.5litre cube and being driven by a Cyrus CD and amp and connected with bogstandard bell-wire like cable. We were listening in the near field, close enough that you could almost touch the speakers, but they were plonked on the edge of a table. No stands, no tip-toes, not much to hope for.

The sound was staggering, with the sort of imagery I've only heard from an Eikos FR-1 (itself a single driver speaker) but with extension into the treble and bass so notably absent from the Eikos design. The prototypes disappeared, and took most of the surroundings with them,

presenting instead a hologram of sound that you were smack bang in the midst of. There was also little of the hot-spotting of good imaging speakers; you could walk around this image reasonably well, with no profound drop off in detailing or imagery. The demo lasted about two minutes at most and comprised recordings of radio stations, the obligatory train going from far left to far right and a bit of easy listening.

But, even on this extremely limited exposure, it was clear this was doing something very different and very good to the sound. I'd love to hear more, but products – instead of engineer's samples - need to be made.

There lies the rub. You don't need to pay a fee to a licensing organisation for cones and domes, which is why the Rice/Kellogg system has been so universally adopted. Any system sporting any flavour of NXT has paid fees to the company itself for the rights to use the technology. Although BMR means fewer.

> potentially cheaper drive units in a speaker, the cost goes up because we end up paying that license fee stealthily. Nor will this likely be cloned, because the mathematics needed to develop the drive units is too complex for the average speaker guy to design from the ground up. All of which mean this truly stunning technological innovation is unlikely to replace cones and domes, no matter how demonstrably better it is.

There are other factors to consider, here. These are almost entirely untested ideas. Can they successfully 'scale', as NXT claim, or will the designs be limited to tiny boxes? Will BMR prove reliable in the long term, or will the speakers disintegrate after three years use? Will the drivers be easy

to produce using conventional production engineering methods, or will they necessitate putting custom machines in factories (which would make companies wary of shifting production to BMR). Will the

inherently conservative hi-fi buyer suddenly be completely ready to drop tweeters in loudspeakers? All these questions and more will remain, no matter how good BMR is in practical terms.

I hope this doesn't mean the inherently reactionary and impecunious hi-fi industry shuns NXT's paradigm shift out of hand, but I suspect it might. I fear that this potentially fantastic sounding technology will never be seen sitting in glossy cabinets in the listening rooms of audiophiles simply because the manufacturers fail to put the technology into practical applications.



by Jason Kennedy

Cables are a pain. It's a blooming nuisance that they affect the end result so much and it's even more annoying that they will affect it in different ways according to the kit at either end. I'm talking about speaker cables here but the same often applies with interconnects as well, but I'm happy with my Living Voice Potato Wire (Spud to their friends). They seem to do resolution and musicality well and these days they have sprung Neutrik plugs (which are essential for the reviewer because you don't get nasty noises when you unthinkingly yank them out and they don't fall apart with over use).

But speaker cables have

been giving me some grief of late. I have been using Max Townshend's Isolda DCT for a long time. Prior to that I had Paddy Hanscombe's Electrofluidics. Both cables are based on an impedance matched design with flat ribbons of copper bonded together to give vanishingly low inductance, tremendous resistance to RF pollution and high capacitance: it's a combination of characteristics which can prove scary for

some amplifiers, even fatal for a few. Which is why I made the move to the Isolda because Max incorporates a stabilising network so that the amp sees a manageable capacitance and those that need this aren't inclined to oscillate to the point of sounding bright. The advantage of this cable topology is remarkable solidity of image; stereo in the true sense of the word is achieved to a significantly greater extent than I've encountered with regular cables. This is combined with great tonal balance as well as instrumental colour, very natural high frequencies and quite literally monster bone crusher bass – at least where the speaker is able to produce the stuff.

According to Goertz maker Alphacore (which has patented the design in the US) these qualities are down to the impedance matched nature of the cable. Alphacore and Isolda have an 80hm impedance which is far closer to the impedance of speakers themselves than the 50 to 2000hms figure found with most stranded cables. Impedance matching is common practice in the communications industry and even our TV aerials have impedance matched connectors to remove the ghosting caused

by reflections in the cable

that can occur with mismatched connections. The first company to market an impedance matched cable was Monitor Audio way back

in 1978. Apparently it received a very positive press response but fell out of

favour because of the dominance of Naim amplification in the market at that time. Naim was one of the few manufacturers that didn't use a stabilising inductor in its amplifier's

output stages – which is why Naim amps needed to see some inductance in the cable to keep them stable. It was enough to kill the Monitor Audio cable and create a generation of "cable slaves" unwilling to countenance anything other than Naim's own NAC A4 or A5. The latest generation of Naim amps are far less critical, with Nordost's cables gaining quite a following amongst the flattest of flat-earthers these days, but Goertz and its like remain a major no-no.

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But this type of cable suits me down to the ground so I have used Isolda in both standard and DCT forms for all my listening and reviewing over the last five or so years, unless I was given an alternative by a speaker maker (rare) or was using the mighty ATC SCM150 ASL active speakers in which case no speaker cable was necessary. Then B&W brought its 802D speakers for me to review (Issue 42) and a mighty entertaining experience that was too. However, on the day that the B&W crew brought them they played a few of their test tracks and swapped the Isolda for some well used Audioquest Gibraltar, which seemed to elicit greater high-frequency extension from the diamond

tweeter.

I tried to get hold of some Audioquest Gibraltar but it is no longer being made, and even if I did it would not be a great surprise to find that the cable used to voice the 802D happened to produce a great result with it. Having used the speaker with both Chord Signature and Isolda DCT over a longer period I can safely say that I prefer the latter primarily because the sound is more relaxed without giving much away in terms of detail retrieval. This is more apparent when playing ones favourite music in anger (ie loud) than it is in AB comparisons when the analytical qualities of the Chord give it the edge in hi-fi terms.

Which left me wondering why the Isolda seemed rolled off by comparison and frankly concerned that I might have been using a cable that was having such an intrusive influence when reviewing speakers.

As a result I asked the nice people at the Chord Co if I could borrow some of their Signature speaker cable to see whether this would bring about the same result. Signature is an extremely analytical and revealing cable with remarkable dynamic range and micro dynamic resolution. It also gives the impression of extending further at high frequencies than the Isolda. That said, going back to the Townshend cable always seems to elicit a more relaxed and natural sound where high frequencies are clear and smooth rather than being crisp and etched. What's more the Isolda images with greater precision, the placement of voices being more precise than with any stranded cable I've tried. Which would suggest that there is more than adequate HF extension but that it is not explicit in balance terms.

The 802D and its diamond tweeter equipped stable mates are more revealing of this end of the spectrum than most speakers and yet like the Isolda do as much without seeming to emphasise the treble, which is more than can be said of some competing 'super tweeter' equipped designs on the market. Ultimately what I want from my system is the ability to enjoy great music at an engulfing sound pressure level (which is not as loud as the engineers at B&W prefer but approaching it, on occasion).

Max Townshend is of the opinion that the reason why some cables sound like they go up further in the treble is brightness caused by the reflections created within the cable because of the impedance mismatch. Undoubtedly stranded cable makers would disagree, but if the proof is in the listening then the harmonics and 'air' that one hears with Isolda DCT are sufficient to let me go back to using the cable as a reference, even if recent advances in loudspeaker performance have made me more aware of compromises and other aspects of cable/speaker matching.



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NFWS

Some You Win...

When we reviewed the Lyra Connoisseur 4-2L SE in Issue 43 it was a pleasure indeed to renew acquaintances with one of the most impressive single pieces of hi-fi equipment

\$16K, still more than reasonable for the stellar performance on offer, but a lot more than the \$12K listed in the copy.

that's ever crossed my path. However, what I should also have figured is that price cuts are not part of the hi-fi equation. When we reviewed the 4.0L back in Issue 16 it was priced at \$13K. Since then, the unit has gone through a series of improvements as outlined in the latest review. first to 4-2 and then SE status, changes that have significantly improved the sound. The last step in particular, has resulted in a price rise to

Oh well, if that shatters your plans (and I

certainly apologise if it does) then console yourself with the fact that the Lyra Olympos reviewed in the same issue was overpriced. Instead of \$7500, the actual price is \$4995. Which is kind of neat in a way; simply buy both and your budget is barely disturbed.

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It's Showtime...

The on-going soap-opera that the Heathrow hi-fi show has become took a new and suitably implausible turn recently when IPC and Hi-Fi News, faced with rising costs and falling exhibitor numbers, withdrew to what they thought was the comparative safety of the Renaissance (née. Penta) Hotel. Whereupon, their arch rival and organizer of the Manchester Show, Chesterfield Communications, duly booked the abandoned Park Inn for their own parallel event on the very same weekend in September.

To the muted thud of multiple soft-toys being hurled from prams, and bristling with outrage, IPC duly started contacting the industry to put a stop to this damaging and divisive behavior*. The trouble is that the companies to which they've appealed are so disillusioned by the whole sorry saga, the poor performance of recent shows and the costs involved, that their responses have varied from the indifferent to, "You must be having a laugh." Meanwhile they sit on the fence and play off one organizer against the other, safe in the knowledge that until money actually changes hands or pen meets paper, they can simply withdraw from any agreement under discussion. It's like watching a herd of wildebeest milling around the side of a river, waiting to see which fool will be the first in. If it

*My personal favourite was the letter that promised all sorts of new and innovative ideas and events to help attract punters, only to ask the reader, in the very next breath, if they had any suggestions?

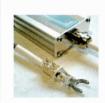
wasn't so chaotic it would be funny.

At present it looks like there are three possibilities: we'll get two shows running in parallel, neither show will achieve enough support to reach viability or, finally, this industry will get sick and tired of the whole circus and organize its own event for next year. None of which looks particularly brilliant as far as September '06 is concerned. It makes you wonder just how long it will be before the BFA and BADA finally pull their fingers out, start talking to each other and organize the show that the industry so desperately needs.

By now, dear reader, you might be wondering just what all this has to do with you. Well, apart from the insidious pleasure to be derived from a nice bit of gossip, a decent national hi-fi show would be a great event to visit. Properly organized it would offer the opportunity to experience equipment that's new to you, learn about getting the best out of the system you already own and meet and talk with the people who designed it as well as those shaping the future. Of course, all that's a far cry from what's been occurring in London for the last few years. But now you have rival organizers vying for your attention (too much to ask of course, that they might cooperate). This might be a good time to exercise your democratic rights and let them know what exactly you expect from them in return for your support and hard earned cash. After all, without you, ⊳₽ there is no show...



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RG. What made you start producing electrostatic loudspeakers?

GS. Speakers were a fascination. I was constantly tinkering with design projects after hours, I'd built every conceivable woofer configuration. At the time (the late '70s) I was building commercial systems for other people and doing installations. I'd been in hi-fi retail and then gotten into an organ company – the Reuter Organ Co. here in Lawrence, Kansas, one of the few pipe-organ companies that still flow out the tin, roll out the pipes, voice each individual pipe. It's a real pipe-organ company and I was working in their engineering department, fitting organs into different environments. After that I got back into the audio industry, but the whole of this period I'd been tinkering with little projects, building things, and slowly, over a period of time I'd become enchanted with electrostatic technology: Peter Walker and the Ouads, even Infinity got their start with an electrostatic product. They were using RTR tweeters and their own midrange transducers to build a product called the Infinity Servo-Static; quite an innovative product. Arnie Nudell had come up with a sub-sat system a decade before they hit the market.

That was what made me realise that the sonic characteristics and performance levels to be obtained from an electrostatic transducer, particularly at that time, were so far beyond what electro-magnetic systems could produce, and the idea of a uniformly driven, almost mass-less surface producing a large, phase coherent spectrum in an almost distortion free environment just intrigued me so much.

RG. It's an intellectually elegant solution.

GS. Perfectly stated. But then of course there's always the problems: the small problem that it blew up, it arced, it sparked, it fell apart, it was very narrow in dispersion. All of these things I felt were engineering challenges. They weren't inherent to the concept – they just needed to be attacked in a methodical way. They were a product of execution rather than the technology itself.

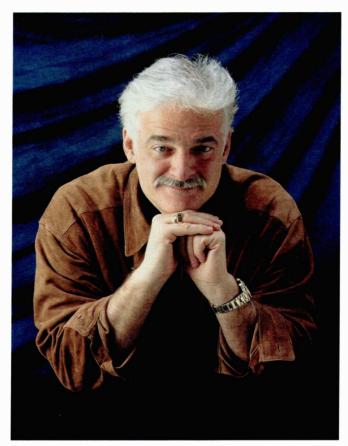
So I spent two-years in the University library here, just researching anything electrostatic - to do with transducers to do with electrostatic development. Limmersed myself in the science of electrostatic technology before starting to develop my first electrostatic transducer in the late '70s. And deep, somewhere in the back of my mind I was thinking that if I could solve these problems then maybe I could build a better mousetrap; perhaps I could build a little company which is all about performance and at its heart is electrostatic technology. It wasn't a plan, but it was there in the background as I started to dip my toe in the water. What I was thinking was that if I could really get it to work then this technology was so special that it would immediately differentiate that company from the marketplace as a whole, giving it a huge edge. I wouldn't have to differentiate myself on the basis of cabinet size, shape or material; if I got this right then the World really would seek out the better mousetrap.

RG. So what was the first product?

GS. The Monolith – a large, hybrid design. That was literally built in my garage with the help of a German technician named Gunther DeVries. He was from the old country and very German, and he helped me build this thing in a manufacturable way. There were no visible connections to the panel, it was very clean, very elegant. Aerospace materials were just becoming available, getting out of the lab and being offered to manufacturing industries – it was possible to source them. There I was, sitting at my door that served as a desk, in my garage that was my workshop and I'd call these people up, Jet Propulsion Laboratories, Optical Coatings, I'd call anybody and say "Hi, I'm Gayle Sanders and I'm researching electrostatic technology for one of our products. I know that you have insulation technology and I'd like to speak to your engineering department".

Invariably they'd put me through and I'd engage the engineers and there'd always be someone who'd say "Interesting" and then you are in. You can feed on their intellectual interest and excitement, seeing how their technology could be applied to insulation, coatings or adhesives, which were the big challenges back then.

I was able to harness all these amazing research departments with nothing more than a few phone calls. That's how we got our uniform, vapour deposition coating for the diaphragm; that's how we got 3M to develop an adhesive that would be flexible yet immensely strong in the surface tension mode; that's how we found a



coating that would conformally coat a piece of perforated metal. The stators themselves were a huge challenge. They had to be insulated up to 10000 Volts RMS and maintain very close spacing. Quad had worked on this a bit but that was still one of their real limitations. Once you hit them hard they would arc. Acoustat developed a fretwork of insulated wires but it was complex to make and resonated as well as having consistency issues. But to me, push-pull operation and rigid stators was the way to go and I really pursued that. Fortunately the new nylons, teflons and conformal applications were just coming on-line and I was able to find suppliers interested in insulating at these levels.

I worked on something which I felt other engineers had overlooked. I went for a near mass-less diaphragm but with massive surface resistivity – half a million Ohms per square cm, something like that. So you can really charge the diaphragm up while locking the electrostatic potential in place, preventing migration and maintaining pistonic motion. At the same time I wanted to perfectly insulate the stators and close the gap right down to get the efficiency up (which is directly proportional to that spacing). So everything was driven towards those three goals. I found high technology solutions for them and suddenly I had a reliable, high-efficiency transducer. That original, flat panel was what made its way into the Monolith.

The form of that product was dictated by the performance demands and the technology employed. It needed to be a hybrid because of the di-polar roll-off below 500Hz, but by making the panel two-feet by four L got sufficient area to maximise the bandwidth and get useable output down to around 100Hz. Given the aspect ratio of the electrostatic panel and the requirement for the woofer. I then just had to create an architectural framework to embody those elements.

RG. How did you arrive at the name Martin-Logan?

GS. By this time I'd started to run up against certain electrical engineering problems. Physics, mechanical engineering, those things I was pretty good at and really enjoyed, but I needed someone equally competent and interested to develop the interface transformer and crossover. To make it a world-class product I needed somebody better than myself in these areas. That's when I met Ron Sutherland at a local retail shop. He was from the University of Kansas with a Masters in electrical Engineering and Physics (the man behind the Sutherland products today) and got just as fascinated with the technology as I was. So I said, "Let's form a little team together and pool our talents." He helped me develop the interface transformer and crossover elements and that's when we really had the raw components of what became the Monolith, what we call the proof of concept; the basic woofer box and the flat panel electrostatic transducer. Still flat because being an audiophile I was only interested in sitting in one spot!

We really had something that was performing well. It had dynamics, it was revealing previously unheard information, it had layer on layer of soundstaging. It was that clear potential that really encouraged and energised me to turn this into a real product. Part of that process of course is to actually form a company so we started to wonder what we should

name it: Great American Electrostatic Loudspeaker Co? Oh gee, I don't think so. I started looking at other successful, non-audio companies like IBM and Xerox and I realised that a name is actually just a feeling. We were discussing Sanders-Sutherland but that didn't work.

and someone actually said, "Well, what are your middle names?" I said "Martin" and Ron said "Logan" and I said "Oh gosh, that's it." Martin-Logan just sounded right; it had the feel of who and what we were, so that's how it came about.

So by now we were close to having a product, but I started to think about other large panel loudspeaker companies that were narrow in dispersion. They'd run for a while but those products never really stayed the course. The fringe, crazy area inhabited by audiophiles will love it, but if you want to get into a wider market than that, general music lovers, they're not going to accept something that has such narrow



dispersion. If you have a product with great strengths but a single significant weakness people will be impressed by it at first, but long-term those strengths will be undermined by the one weakness, they'll get frustrated and you'll go out of fashion. I didn't want dispersion to be our fatal flaw, so I impressed on Ron the need to solve the dispersion issue.

So I went back to the marketplace and at that time Peter Walker at Quad was tackling the very same issue with electrical delay lines and concentric stators in the ESL 63. I was really impressed by that and thought about it a lot. At the very same time Harold Beveridge was doing the same thing mechanical-acoustically with his Acoustic Lens. What they were doing was delaying information progressively as it got off axis. That created an envelope or bubble of dispersion. The problem with a flat panel transducer is that it creates time and phase coherent energy and information that all lines up like a laser beam. Delay that energy progressively as you move off axis and that generates dispersion. So late one night Ron and I were poring over the problem and I was at his chalk-board and sort of poking at it while saying "How do we delay this off-axis information? How do we do it?" I felt that the Quad solution had problems because of all the wiring in the delay lines, while the Beveridge introduced acoustic anomalies. I wanted



something pure that allowed the transducer to unfold information in the room without compromising its essential simplicity. We were discussing point sources and I was jabbing away at the board and I suddenly realised just how small the delay required was: "Gee Ron. why don't we just curve the panel?" I saw it immediately. but while it was easy to sav... Weeks later I was still in the lab! was a guitarist. played all through college and eventually I realised that if we could do this with guitar strings we could do the same thing with the diaphragm, which is how we developed the stretching techniques that we still use today. Ron and I figured out the mathematical model of what it would take to develop ±30 degrees and by gosh, it worked.

RG. As an outsider, I think it's

hard to appreciate that electrostatic panels are quite literally hand made. Leaving aside the issues of consistency and accuracy, as soon as you start to curve them then the spars necessary to separate the mylar diaphragm from the stators have to represent a huge problem. Sourcing the material, testing it mechanically and sonically and being sure that it will be consistent over time: that has to be a nightmare.

GS. Oh, it was. Funnily enough I was again able to engage the 3M company and they were able to develop a special, high-density, high-dielectric medium that remained compliant so that it wouldn't harden and crack. Applied to a foam core to create a double-sided strip, it has incredible strength in the sheer-mode, as one surface tries to move across another. This allowed us to create this brilliant manufacturing technique where we literally cut strips and then lay them out on the rear stator before stretching the diaphragm over them. The Clear-spar technology we use now has advanced even beyond that, with greater rigidity, an even higher dielectric value and an optically clear medium. But the basic concept is identical to what got us off and

running in the early days, what made small scale manufacturing a viable possibility.

RG. For me, the first Martin-Logan product that really caught my attention was the CLS. I felt it represented what was at that time, a massive breakthrough both in sonic performance but also in the visual elegance of its aesthetic solution. It was at once large and imposing yet striking enough to be something that people wanted to own just because of the way it looked.

GS. Thank you. Yes, but at that time it was a mess. The panel was very ugly, with glue all over the place and that's why they were put behind grille-clothe in the early days. That's where Gunther came in! The very first Monoliths used flat transducers and a very crude assembly, but the arrival of the curved panels (Curvelinear Line Source as we dubbed them) gave us dispersion. They had a bunch of unique attributes in that they launched a pie shaped wedge in the horizontal plane but remained a line source vertically, so that they didn't interact with the ceiling or floor. That wedge pattern pushed mid and high frequency information into the room in a very controlled fashion, delivering an incredibly uniform spectral balance to a fairly wide audience while also minimising near-field room interaction, thus overcoming one of the major challenges facing point-source transducers. This gave us yet another jump in terms of room interface and the ability to focus information down to micro-sonic ambient levels. Suddenly, as a result of combining the electrostatic transducer and this wave launch pattern, lovely things started happening, the music – and the product – really started coming together.

With this technology enclosed into an architectural package, the Monolith really started to unfold and develop, and with it my concept for the company. My vision for MartinLogan was, number one, to always use respectable technology; preferably advanced and innovative technology but you can't innovate in every area, so our technology needed to be intellectually and mechanically respectable as an absolute minimum. Then, we needed to always package and house that technology with the highest levels of aesthetic design and realisation. Those became the fundamentals for MartinLogan, our calling cards; always be as advanced and innovative as you can with the technology and then never, ever compromise the aesthetics.

RG. Looking in from the outside it seems that two things set MartinLogan apart: the early realisation that you won't survive and grow on the basis of an audiophile audience alone (so you are immediately aware of having to broaden your market appeal) and the decision to rely on technology to achieve that aim.

GS. Absolutely – but let's be clear that there's deep respect for the audiophile here. But we can deliver much more to the dedicated listener if we've got a wider audience supporting our efforts. For me this is all about the experience, delivering the stereo (or, now, multi-channel) experience as best we can to as many people as we can. It's about musicality; to me it's about the Olympics of audio and for me personally that still means the purist approach; that still means stereo. But I wanted to do what I love and that means building a company that provides a solid business foundation so that I can get back into the engineering department and do this stuff. And I knew that unless I didn't grow it to a certain level that I'd always be a one man show and I'd always be having to make compromises in design and engineering because I'd have to be running the business and making sure all that was okay. So I needed to grow it to a larger size where I could have quality people in all the right places, doing the right things so that I could shape the designs and champion the vision.

You mentioned the ethos of the group here, just how much of a team it really is and that's nice to hear because that's exactly what I wanted to achieve. Take Joe Vojtko as an example. He's kind of dry and so humble but he's a truly brilliant engineer. Of course, when he started with us he really was an engineer, so cable was just cable and all that stuff and we got to a point where I said to him, "You know Joe, if we're going to take this thing farther then either you're going to have to become an audiophile or I'm going back to school top become a better engineer." He just looks at me and kind of pauses before saying, "I'll be the audiophile..."

So we started working and listening together and now when I say "This is a little bright" or "There's no depth to the soundstage" he knows exactly what I'm talking about - and he knows it in engineering terms. The same with (product designer) David Allen; he designed this speaker and I looked at it and then I turned the lights in the room down low and stood the speaker in the corner and gave him a coil of this great, thick speaker wire and said, "There you go, you hook it up". Well, he couldn't do it. You know, we need an uncompromised, high-performance connector but it has to be something that human beings can connect to. So my mission was to turn these guys into practical audiophiles, to build that culture around them, get them to understand so that they could take their talents to the next level. I brought David in 12 years ago because for 15 years I'd been the sole designer and I could see that our products were stagnating. I really wanted to take them to the next level; to bringing a new dimension of design and aesthetics to the company, to expand it beyond just my self. So David was the start of the industrial design team which has brought the company to where it is now.

INTERVIEW

▶ **RG.** Just backtracking a little, how did you move from the Monolith to the CLS?

GS. That's a fun one (he says with an ironic chuckle). We had really turned the corner on the monolith. It had become a mature, well-engineered and manufacturable product. But in my development sessions I'd taken to listening to more advanced transducers in just an open frame. The new coatings for the diaphragm were now optically clear and the spars were becoming far more refined and all of a sudden the magic of this see-through speaker hit me. I'd be listening late at night, because that's when you do development

work if you're also trying to run the company, and I'd put backlights on the walls behind the speakers





and looking straight through them while they produced this lovely

soundstage; it was just a wonderful experience, a wonderful visual analogue for the sonic transparency. And I started to think; what if I could produce a full-range, transparent, curvilinear transducer?

That's when I started off on the CLS, and every night for two years, I sat down with a transducer and an array of components and worked and worked. I'd go back in the day and develop a new transducer, or a new interface, with different coils or caps or transformers. It was a labour of love, over and over and over again, making tiny steps in one area whilst trying not to compromise performance in another; high-frequency extension and air, bass depth and power, keeping from blowing up the amplifier, the list goes on. **RG.** And yet the ironic thing is that despite being the only full-range electrostatic that you've made, ultimately it was a failure: A glorious failure, to be sure, but still a failure because most owners used it with a sub-woofer, thus turning it back into a hybrid. Why, because at the end of the day, it ultimately just couldn't do the bass.

GS. Well, all hybrids suffer from the same problem. It's physics at the end of the day, and it will have its way. It was small, it was manageable, it just wasn't going to do

everything. I was reaching the limits of the laws imposed by physics. Let's start with wavelength; a 50Hz wave has a 20-foot wavelength. You've got to pressurise a 20-foot space to generate that wave-front. That's why we feel bass. A 100Hz wave is half as long and so on. A 25-foot wave is twice as long - 40-foot. So you've got this itty-bitty transducer, two-foot by four trying to pressurise all of that air. Now, how do we do that? What happens is that in a di-polar mode the air in front of the driver is not isolated from the air behind, so you simply push the air forwards to pressurise it but at the same time you pull the air behind by rarefying it. You end up with an impedance mismatch and with a low-mass transducer that raises the fundamental resonance to the point where you have no bottom-end anymore. Every dipolar speaker has to confront that same reality. The only way to offset this di-polar roll-off is with larger amplitude in the transducer. But with an electrostat you can turn it up. You can use transformers that increase voltage progressively against frequency to offset that roll-off. 500Hz was where the roll-off started. Below that I started to turn up the voltage. So at 250Hz I was 12dB down, at 100Hz, another 12dB. So I used the transformer as an equaliser. But I had to increase the plate spacing to do that and that was costing me efficiency, inversely to the square of the

distance, so that bites hard and fast; double the spacing, you get four times less output! You have to balance extension against efficiency. Well, by now I was at 15KV on this system, I was ionising the air...

But remember, I wanted to build a reliable product, not just a spectacular one; something that would hook up to amplifiers well. So you constantly have to juggle bandwidth, efficiency, reliability and drive characteristics, just like any other speaker. And I became intimate with every change and every compromise in this transducer after two-years living with this thing. Now everybody has the same problems, which is why no full-range di-polar design really exists today. Having said that, the CLS almost cost me the company. We suffered migration of the conductor surface on the diaphragm. The electro-chemical relationship between the voltage and the conductive surface actually eroded that surface, causing loss of efficiency and eventual failure. Working at the edge of technology you don't know this is a problem until it happens. The voltages in the CLS aggravated that situation. Fortunately my retail experience had taught me that you wanted to develop a serviceable product, because everything that comes back into the shop costs you money. So I told myself that this thing was going to be fieldserviceable and modular. Any mechanically orientated guy should be able to fix this thing. I knew we were dealing with cutting edge materials and even all the accelerated aging tests we did couldn't tell us how long these things might last. What I didn't want was to see truck-loads of them coming back for service and killing the company. I insisted that that first CLS transducer be UPS shippable so that we could do straight replacements. Consequently we got a reputation as a company that fixed its problems rather than had things break as a result of them. So a minus actually became a plus.

The CLS became a huge overnight success, the darling of the industry. The trouble was that we got huge numbers out there and then everyone broke. The first CLS panels used a full curvilinear profile and I didn't isolate the bass sections to a specific area. As the diaphragm material started to migrate the control of the radiating area got looser and looser and the whole driver started to enter resonant modes. It would just rattle. Play it for a few weeks and slowly but surely it would start to rattle every time you hit a bass note. It wasn't so much of a problem in the lab (maybe because we were constantly swapping and working on the panels) but in the field it was just disastrous. We were taking all these calls and saying, "try this, try that" and just pulling our hair out. I was modifying panels on the fly and tweaking the power supply and nothing was working.

It got to the point where I was about 24-hours from having to close the doors. It was about midnight in our huge old factory and I was staring at this transducer and thinking, "Why can't I make you work?" I noticed that on this particular transducer the sides were flat so it had been rejected and left to one side. It got me thinking about moving away from the perfect curvilinear panel, and using one with a curve in the centre and flat sides, a concept that I'd rejected originally because it would cause lobing at high frequencies, but faced with the alternative I thought I had to check it out. So that night I built a transducer that mechanically isolated the centre section. Electrically the whole panel was driven uniformly but the curved element only operated down to about 100Hz. The sides I opened out to allow really big excursions down to whatever they could do. This would give deeper bass and prevent the resonances. After I built it I got almost identical tonal balance, deeper and tighter bass and you know although I noticed the lobing in the treble no one else complained about the off-axis response.

So, next morning I got everyone together, showed them the new transducer and started production. We called all the dealers, pulled back every panel and replaced it. I was one inch under the maximum allowable size for a standard UPS package and I thanked God that I'd taken the trouble to design that shipping box with that in mind. We shipped 200 transducers that week and pretty soon we'd fixed the problem. And you know, because we came out the other side this acted like a bonding experience with the dealers. We'd all been part of the CLS brotherhood of pain, and subsequently we all shared in the success. "Man, I was an original CLS owner – I was there..." You're in the club.

RG. Which is why the legend of the CLS has really come back to haunt you. Since the last CLS model, every speaker you've made has been a hybrid, yet there must be a legion of customers constantly demanding to know when the next full-range electrostatic is coming?

GS. CLS II was a disaster for us. I'd designed a product (in the original CLS) which was limited in bandwidth and somewhat limited in efficiency but which had an overall balance of virtues that was simply astonishing. In attempting to better that product I hired an engineer (whose identity and history will remain unspoken) to oversee the project. I was simply too wrapped up in actually running the company by that time. Anyway, the product that emerged was less efficient, went a little lower in the bass but had an impedance that was worse than a nail! It was also much more expensive. In other words, it undermined everything that made the original version such a success. But even with a 35% price hike we were back ordered up the kazoo for this thing so - against my better judgement - I allowed it to go to market. Even then I kept asking how it was going, how were the re-orders? Because I knew that this thing was selling on the reputation of the CLS, not it's own performance. I could just feel this going bad, but no one would give me the figures. They just kept telling me how we were still backordered and how I shouldn't worry. Meanwhile this speaker was out there destroying amplifiers.

RG. It strikes me that there are two lessons here: the one about letting the product go to market, but also the one about the structure and flow of information within the company. From your description I guess that this was a formative experience?

GS. Very formative – because I could feel it; I knew inside that something was wrong. Well it was and we hit the

brick wall. As soon as we got through the initial backorders the sales of the CLS II just fell off the face of the map. That product was dead and there was no was we could resuscitate it. But the CLS had a premature death because I allowed inadequate engineering - against my own judgement and heart - but you know how things get a momentum and chaos is going on and you're a small company and everybody is saying "It's going to be fine". You're saying "I don't think so!" but yours is a lone voice and you've got time energy and investment tied up in this thing and you just get swept along, over the cliff and into a disaster. Thank God that by that time I'd also developed the Sequel, the first of the new hybrids and the prototype for everything that's followed since. It was called the sequel because it came after the Monolith and I'd kind of asked myself what would happen if I just sliced a monolith in half.

RG. But the enduring appeal of the CLS can be seen in the affection with which people still regard it.

GS. And I'd love to build, and Joe would too, the next generation of full-range di-polar transducers. But it probably wouldn't be a single unit, maybe a two-way. It would probably use one our curvilinear panels with a sub-woofer array - a little like a mini Statement without the woofer towers. Because you are still working with di-polar roll-off you could probably get that down to 50Hz, usable energy down to around 30Hz. I'd love to do a CLS again but if we go back to its premature demise I looked around and time had moved on. Apogee had fallen by the wayside; so had Acoustat and Beveridge. The Quad was always a niche product and struggled to escape its limitations. Magneplanar had shrunk and was no longer the force it had been. Compare even a CLS to the Summit and it seems large and cumbersome in comparison. From the moment I brought the Monolith to market, large speakers started to lose their desirability. The Monolith and big Apogees appeared right after (the film) 2001, which is no coincidence. But the next wave of loudspeakers was headed by the WATT and the writing was on the wall - public consciousness was shifting. Fewer and fewer people wanted to own or deal with large products. If you wanted to retain your relevance outside of the audiophile market then you needed to evolve. I came to realise that the size of our products was limited our sales. People were buying smaller speakers that didn't sound as good simply because they were smaller.

RG. The CLS raised the bar in so many ways, not least of which was its appearance; this thing didn't just sound good, it looked good too. Suddenly the competition were forced to respond and particularly in Europe we saw a range of smaller, much more elegant designs coming from the likes of Final and Audiostatic, a pressure that in turn forced you to respond...

GS. How interesting. You know, I never quite put that together but you are absolutely right, without question. You know, I was listening to a pair of Monolith IIs last night and they just sounded great, but they're too big – way too much physical presence for this market now.

RG. You decided right from the start that a hybrid design was the way to get bandwidth out of an electrostatic speaker, but specific problems does that interface present?

GS. From day one, as an audiophile I loved refinement and subtlety and detail and all that. But as a designer it's also about science and the physics of the thing. To me it wasn't about mating dissimilar technologies. The question was whether you could get accurate information to the listener's ear in perfect order. I don't care if it's a pancake down there; if it can put out accurate information and you can put it in order so that it arrives in the same way that it went into the microphone then you've succeeded. So hybrids were never sacrilege to me, they were just a challenge and an opportunity. What I recognised very early on was that we needed to be masters not just of electrostatic technology but also dynamic woofer techniques too. Look at the market and you see some really impressive planar driver technology, but too often it's mated to a poorly executed woofer, or compromised by having no woofer at all - like the designer didn't want to get his hands dirty or something. "Dynamic drivers are bad, bad..."

But if you want to move a lot of air down at low frequencies then they can be pretty good. But they need to be executed to the same level of engineering excellence as the planar driver. So much of the prejudice that exists is purely visual, but I realised that we'd never, as an industry, ever pushed these two technologies equally hard in combination. So to integrate them you have to achieve a couple of things. You have to have appropriate driver design (you can't just slap any old driver in a box). You've got this phenomenally refined and accurate transducer that has to integrate with another driver. Granted, down at 150-200Hz we're not moving as fast in real terms, but to achieve the necessary speed without cone break-up from a dynamic driver is a big ask. That takes a lot of work and development, a lot of damping and specific design and that makes these drivers expensive. Ultimately there will always be a trade-off but I always respond to people who claim to hear the "join" that this is a smaller price to pay given the overall quality of the electrostatic transducer than the compromises inherent in more seamless designs. Why reduce everything to the lowest common denominator.

It was with products like the Sequel II and Aerius that we really turned the corner and became masters of dynamic drivers, and we started to re-evaluate how we tested our systems. Because of the way we launched information into the room, the conventional approach of 1W/1M really

didn't tell us what we needed to know. What we wanted to see was how the information merged at the listener's ear. So we started moving our microphone closer and closer to the listening position, viewing that information in the time domain, a technique that was just becoming possible. This allowed us to gauge the impact of the driver design, the box, the crossover and the electrostatic panel, but more importantly, how they all fit together. As we developed testing procedures so we were able to refine the hybrid concept and really get it to work.

Prior to MartinLogan, the only hybrid designs we'd really seen in the market place were not fully engineered. They'd used off the shelf components and conventional crossovers of relatively poor quality so it's hardly surprising that they achieved such lacklustre results. Unfortunately they gave hybrids a bad name, but when we really pushed it we really started to make them work.

RG. What kind of crossovers do you use in your passive designs?

GS. They're progressive; what we'd typically find is that they work best as first order at the crossover point itself, but that they then need to get steeper and steeper as you move away from it. But there were also other things that we wanted to do for impedance and amplitude matching which were critical to hybrid performance.

RG. So by now you have the passive designs working somewhere close to your satisfaction. Meanwhile, there's the drive to produce the smaller, more compact product. But at the same time you are also working on the sub-woofers. To what extent did that inform the development of the Summit?

GS. That actually started with the Statement. I really wanted to see how far I could push the limits of electrostatic technology, but as it turned out, the real challenge was the sub-woofer – to get uncompromised performance and a seamless blend with the electrostatic panels. It remained that way right through all three evolutions of the Statement. That was our introduction to sub-woofer technology, but of course it was soon to become a genre on its own, driven by the home theatre market. We began to realise that dynamic drivers in and of themselves, unless they're in a chamber the size of a refrigerator, get non-linear for a number of reasons. Put them into smaller chambers and those non-linearities start to permeate the system.

Well, we started to come under pressure from dealers and customers to add a sub-woofer to complete our range but I resisted. Despite our accumulated experience, unless we could produce something genuinely special, I felt that we would be judged as a whole on the results of that possibly inferior product - which obviously goes right against my whole model and ethos. Meanwhile Joe and I had been working on all manner of different servo-control implement-ations. I felt v ery strongly that servo-control was the only way to get large, controlled excursions from drivers in a small box, thus getting that distortion down - the only way. I mean, we'd get \$1000 drivers, put them in a small box and they simply didn't perform that well. We did a huge amount of work on acoustic servocontrol, driven from a microphone at the listening position, but we never got it to the point we really wanted to. Then a friend of mine adept with accelerometers helped us to design a system building that technology into a manufacturable transducer. With that mechanical input and all Joe's

accumulated listening experience with the acoustic systems, suddenly we could produce a stunning driver system.

Economies of scale allowed us to install t hat driver in an individually servo-

controlled, balanced force system.

Joe loved balanced force and mechanical opposition, just like in a BMW motor-cycle, and of course, we'd used that in the Statement subs. Joe believed that there was simply so much movement coming from the drive-unit in a sub-woofer that a huge static weight would be required to offset it. By opposing the drivers you simply cancel that energy, producing a highly linear and neutral output. We applied that same basic opposed format from the Statement in the smaller system using a pair of 10" drivers but it didn't have enough oomph, so we triangulated them. That developed into the Descent, based around \triangleright

this incredibly simple but effective servo-control system, reducing the distortion dramatically and giving us this tremendously musical and really easily integratable subwoofer. That was the other real break-through. The experience of the Statement and all the other hybrid designs had made Joe a master of filter design and this achieved a new level

in the Descent. I could spend a whole day just talking about those filters and why they work so well. Roll them together with the servo-control, the balanced force topology and the excellent engineering execution and I looked at the Descent and thought, "You know what, this really is a world-class product." That's when I was happy to go to market – with a design that made total sense in completing the range of MartinLogan products.

RG. The micro-perf panel used in the Summit with its smaller gap has allowed greater efficiency and smaller dimensions. Now you can couple that to the other half of the equation.

GS. Exactly right, but let me go back a

little way. We'd reduced our products a little bit in scale, but they were still noted for being a "lovely but large" loudspeaker company. So we were constantly working on the aesthetics of the systems so that although they were large, they'd work visually in a room. So the next step seemed obvious - to power the woofer element in a hybrid design, integrated with the latest iteration of the electrostatic transducer. Powering the woofers allows us to reduce the cabinet size by 75%. Of course, by now we had considerable accumulated experience with dynamic drivers, interfacing them with cabinets and also with electronics and amplifier packages. But the hybrid speaker project required performance to well above the 100Hz or so of the subs and demanded both a new driver and a new approach. In many respects the bass driver in the Summit is itself a hybrid, with very long -throw but a very low mass and a super precise motor. That's coupled to a sub-woofer driver firing down into the floor. The downward firing unit operates below 50Hz whilst the front one runs up above 200Hz. Also, as well as reducing the bass cabinet size, because we are using specific, highly developed drivers we don't have to resort to mechanical means like ports or passive radiators to augment the bottom end. The sealed box is so much easier to deal with in resonance terms as well as being very clean and linear in performance. We're using ICE power modules to drive the

woofers and the interface filter therefore has to be active. In the past, whenever we've tried to impose an active highpass filter in a hybrid you hear it. You lose dimensionality, transparency, air... Pre-amps are hard to do and this thing needs to be as good as a pre-amp if you're not going to hear it. We learnt this with the Statement, so we use a

passive for the high-pass, active for the low-

pass, separated at the terminals on the Summit. The dual amp, dual driver set-up also allows individual control of the two elements in the bass system, so we can have separate level controls at both 50Hz and 25Hz, which is a key aspect of optimising interface with the room, carrying that ease of integration over from the sub-woofers.

RG. The Summit represents the first model in a genera-tional stepchange for MartinLogan – a fact clear from both the technology it contains and its appearance. You also have the Vantage, which could be characterised as a smaller and simpler version of the Summit using

one active bass driver and at a little over half the cost. Launch date for the next model

down the range is yet to be announced, but the price-point precludes active operation. How have you overcome that limitation?

GS. Well, for the Vantage we went back to a ported system, but it's a huge, huge port - more of a folded line. It's the sort of venting you'd associate with a huge box but we've combined it with a smaller, active cabinet and it gives us great depth and control from an 8" driver. The passive bass cabinet on the next model down is both physically larger and conventionally ported. Now, I'm not a great proponent of port loading, but the market demands at least a sense of deep bass and you can get pretty good results if you apply the (really quite well developed) science and the testing related to port execution. It's a balancing act; what are the trade-offs you are prepared to accept. That refers to the design of the bass cabinet, but as you bring the price point down, it also refers more and more to the design of the product as a whole. You have to choose the right engineering solutions for that product at that price. I'm not one to preach upstream and if the market says, "We don't like this product because it's too big" then I have to face that reality and design within the acceptable parameters. Every day, part of my job is to say, "Here's my vision - this is it." But I also have to balance that against

the reality of the marketplace to ensure that I'm not just being an idiot. There's a lot of guys who build great products that never last long because they spend too much time listening to the product and not enough to the market. It's a fine line that's critical to the longevity of any company. You can't compromise your integrity but you must, you absolutely must inform it.

RG. You have managed to retain the ethos and identity of an audiophile company yet you've also grown it into a genuine, credible business organisation. That's a rare achievement.

GS. Yes, and I had to make a decision about that. There was a juncture when digital technology really hit the audiophile world and things started to change. Suddenly, the guy sitting alone in a dedicated room, listening for every last bit of textural detail – that customer base started to shrink. I looked at the situation and said to myself, "Gayle, you can either shrink your company back in size and be successful as a smaller company, or you can go out and bring better talent than you into the organisation, nurture them and coach them in the high-end way, and build the organisation to the next level in that way. I consciously chose the latter and worked in that direction.

RG. A lot of companies made no such decision and they either went through very hard times or they've gone.

GS. We're not alone. There's a couple of companies who've turned the corner pretty handily and succeeded – but a lot have struggled. But there's no escape; either you make the choice consciously or the market forces it on you.

RG. What are the challenges facing MartinLogan now?

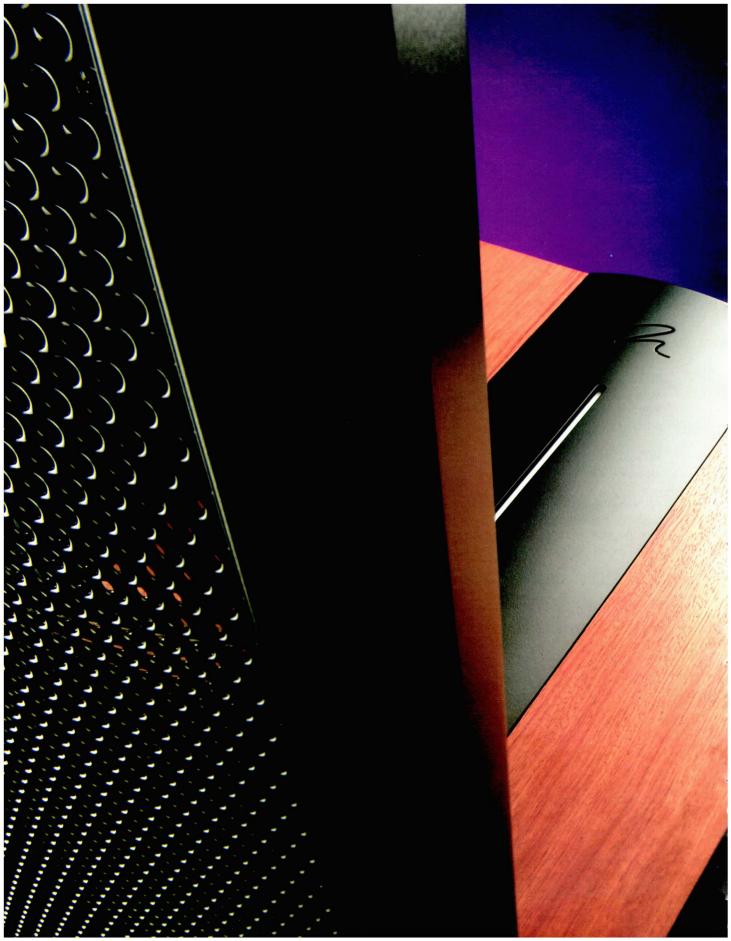
GS. They're huge. Firstly changes: the world has changed so much and our world has changed with it. In the audiophile era hi-fi was top technology, the ultimate technology the consumer would put into their living room. Today that's not the case – we're just one amongst many. Suddenly there's a proliferation of use that never used to be there: it's about servers, it's about broadband, it's about sharing information, it's about MP3 files. Now our customer's life embraces so much, there's so much he or she wants to do with music.

At the same time channels of product distribution have been revolutionised. You used to have the boutique dealer, the mass-market store and the mail-order catalogue – those three channels to market. Now there's the custom install guy, regional multiple outlet groups, conglomerates like Walmart and Costco are now in the audio/video business so product use and product supply have both changed dramatically. I for one – this technology (brandishing his iPod) – I love it. There are some audiophiles who see it as the bane of our existence but I just love the opportunity represented by the explosion of digital technology. I can see the day where we will have wireless connectivity combined with higher sampling rates used to deliver rather than just store music and I want MartinLogan to be in the forefront of that; I want MartinLogan to be the name that customers look to for high-quality sound solutions – whether on-wall, in-wall, outside, for their computer – wherever. So that's where I'm focusing our engineering and design, but it's one step at a time. You'll notice that we don't have an iPod application. We want to take each step carefully and slowly, heading in the right direction but sure that each time we provide a better solution. That's why it took us so long to come to market with a sub-woofer and it's a lesson I've learnt well.

RG. One thing that is very clear from touring the factory is the appreciation of what exactly you can do here, what it makes sense to do here – and what you get other people to do. There's a potent sense of teamwork, with each individual knowing their role and having it appreciated as part of the whole.

That must give you tremendous control over process. So if you want to get something built in China, fine – go ahead. But be there to guide them and then quality control the hell out of it here. It suggests tremendous clarity of vision in the application of engineering solutions, the current incarnation of exactly where you started.

GS. Yes. I'm glad you brought that up. Our high-end products, we want to control every aspect of, so we hand-build the cabinets and panels, hand-build the crossovers, hand-assemble everything. Huge amounts of care and man-hours go into them because our customers expect that. We are a craftsman company. But if we want to grow and feed the wider market then we need to look at out-sourcing. So we have become masters of controlling the design and quality of a product that can be built someplace other than here. We recognise our limitations and our strengths. We will never be known for our manufacturing abilities - new ways to punch millions of holes in a bit of metal. We don't want to invest in heavy machines or we tie ourselves to specific processes - "Oh gosh, how do we use the CNC machine this week?" Maybe we don't want to CNC our next product, maybe there's a better way? What we are is expert in applying or furthering available technology or processes to meet our goals. Mastering outsourcing is about getting predictable, consistent results every time and fortunately David Allen, the head of our design and Engineering department brought a wealth of knowledge and experience with him in exactly that field. That's absolutely vital as we begin to expand and broaden our product line with more affordable designs. So sourcing things like injection mouldings becomes an extension of the skill-set we've developed with our bass drivers.



The MartinLogan Summit Hybrid-Electrostatic Loudspeaker System

In one sense, the interview that accompanies this review actually covers much of this product's background and the thinking behind it. But the Summit's get really impressive once you get down to the detail. Their svelte, even petite profile hides a generational step-change in hybridelectrostatic technology as applied by MartinLogan. Their compact dimensions (remember, everything's relative and we are talking about an electrostatic here) barely hint at the scale and quality of the performance they're capable of, or that this represents a genuine range-topping model. The massive, four-tower Statement e2 no longer exists so technically and technologically the Summit represents a new (albeit rather more modest) flagship.

It's also the best-looking MartinLogan ever – and that's saying something.

Heart of the Summit is its XStat curvilinear panel - the see-through vertical element that has become the company's unmistakable identifier. But despite the conclusions possible at first glance (one of the dangers of familiarity) this is a far cry from those original CLS or Monolith transducers. For a start it uses the MicroPerf stators, meaning that the curved plates that embrace the diaphragm are punched with more, smaller holes, giving a greater space to metal ratio (and a really neat look). More importantly, these are the first panels that use a vacuum press for final assembly. Until now, all MartinLogan electrostatic transducers have been laboriously hand-assembled. Well, the

by Roy Gregory

XStat panels are still physically assembled by hand, but the final stage of actually sandwiching the diaphragm and spars between the stators is now executed mechanically. This affords greater consistency between panels and all importantly, a narrower gap between the stators. The end result is a transducer with greater efficiency and

reliability, which helps explain why the XStat panel used in the Summit is about half as wide as a CLS transducer. Visually the biggest change is the use of extruded aluminium structural spars in place of the

woodwork that graced earlier models.

This AirFrame construction reduces

physical and visual bulk while also

allowing careful profiling of the

surfaces around the transducer in

order to minimise diffractive effects.

Used with solid billet end-plates, these

aluminium spars are also more rigid,

reducing parasitic resonance and intermodulation distortion – particular problems when you have a structure this large. Take the physical reductions along with the increased efficiency of the narrower gap and you end up with a curvilinear line-source transducer 111cm long and only 32cm wide. And it's see-through.

But if the new panel technology dominates the visual presentation of the Summit, it's the bass element in its hybrid configuration that demonstrates the greatest forward strides. The asymmetrically shaped cabinet contains the two driver differential arrangement first seen in the Prodigy, but this time it's active. Applying the ICE-power modules first employed in the Descent sub-woofer has allowed the creation of a dedicated, active bass enclosure to mate with the new panel. The 250mm drivers used are task specific, engineered for different functions within the system and each driven by its own 200 Watt amplifier. The forward facing unit located at the bottom of the electrostatic transducer, and visually shielded by the same punched steel material used for the stators, crosses over at a relatively high (for a 250mm driver) 270Hz,

meaning that it generates necessary output well into the all important midbass. That requires not just long throw, but a light and precisely controllable cone. Meanwhile, the downward firing driver operates below 100Hz, where cone mass and a low fundamental resonance become far more critical. As well as separate drivers and amplification, the bass range gets a pair of level controls, one centred



▶ on 50Hz, the other on 25Hz. These equalize and optimize the output of the bass cabinet, ensuring a seamless interface with both the panel and the listening room, but more on that later. On the back of the cabinet you find bi-wire terminals, one set for the panel and one for the bass cabinet, along with a third control that simply sets how brightly the illuminated logo on the upper surface of the cabinet shines. Hey – if you've got it flaunt it.

The one obvious question arising out of this configuration, as sophisticated as it is, is why MartinLogan eschewed their preferred force-canceling arrangement as used in the subwoofers? The answer is both simple and prosaic. On the one hand the differential equalization of the two drivers reduces the absolute efficiency of the approach, but more importantly, with one driver necessarily firing forwards, they didn't want to have the other on the cabinet's rear panel. Why not? Because it would have meant having the input panel and controls on the top of the cabinet, which would have been a definite aesthetic no-no. Given the superb results achieved by the existing arrangement, I have to call that decision good.

Bolt all these elements together, including a passive highpass filter to feed the electrostatic panel, and you end up with a product that is purposeful and elegant in appearance, beautifully finished and presented and a lot more compact than pictures lead you to believe. At first our prevailing culture makes you wonder why such an expensive speaker is so small and visually unobtrusive, but even a cursory examination of the technology and design parameters makes you realise that the petite proportions are deliberate, and actually represent something of a product engineering tour de force. That bass cabinet contains two 250mm units plus all the electronics to control and drive them, as well as those necessary

to interface them with the panel; take those elements and simply stack them in a cardboard box and you'd end up with a package of about the same size! That's how seriously MartinLogan have taken their minimization mantra.

What's even

more reassuring is the quality of the execution. Fit and finish is flawless, while the basic housekeeping has received equal attention. The binding posts work while the large, milled feet that space the downward firing driver from the floor contain massive, easily adjustable spikes fully half an inch in diameter. These are reversible to flat stubs for polished floors while the large diameter of the locking rings makes leveling the speaker a simple and permanent operation. Likewise, the owners manual is a model

of clarity and sensible, useable

advice on positioning and set-up. It's available on the MartinLogan website and manufacturers wanting to know how it should be done could do worse than download a copy. Would that all products arrived with such instructions.

To get a real feel for just how radical the Summit is, let's compare its external dimensions to its predecessor, the Prodigy. Summit is 20cm shorter and 10cm narrower than the old model – quite a difference given the physical

limitations imposed by the electrostatic transducer. More telling is the depth of the footprint, again reduced by 20cm - but even that doesn't tell the whole story. The Prodigy's bass cabinet is taller than it is deep; the Summit's is the other way round, and tapered in rather than out. The end

result is a 70% reduction in the volume of the bass enclosure, which has a pretty dramatic effect on the visual bulk of the system as a whole. Weight is down too, with the new model being almost half as heavy as the old. All that and it goes deeper in the bass, is more efficient and sounds better too. Now that's what I call progress.

Of course, all this good stuff would be a complete waste if the speaker

didn't work. Getting it to work, like any electrostatic hybrid, is down to things: getting the dipolar panel to work in the room, and getting the bass to integrate properly. Unlike most speakers, it's the former that really dictates position, the adjustability of the bass cabinet then being used to achieve proper integration. This is where the manual comes in; following the instructions on

location precisely (execute a pair of simple equation and then place the speakers accordingly – to the mm') and you'll achieve near perfect positioning and toe-in. Further, subtle shifts once the bass controls have been tweaked will dial in the last degree of focus, but that's about it. What you'll end up with is the speakers further forward than you'd have guessed and closer together too, although it does depend on room dimensions. Bass settings will depend on your room, although with ±10dB ▶ of control centred on 25 and 50Hz, if you can't achieve a good working balance then you are either blessed with the room from hell, one that's cubic or simply too small. The interesting thing is that in just the same way that subwoofer design has informed the development of the Summit, so familiarity with that

genre makes setting up and adjusting the speaker so much easier. What could be a fairly daunting task given the transparency and speed of the stat panel and the prodigious capabilities of the bottom end trying to match it is actually an exercise in simplicity. The elegance of MartinLogan's concept only really becomes clear when you work with it. The spacing

of the two bass frequencies is sufficient to render their impact clearly distinguishable while their duality mirrors the twin bass humps that characterize most listening rooms. Small adjustments are clearly heard in their musical impact, while the fact that the bass cabinet is interfacing with a known transducer (unlike a lot of sub-woofers) also eases the interface considerably. I ended up with the 25Hz control set at -2 and the 50 Hz at -0.8, settings that took about half an hour to achieve and which never varied by more than 0.2 over the following days of dial-in. All that remains is to set the brightness on the funky blue status indicators...

That's less adjustment than normally goes into a pair of conventional speakers; all the more remarkable given that this is a genuinely full-range system with true flagship capabilities.

Not that set-up is entirely painless. Whilst positioning and adjustment are astonishingly straightforward, the speakers' revelation of partnering equipment is just as astonishing. Any shift in spectral balance or variation

in energy levels across the range is revealed just as clearly (and unflatteringly) as swimsuits reveal unwanted rolls of flesh. Linearity is everything with this speaker, a challenge to amplifiers in

particular as they do require a certain amount of power.

> The flatness (no pun intended) of the Nordost cables hooked up to the Hovland RADIA proved ideal, delivering sufficient

dynamic range, speed and control to really make the most of the speakers' transparency and wide-open soundstage.

Likewise the evenness of the Stabi XL/Airline carrying either the Titan or Koetsus (Coral or Jade) delivered the micro dynamic detail and harmonic substance that brought the Summits dramatically to life. The intimacy and texture delivered by this exceptional analogue source, devoid of the usual thickening and slurring that afflicts the

bottom end of so many turntables, was just what the MartinLogans ordered. Playing 'The Great Divide' from Neil Young's Silver and Gold really underlined the depth and precision of the Summit's tactile bass, it's easy mastery of the loping rhythm (all too easy to slow to a dirge-like plod). But what really impresses is the way that the speakers impose an entirely new acoustic on the confines of the listening room. They don't put the musicians in the room, they bring the room with them. It's not just the dimensions of the recorded space (synthetic or not) or the layout of the

band, it's the sonic character of that space that's laid so bare. You suddenly realise just how dominant your own listening room's acoustic colour is in defining what you hear – which makes the Summits' "time and space machine" act all the more impressive.

Genuine acoustic recordings are a joy. The sound-scape extends well beyond the outer edges of the speakers; depth and separation of individual instruments and groups within the orchestra is utterly natural. There's no effort in seeing to the back of the stage, of hearing the rear wall, a distinct rear wall, rather than simply the wall behind the speakers. The Ricci Carmen Fantaisie (Decca SXL 2197) underlines the MartinLogan's strengths. A soloist's as well as an orchestral showpiece, it shows the Summits to full advantage. Unlocking the quicksilver bow-work and precision of Ricci, the speakers' react so quickly to the signal that they banish strain from this most difficult of pieces, allowing you to marvel at the maestro's easy grace and poise, bringing control and shape to what can sometimes seem like a welter of cascading notes. But for a speaker so fast and responsive to nuance, the orchestral accents and punctuation arrive with impressive substance and body, underpinned by that sure-footed bass. For once, the percussion sits

back where it should rather than hovering somewhere forward in the stage. There's no loss of drama or tension in the slower passages either, where Ricci's masterful restraint is evident. For many, the very idea of a hybrid electrostatic is anathema, and until now if I wasn't one of them then I was certainly a sympathizer. The Summits reduce the issues of integration to below the level of those experienced in all but the best moving-coil designs (those like the Avalons that ironically boast an "almost electrostatic continuity"). There is no corner here, no obvious shift in speed between the bass drivers and the membrane, no loss of substance through the mid-bass transition, which are the all too common giveaways.

In fact, if I had to point a finger it would be at a slight sheen, a hint of plasticy tone far further up the range. It smooths away some of Ricci's notorious cutting edge, adds a subtle hollow quality behind the chest of some vocalists. How big an issue is it? Small enough to be submerged below the artifacts of most recordings; small enough to make you wonder whether it IS the recording. But listen long enough to enough material and you find a subtle extra percussive quality to the piano's right hand, a hint of twangy attack to guitar strings. It's subtle and could even be seen as an enhancement in certain cases, but if it's truth you're after then enhancement shouldn't be on the menu.

One of the most abiding musical disagreements that separates Louise and me is the vexed subject of Pat Barber. Well, vexed as far as I'm concerned. Too many audiophile pressings and schmaltzy recordings have left me with a distinctly jaundiced view of the lady. But, responds Louise, you need to hear her live, without the over production and added sweetener. Well, Classic's recent release of the live album *A Fortnight In France* has rather supported her

> point - Pat can. definitely sing. Even the deep, plucked bass of 'Blue Prelude' that carries a little extra weight and warmth. presents the Summits with no problem. Notes start - they stop; pitch steps and pace changes are clear. You don't even notice the clumseyness in the fingering injected by the extra padding. Which is really the point. These MartinLogans are so innately articulate, so holistic and of a piece, that in the same way that they reveal Ricci's control, they cut through to the deep groove that's driving Michael Arnopol. It's the effortlessness of the access that sets them apart, the ease with which they unravel the playing and the player's

skill. When they need to be big, bold and powerful, they are. When they have to be subtle and intimate, you guessed it – just not quite how subtle they really can be. They react to the signal – in every sense and every parameter, which can stress the partnering system as surely as it can stress the recordings being played, but through it all, like all truly great and truly transparent products the summit is transparent to the sense of the music as much as the fact. It's quite a saving grace.

Listen to these speakers with the

lights off. Enjoy their seamless staging, scale, dynamics and coherence. Play them loud and then play them louder. Feed them with a quality source and drive them with some power that can match their agility. Love their immediacy and presence, feel their low-end extension, reach out and touch your favourite vocalist. Now turn the lights on and remind yourself that this is an electrostatic, that it's a hybrid and that it's one of the most elegant speakers you've ever seen. There's none of the wimpiness and fragility that betrays so many 'statics. There's no jarring discontinuity where cones end and clingfilm begins. There's just a superbly engineered loudspeaker making the most of its technology to make the most of your music. The Summit is righteously named; it's the speaker that MartinLogan always threatened to make

TECHNICAL SPECIFICATIONS Type: Hybrid electrostatic loudspeaker Drive Unit Complement: 1x 111cm Xstat Panel 2x 254mm aluminium coned bass drivers Crossover Frequency: 270Hz

Clossover frequency. 27012		
Bandwidth:	24Hz – 23kHz ±3dB	
Impedance:	4 Ohms (0.7 Ohms minimum	
	at 20kHz)	
Sensitivity:	92dB	
Bass Amplifiers:	2x 200 W/Ch ICE Power	
	modules	
Bass Controls:	±10dB	
Power Handling:	100 - 300 Watts	
Dimensions (WxDxH): 320 x 1500 x 520mm		
Weight:	34 kg ea.	
Finishes:	Myriad	
Price:	£8498	

UK Distributor:

Absolute Sounds Tel. (44)(0)20 8971 3909 Net. www.absolutesounds.com

Manufacturer:

MartinLogan Ltd.

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Gershman Acoustics GAP-828 Loudspeaker

If hi-fi should be about the music rather than the system delivering it then these Gershmans are a great place to start (or finish). The infectious life and energy, the weight, presence and vigour they bring to the Cure and the Deluxe Edition of Seventeen Seconds draws you into the undulating throb of the pulsing bass lines, winds you in the subtle shifts and evolution of the meandering guitar trails; it's almost hypnotic - repetitive yet never the same. There's a solidity and substance to the music that speaks of real events without the accent of reproduction. You hear it first in the emphatic smack of Lol Tolhurst's drumming before you realise that it's there too in the slashing edges of Smith's (seriously underrated) guitar and the tactile thrum of the Gallup-ing bass. The swirling wash of keyboards sets the scene, providing the backdrop for the orderly parade of patterns and interlocking phrases that build into the tracks, layer on layer leaving just enough space for the claustrophobic vocals. It's what this album is about and the GAPs get it, which means that the listener gets it too. No sludgy mess of overlapping phrases and instrumentation, no impenetrable morass of leaden low frequencies. This is about subtle textures, exquisite timing and placement.

Change the disc to classical or put on Art Pepper's *Smack Up* and you'll hear the same bold, substantial presentation, just scaled to suit the material and recording. There's energy when required, and restraint too. But above all there's that presence, a quality that speaks directly to the listener. It was fascinating to notice the way that visitors spoke about nothing but the appearance of the speakers until they started playing – then

by Roy Gregory

they spoke about nothing but the music. That's what the GAPs do. They give the music a commanding presence in the room; they make it hard to ignore, and they do it regardless of genre. They're engaging and above all they're enthusiastic. That makes them both unusual and in many ways quite special. The question is how do they do it?

Whilst Canada might not be first on the list when it comes to countries with a long and illustrious hi-fi heritage, that reflects perception rather than the facts. Think a little harder and names like Oracle, Magnum-Dynalab, Meitner and Moon all spring to mind. And that's before we get to speakers: the likes of Coincident, Reference 3A and Gershman are representative of a thriving and adventurous tradition, with the Gershmans being amongst the longest standing and most respected. The GAP was their first product, launched 13 years ago and here present in its third iteration, although all have shared the same, striking, sculptural form. In many ways understanding that cabinet is the key to understanding the speakers' performance.

In a world of me-too loudspeaker designs, the GAP remains just as distinctive as when it first appeared, the tapered profile and upsidedown driver array setting it firmly apart from the crowd. The pyramidal shapes offer obvious benefits when it comes to overall rigidity and low diffraction, resisting resonance and

offering a constantly varying distance between the edge of the baffle and the drivers mounted on it. But they also distract from the care that's gone into the internals. The lower half of the cabinet is a double skin construction. a 19mm internal enclosure being bonded to the 25mm HDF carcass with a lossy adhesive. The resultant differential constrained layer is acoustically inert (as well as contributing to the speaker's considerable 57kg mass) and minimises transmission of mech-anical energy into the upper cabinet where the midrange driver and tweeter are mounted. If that wasn't enough, the 250mm bass-driver is reflex loaded by a long, critically tuned slot port that doubles up as an internal brace to further stiffen the low-frequency



difficulty of gluing and clamping such a complex structure should give a clue to the obsessive attention to detail that's gone into these speakers. Efforts that reap a clear dividend; mass loading the driver diaphragm with a brass ring combined with the large volume of air in the long port results in a -3dB figure of 22Hz, impressive from such an elegant cabinet.*

enclosure. Just the

* Look closely on the photographs and you'll see a switch above the terminals. This allowed some user adjustment of the crossover but has been deleted in current production, with all Gaps now being supplied aligned to the equivalent of the On position.



Interestingly this approach combines elements from two of my long-term favourite speaker designs. The long, folded port and separate mechanical environment for the upper registers are reminiscent of the Audioplan Kontrast, while the mass loaded bass unit and composite cabinet structure echo the Sonus Faber Electa Amator. The difference is that the GAP is much bigger than either, and thus offers prodigious extension and subtlety at low frequencies, without the crippling

> impedance curve

and efficiency of a speaker like the Amator. Be warned though that such generous low-

frequency output can be demanding of listening rooms and placement. I experienced no real difficulties in my (extremely well-behaved) room, but small adjustments of around half a centimeter were necessary to achieve the optimum balance of bass weight, power, speed and attack from the speakers.

What proved to be far more critical was listening distance and height. The warm balance favoured a slightly closer than expected seating position, at odds with the distance between the mid and bass drivers, which suggests that space to integrate their outputs might be a good thing; I actually ended up just inside a notional equilateral triangle, a point which maximized dynamic range and definition. More importantly, I found a slightly higher than usual listening position (a more upright stance) was essential to achieving proper musical life and energy from the GAPs. Too low and they sound dark, sluggish and disjointed, images overblown, voices elevated. Sit up straight and suddenly everything locks into a single, gloriously coherent and transparent soundstage. Images are beautifully scaled and dimensioned, with real substance and presence. It's a situation that isn't exactly helped by the large, brass cones that anchor the speakers in place, but they too are essential to the final result. Potential purchasers who slouch or own futons had better include a new listening seat in the budget or be prepared to play with angling the speaker forward on its conical feet. Me? I just sat up straight...

Integration is always the greatest challenge facing a speaker designer, one that becomes dramatically more difficult and complex once you move from twoto three-way designs. The sheer distance between the GAP's bass and mid unit

(the upper of the two top drivers) combined with the variety of materials used across the different frequency

ranges (fibre-glass at lowfrequencies, carbon-fibre for the mids and a silk dome tweeter) suggest that designer Eli Gershman is going to have his work cut out. But once you sort out your listening position, seamless integration is one of the GAP's most appealing qualities, doubtless helped by the use of first-order crossover slopes. The striking forward tilt of the head array doubtless contributes, but this is a speaker that defies appearance and assumptions with equal ease. However, there's one important caveat:

those grilles have got to go. The yellowconed bass unit might encourage you to leave the lower cover in place, especially on the optional Antique finish as supplied for review, but that would be a mistake. Do so and you'll hear a stark discontinuity between bass notes and

> their harmonics, as well as a darkening and blurring of the rest of the range. Removing the grille restores balance and illuminates the soundstage, adds attack and purpose to playing, injects the life and energy that

makes these speakers so appealing.

Oh, and a word about finishes.

At nearly five-feet tall, the GAPs make a serious aesthetic statement, even taking their slimming proportions into account. Standard finishes are Black or Burgundy lacquer, the former looking particularly striking in a Darth Vader-ish sort of way. The Antique finish shown here (I'd call it "Adobe") costs extra and is more successful than you might imagine, softening the visual impact of the speaker considerably. After that, the world is vour ovster as far as colours go, but the options do cost extra and should be considered with care, given the shade of the bass driver and the sonic necessity of removing the grilles.

With the speakers placed 72cm out from the rear wall, giving the rear-facing port plenty of space to breathe, and with a modest amount of toe-in, the GAPs began to deliver in earnest. Their moderate 88dB efficiency and bass extension demand a capable amplifier and the RADIA proved an ideal partner, combining textural subtlety and agility with the necessary control. Whilst it's tempting to reach for a muscle amp when a speaker goes this low, in the

> case of the Gershmans that would be a mistake. These speakers deliver plenty of colour and physical presence; what they thrive on is life, resolution and finesse. With the Groove and Vibe driving the RADIA via the Nordost Valhalla cable

loom they were getting exactly that, and it showed in the music they delivered.

The GAPs were faced with following the Nola Pegasus into the system, which sets a serious benchmark for transparency at low frequencies, yet they didn't shrink from the challenge. They couldn't match the bigger (and much more expensive) system's transparency and focus, the sense of contained air within the acoustic, although their natural warmth and slightly shut-in highs mimicked the overall balance to an uncanny extent. Their soundstage was slightly elevated, although with correct listening height, coherence, volume and integration were all excellent, especially depth.

I've said it before (and doubtless will again) but so much of music is built on the quality and presentation of the lowest frequencies. There really is no substitute for bandwidth – or low frequency energy. The dry, clipped and over-damped bass favoured by so many designers gives impressive, even exaggerated definition and focus, but at what cost? Eli Gershman delivers realistic weight and extension from the GAP. It doesn't have

the intimacy and immediacy of some across the mid-band, it doesn't have the stark transparency either. But what it has is reassuringly convincing weight and substance, beautifully placed bass notes and a harmonic complexity that brings shape, colour and texture to instruments. This is all about musical enthusiasm and energy.

The Yepes Rodrigo places the soloist (perfectly scaled) in front of a velvety backdrop. His playing might lack the sheer detail and attack that comes with some other speakers, but the shape and volume of the guitar, the placement and sustain of his notes, the shape he works into his phrases is all gloriously apparent. The orchestra is arrayed in a wide, deep soundstage, and if it lacks the reach out and touch quality that can come from this recording (down to that texture in the acoustic space) the purpose and power of their contribution is never in doubt. Just listen to upright bass if you want to hear both the texture and agility that these speakers are capable of at low-frequencies. Ed Thigpen's lines and solid plucking on that old chestnut 'You Look Good To Me' are wonderfully tactile, his instrument beautifully scaled and placed within the soundstage.

That combination of texture and shape flows throughout the GAP's music, bringing power and purpose to pop and rock, underpinning the emphatic delivery of heartfelt vocals, be they Ella or Eliza, communicating the scale

and power in playing, whether that belonging to a full orchestra or a Jazz quartet that's really cooking. I started in with the early Cure and where better to finish. Thoughtful, emotive and subtly powerful, their music is a test for any speaker system's integrity. Gershman's GAPs pass that test so convincingly that you don't even notice them doing it. If you really want the message in the music rather than the last ounce of inner detail or spatial precision then these speakers deliver just that. I waited a long, long time to get the GAPs into my system at home; it was worth it. Just like Robert wrote in 'Seventeen Seconds' - they're a "A measure of life ... "

TECHNICAL SPECIFICATIONS

Type:	Three-way, port loaded
	loudspeaker
Driver Complement:	1x 130mm carbon-fibre
	midrange
	1x 25mm silk dome tweeter
	1x 250mm mass-loaded
	glass-fibre bass
Bandwidth:	22Hz – 24kHz
Efficiency:	88dB
Impedance:	8 Ohms
Dimensions (WxHxD): 395 x 1470 x 395mm
Weight:	57kg each
Finishes:	Black or Burgundy lacquer
	(Others to order)
Price:	£10950

UK Distributor:

Select Audio Tel. (44)(0)7962 176477

Manufacturer:

Gershman Acoustics Net. www.gershmanacoustics.com



The Coincident Total Victory II Loudspeaker

by Roy Gregory

Back in Issue 40. JK reviewed the Super Eclipse III. a substantial floorstander from Canadian company Coincident Speaker Technology, Relatively conventional in appearance, one look at the spec sheet tells you that this is far from a run of the mill design; bandwidth extends down to a -3dB point at 28Hz. vet sensitivity is pegged at 92dB. Then there's the impedance rating of between 10 and 14 Ohms. Clearly, ease of drive is high on the agenda, but designer Israel Blume is not prepared to sacrifice scale or bass extension to get there. It's a combination of virtues that bought music to JK's ears, whose enthusiasm for their energy levels, bass extension and gripping musical presentation was clear to read. Here, he concluded, was a genuinely alternative approach to speaker design, one uniquely suited to lower-powered amplification, while even at the imported price of \$4750, material value for money was hard to fault. Take their enthusiastic musical delivery into account and the Coincidents represent something of a bargain.

Which rather begs the question, just how far can you push this particular envelope? The Super Eclipse uses five drivers, two of them sideways firing woofers, the other three in a D'Appolito arrangement on the front face of the narrow but deep cabinet. Separate internal compartments for mid and treble drivers as well as extensive bracing contribute to the 43.6kg mass of each speaker, while the absence of internal damping material helps maintain efficiency. Using first order crossover slopes also helps keep the drive characteristic even, making the speaker an easy load. What happens if you take that basic recipe and simply double up on the list of ingredients?

The answer is Total Victory - or to be more precise, the Total Victory II, because that's pretty much exactly what Israel Blume has done to create his flagship model, conceptually if not materially. Bigger (let's make that MUCH bigger) and using nine instead of a paltry five drivers, the TVII is mightily impressive and mightily imposing. in just about every conceivable way. Each cabinet is around 30% larger in height and depth, as well as an inch wider. The front baffle carries the tweeter, two 75mm dome midrange drivers and a pair of 165mm mid-bass drivers while there are no fewer than four 200mm woofers housed on one side panel of each cabinet. That adds up to a lot of radiating area! It also adds up to a lot of componentry and seriously complicated woodwork - none of which comes cheap. The Total Victory II costs a substantial \$9000. vet as we shall see, it's hard to criticize it on grounds of material value. Anyway you look at it this is an awful lot of speaker for the money.

The complex cabinet is CNC machined and laboriously spline jointed in Canada, all panels being veneered inside and out to aid rigidity and keep things true. Internally it consists of a separate sub-enclosure that loads the mid-bass drivers as well as isolating the other forward facing drivers from what amounts to a discrete sub-woofer containing the four bass units. However, not only is that mid-bass enclosure multiply and critically braced, but each bass driver has what amounts to its own separate enclosure, created by the horizontal and twin vertical braces, but cascaded to form a single acoustic

space loaded through a fistsized, rear facing port. The end result is extremely rigid (Coincident claim an astonishingly high 350Hz fundamental resonance for the cabinet remarkable in an MDF enclosure of any size. let alone one this large) as well as extremely heavy. Tap the cabinet at almost any point on its surface and you'll find the resultant sound amazingly consistent, again suggesting an incredibly even resonant character. Of course, all that woodwork doesn't come light (or cheap!) and at nearly 100kg each, the TVII is a definite two-man lift, while handling them simply reinforces just how dense and solid they really are.

D

But what is so fascinating about this speaker is the way it is both complex and simple at the same time. Massive, highly braced cabinets containing nine drivers are inherently complex, right? But at the same time the speaker as a whole is conceptually simple and displays some real elegance of design. With all those drivers. phase coherence and drive characteristics are going to be a serious concern. So, just as with the Super Eclipse III. Blume relies on firstorder crossovers to minimize phase shift. But he actually goes further. taking advantage of the mid-bass subenclosure to use a small, forward facing port to roll the twin 165mm drivers. off mechanically below 81Hz. That eliminates another inductor from the signal path and helps contribute to the basically flat, 8 Ohm impedance of the TVII, the only deviation being a gentle rise to 12 Ohms across the mid-band. Bass only goes down an extra 2Hz to -3dB at 26Hz, but efficiency rockets to 97dB, making this a speaker capable of delivering full-bandwidth sound from even flea-powered SETs – but more on that subject later.

The end result is tall, narrow, deep and very heavy, visually and physically slab-sided in a purposeful and not unattractive way. Fortunately, Coincident supplyaluminium outrigger legs supported on profiled brass cones which offer some much needed stability to what could be an otherwise vulnerable structure, as well as the essential ability to get it absolutely vertical (an aesthetic imperative even if is wasn't a sonic one). Even the bits that look a bit tacky are anything but. The rather glitzy gold binding posts are actually solid copper items, machined locally specifically for Coincident. As the designer states, "Raw copper would sound even better for about half an hour". There's nothing here that hasn't been considered, from the in-house, pure copper internal wiring to the careful profiling of the rear port.

Coincident make no bones about the fact that every element of the speaker is sourced and assembled in Canada, apart from the drivers, all of which represent the top-end offerings from reputable

> European manufacturers like SEAS and Scanspeak. This is they claim, with some justification, the only way to ensure consistent results and is a policy that applies to all their products.

Talking of drivers, one thing that separates the TVII from the rest of the Coincident range is its use of a planar, isodynamic ribbon tweeter, teamed with a pair of silk-dome midrange units. This extends upper frequency response to

35kHz, but mixing these differing technologies along with the high driver count might lead you to expect a lack of overall coherence from the speaker. In fact, nothing could be further from the truth; turn the lights out and these speakers really live up to their name, top to bottom coherence and integration being one of their real strengths. Others

More to come?

used the Total Victories on their standard feet and with my normal Nordost Valhalla cable loom, with the impressive results I've described in this review.

But Coincident distributor Musicology also imports the Symposium support products reviewed so enthusiastically back in Issue 41 Headman Simon Mantele was keen for me to try the TVIIs supported on a combination of Rollerblock S2+ isolators and Symposium Syelte platforms, while designer Israel Blume suggests that Coincident's own TRS Extreme speaker cables, as used internally on their products, are also a must hear option. With that in mind the necessary wiring lengths are duly being dispatched, although they failed to arrive in time for copy date. That and the fact that I want to examine the Symposium and Stillpoints supports under speakers as a separate issue, means that there's more to come on the TVIIs. How much more only time will tell...

include a fat-free balance, devoid of overhang or stored energy, tremendous overall neutrality and a dynamic performance that puts most of the competition in the shade. It's not just that they go loud (and with 300 Watts of power handling you'd better believe that they do) but that their grasp of dynamic discrimination and shading is so precise and communicative. Micro-dynamic

> clarity at one end of the spectrum and macro dynamic jump at the other are the two most obvious things separating the live event from the recorded. That's why horn speakers can sound so "real" despite their massive

failings when it comes to colouration and bandwidth. These Coincidents create a new class of performance, one they share with the Eben X-series speakers, which manages to combine much of the tactile immediacy of a horn with realistic bandwidth and natural tonal colours; the Ebens trade neutrality for impact, the Coincidents tread a more balanced overall path. Where the Scandinavian speaker, rather like the horns it emulates, tends to be a love it or hate it proposition, the Canadian alternative gets precious close to being all things to all men.

As I mentioned earlier, one look at the TVII's paper spec will have singleended amplifier fans rubbing their hands in glee. But actually, the ease of drive makes the Coincidents far more universal than that. Israel Blume feels that his speakers should allow users a free choice of amplification and that they certainly do. Indeed, the importer supplied a pair of Atma-Sphere M-60 Mk II OTL mono-blocks along with the Total Victories, so enamored is he of the combination. I can hear what he likes, but for me it slightly misses the point. Whilst these speakers will work with almost anything, their wide bandwidth necessarily carries its own burden, and you will hear any lack of drive or control at frequency extremes. The tactile quality and immediacy that the TVIIs communicate so readily, their wideopen and unconstricted character means that they reflect the strengths and limitations of partnering electronics with the kind of clarity I associate with a spot-lit

mirror. It's not a musically destructive or analytical tendency, it's just that differences between components (and thus their essential nature) are so apparent as to be obvious. The excellent Tom Evans Vibe complements the speed and agility, transparency and resolution of the speakers superbly. But putting the Lyra Connoisseur 4-2L SE back into the system emphasized the yawning chasm of quality that exists between these two components. You'd hear it in just about any system – just not this clearly or this quickly. The good news is that the TVIIs seem to have an innate ability to get hold of the good parts in a signal, which means that good products sound great and better ones are better still.

Which means you get to hear exactly what it is you like about your amplifiers (and whether or not you were deluding yourself when you bought them!).

More importantly, you get to hear just how hard an amp is working – and conversely, whether or not it's operating within its comfort zone. Yes, you can get awesome levels from as little as 20 Watts (or less) but it's when you hear the consummate ease and confident headroom that comes from a quick, agile and organized 100 watts that you really begin to understand what makes these speakers special. The "small amp with headroom" sound of the RADIA proved a near perfect match, and despite forays with other partners, none ever matched the easy grace and dynamic precision of the Hovland.

Play that Neil Young masterpiece 'Safeway Cart' (*Sleeps With Angels*, Reprise 9 45749-1) and there's a hypnotic insistence to the sure-footed and perfectly pitched and spaced bass line. The surprising subtlety of the drum patterns holds your attention, the guitar has a hesitant poise, a relaxed mastery that accents the vocals perfectly. You want rhythm and timing – you've got

it. You want tactile, just listen to the pluck and release of those bass strings. Likewise, the beautiful Chandos recording of Yoshimatsu's Symphony No 4 is revealed in all the chromatic brilliance that makes it so reminiscent of Copland and Gershwin. There's a glorious sweep and vibrant energy to the compositions that constantly arrests and entertains the listener. Mahler it's not – but then the Coincidents make it clear that it's not trying to be.

In the same way that the TVIIs effortlessly distinguish the nature and character of the driving electronics, so they sort sources and source material. Thankfully, once again they display that spooky ability to bring out the best, the most direct and most communicative elements in a recording and the equipment playing it, but the differences between ordinary recordings and the really great ones are all the more obvious, while they not surprisingly stand as a telling testament to the enduring superiority of good vinyl over digital replay. The sheer presence and shape these speakers bring to the sound of a good record player is both engaging and impressive, thriving on the surface textures and harmonic complexities revealed by the

medium. Comparisons of record and CD are damning indeed. It's not that the CD is unlistenable - it's just that the record sounds so much more there. Just listen to a few bars of the 'Play For today' (The Cure, Seventeen Seconds) to appreciate the bustling energy and vibrant presence these speakers bring forth from vinyl. So many of their inherent strengths are shared with the medium that it's a marriage made in heaven. But what is equally clear is that the Coincidents really reward front-end quality, regardless of format, exploiting every last nuance and shred of life coming off the source.

As much as I thrilled to the sound of my records, they never stopped me listening to CD – and you know what, on its own terms, that sounded pretty darn good too.

The essential neutrality and seamless integration of the Total Victories, combined with their lack of additive energy or smearing makes them disarmingly honest. Despite the apparent similarity in their bottom end extensions this speaker's bass is a world away from the sumptuous foundation that underpins the Gershman GAP. This is all about deft precision, speed and lightness of touch. It means that the soundstage hangs upon the instrumental or vocal images as opposed to enclosing them in a single, coherent acoustic space, but it's a presentation that suits the

immediacy that represents the speakers' greatest strength. They give you "reach out and touch" transparency, yet do so without any of the forward placement, glare or hardness that so often accompanies such a dramatic performance. In the same way they tend to focus on the strands within the music. the individual elements rather than the whole. It's undeniably captivating but it's still a slant you need to be sure you appreciate. The GAP's more holistic perspective might be more to your taste, but what I find fascinating is that two such different designs can, on their own terms be so equally, startlingly successful; that one should represent "life" and the other "live". Truth of course lies somewhere in between... The timing, transparency and pitch integrity that I hear from the TVII's bottom end comes as no surprise. It's something I associate with the extended and beautifully unforced top-end of the speaker. But it leaves the audio excessive in me wondering just what a really good sub-woofer would bring to the party?

For the Total Victory IIs it's all about energy, and the ability to accurately map and track the varying levels within the band, within the gamut of a single instrument or voice. That's what gives them that harmonic and micro-dynamic accuracy. Like all good high-efficiency speakers

musical texture is an area in which the Coincidents excel. What sets them apart is that they do it across a wider bandwidth, more consistently and with less compromise than the competition. This degree of tonal accuracy and breadth of tonal palette is unusual; to find it in a speaker of this sensitivity is rare indeed (unique in my experience). The range of emotional expression that results, the ability to swing from delicacy to full dramatic power is almost equally as rare - and to be treasured. To find it in a speaker that's as honest to the partnering equipment as it is to the music makes the Total Victory II a towering achievement in more than just the visual sense. ▶╡

Type:	4-way, port loaded
	loudspeaker
Driver Complement:	1x isodynamic planar
	ribbon tweeter
	2x 75mm fabric dome
	midrange
	2x 165mm paper cone
	mid-bass
	4x 200mm paper cone bass
Bandwidth:	26Hz – 40kHz ±3dB
Efficiency:	97dB
Impedance:	8 Ohms minimum
Dimensions:	9 x 54 x 22" inc feet
Weight:	96Kg ea.
Finish:	Cherry or black veneer
Price:	£10400

TECHNICAL SPECIFICATIONS

UK Distributor:

Musicology Tel. 44(0)1273 700759 E-mail. sales@musicology.co.uk

Manufacturer:

Coincident Speaker Technology Net. www.coincidentspeaker.com Discover 20-40% more musical information in your system for only another 10% of the cost – and you will want to listen for hours.



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Right

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CD: Accustic Arts, Audio Synthesis, Bel Canto, dCS (Elgar, Delius, Purcell, Verdi, Verdi, Verdia, Vinyl: Avid, Basis, Clearaudio, DNM, Graham, The Groove, Lehmann, Michell, Origin Live, Sumiko Blue Point Special, Transfiguration. Tuners: Magnum Dynalab. Amplifiers: Bel Canto, CAT, DK Design, DNM, Gamut, Hovland, Sonneteer, Stello. Loudspeakers: Audio Physic, Dali, Ethos, NEAT, Totem. Cables: Argento, Chord Co., DNM, Nordost, Vertex AQ. etc. Mains Vertex AQ. Supports: Arcici, Stands Unique, Vertex AQ.



A range of cartridges that will reveal the finer details within your record collection. Dynamic, natural and always musical. Transfiguration

49



The Mordaunt-Short Performance 6 Loudspeaker

Mordaunt-Short is a British speaker brand with a longstanding reputation for building good quality budget products. That reputation extends both before and after its acquisition by Audio Partnership some years back. But, the company has always struggled to have a similar reputation further up the loudspeaker evolutionary line. Up to about \$500, Mordaunt-Short trades punches with the best of 'em; over that mark, it throws in the towel. At least, until recently: Mordaunt-

Short's Performance 6 floorstander is a \$3,500 contender that

fights way above it's weight.

The thing is, Mordaunt-Short is a very technology-led company, but the constraints of producing a high-tech speaker for the price of a decent night out in London means that some of that high-tech never really shows itself. Being freed from the shackles of budgetary considerations is a liberating experience

for a designer of the blue-sky brilliance of Graham Foy, Mordaunt-Short's Head of Acoustic Engineering. And what he and the M-S team has come up with reflects that opportunity.

You could point to almost any part of the Performance 6 design and mark it out as being something special, especially the grey or silver cabinet. Instead of the more conventional treerelated builds, this one uses industrial structural foams. These foams can be formed into any shape – and at any

by Alan Sircom

thickness – yet retaining, sometimes exceeding, the stiffness of wood. Making your own enclosure from scratch with zthe shape entirely curvilinear and non-parallel, something that's hard to achieve with slabs of MDF Let's face it, few speakers can match the winebottle shaped elegance of the Performance 6. Better still, you can define the behaviour of the foam and M-S has made the Performance 6 a bit like a Minstrel*; hard shell on the outside, less dense within

> (although Performance 6's are not

recommended as a chocolatey snack). This changing cabinet density affords the Performance 6 enclosure excellent damping properties, yet also means it does not store energy unduly. To make a similarly innovative cabinet out of wood is more or less impossible, short of digging up Stradivari to hand build your enclosures. Four hefty chromeplated floor spikes seal the deal

This is a three-way floorstanding, ported design, albeit one with two bass cones. Unusually for a modern highend loudspeaker – many of which have abandoned such 'frippery' – the Performance 6 is tri-wired, using three sets of solid terminals at the base of the speaker. The bass and midrange units are all Mordaunt-Short's Continuous Profile Cone designs, using smooth aluminium drive units, with radial ribs on the bass units that are said to reduce cone break up. These 165mm drive units are unique to Mordaunt-Short and are in their third iteration here, with changes to the surround and speaker basket (as these are essentially the same designs as seen in \$200 units, you'd hope for some design innovations).

It's 100mm alloy CPC midrange unit is entirely designed for the Performance 6 and not seen elsewhere in the M-S portfolio. It features a bi-metallic chassis glued together to help sound deadening and sports a rare earth

magnet to keep the overall weight of the driver down.

The Performance 6 has a special arrangement for the 25mm alloy dome tweeter, not dissimilar to a cross between a flute and the Nautilus tube used in B&W designs. There is a protruding chrome-plated rear tapering tube which gives the tweeter its Aspirated Tweeter Technology nomenclature. In fact, within this is a series of different length small tubes, all calculated on a logarithmic scale (so that's where your slide rule went, geek boy). This works by releasing air from the back of the enclosure - making the tweeter appear open backed, without the dipolar radiation pattern this open-backed design would naturally entail. That sounds simple... it isn't, and that logarithmic tube 14-

^{*} M'n'M for you sweet eaters across the Atlantic.

▶ layout is the key. Although there is output from the rear tubes, the clever layout of the tubes means the output is not phase-coherent. The only problem I have with this tweeter tube is that it's a not insubstantial spike sticking out of the back of the speaker and if your child is as playful and as hyperactive as I was aged about six, damage will happen and possibly blood will be spilled. Of course, the same thing applied to everything from shoelaces to gas turbines when I was age six. I calmed down.

There is a lot of technology goin' on in these speakers, but sometimes this isn't a good thing. We've all heard of the technofabulistic design, with drive units hewn from dilithium crystals and featuring a crossover so recondite that it comes with its own theoretical physicist to install it. Then, we've all heard the sound quality of said device, which closely resembles the sound of a wet cardboard box filled with spoons and a few squirrels being thrown down a rusty fire escape (apologies to lovers of bushy-tailed tree rats and their happy-go-lucky bark stripping ways). All of which means, high-tech design cuts no ice here; it's the sound that counts.

Fortunately, the Performance 6 is one of those rare designs where the high-tech approach not only pays off, but pays dividends in the process. It may not re-write the Official Loudspeaker Rulebook (the one that explains both the offside and the off-axis rules), but it does push the boundary of what can be done with a three and a half grand speaker.

Although it's a very flexible speaker and will work with a host of different equipment, it's worth pushing the boundaries here too. Given most people will hear it working successfully on the end of the top of the range Marantz models, there is a temptation to consider this the acme of compatibility and that supplanting the Marantz boxes for more esoteric equipment is a pointless exercise. In fact, the reverse is true; the Marantz equipment should be considered a minimum standard. I tried these speakers with the excellent Jadis DA88 Signature integrated amplifier fed by the Townshend TA 565 CD and found the Performance 6 not only gave as good as these very fine products, but was still

far from being out of its league. It could be possible to have the Performance 6 as the cheapest component in the chain (even including cables and tables) and still not have

reached the Mordaunt-Short's limits. And that's part of the reason why this speaker is so very special. There's a sense of detail here that borders on the psychic. Almost

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regardless of the room they are sited in, the speakers deliver a precise, insightful analysis of whatever disc is being played. They seem extended well into SACD bat-eared realm at one end and almost have enough bass to perform cruel experiments on your own internal organs at the other. But, we need to be clear here; there is a profound

difference between bass extension and bass levels, and the Performance 6 is very definitely in the former camp. The bass reaches down to extremely low regions, but does so without the sort of overt enhancements we are normally used to from loudspeakers. Instead, deep bass is musical, tuneful and slightly dry. Those weaned on big, bloaty bass will find it hard to summon up much good to say about it... until they go back to their old speakers. Suddenly, the bass line sounds fat and blurred compared to the Performance 6's honest approach and what went before is simply unacceptable. Strangely enough, the music that best highlights the joys of the Performance 6 is the type you'd least expect to shine through the design; dub reggae. Stick on some nasty King Tubby at full tilt and you lose the 10dB lift normally found on some box speakers, but instead you get a discernable bass line, with musical deep notes. No more droning one-note boom to shake the windows out of their frames, just an open window into the studio process.

It's not just about the frequency extremes, though. In fact, the deep, dry bass and the extended yet not brash treble may be the most immediate aspects of the design, but they aren't the ones that make you reach for your PIN number. It's the mid-band wot won it! There is an openness to the midband which makes you think you are listening to one big drive unit per channel. Sounds are fully three dimensional and right-sized, too. Coupled with the solid underpinning of the bass, this doesn't just make for holographic imagery, it gives you a real sense of music happening in the room itself. The last time I heard something this 'disappeary' in a loudspeaker, it was a pair of very well set-up Quad Electrostatics – only this time, the speakers had some weight

and extension behind them There is a definite character to the sound, a stark honesty that will make Sonus Faber owners shake their heads in disbelief. There is no romance to the sound, no prettying up the sound or covering the tracks of poor recording quality. What's on the disc is punted out of the speakers, warts 'n' all. That said, often highly analytical designs like this leave the music as dead and cold as a side of beef. Not so here: the music is lively and entertaining and insightful, just free from artificial additives or flavours from the cabinet.

I am reminded of one of the great loudspeaker legends, here. There is a similarity between the Performance 6 and the original Townshend Glastonbury in many respects. Of course, the intervening decade or so between the two designs makes for a very different package; the Performance 6 doesn't weigh as much as a small car engine, doesn't have drive units that self-destruct at the first sign of volume and isn't made from a material that has an alarming habit of growing a substantial extended family of interesting-smelling bacteria inside the cabinet. But, those Glasto owners happily skirt round these issues because the sound they get from their speakers is so astounding, they remain enraptured by the design. This is why there are very few Glastonbury speakers sold second-hand; expect the same loyalty (and then some) from Performance 6 owners.

It's a crying shame that the Performance concept is not more widely received. It's a perception thing and nothing to do with the product or how it sounds. Dealers and audiophiles alike find it hard to think of Mordaunt-Short as anything other than a budget brand these days. Although the Performance 6 is selling well, plans to introduce a standmount version have seemed to vanish (although a smaller floorstander, centre channel and subwoofer are all slated for this year). Personally, I'd love to see the range finished off with a small twoway that did a hefty chunk of what the Performance 6 can do at around the \$1.200-\$1.500 mark. This would prove a direct challenge to the likes of B&W, Focal and Totem's stand-mount monitors,.. and would ruffle more than a few feathers in the process.

There's not a lot to dislike about the Performance 6, and everything in

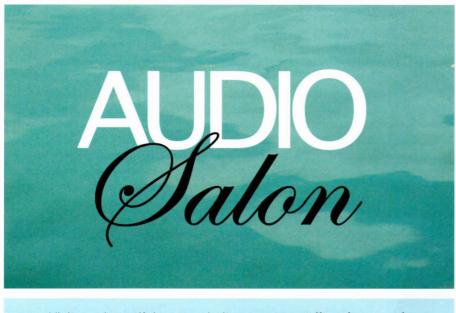
its favour. Don't confuse this with some blah three and a half grand speaker: think of it as a six grand speaker (or maybe even better) that someone forgot to price properly. It delivers the sort of sound you might otherwise get only by nailing together three or four entirely different types of loudspeaker, but it's no Frankenspeaker. That it does all this and still manages to look elegant and doesn't require a room the size of Lincolnshire to come on song. makes it a speaker to seek out. I even grew to like the child-catcher spike at the back of the design, so powerful is its sonic appeal. Just one thing to remember; don't consider partnering it with the sort of equipment it's often demonstrated with. Try this on the end of \$20k's worth of high-end valve amplification and see what these speakers can really do... then you'll discover why they really live up to that Performance name tag. ⊳ф

TECHNICAL SPECIFICATIONS

Three-way floorstanding
loudspeaker with innovative
structural foam cabinet
1x 25mm aluminium dome
tweeter
1x 100mm aluminium
CPC midrange
2x 165mm aluminium
CPC woofers
35Hz to 25kHz ±3dB
89 dB
: 4-8 Ohms
Damped 2nd order
): 240 x 1210 x 370mm
30kg ea.
Grey or silver
£3500

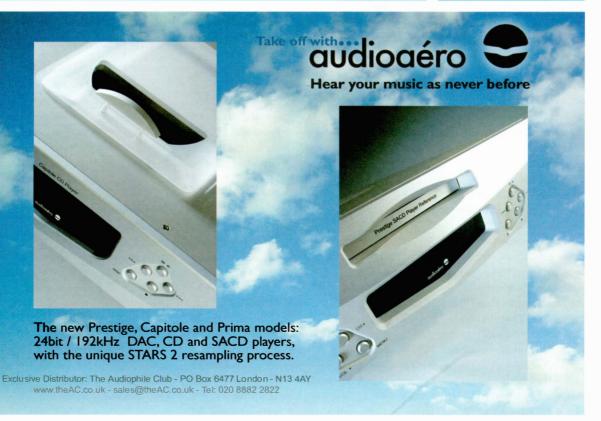
UK Distributor:

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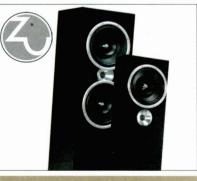
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The kibri Naima Loudspeakers

As the resident omni user and supporter on the HiFi+ payroll I guess it was inevitable that I would get to review the kibri Naima speakers. Hailing from Denmark kibri, like Shahinian, Duevel and others, are firm believers that speakers should try to mimic the natural dispersion of real sounds. They are preaching to the converted as far as this listener is concerned but many will rightly question the theory. Just as I did in the Shahinian Obelisk and Duevel Bella Luna reviews, I will avoid commenting on this whole issue as I simply do not feel qualified to offer a cogent analysis or opinion. What I do know from significant experience over the last eight or so years, with four different brands of semi or pseudo-omni speaker in my and other systems is that a well executed pseudo-omni can sound very real and natural and can bring a performance into your listening room in a way that eludes most conventional, direct radiating speakers, at least to these ears. Whether the result with this category of speakers is strictly accurate could be debated but when it sounds so good I tend not to question too deeply. The kibri Naima's are certainly capable of producing the beguiling qualities of the better omni's and allied to their excellent timing and tonal qualities they are another pseudo-omni winner.

The Naimas become a pseudo omni in the same way that the Heed Envoys and some of the Shahinians do, by mounting their drive units on a baffle that is reclined at approximately 45 degrees to the vertical. This rakish angle goes far beyond the sort of sloping baffles seen to achieve driver time by Jason Hector

alignment on numerous other speakers. While the Naima design overlaps with the Shahinian ethos in many ways they are still a unique speaker. In much the same way that Heed have admired Shahinians and made their own take on the theory so have kibri. But the best thing about the Naima's is their price of around £1450 a pair once a UK distributor can be found. This price handily places them into a market sector currently bereft of competing pseudoomnis. Once you heft the cabinet. admire the fit, finish and material choice and then get a listen you quickly realise that this very attractive price is reinforced by the sound quality.

Driver compliment of the Naima is pretty standard with a 170mm coated-paper bass-mid unit which is rear ventilated behind the spider and partially chosen for it's high power handling with low total harmonic distortion (THD). The tweeter is a 27mm fabric dome with an acoustically damped rear chamber. Like the bass unit it has low THD and

according to kibri both drivers release extraneous energy very quickly. This concern with the handling of energy is a key design criterion. The company have obviously invested significant thought into the way that the speaker handles pulses of sound and how the speaker components deal with unwanted energy and vibrations. It is no surprise that the reason they have eschewed the perennial MDF, turning instead to ply, is because they believe it handles energy better; to paraphrase the designer, the energy is removed from the driver and the baffle that bit faster and without out of phase vibration which can smear the sound. Like the ply Shahinians the corners of the cabinets are cut off to reveal the material.

The average impedance of the speaker is 7 Ohms and the minimum

impedance occurs at approximately 50Hz and is close to 5 Ohms. While that sounds pretty benign I think this impedance could be a bit reactive and combine this with a sensitivity of 88dB and you have a speaker that is unsuitable for either cheaper valve amplifiers or poorly damped solid state. The speakers absolutely thrived on the control offered by my usual Dynavector power amplifier and they have enough quality to benefit from high performance upstream components. The crossover used in the Naima has been kept to six pair matched

components, which are hardwired by hand. It is clear from the accompanying literature and correspondence that kibri have tried a number of different approaches to the crossover in their speakers and have traded off some smoothness of response for a more direct and agile sound. They claim that complex impedance corrected crossovers sap some of the excitement and life from the sound and they do this by "slowing transient attack", an opinion I have sympathy with, preferring lively albeit compromised speakers to ruler flat and dull alternatives.

The Naima's share venting duties across two ports which are mounted on the rear of the cabinets. According to kibri the Naima's "are tuned to something between a sealed and a ported type. Their total "Q" is lower than usual with this kind of design, but sure contributes to its quick and agile style." (sic.) Well, I can agree that the kibri's are a quick and agile design, and the ports did not have any significantly negative affect on the sound. When positioned correctly, the ports did not seem to be asked to work as hard as those on other speakers of this size that try to go deeper with a similar driver and cabinet size. The Naima was capable of producing some good bass without boom or overhang and while they don't plumb the depths, the presence region above 50Hz is strong and with their transient abilities the Naima's will sound like they go deeper than they do; just don't expect to hear all the pipes of a large organ. Overall the Naimas were pretty relaxed about room placement and require about 12 inches of space behind them. In my room some toe-in allowed the ports to breathe but they were close to energising a room mode (noticeable with certain tracks and higher volume) and some extra care with placement was necessary to ameliorate this tendency. Trying them with a significantly lower powered integrated amplifier did reveal how much they benefit from a bit of power and this led me to question the reactivity of that impedance. By driving them with reduced power (actually transient current delivery) the speakers lost some of their incisiveness and as you might guess, the bass started to wallow a little. This isn't a real issue provided you choose your amplification with care. Anything from the cheap but strong Rotel RA1062 upwards would be fine in most applications, and quality is still preferred over quantity.

The one fly in the ointment is the look of the speakers on their manufacturer-preferred stands. The speakers themselves won't

be winning many beauty pageants, the murky brown finish undermining the excellent quality of the fit and materials. At least the slanting baffle has the effect of reducing the perceived size of the speaker. But place them on the open frame, square section stands and you have some visual synergy - the combination looks worse than the sum of its parts. I exaggerate slightly but the problem for kibri is that I am not sure that any standard stand design will look much better (the obvious solution is to make them a floorstander but I am guessing the price would then have to increase) and while they aren't the

prettiest solution, the stands provide good support and a solid installation. With this in mind I stuck with them for the review period in an effort to create the sound intended by the designers, averted my eyes and just enjoyed the sound.

The Naima was good at letting you know when a piece of music was building in excitement and tension. They allow music to progress and develop and they achieve this by exhibiting commendable timing right across the frequency range and by being surprisingly consistent with level. I found the Naimas were particularly successful at communicating music when played quietly. Unlike many speakers there is no threshold above which they work. They easily retain the relative dynamics of a recording so that when the volume is reduced they still sound believable. They are not a rushed sounding speaker; instead they follow the musical flow. Even playing my timing torture tracks did not unduly phase the Naimas. A good example is the Home Burns album by Orange Can which has a

wonderfully retro feel and builds and builds in complexity, from various simple motifs played on bass guitar. As the track evolves so to does the rhythm and the bassist weaves in more complexity around some repeating themes played on the electric guitar and delivered by the vocalist expanding the range and varying the pace. This can all fall apart and sound frankly boring on a poorly timing system. No problem with the Naima; at no time were you left in any doubt about the way the group of musicians was playing together. This was true across the musical range, from a simple clapped rhythm on Seth Lakeman's *Kitty Jay* album to the complex intertwined melodies of larger pieces.

Large scale orchestral was particularly convincing because the speakers, like the other good pseudoomnis, are capable of plausible scale. They don't image in a holographic way (set against this is the lack of a sweet spot and the ability to enjoy these speakers way off axis) but they do present the performance in a natural sounding acoustic. It is very easy to close your eyes and feel that you have entered the hall in which the music was recorded with the orchestra arraved in front of you in a palpable fashion. So while individual instruments and even groups of instruments are amorphous in the soundstage it is clear how big a sound they produce. I am trying to expand my classical music appreciation and have been exploring choral works. Again the Naimas are excellent at scaling a soloist relative to the choir itself (Beethoven's Symphony Number 9 SXL6233 being a prime example) and retaining the sense of space between them. Returning to the Seth Lakeman for a totally different acoustic environment and the small intimate domestic spaces this album was recorded in are just as obvious, you are moved a lot closer to the performers (from the concert hall into the pub in most cases) but the relative scale of the people and their instruments in the space is well rendered and believable.

I have already admired the Naima's abilities to reproduce scale but they also demonstrate fine tonality and this allows acoustic music to sound very authentic. Rise times are pretty fast and decays are as expected with some truncation, but the timbre is as good as I have heard at this price. Different instruments are obvious in their construction, material and operation, while smaller scale transients like plucked acoustic guitar strings on the wonderful Opus 3 Eric Bibb Spirit and the Blues recording sounded real, with the solidity and tone of the guitar's body behind them. With this recording we also have more evidence of the Naima's ability to bring a performance to you, with Bibb and the band, who are asked to contribute instrumental and vocal accompaniment, arraved around and behind the speakers in a very credible fashion. Commercial recordings, like the Kaiser Chiefs Employment, have their production failings and variable recording quality exposed, but when the band have managed to create a real hook like the song 'I predict a riot' (where there



is a wonderful driving beat which merges well across the verses into the chorus of the song) the Naima's produce entertainment by propelling the rhythms into the room and grabbing your attention in the visceral way the band originally intended. Playing better recorded music reveals one of their few failings, a clouding or lack of absolute resolution and transparency. While this is most noticeable in the upper midrange it is not obvious in isolation, but comparing to a better (and significantly more costly) speaker or playing a piece with a really dense sound, some detail is lost while some instruments or note sequences remain unresolved. This fault is not as bad as it sounds if you are somebody who prefers to listen to music in the round, absorbing the whole rather than trying to dissect individual parts. The treble can sound curtailed in level compared to direct radiating speakers but this is more a function of their pseudo-omni operation than a real dip in response or treble energy. Not surprisingly, considering their country of origin, the Naimas tonal balance will suit livelier, Scandinavian style rooms to overstuffed Victoriana.

Overall these speakers like all others at this price are a mixed bag with some fantastic strengths: their portrayal of space, scale and rhythms and their relative room friendliness. But they also have some failings in resolution and physical looks. After spending significant time with them as my main speakers and really exploring their limitations I believe that the strengths far outweigh the negatives and I whole-heartedly recommend you try to audition these speakers, especially if you tend to listen quietly.

TECHNICAL SPECIFICATIONS

Type:	Two-way pseudo-omni
Overall impedance:	7.2 Ohm, 5.1 Ohm minimum
Sensitivity:	88dB/W/m
Dimensions (WxHxD): 250 x 420 x 285mm
Weight:	7.2kg.
Finishes:	Three different stains
	available
Prices -	
Speakers:	£1450 (Expected)
Stands:	£100
Grilles:	POA

Manufacturer:

kihri

Net: www.kibri.dk



The Focal/JMlab Electra 1007 Be Loudspeaker

The introduction of the beryllium tweeter to their Utopia range in 2003 moved JMlab onto a new level. After much research into the viability (or not) of add-on super tweeters they decided not to bother and to manufacture their own pure beryllium units and this proved a technological challenge requiring huge investment. JMlab are now known as Focal and still supply their drivers to other manufacturers, especially their excellent classic inverted dome tweeter which they make in different materials. But the beryllium version is kept purely for inhouse use much to the chagrin, I would suspect, of those third parties keen to incorporate it into their own designs. But what a driver it is. After you have lived with it, as I have in the Micro Utopia Be, it is a real jolt to the senses when you revisit the old dome tweeters that you used to listen to. They now seem limited in pure high frequency extension, coarse and thin and have a very different way with leading edges which are inevitably somewhat blistered and compressed, or just plain soft in comparison. The pure range and subtlety of tone, dynamics and resolution that the beryllium unit brings has shifted the goalposts somewhat and any manufacturer thinking about introducing a speaker in the *§*2K+ price range really does now need to think carefully about the unit that is chosen to handle the high frequencies because Focal have and the quality of the beryllium driver is now available at this sort of price in the Electra 1007 Be. At this moment, of those I have heard.

by Chris Thomas

only diamond and perhaps some ribbon models like the twin unit that comes fitted in the Chinese JAS range, offer anything to rival what Focal are producing and this, to my ears, gives them a huge edge.

There was, I remember, a previous limited-edition stand mounted Electra range and I reviewed the equivalent stand mount, the 907Be. This simply

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grafted the beryllium diaphragm onto the motor from a standard Electra tweeter (rather than using the complete Utopia unit) but still proved extremely popular in the marketplace and sold very quickly indeed. Focal have now decided to replace their existing Electra range with just two new models, the 1027 Be, a floorstander that incorporates twin 165mm bass drivers, a 165mm midrange driver and an all-new 25mm beryllium inverted dome tweeter in a tall, slim bass-reflex cabinet and the stand-mounted 1007. This is a straightforward two-way design with an ultra rigid cabinet, again reflex ported, but with only one of the classic 6.5-inch W-cone mid/bass drivers that Focal are so well known for. These drivers compliment the tweeter superbly and have cones constructed from a sandwich of materials that can be subtly configured in mass and mechanical impedance

> to match individual model requirements. So what seems like the same driver can vary significantly from model to model.

Early mutterings from those who had heard the new 1007 Be at its factory launch suggested that this speaker was perhaps a little too good for Focal's own good as its performance was uncomfortably close to the Micro Utopia Be and would sell for something close to half the price. Even a cursory physical examination shows that Focal have spent time on the cabinet design and construction and have given the 1007 Be a comprehensive reworking with its curved baffle and tapering sides, though the mass-damping side cheek construction remains. The newer speaker is rear ported as opposed to the Micro's more convenient front siting but they are both slot types and the 1007 Be comes with removable foam bungs that are designed to be used if the speaker finds itself out of necessity, being close to a rear wall. Focal obviously believe in bolting their drivers to substantial structures and the baffle on the 1007 is 50mm thick and this. together with the chunky side 8

▶ panels, give each speaker a weight of 15kg. The baffle itself is beautifully curved and the tweeter plate follows the line, which is both aesthetically pleasing and



cleverly functional as it takes the mounting plate away from the inverted dome, cleverly minimising any early reflections. In fact, take a closer look and you can see that the streamlined look of the 1007 Be cabinet incorporates a number of subtle elements and profiles around the drivers, all designed to minimise the cabinet's external influences. The bass driver is rather curiously mounted in an oval, well back into the thick baffle and concealed with a clip-on cover. Both this and the dome cover on the tweeter, elegant as they are, are also all too audible and should be removed when the speaker is in serious use. Build quality inside and out is superb and the finish can only be described as impeccable.

But, perhaps the most interesting and radical aspect of their design is Focal's decision to take further advantage of the tweeter's response by extending its influence downwards into the range normally handled by the mid/bass driver by almost 30 % over the previous Electra Be. Where the 907 crossed over at 2800Hz this is reduced to 2000Hz in the 1007. Focal claim improvements in definition, distortion and dispersion and I say, do not ignore the speed either. And this is one of the first things that strike you when you hear them playing music as the tonal balance is very different from the Micro Be and every other Focal/JMlab speaker you may have previously heard and most likely points the way for their speakers to come.

But first things first and the ever thorny subject of stands. The currently supplied, versions look the part but their medite construction proved disappointing in performance. I resorted to the far heavier Micro Be stands which were a good sonic if not mechanical pairing, banishing a hollow softness that afflicted the 1007 versions. Hopefully Focal will adapt the Utopia design to suit, although there's also a fascinating Perspex stand available from Quadraspire that I'm hoping to test. In the meantime, don't audition the 1007 Be on its matching stands, because they don't and you won't hear half of what these superb little speakers can do.

Let's clear up a couple of things first. This is a very, very good speaker and undoubtedly one of the best you can buy in this price range but, in my opinion those early impressions were wrong. It is no match for the Micro Be, which remains to this day one of the very best small stand mounts that you will find at any cost and one of the few such speakers that can react very respectably in systems of very high guality indeed. The Micro Be has more space, ease, depth, tonal articulation and range. I find it a more emotive speaker and though one of its other

strong points is its tonal sophistication that tweeter with its extension, speed and pure resolution means that it is no shrinking violet when asked to get dirty either. The 1007 Be uses a different version of the beryllium tweeter but its lower crossover point and integration gives it a completely different tonal balance and this has repercussions when it comes to matching it to a suitable amplifier. It also takes a long time to run-in so straight out of the box demos should be strictly avoided. I have read other reviewers say that the Micro Be is demanding, hard to drive and requires oodles of expensive amplification but this is true only up to a point and I have a couple of friends who are using the speaker quite satisfactorily with Moon i-5 integrated amplifiers in the full knowledge that better amplification will bring musical rewards but this is as much a matter of amplifier quality, strength and resolving power as it is pure cost. This speaker is no less demanding. Matching an amplifier to the 1007 Be means



seriously taking into consideration the balance of the design throughout its tonal range and if you often listen late at night, its performance strengths at low levels. Because you can really hear the downwardly extended range of that exceptional tweeter. It leaves the balance much leaner and gives the music

a fat-free shape and this brings excellent articulation and resolution through the upper mid-band. The 1007 Be is a leaner, tighter speaker than I was expecting. It has a transparent clarity about it from the tremendously extended and textured top end through the lean, dynamic mid-band and down to the low end which is quick and tighter and punchier than even the Micro Be. In fact I have always thought of the low bass as an area where Focal/JM speakers were perhaps not at their best, but this speaker maintains shape and precision even at the lower extremities of its bandwidth where it remains very agile with excellent start/stop abilities. But I stress that it needs a very accomplished amplifier to realise its potential. Use it with the wrong design and it will sound all detail but with little flesh or scale. But get it right and you will be amazed as it is rhythmically very fluid and has the strength to lay the music before you in an extremely concise and accessible way. While its sound may be more compact it is also more forward and has uncanny abilities when it comes to sound staging.

But all this requires time and effort spent on positioning and particularly on toe-in, which is crucial to achieving that engaging clarity of integration and focus. Give them as much room as you can and keep them away from rear walls. Remove the foam bungs from the rear slot ports anyway as they congest the rhythmic flow too much. The rewards are there and certainly worth

pursuing as a carefully matched and installed pair of 1007 Bes offer an intriguing blend of strength and subtlety that make it very easy to get musically involved.

From my early Hi-Fi days I have developed a fondness for this type of speaker. For me an intelligently

as it is hard to think of many other speakers that combine its particular combination of virtues in such a compact package. If you are looking for a high quality stand-mount then give the 1007 Bes serious consideration. They certainly deserve it.

TECHNICAL SPECIFICATIONS

small box two-
way which uses
superb drive units answers so many
questions when it comes to achieving
satisfying musical results at home
where space is often at a premium.
It obviously doesn't do really low bass
with any real power although a first rate
source and amplification always leads
to surprises in this area. But a good
little'un can avoid the pitfalls that large
floor standers often suffer from. With
a speaker like this you can use its full
bandwidth for more of the time and it
places less stress on those awkward
acoustic situations that living/listening
rooms always present. It also has lots of
potential for improvements in source
and amplification. It, like all excellent
audio, thrives on coherent information;
the more the better as it's resolution is
most impressive. In many ways it sets
a very interesting standard at this price,

designed

Type:	2-way with rear slot port	
Drivers:	25mm pure beryllium	
	inverted dome	
	165mm W-cone mid bass	
Bandwidth:	46Hz-40kHz ±3dB	
Sensitivity:	89dB	
Minimum impedance: 3.9 ohms at 22 Hz		
Max power handling: 90 watts		
Crossover Frequency: 2000Hz		
Dimensions (WxHxD): 264 x 385 x 350mm		
Weight:	15Kg	
Finishes:	Classic or Signature	
Price:	£2299	

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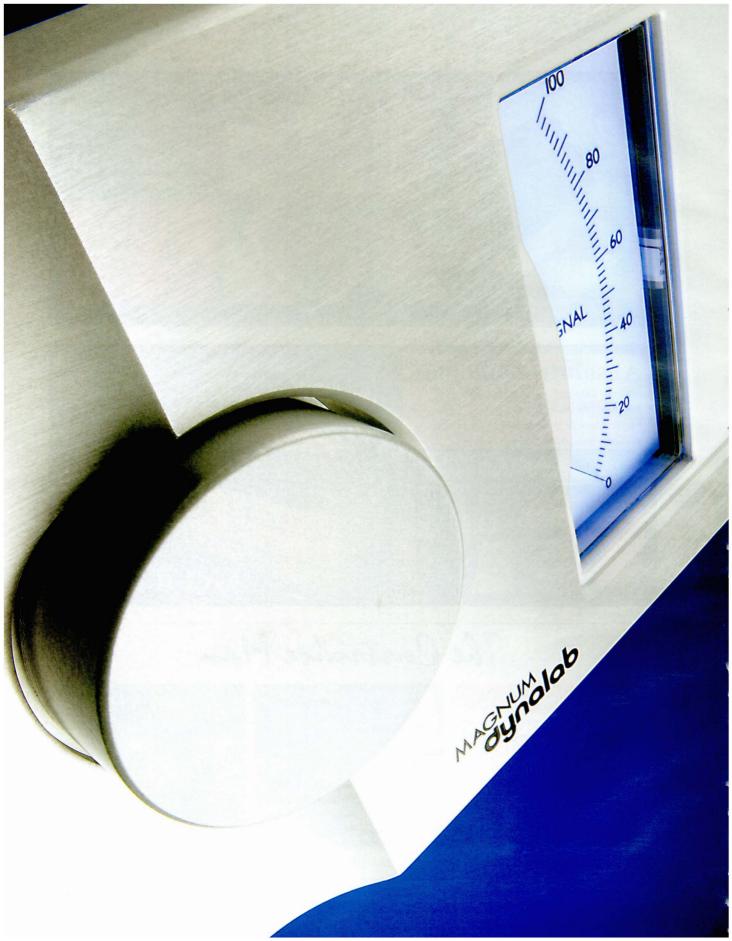


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The Magnum Dynalab MD 109 Tuner

by Alan Sircom

There is a sense of the traditional to FM tuners. They have a sense of decorum; staid even. Hardly the sort of thing that you'd expect 50 Cent to get excited about: Until now that is – the Magnum Dynalab MD 109 fits the bill perfectly. It is the King of Bling, in tuner terms.

This FM only unit has all the elements needed to loft it to the top table of radio receivers. First, it's made by Magnum Dynalab; that in itself is an arbiter of the highest quality. Okay, having a brand name is no automatic guarantee of quality, but like there hasn't been a duff Rolls-Royce or a naff Leica, so there isn't a mediocre Magnum Dynalab tuner. Next, the MD 109 is dubbed the 'Triode Reference FM Tuner' by Magnum Dynalab and is they feel, their best effort. Then, instead of the usual tuner circuit, the MD 109 features the proprietary TRACC (Triode Reference Audio Control Center) circuit and features a toroidal transformer the sort of size normally found in power amps. Then, finally, there's the display and the sheer simplicity of the device. There's another bonus, too... but let's not spoil the fun just yet.

This big, heavy tuner comes in an even bigger and heavier blue flight case. This is too snug for the remote control to be packed in with the case, so this has to travel separately. But, given the robust, tank-like build of the handset, it should be able to look after itself. Other remote controls tend to dive down the back of the sofa in fear when confronted by this Mike Tyson of a handset. Yes, it has all the ergonomics of a housebrick and functions happen a little slowly, but the 18 buttons are big and clearly marked and I'm happy to trade small and breakable for big and brutal.

The unbreakable build of the remote extends to the tuner itself. Magnum Dynalab makes big, solidly built products, but this is exceptional even against such impressive stable-mates. The flight case seems almost superfluous; you could drop the MD 109 out of the back of a low-flying Hercules onto a concrete airstrip and the only thing that would dent is the runway. Well, almost. There are smaller, lighter and less

well-built power

amplifiers -

can you think of any other tuner (the legendary Marantz 10B excepted) that needs two people to lift it out of the packaging?

This is Magnum Dynalab's World Source Platform. Not just marketing hype, the platform (and the aforementioned TRACC technology entailed within) has taken two years to design. Basically, it means the MD 109 delivers an unparalleled 200 ohm output impedance flat from 0.2 Hz to 200 KHz, (which virtually eliminates the influence of the interconnect cables). It also has a signal to noise ratio better than 110 dB, with no phase shift or distortion variance from 0.2 Hz to 200Khz. Much of this is thanks to the power supply stage, as designer Zdenko Zivkovic concentrated much of his effort on perfecting the ground plane. By lifting the audio ground from the chassis ground, it's suggested that impurities that originate with the ground plane are effectively eliminated, leaving only the original signal. A ripple-free power supply and a hefty pair of transformers (one for the RF and control stages, one for audio) help, too.

The RF stage has been completely redesigned as well. Already well known for rolling their own, Magnum Dynalab take the concept to the limit here, with an eight-stage Varactor –tuned front end. This allows three levels of IF selection

(instead of two in previous Magnum Dynalab models) for absolutely pin-point precise analogue tuning, which is surprisingly drift free from the outset. Normally, Magnum Dynalab

tuners bristle with toggle switches, covering all the finer points of locking a signal in place. Not here. Instead, the MD 109 sports just two dials; the right hand one covers tuning, the left is a selector, but for now is effectively dormant. But, all those other controls are still required by a tuner of the MD 109's mettle. So, where are they?

This is where that huge LCD display comes into play. It's actually a touch-screen. Touch-screen panels are not



new to audio – Classé has been using them for a while, as have various homecontrol systems – but it's the first time something so advanced has been used to control something as retro as a fullyanalogue, tube tuner. Along the bottom of the LCD screen are six 'soft' buttons for power, stereo/mono, band (actually that three position IF sensitivity control, not AM or FM

selection), blend, it presents a big Magnum Dynalab logo on the touch screen until it reaches the right operating temperature and turns back to being a tuner. So far, so very high-tech. There's a word in the name that suggests an older heritage though; triode. This tuner uses four of them, 6922 double triodes to be precise, sourced from different manufacturers for different uses within the tuner itself. The 6922's used in the V1 and V2 sockets are Amperex Bugle Boys, while the V3 and V4 and there's also a large blanking plate, too. More on this later.

It's been getting harder and harder to write about Magnum Dynalab tuners, because you keep running out of superlatives. Every time you hear one, you are surprised by how close to the studio you are getting. And the next one up the portfolio just gets better than the last. Now we are at the top of the Magnum Dynalab tree. Now, it gets silly. You start to question if it's possible to hear that much detail from a tuner source, no matter how impressive that source may be. After all, FM broadcasts are often compressed and the sheer live nature of the medium at its best can produce compromises in their own right. Besides, most of the time, you are listening to CDs being played

> through players markedly inferior to the one in your system. But strangely, none of this seems to matter.

The odd thing is just how much the MD 109 improves even the dirtiest talk radio ('dirty' here meaning 'poor sound quality' and has nothing to do with shock jocks like Howard Stern). When Baz from Leytonstone calls in to the station on his mobile phone, you don't expect much, yet the MD 109 rewards such listening by seeming to eliminate spitch from the transmission that normally gets between you and the person speaking. But, that's merely an aperitif. The entrée is decent

live broadcasts, well produced plays and the sort of highclass programming the BBC is occasionally so justly proud of.

There is a sense of naturalness to the source that you don't often get with CD, even when the station is playing CDs. Now, that's odd. It's an analoguelike sound, without being

faux analogue-y. I suspect this may be something to

mute and display

dynalab

dim. The touch-screen is good for 10,000 hours, more if mostly dimmed, but doesn't switch off completely until you turn the tuner off. This can be a distraction in some rooms, as can the large display, but at least the station's frequency can be read across the room... even if that room is the Albert Hall. You can manually store up to 40 presets, and these can be accessed from the touch screen or the remote.

Sadly, the inclusion of the display spells the end of the magic eye found in other Magnum Dynalab designs. This is a shame because it's one of the most easy, intuitive and accurate ways of determining how good the signal is. But, the big signal strength and centre tune VU meters are in place, arranged vertically either side of the main display.

When first powered up, the tuner goes into a diagnostic/stealth mode for half a minute or so, during which positions

are occupied by Jan Philips designs. The only other physical switch is the on/off rocker switch at the back of the tuner. The rest of the rear panel is populated with an IEC mains input and both heavy-duty gold-plated phono and XLR sockets for single ended and balanced

output. There's an f-type aerial input, do with the deep yet close-knit soundstage, or maybe that FM as a source introduces more crosstalk than CD. Whatever, I found the playing of CD music on the radio on a par with the best home sources on this tuner.

This is an interesting conclusion. Crosstalk – where the signal from the left channel bleeds into the right and vice versa – is a given on FM, but usually it's masked by the noise floor of the signal. Or, so I thought. Perhaps, that noise floor is in part related to the tuner itself and in this tuner that noise floor is simply lowered. Something very positive is going on with the MD 109 that isn't going on with any other FM tuner currently sold in the UK (I'll hold out from saving this positive trend is not found on any current tuner, simply because the Day-Sequerra is back and is an untested force).

Soundstaging is another Magnum Dynalab strong point, amplified to the nth degree here. The sound is deep, wide but not especially so and with surprisingly good soundstage height. It's rare to find a wide soundstage on FM, unless it's done at the expense of all other dimensions, but there's no sense of trade-off on the MD 109. The sound stands slightly wide of the loudspeakers, but this is easily overlooked when you listen into the cavernous depth of the staging. A quick snippet of Brahms on Radio Three ably demonstrated this; the image depth seemed to be well past the end of the living room walls, and should have come with a

sign saying 'Here be Dragons!'

Of all the tuner benefits, the most obvious one is vocal articulation, though. The MD 109 sets a benchmark for voices that no other tuner can match as yet. News programmes take on a clarity and directness that makes them sound like it's a conversation in the room, not in a remote studio. The voices are not behind microphones, they are living, breathing solid human beings, there in the room with you. This makes outside broadcasts to war-torn zones or rainforests seem rather strange and discomforting when the giant gorilla (or guerrilla) jumps out of the sideboard.

All of these aspects could be very closely replicated – to a lesser degree - with a cheaper tuner. But no tuner combines all these aspects so gracefully and so incisively. This doesn't just put you in the broadcaster's suite, it makes you a part of the broadcasting chain. I found myself talking back to the people in the room as if I were engaged in conversation with them, then shaking my head to remember they were in a studio and weren't really in the same room as me. This was disturbing, but understandable and there was no need to reach for the chlorpromazine. That almost hallucinogenic holographic property transcends normal tuner values, though and is my main justification for recommending an eight grand tuner in what are the twilight years of FM.

Of all the FM-only tuners yet tested, this is the most future-proofed. Why? Because of that 'another bonus' mentioned earlier. There is a panel at the back of the MD 109 that is currently blanked over. Soon, that panel will be filled... with a digital tuner module (presumably the aerial input is located on another plate so that if a second aerial socket is required, it's easier to change back plates than deliver an expensive tuner into the hands of Messrs Black and Decker). Although entirely untested as yet, that digital module option means this tuner is currently the only dedicated FM-only source component that doesn't have a slight tinge of Death Row about it. One day, perhaps soon, perhaps not for a generation, analogue radio will switch off forever. Anyone buying an expensive FM tuner today is hoping the switchoff is a long way off and they will get a decade or more from their purchase. The MD 109 is different. It will confidently see out FM... and still be waiting for you in the DAB future. I still miss the magic eye, but I'll get over it.

TECHNICAL SPECIFICATIONS

Type: All analogue, valve FM Tuner Valve complement: 4x 6922 Audio frequency response: 2Hz-200kHz (+0.05 dB) Output Level: 2.0V (balanced) 1.0V (single-ended) Output impedance: 200 ohms (2 Hz - 200 KHz) Signal to noise ratio: >110 dB Usable sensitivity (mono): 0.7µV (9.0dBf) 50 dB quieting (stereo): 2.3µV (20.0dBf) Capture ratio: 1.5 dB Image rejection: 125 dB Signal to noise ratio: 80 dB Alternate channel (wide): >46 dB Alternate channel (narrow): >70 dB Alternate channel (super narrow): 80 dB Adjacent channel (wide): 3 dB Adjacent channel (narrow): 21 dB Adjacent channel (super narrow): 48 dB Stereo separation: 50 dB AM suppression: 70 dB SCA rejection: 80 dB IF Rejection: 80 dB Dimensions (HxWxD): 152 x 483 x 407mm Weight: 17.1kg Finishes: Black or silver Price. £7990

UK Distributor:

Audiofreaks Tel. (44)(0)20 8948 4153 E-mail. info1@audiofreaks.co.uk

Manufacturer:

Magnum Dynalab Inc. Net. www.magnumdynalab.com



The Origin Live Illustrious Mk II Tonearm

By now you'd have thought LP reproduction had gone about as far as it was possible to go in terms of quality. But, it seems there's no holding analogue back: just when the outer limits appear to have been reached, along comes a new component – could be a turntable, arm, or cartridge – and suddenly a whole new level of performance opens up.

Such were my thoughts as I began listening to Origin Live's Illustrious Mk II tonearm. Having already reported favourably on their less costly Encounter arm in a past issue of HF+, I was expecting good (nay, great) things from the Illustrious. At \$1570 it's not exactly inexpensive, but still quite a bit less than their flagship Conqueror arm at \$2500. All the same, I wondered would it justify the extra cost in sonic terms?

Actually, the short answer, in a word is - Yes. Right from the off the Illustrious II impressed with a combination of smoothness, precision, control, dynamics, separation, sharpness, and a deliciously-relaxed effortless clarity. The music simply materialised between the speakers, sounding clean, fresh, and natural, yet crisp, detailed and very articulate. There was all the focus and control you associate with CD, yet without CD's 'tightness' and almost antiseptically clinical precision.

At the same time, there was something else – the musical presentation had a magical 'holographic' quality that made voices and instruments project from the loudspeakers in an

by Jimmy Hughes

uncannily vivid and three-dimensional manner. The sound had real presence, with an engaging spatial depth and width that made speaker boundaries melt away. The music had an innate dynamic projection, filling the room without needing to be played loudly.

Allied to this was a lovely delicate openness and tonal sweetness – very smooth, very natural. Yet there was no lack of impact or attack. For all the air of refinement, the sound was vivid and full-blooded, with brilliant vibrant

tone colours and crisp detail.

Soundstaging was very spacious and airy, yet precise – something evident on naturally-miked recordings of unamplified voices and instruments. Even when playing unsophisticated

'multi-mono' pop recordings, there was a convincing recreation of space and depth in all but the most hopeless cases. Of course the tonearm is just one member of a team. The other players - the turntable, cartridge, and phono stage – influence the sound by varying degrees. The turntable is undoubtedly the dominant component, followed by the arm and cartridge.

For my turntable I had Origin Live's Aurora Gold – an excellent platform offering excellent stability and firm control. The pickup was Transfiguration's Temper W moving coil – a beautifully delicate yet highly detailed cartridge. Lastly, the Phono stage - Sutherland's PhD – a battery-powered solid-state device offering an unusually smooth and open sound.

While the above combination is hardly the most expensive one could put together, I'd say that it's good value in audiophile terms because each component occupies a sort of staging point beyond which further improvements of any significance start to become very, very expensive. In the normal run of things, a tonearm costing \$1570 could not be described as 'good value'. But if you stop to consider that Origin Live's next arm

> costs approximately \$1000 more, the Illustrious Mk II definitely represents value of a kind.

One of the first LPs I played was Tomita's synthesiser

realisation of Mussorgsky's *Pictures At An Exhibition* – a Japanese RCA Victor pressing. When I first heard this LP back in the '70s, it struck me as a very average sort of production; good, but not very sophisticated - certainly nothing out of the ordinary. Neither frequency range nor dynamic extremes seemed exceptional. And yet... On a good turntable/arm/cartridge the recording exhibits remarkable spatial depth and impressive holographic dimensionality.

Certainly, Tomita's *Pictures* sounded amazing via the Origin Live/ Transfiguration combination – with adroit left/right/centre positioning and front/back depth placement. The combination of focus and precision on the one hand, and relaxed open spaciousness on the other, was very beguiling. CD certainly manages the first part, but tends to sound a touch 'hard' tonally - somewhat cold and regimented. It's rare for CD to sound relaxed and sweet, while at the same time retaining focus, precision, and attack.

By some strange form of sonic alchemy, good vinyl seems better able to reconcile such opposites, sounding crisp, detailed, and lucid on the one hand, yet open and liquid too, with a sweet tonal balance that's natural and realistic. Certainly, there was no lack of focus or precision from the Aurora Gold and Illustrious Mk II. Yet it presented the music in a very relaxed and fluid fashion, sounding effortlessly smooth and open.

Although this isn't a review of the Aurora Gold (which will come later) I must say how impressed I was by its outstanding pitch stability. Fine speed fluctuations seemed vanishingly low, giving the music a stable

rock-solid

quality -

as good as anything I've

previously

experienced

from vinyl. And it has a DC motor too! Conventional wisdom (prejudice) has it that DC motors cannot match the rotational evenness of a good AC synchronous type; but here's the exception! And - the acrylic platter is hardly massive...

Like other Origin Live tonearms, the Illustrious Mk II has the same 223mm mounting distance and 24/25mm dia fixing hole requirements as the Rega arm. The arm is very simple to install, and the cartridge fixing wires and tags (robust PTFE covered silver plated headshell cables with gold plated copper/beryllium tags) are sturdy and easy to fit. The green/blue colour-coding of the two negative cables could be a bit clearer though – or is it my eyes? A threaded VTA collar of the type familiar from Rega arms is also supplied, allowing precise height adjustment, although not "on the fly".

Internally, the arm is wired with a special Litz type cable, and highgrade Bullet phono plugs are fitted. The arm cable is 1.2m long and is a fixed (captive) type – there's no plug and socket on the base. Origin Live claim their arm cable to be The Best a Man Can Get – or Woman come to that - chosen for its excellent sonic properties and ability to handle delicate low-level signals. Build quality is

excellent in engineering terms,

but cosmetically the arm is not in the highest class. If you're expecting SME or Ekos standards of finish and attention to fine detail, forget it – the Illustrious Mk II is not in the same league. Not that it's badly/roughly finished; just a bit utilitarian by the highest standards – it looks like a handmade item, rather than something that's been mass-produced. In engineering terms it's very well made and ultimately that's what counts.

A recurrent theme with Origin Live's design philosophy is the control of resonance. Rigidity is important too, but not as a goal in itself. The arm bearings are actually designed with a small amount of decoupling built-in. The same is true of other key interface points on the arm – for example, the fixing between arm tube and headshell.

The engineering aim is a structure that's firm and solid, but not over-tight.

Origin Live believe that natural subtle tone colours are sacrificed if rigidity is pursued as an end in itself. The resulting sound may well be impressively tight and controlled, but

the vibrancy of the original recording will be eroded.

To this end, particular importance is placed on reducing ripple resonance effects, whereby all sorts of unpredictable twists and angular forces impinge on different parts of the structure – headshell, tube, or bearings - due to the shock waves and after-shocks imparted as stylus traces groove.

So, rather than mindlessly going for high rigidity, Origin Live deliberately engineer-in a degree of compliance to create conditions that are beneficial to the specific needs of vinyl replay, with its constantly changing bandwidth, accelerations, and shifts of dynamic energy. The Illustrious' arm bearings are very widely spaced, being some 6.5cm apart. This helps create a strong solid structure, largely immune to adverse torsional motion effects. Bearing friction is very low.

The arm tube itself is an interesting one-piece 'stepped'

design, machined from a solid billet of aerospace alloy, that aims to break the resonant modes of a normal straight or tapered arm. It's the same arm tube used on the \$2500 Conqueror, and owners of the original Illustrious can have the new arm tube retrofitted for a cost of \$299 – an upgrade Origin Live designer Mark Baker claims is money

well spent.

The headshell is milled from a solid block of highstrength alloy and the design includes side webs to increase rigidity, while lowering resonance and mass. The underside is hollowed and sculpted to reduce the contact area between headshell and pickup cartridge, thereby improving the interface. The counterweight is fixed via a single allen bolt, and is moved back and forth to set tracking force using stylus scales to measure downforce. A basic Ortofon see-saw is provided but an arm like this really deserves something better.

A simple thread and weight bias compensation system is used. Because the headshell is flat, the finger lift has no elevation. Using the Temper W cartridge, which has a medium-depth body, I found it tricky to get my finger underneath to lift the arm manually – a deeper cartridge would've helped, as would an upward pointing finger lift. The lift/lower device works smoothly, and the arm travels up and down without skewing from side to side.

LP surface noise was very low indeed – both impulse clicks and general low-level background rustles and noises. This is always the signature of a good arm (and turntable and cartridge too), and the Illustrious Mk II minimised noise – even when playing LPs known to have crackly surfaces.

The Temper W is a good secure tracker, and installed in the Illustrious it gave a thoroughly poised and secure account of itself, sounding very solid and unflappable – even when playing loud highly modulated 'difficult' LPs. It was also very good with LPs cut at low modulation levels, sounding focussed and detailed, with low background noise and excellent presence.

There's a welcome absence of strain. The music sounded beautifully clean and secure – it rarely seemed as though the cartridge was having anything other than an easy time of things.

Doubtless it often wasn't, but it sounded like it was – which is the main thing! This security was maintained right to side ends. Providing the stylus stayed free from dust and debris, the sound was invariably clean and free from edginess and break-up.

Bandwidth was impressively wide, with a good solid bottom end very much in evidence, balanced by brilliantly clear sparkling highs. The bass sounded strong and dynamic, but precise and tuneful too, with good attack and excellent pitch definition. Music with strong and powerfully projected bass lines came over with the right sort of weight and forward driving momentum

This too is one of vinyl's strengths over CD – the ability to produce a strongly dynamic 'projected' bass line that has colour, shape, and vibrancy. Yet it wouldn't be fair to say that one part of the frequency range was being favoured over another. For all that the bass was outstanding, the overall sound was always whole and integrated. While one could point to areas of individual excellence, the total effect was extremely homogenous.

A superb sounding arm then – certainly one of the best I have ever had the pleasure of listening to. Good as the Encounter was (and I was very impressed with its performance) the Illustrious Mk II goes further and does everything that bit better. Which leaves me wondering how good the Conqueror is, and whether or not it justifies its significantly higher price tag. The new Illustrious II is so good you almost wonder how it could be

improved on. But that's the trouble with vinyl; there're always more to come..

TECHNICAL SPECIFICATIONS

Туре:	Gimbal bearing tonearm
Effective Length:	223mm
Effective Mass:	14.5g
Geometry/Mounting: Rega/25mm single hole	
VTA Adjustment:	Threaded collar
Bias:	Falling weight
Downforce:	Close-coupled
	counter-weight
Weight:	820g
Price:	£1570

Manufacturer: Origin Live Tel. 44(0)2380 578877 Net. www.originlive.com

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The Denon TU-1800 DAB/FM Tuner

In the world of tuners, there are just two models; Denon's TU-260L (now in Mk II guise)... and Everything Else. You see, Denon's little cheap tuner is so damn ubiquitous, that it accounts for almost the whole market, with every other design scrabbling round for the last few per cent. Even when Denon had almost entirely abandoned the hi-fi industry in favour of home cinema, this was one of the products the company knew it could never quietly drop. But, today the TU-260L II has a fatal flaw... it's not DAB compatible.

This might not be a problem if the Denon were a higher end device. We aficionados are prepared to spend good money on something that sounds fantastic, but may or may not have a comparatively short life expectancy. But, when you are spending less than \$300 on a tuner, it's more of a long-term purchase. It's a bit like comparing car buyers; Honda Guy will likely buy a car for the long haul, expecting a decade or two from their purchase, where a Mercedes Man will trade in their shiny C-class for a newer model after a few years, just to keep up with the times.

Denon are returning to the hi-fi business with aplomb, and this meant it was time to rethink the tuner. Enter the TU-1800 DAB, a combination AM/FM/DAB device, complete with remote, stubby DAB desktop aerial, nice silvery finish, a two-deck scrolling liquid crystal readout... and a reputation to live up to. All for \$250. No, this isn't the replacement for the TU-260L II, but think of it as its spiritual heir apparent. by Alan Sircom

There really isn't much to say about the internal workings of the unit, except that it doesn't use the sort of chipsets featured in British DAB devices (Pure being one of the most common

suppliers of both chips and DAB devices). Perhaps this is why it speaks both Band III and L-Band DAB, even though there's nothing at all to hear on L-Band in the UK as yet. This is a truly international digital radio, to cope with DAB services appearing round the world. The analogue tuner stage is possibly an off-the-shelf affair, but not the same shelf from whence came the TU-260L II. But, so what... the provision

for DAB, AM and FM replay on a standalone tuner for this little cash is impressive in its own right, why be bothered about who made what internally. It's the performance that counts.

Performance today includes installation, as much as sound quality at this level, and the TU-1800 DAB is a good performer here. It installs DAB channels swiftly and picks up all the standard fare without complaint. Analogue tuning is good too, although the interface is not as responsive as most dedicated analogue tuners. In particular, those used to a zippy tuning knob may find the twiddling tardy. Nipping from preset to preset is slower on analogue than digital, too. But, with 100 DAB and 100 AM/FM presets on tap, the chances of running out of stations to listen to is remote.

Tuner sensitivity is good on both sides of the fence. A DAB prong and an AM loop are supplied, and should be good enough for reception in most urban or suburban regions. The FM section needs a good discriminating aerial, ideally roof mounted, to deliver the best possible sound. Fortunately, a good slew of signal strength displays are on tap, especially for DAB, where

the tuner even shows error rate. This could be the start of DAB geekiness, akin to pawing over signal strength meters on analogue signals.

As well as the regular AM/FM terminals and analogue phono outputs, the TU-1800 DAB also has a separate DAB aerial input, phono and toslink digital outputs (for the DAB section only) and a toslink output for Radio Data Interface. Currently under-utilised, RDI allows extended features (such as text, graphics, even video) to be displayed on a separate device (such as an RDI-equipped PC). This is one of the added-value extra features originally talked about from the early days of DAB and are only now coming to fruition.

Overall, the build is good, although the tuner is extremely lightweight

(high-end remote handsets can weigh more than this 3.8kg device) and the product is available in black and silver. Just be careful not to partner this tuner with any really hefty interconnect cables, or the tuner will float freely in the air. The right hand of the TU-1800 DAB's front panel is the business end, with five control buttons and a combined preset/tuning dial (the other side is simply display LEDs and a power switch). This is somewhat limiting when gambolling through the wealth of digital stations on tap, so always keep the remote handset to, er, hand. This is a big black plastic affair, showing how far Denon has gone down the DVD route: it's far more button filled - but also ultimately more useful than most hi-fi handsets.

With 192kHz, 24-bit processing inside, there's reason to expect great things from the DAB side of things, and the Denon lives up to the expectation. As with most things DAB, the limitation is in the quality of the

source material, not the receiver. but here, the TU-1800 DAB makes the best of a bad job. The processing of lower bit-rate talk radio seems less intrusive, the sound seems more dynamic and detailed than many DAB implementations. Best of all, music sounds like music here (too often, the music is almost sidelined dynamically thanks to compression, but the Denon does an admirable job of helping you to listen past that compression).

There's a temptation to hook the tuner up to a DAC, just to see how things are improved. This is not entirely an exercise in futility, the sound does seem a touch more detailed and the spaces around instruments seems slightly better defined. But, there ain't much more detail to be wrought out of the signal anyway; that's the DAB downside. However, the interesting thing in Denon's favour is that you are keen enough to try the DAC test in the first place. Usually, the sound from DAB tuners is mediocre and makes you want to leave the sound of DAB well alone

> BBC Radio 2 BBC National DAB

its low noise floor. Suddenly, the analogue hiss of a not quite good enough aerial is an annoyance, far more than you might expect. It's not like comparing LP with CD, where somehow vinyl's low noise floor was less musically intrusive; on radio, it's a bother. That said, the overall sound of the tuner is not far removed from that of the TU-260L II legend, so perhaps this noise intrusion is endemic to FM against DAB.

Let's put this into perspective. This is not the best DAB implementation ever. There are several more expensive designs (notably the Arcam and AVI models) that will show up some of the limitations of the TU-1800 DAB's performance. There are also several forthcoming models (such as Magnum Dynalab) with the promise of widening the gap between budget and high-end DAB tuners still further. But, as it stands, if you look at DAB with your value for money radar switched on, this makes the biggest ping on DENON the scope. The differential in performance between this

model and more

expensive ones isn't really wide enough to justify the extra expense, at least on DAB. But we shall see how future products change that equation.

The Denon's FM is not a weak spot, but is contingent upon the aerial. In fact, this becomes all the more noticeable when set against DAB, with

However, the fact that you do get bothered about FM sound quality is one of the key aspects of the Denon TU-1800 DAB. Most DAB/FM implementations seem to 'big up' DAB to the detriment of FM; DAB sounds clean and detailed while FM sounds like someone put socks over the drive units. Here, for once, Denon has made a tuner that gives both radio media free reign. FM sounds clear and inviting. with a naturalness to talk radio that is so much without artifice that DAB still has to struggle to compete. On the other hand. DAB has the freedom from noise and relatively rich sound - and the plethora of stations - that makes it hard to better, too. In short, Denon has come up with a win-win tuner.

So, am I a DAB convert. Well, sort of. DAB offers a wider range and diversity of stations than FM can, but the data compression most of these stations are forced into makes them less than commendable. And, it's getting a lot worse; I took a few months away from DAB, while listening to more exotic stuff, and ▶ found – upon my return to the digital airwaves – more compression and worse sound than when I left.

But, that compression fatigue hides the secret pleasure of DAB. It's diversity is key. At a pinch, I can receive 50 of the claimed 52 different stations it's possible to pick up in my area, everything from *BBC Radio One* pop to *Yaar Asian* hits, with cheesy listening, Christian rock, talk radio and nonstop 1940s/1950s music on *PrimeTime*. The pirate station has been broadcasting almost every day for about a month now, and the DTI cannot (or will not) touch them. If you live in the West London area and have more than three fillings, chance are you will hear this pirate station. The only way for most of those on the flightpath to listen to radio without handover takes place. Or even, you want a cheap and cheerful tuner, and aren't too bothered about whether it's DAB or FM replay. In all cases, the Denon TU-1800 DAB is ideal. You could spend a lot more and not get a lot less, but get virtually the same performance. The budget tuner king is back!

OK, with a small aerial farm

and some good listening gear, I can tune into broadcasts around the world on short wave, but this is variable depending on time of day and weather conditions, and the sound quality varies from bad to dreadful. Here, the stations may not have the sort of dynamic range and clarity we came to expect from the best of Radio Three, but it'll do. Whether that's a damning indictment of DAB or backhanded praise for the multiplicity of stations, I'll let you decide.

Despite this, DAB is winning me over, albeit through subterfuge. DAB has a great advantage up its digital sleeve that might set the seal on FM for me... no pirates! As I write, the local pirate soca and reggae station has kicked off for seven solid hours of musical entertainment. The choice and selection of music is actually pretty good, unfortunately that means nothing when the station's poorly controlled sidebands burst through every other radio station from about 90-96MHz. intrusion is through DAB (even a discriminating aerial won't help in my case – the pirate station is broadcasting somewhere between me and my transmitter mast). It may seem like a trivial way of pushing my beloved FM aside, but if the choice is between data-compromised but listenable broadcasting and interference-filled uncompromised unlistenable radio, guess which one wins out?

No, the Denon is not capable of performing minor miracles with the sound of DAB. It cannot turn off the data compression and cannot make the signal deliver CD quality sounds. Nor does the FM radio deliver Magnum Dynalab quality performance, but this is missing the point. This is a £250 tuner, that produces good FM and excellent DAB reception in one ultra-light package. It maybe you use it for its DAB reception only, having already purchased a good FM tuner, to smooth your path into digital radio. Or, it maybe that you want a does-it-all tuner for the next six or so years until the great digital

TECHNICAL SPECIFICATIONS

Туре:	Hybrid analogue/
	DAB tuner
Bands:	DAB (Band III & L-Band)
	174 - 240MHz, FM (with
	RDS & RadioTEXT), MW
Internal DAC:	192kHz/24 Bit
Tuning Aids:	Automatic search
	and preset
	Dynamic range control
	RDS (FM)
	100 x DAB presets
	100 x FM/AM presets
	RDS with RadioTEXT &
	EON for FM analogue
	reception
	Full DAB data services
Outputs:	1pr RCA/phono analogue
	1x RCA/phono co-axial
	digital output
	1x TosLink optical digital
	output
	RDI optical data output
	Antenna Connections:
	DAB, FM and AM
Dimensions (WxHxD)	: 434 x 74 x 286mm
Weight:	3.8kg
Price:	£250

UK Distributor:

Denon Tel. (44)(0)1234 741200 Net. www.denon.co.uk



Opera Audio Consonance CD-120 Linear CD Player

In retrospect I initially misjudged the CD-120 Linear. While I liked it from the start, it nevertheless took a while before I fully appreciated just how good it actually was. Don't get me wrong; all the early signs were favourable. But, following on from the Chord DAC-64, the CD-120 Linear seemed somewhat less immediate and assertive in terms of its musical presentation. It was certainly pleasant to listen to, and from the start it was obvious that its sound was both friendly and inviting. Only gradually did it become clear that all this was just the tip of the iceberg. Behind that cultivated exterior there's actually a remarkable amount going on.

The CD-120 Linear is deceptively subtle and surprisingly detailed. It can appear smooth, understated, and (seemingly) laid back and relaxed. But you'd be wrong to conclude it lacks teeth. In many respects it's very Analogue. It has that easy refined naturalness you get from LP at its best. You really notice this with massed choral forces; the sound has a delicious openness that simply sounds right. There's no exaggeration - no undue emphasis of sibilants or shifts of tonality. Dynamics are impressive, but not in an aggressive 'in your face' manner. Instead, you get the impression of the music expanding and growing naturally and effortlessly as dynamic levels increase.

By comparison, the Chord DAC-64 gives a more assertive and perhaps more exciting musical presentation. It creates a more acute sense of things happening. The CD-120 Linear is superficially less brilliant, but this is deceptive. The sound is truer and more natural, with much finer differentiation of subtle tone colours and dynamics. The better your

by Jimmy Hughes

system, the more this will become apparent. During a lengthy review period, I changed amplifiers three times, and as I did so (and things improved) the special qualities of the CD-120 Linear became more and more apparent.

For starters, it's unusually holographic for a CD planer, creating a real sense of space width and depth. This became especially noticeable when I started using the Prima Luna

> Prologue 3 and 5 amplifiers.

> > consonance

The way the CD-120 Linear images is impressive.

The soundstage has excellent left/right width and a truly palpable sense of depth, and this creates a vivid holographic effect whereby the music sounds three-dimensional. That two-channel stereo can create the impression of a spacious acoustic that exists between and beyond the boundaries set by the loudspeakers is one of the unexplained mysteries of hi-fi.

Although CD typically produces sharp clean images with wide dynamic contrasts, it rarely if ever achieves comparable dimensionality to a good LP on a top-class analogue front-end. While I'm not claiming the CD-120 Linear fully equals or beats the best turntables, it nonetheless produces a beautifully subtle and holographic soundstage that's unusually natural and open. By typical CD standards it's exceptionally smooth and uncoloured, with a delicate openness that is very engaging. It's not a CD player that immediately strikes the ear as 'impressive', yet who could fail to be impressed when faced with such realistic results? The more you listen, the more engaging it gets. At least that's what I found.

As a CD transport (forgetting sound quality for a moment) the CD-120 Linear is nothing much to write home about. Track access is lazy, as though the player had to think for a few seconds before executing your command. In this and

one or two other respects, the CD-120 Linear reminds me of CD players from the early 1980s. It's frustratingly slow after a typical modern player. In particular, the drawer mechanism was a bit clunky, and, on the review sample, would not fully open or close without a pull or push –hopefully a local fault, and not something that afflicts other examples.

Display Off is offered – a useful feature that (with some CD players) can sometimes improve sound quality. Unfortunately, once you've switched off the display - that's it; off it stays! Unlike some more advanced CD players, the display doesn't temporarily light again - when you press Stop or Pause, for example. Unless you select Display On via the supplied remote handset, the lights stay off. You've the option of dimming the display, or switching it off altogether. Now, it could have been imagination, but I thought the sound might've been fractionally cleaner with the display switched off. But, if there was a difference, it wasn't a very big one.

A single set of unbalanced

> analogue outputs are provided, plus a digital output for an external DAC. Shrewdly, given the CD-120 Linear's natural unexaggerated sound, the manufacturers have increased the analogue output slightly to 2.35 V, compared to the more normal 2 V. This gives the CD-120 Linear marginally greater drive, subjectively helping to suggest increased presence and dynamic attack. If you're making A/B comparisons with other CD players, be aware that the CD-120 Linear may well sound a fraction louder at the same volume level because of this slightly increased output.

The CD-120 Linear uses a 16bit TDA 1543 D/A Converter, and does not have a digital filter on the output. This is its magic ingredient. For those interested, there's a link from the company's website to an article written by Japanese engineer Ryohei Kusunoki who first advocated this approach, explaining (in rather fractured English) his rationale. Put simply, it boils

down to

the cure being worse than the disease. So, Consonance ditch the digital filter, and in doing so claim much improved phase linearity and better timing, with less smearing of the extreme highs.

Certainly, the CD-120 Linear has audibly less of that tonally 'hard' closedin effect one typically associates with CD – it's without doubt unusually natural and open sounding. Kusunoki argues that CD's sonic problems are largely caused by the digital filter, and claims the adverse effects of this filter have far more significant effects on sound quality than the imposed limitations of CD's 44.1kHz 16bit specification. Judging by the sonic performance of the CD-120 Linear, he may well be right – though I daresay there are other factors too.

The CD-120 Linear can either sample at regular 44.1kHz,or at 88.2kHz – this being accessed from the remote control. Comparing 88.2kHz with standard 44.1kHz, the latter sounds slightly edgier and a shade more congested. The 88.2kHz option sounds noticeably cleaner and more trans-parent, with less of that electronic 'edge' and congestedness one so easily gets with massed violins and voices. In 88.2kHz mode, the CD-120 Linear is much more of an open window on the recording being played, sounding clear, sweet, trans-

parent, and very natural.

It was pleasant to listen to, but engaging too - making the music sound interesting and involving.

At the same time the actual sound itself was easy to 'forget'; it had presence and colour, yet did not draw attention to itself. Again, these are very Analogue sorts of qualities. The total effect was very natural and believable, and once acclimatised to the way the CD-120 Linear did things, I did not feel it lacked brilliance, clarity, or separation – indeed, quite the opposite.

My final surprise was price. I wasn't aware of the CD-120 Linear's very reasonable cost when I first began listening to it, and was agreeably shocked and pleased to learn how little it will set you back (in audiophile terms). It easily gives Chord's DAC-64 a run for its money, and actually beats it in terms of relaxed smoothness and unexaggerated natural-ness. If you prefer your music with a bit more attitude and excitement, the Chord still has the edge – but not by much.

> Sometimes a new component has you excitedly going through your favourite recordings, listening out for fresh details or new revelations. The CD-120 Linear had me doing just that; I was curious as to

what it might make of each new recording I tried. But, rather than sitting there on the edge of my seat waiting and hoping to be impressed, it was more a case of just leaning back and enjoying the results. It's definitely a CD player that appeals to your heart and emotions – though that isn't to say it doesn't stand up to being analysed; it does.

The CD-120 Linear is a curious mix of apparently conflicting opposites. It produces natural and unexaggerated results that aren't 'impressive' in loud or extrovert terms. Yet at the same time you could never claim the results are bland or faceless. The music is reproduced in a deeper more meaningful way than one often finds with silver disc. The CD-120 Linear is a very musical CD player – one of just a few able to make digital sound like good analogue.

TECHNICAL SPECIFICATIONS

Type:	Integrated CD Player
Chip-set:	16 bit TDA 1543 x2
Outputs:	1pr single-ended RCA/phono
	1x co-axial digital
Output Level:	2.35 V
Dimensions (WxHxD): 430 x 85 x 320mm
Weight:	10kg
Finish:	Silver
Price:	£695

UK Distributor:

Alium Audio Tel. (44)(0)1273 325901 Net. www.aliumaudio.com

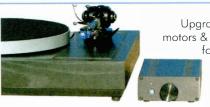


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The Anatek Audio CM1 Passive Control Unit and MB50 Mono-blocs

Three years ago, in Issue 22, I reviewed an obscure but rather delightful sounding integrated stereo amplifier called the Anatek Audio A50. It was a new name to me, and I daresay the vast majority of readers too, but I wanted to review it simply because I liked the way it played my music. Start-up operations often struggle to survive their early years. I was therefore particularly happy to get a phone call from Martyn Hook late last year, asking me if I would like to try Anatek's new pre/power combination. Naturally I said yes, pleased to discover that the company was surviving its early growing pains.

The A50 is currently undergoing a redesign and

will shortly re-emerge as the A50R, including full remote control operation and a price of \$1,400. At the same time Anatek is introducing this much more costly (\$4,550) separate CM1/MB50 pre/ power combo, which has some elements in common with its junior stablemate, but uses much more costly internal components in a very different configuration.

Unusually (though not uniquely), the entirely passive pre-amplifier features full remote control operation, which in this critics view is an important bonus. Dealer (ie customer) pressure has persuaded Anatek to change the A50, and Martyn admitted to me that he hadn't appreciated the virtues of remote control until he had it – and now he wouldn't be without it!

Remote operation doesn't of course come naturally to an all-passive and therefore essentially un-powered by Paul Messenger -

device like the CM1, and implementing it naturally raises the costs and complexity considerably. In this case the signal path remains unpolluted by any external electronic influences, and the step motor, relays and control functions themselves are all implemented by means of a compact external power supply, connected via a DINterminated lead.

Features are

naturally pretty

basic.

The lack of balance provision or mono switching was noted, but is only a minor caveat, and the key capabilities of selecting between the inputs, adjusting volume and muting the output are all available. These functions are all performed by a simple five-button handset - up/down to cycle through the inputs, right/left to increase/reduce volume, and a central mute/un-mute button. I can't say for sure whether customers will get the same universal mini handset as the one that was supplied for the review, but can say it was a very neat, simple and easy to use affair. The volume adjustment is performed

by a ladder of discrete Roderstein resistors, chosen for their superior sound quality. These are selected by step motor, and the setting is confirmed by a crescent of green LEDs. The inputs are switched by relays, the one selected indicated by another green LED. Silver knobs duplicate both these functions, and the switching is reassuringly, if a little intrusively, mechanically clunky.

All eight pairs of sockets are WBT Nextgen types, chosen for their sound quality. Six pairs provide the selectable inputs, one pair supplies pre-out, while the final pair can be used to feed a recorder (though it may also be used as a direct input for a single source system).

The power amps also have Nextgen input sockets, and will henceforth be fitted with WBT's new Nextgen speaker terminals. Our samples came with captive mains leads, but this has (sensibly) now been changed to allow a free choice of mains leads. On the front panel a solitary silver knob switches on each power amp, backed by green and red LEDs, the latter to indicate the operation of non-intrusive protection circuitry (short-circuit, overload or thermally triggered) that re-sets automatically.

The power amps have a similar basic circuitry configuration as the A50, a patented technique that keeps the amplifier operating in Class A but without the normal waste heat output: the MB50 heatsinks just get mildly warm at idle. Direct-coupled circuitry avoids the need for electro-lytic capacitors in the audio path, and low DC drift minimises thermal memory effects. Radio frequency (RF) filters are applied on the signal inputs, outputs and mains input. Although the specified power output



▶ is the same 50W that is claimed for the integrated model, these mono units have considerably beefed up power supplies with superior components throughout, including Vishay resistors in the feedback loop.

0

hard to figure, but the combination of the Anateks' Nextgen sockets, together with Nextgen plug terminated interconnects that Martyn brought along, definitely had the edge over the regular – and very respectable – DIN-to-phono interconnect that I normally use, with superior delicacy and detail rendition.

While all the right bits are clearly in place, it has to be admitted this isn't the prettiest rig around. The combination of a steel chassis, aluminium wrap and a slightly oversize fascia, all painted black, might be perfectly functional, but it somehow looks very '70s, and rather hair-shirt audiophile. Though attractively compact, with pre- and power based on matching fascias, the size is also a little inconvenient, as the two power amps placed side by side add up to rather more than can be accommodated by a regular shelf for 430mm components.

You're therefore not likely to choose this Anatek combo for its good looks. The sound is clearly what really matters here, and the sonic performance is where this combo distinguishes itself.

When Martyn brought down this new Anatek combo, the first thing that I learned was just how good those WBT Nextgen plugs and sockets sound. My regular CD player is a Naim CDS3, which comes with both phono and DIN outputs. Past experience had always favoured the DIN socket, even if the reason was Sonically, the Anatek leads with a quite delicious mid-band, where it shows superb voice articulation, a wide dynamic range, and very low coloration. In some respects it reminds me of the character of valve amps, with similarly fine image perspectives and transparency, though its midrange here sounds sweet, combo that I regularly use, though the Anatek pre/power does lose out a little in terms of top end sparkle and leading edge definition, and its bass end also lacks a little poise and precision in comparison. The bass is deep and powerful, but through heavy-but-clean speakers like the B&W 800s that I'm currently using for reference, it does lack a little subtlety and articulation.

However, the CM1/MB50 is clearly and unequivocally a worthwhile improvement over the earlier A50. It has something of the same overall character, but delivers this alongside an altogether cleaner presentation with notably lower background hash. This reduces the distractions and artifice that make one aware that there's an electronic chain between you and the music, and makes it that much easier to suspend disbelief and focus on the music.

Out of interest I tried the CM1 direct into the NAP500 power amp, and finding the

clean and warm rather than the shiny euphonic quality I tend to associate with valves. Certainly the mid-band is sweeter

and less coloured than the (considerably more costly) Naim 552/500

experience very

entertaining, I carried on using this combination for some time. I don't think I'd actually want to swap my NAC552 for a CM1, but I was very impressed by the way it simply got out of the way, yet also provided the remote control features that I find essential. One thing that did become clear is that the slight lack of top end zing and incisiveness noted with the MB50s was not present when feeding the NAP500, so no such complaint

EQUIPMENT REVIEW

▶ can be laid at the CM1's door.

Passive pre-amps have never achieved universal acceptance, and critics have accused them of sounding limp and lacking in dynamic drive. There might be an element of truth in this, but I can't say I found it particularly noticeable, and if there was perhaps a slight softening to the sound, it seemed a fair trade-off for the excellent neutrality and transparency of this ultra-simple but

TECHNICAL SPECIFICATIONS

CM1

Type:

	pr
ine Inputs:	6x
ine Outputs:	Pre
	(be
Remote Control:	Vo
Size (WxHxD) –	
Pre-amp:	25
Power Supply:	12
Neights –	
Pre-amp:	3.2
Power Supply:	2.3
Price:	£1

	Passive remote control	
	pre-amplifier	
	6x NextGen RCA/phono	
	Pre-out and rec-out/direct-in	
	(both on Nextgens)	
l:	Volume, input, mute	
	250 x 100x 350mm	
	125 x 100x 320 mm	
	3.2kg	
	2.3kg	
	£1,900	

MB50	
Туре:	Mono power amplifier
Input:	NextGen RCA/phono
Input Sensitivity:	750mV
Outputs:	NextGen speaker terminals
Output Power:	50 watts into 8 ohms
Frequency response	(-3dB): 1Hz - 100kHz
Distortion 50 watts	1kHz: 0.01%
Size (WxHxD)	250 x 100 x 330 mm ea.
Weight:	6.5kg ea.
Price:	£2,650/pair

Manufacturer: Anatek Ltd. Tel. (44)(0)1903 524602/524619 Net. www.anatekacoustics.co.uk

unquestionably high quality device.In the final analysis I'm rather more impressed by the CM1 than the MB50, and could comfortable contemplate using it as a long term part of my system. The MB50 is also very persuasive, on account of its superb mid-band performance, while the slight loss of resolution towards the bandwidth extremes is acceptable enough considering the price, since I've encountered much the same in several far more costly alternatives.



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The VTL ST-150 Vacuum-tube Stereo Power Amp

There are certain things that just seem to be. Regardless of fashion, regardless of feast, famine and foe, they persist, they survive or the re-emerge. Within the great scheme of things, certain formulae, certain constructs achieve a natural balance of virtues that ensure a lasting appeal. The same is true within the insular environment of high-fidelity reproduction. There's the 25 Watt Class A amplifier, the 8" two-way loudspeaker, the uni-pivot tonearm (our very own Lazarus) just to name a few. And then there's the middle-weight, medium price, push-pull tube amp. Examples are legion but the one that sticks in my mind is the Audio Research D115. Why the lasting recollection? Well, not only was it an early object of audio desire as far as I was concerned, but it seemed to strike that happy balance, not exactly all things to all men, but good enough in every regard to be taken seriously in any company. Rather like a middle-weight boxer it was powerful enough to engender respect, fleet enough to impress and its inherent balance made for fantastic entertainment. Spookily, it also eschewed the popular ultra-linear output configuration in favour of the more efficient (and musically more dynamic?) push-pull tetrode topology. Spooky because that's exactly what I see before me now.

VTL's ST-150 stereo power amp employs exactly the same output topology as the D115; two pairs of 6550 power pentodes a side. But at the same by Roy Gregory

time it coaxes more power from a chassis that's approximately half the size as well as being infinitely more attractive. However, leaving the numbers aside, the basic recipe remains the same; doubling up the output pairs to deliver enough power to drive the vast majority of real world loudspeaker designs with genuine authority a far simpler device than the D115, mainly because it dispenses with the older design's valve regulated power supply. But before you throw up your hands in horror, bear in mind that solidstate regulation has come an awful long way in the last few decades, to the point where in many cases (irrespective of cost) it's the preferred option. So, in some respects it sits in the same highpower/high-value territory as the Rogue Audio amplifiers, which is no bad thing at all.

> Enough of the landscape, how about the specifics? The fully enclosed casework is nearly as tall as it is deep. The large mains transformer is centrally mounted on the rear edge, flanked by the output transformers, making for an awkward package if you pick it up from the front. Between them and the front-panel sit the valves,

mirror imaged in the usual, dual-mono configuration. Each channel consists of a 12AT7 input tube and a 6350 phasesplitter to drive the paired, push-pull 6550 output tubes. Bias points and trim pots are provided on the top-plate, but require a (readily available) basic multi-meter to use, rather than an LED arrangement (á la c-j) or built-in meter (á la Rogue). Slightly less convenient to be sure, but VTL provide extremely

from a single box that's

manageable by a single person. It's not hard to see the appeal, especially when you consider that at \$3000 the ST-150 actually undercuts what the D115 cost 25 years ago!

Of course, there's far more to performance than power output per pound (weight or sterling). The VTL is clear and comprehensive instructions to guide you through what is an essentially simple process. The rear panel sports a phono/RCA input for each channel. fuse holders for the AC and B+ supplies (with spares provided) and the speaker binding posts. There are no separate output taps on the transformers to accommodate different speaker impedances. Instead, VTL fit a single pair of five-way binding posts for each channel, optimised very sensibly for a 5 Ohm load

Which brings me finally to what is one of the nicest aspects of this amp and one that has absolutely nothing to do with sound. The front

panel design is based on the metal-work derived for the company's flagship Siegfried Monoblocs and 7.5 Reference preamplifier. It looks great at those elevated prices: down here in the real world it looks sensational. This is the best looking amplifier at this sort of price that's ever graced my system.

The enclosed casework is practical, the curved front panels attractive and the window makes the most of the valves inside. The power switch and a tiny green LED are all that interrupt the subtle sculpted shape, an object exercise in enhanced minimalism and making an otherwise prosaic box astonishingly attractive. Not only does it look reassuringly like the money, you'll never have to apologise for the appearance of your amplifier again. The only downside is that the most affordable, currently available pre-amp that matches the styling is the TL 6.5 – which costs twice as much as the ST-150. The styling will filter down, but don't hold your breath...

Next to the binding posts you'll find a small switch that enables the user to alter the output stage from tetrode to

triode mode, removing the screen grid from the circuit theoretically improving linearity at the expense of power (80 Watts in place of 150). This option is familiar from most of the other such amps on the market – and it makes no more sense here than it does there. More a response to end-user demands than a n electrically sensible compromise; the public's perception of the superiority of triode designs apparently doesn't extend as far as understanding the necessity of matching the output impedance of the power-valves to the input

with the daunting proposition of sharing system space with a trio of \$10K speakers. At its (comparatively) affordable price you might anticipate it being a little out of its depth. Now, whilst results varied (the Summits tended to dwell just a little too much on its weaknesses) it commanded both the Coincidents and the Gershmans with aplomb, delivering a powerful, fullbodied, driven performance bouncing with life and energy. Indeed, seldom

> has the term power amp seemed quite so appropriate. Again. that's no real surprise, given my fond memories of the D115 However where the VTL differs from the old ARC is in it's handling of space and instrumental focus. Where the Audio Research threw a soundstage that was at once huge and beautifully defined, with a real

of the transformer they drive. As that impedance varies between triode, tetrode and pentode topologies, the amp can only be optimised for one mode, or compromised in them all! I dutifully tried the ST-150 in both configurations but it was no surprise to discover that it sounded consistently better in its tetrode mode. Switching to triode introduced an airy sweetness that disguised a lack of foundation, organisation, focus and placement. The amp lost the sense of drive and grip that made it so consistently appealing and enjoyable in tetrode mode. Gone was the sing-along factor, the tendency to dance little steps on the trips back and forth to change discs; gone was the whole point of having an audio system in the first place. The switches were thrown back to tetrode and there they resolutely stayed.

On arrival the VTL amp was faced

impedance

instruments, this inner detail is the ST-150's weakest suit. Its stage is big. although wider than it is deep, but the transparency that lets you see and feel the space all the way to the rear is lacking, as is resolution around, below and between instruments. Indeed, in this respect, it's more reminiscent of my old (and equally well loved) Beard P100. The stage is peopled with bold, threedimensional images but whilst they are well defined in terms of position, they tend to bleed into the space that should exist between them. It's an affect that diminishes as the amp runs in, but this will never be an ultra-definition device. In practise this adds to the feeling of substance and physical presence, but imaging freaks who want to view etched out ice sculptures are likely to find the enveloping warmth of the VTL cloying and frustrating in equal parts.

sense of the space around and between

Now, on to the good stuff...

90

I've already hinted at the power and purpose that this amp exhibits; it comes with and as a result of other, important attributes. Energy is one thing, but control is quite another. Get too much oomph in the wrong place or at the wrong time and it becomes a seriously destructive influence. After all, music is all about structures and patterns. The ST-150 gets things in the right place and very much at the right time – that's partly why it has such an emphatic sense of backing vocals beautifully separated on the Nanci. The ST-150 might be big and bold but it's not without its subtleties too.

So, colours and pace, weight and dynamics: they all point to the mid-bass, and a combination of weight, power and speed in this vital region. It pulls along the low bass (and tidies it up very nicely thank you) whilst underpinning and fleshing out the all important midrange. The recent Living Stereo SACD of the Walton *Cello Concerto* is a beautiful example of what this amp does and doesn't do. Piatigorsky's instrument is solid, rich and resonant, no hint of the

filling performances with energy and presence, breathing life and colour into them. It doesn't do everything and sensibly doesn't try to. But what it does do is musically important and artistically convincing. At its price it has few peers, and none that are as beautifully present. An amp that puts the guilty pleasures of musical indulgence way ahead of the more cerebral factors of appreciation, it invites you to get down and get dirty. They say that a good biggun will always beat a good littlun; well, the ST-150 is a very good biggun indeed good enough to remind you what you're missing, good enough to leave you always wanting more.

pace and

momentum. Low-frequency transients in particular, whilst they lack the razor edges of some solid-state designs, have their centre of weight placed with precision, which given the weight delivered is just as well. As a result bass is deep, powerful and propulsive. Old favourites like Nanci Griffiths' 'Listen To The Radio' receive a fresh injection of bouncy enthusiasm, getting your toes tapping and the music moving. Likewise, the sublime 'Static On The Radio' (Jim White, Drill A Hole *Through The Substrate...*) has a glorious inevitability about its undulating, deep, deep bass-line that is at once compelling without undermining the melancholy thread that binds the song. Aimee Mann's duet part is instantly identifiable, underlining the VTL's tonal naturalness and the believability of its colour palette. And while we're on the subject, weren't the double tracked and

thinness that can

afflict this recording. The orchestra is arrayed behind and around the soloist, but without the expansive vista of a (much more expensive) amp like the RADIA; it all feels a little cramped. But it's also intimate and direct, which really suits the spiky starkness of this music. The short sharp shocks of the crescendos arrive with a sudden and gratifying crump that's both solid and convincing.

At the other end of the spectrum, live recordings like Jackie Leven's *Greetings From Milford* are breathtakingly real and present, the nuances of mouth turning from mic, the perfect pacing of the spoken introductions just adding to the simple acoustic structures, the beautiful contrast between the guitars. Which is what this amp is about,

TECHNICAL SPECIFICATIONS

Type:	Push-pull vacuum-tube
	power amplifier
Valve Complement:	2x 12AT7
	2x 6350
	8x 6550C
Input Sensitivity:	1.0V
Input Impedance:	130 kOhms
Rated Output (5 Ohm load): 150 W/ch (tetrode)	
	80 W/ch (triode)
Impedance Range:	2-8 Ohms
Dimensions (WxHxD): 480 x 230 x 260mm
Weight:	28kg
Finishes:	Front-panel in silver or black
Price:	£3000

UK Distributor:

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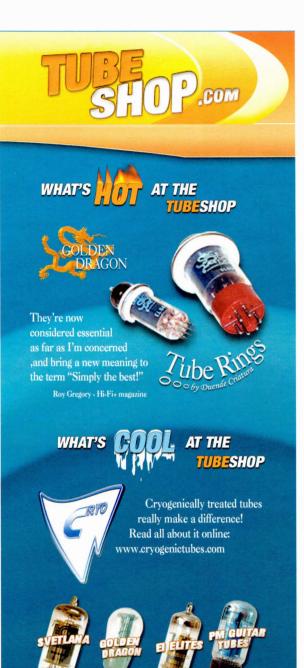
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The KR Audio Electronics Antares VA320 Single-ended Hybrid Power Amplifier

My first experience with KR amplification dates back something like eight years, but it left a lasting impression. The units in question were mono-blocks which used an unusual output device, dubbed somewhat provocatively the "vacuum-transistor" by designer Ricardo Kron. These looked for all the world like a single cylindrical heat-sink roughly the size and shape of a bean can, albeit ribbed and jet black. And very, very hot! Centrally located at the front of a large, elongated chassis, they were said to deliver 100 Watts a side, and boy did they sound like it. Crisp, clean and extremely dynamic, with superb resolution and wonderful tonal colours, these were amps to fall in love with.

Why haven't you seen or heard them since? Well, it seems that Ricardo's 100 Watts were measured differently to everybody else's 100 Watts and that the "scientists" on certain magazines, rather than simply explaining this (and debating it – which would have been far more interesting) instead screamed "Fraud!" at the top of their athletically under-developed lungs. That's right, guys, don't actually listen to it and appreciate the quality; it's different and it's got to go.

Mr Kron probably didn't help himself in this regard by indulging in slightly over-zealous marketing speak and by underestimating the power of the press. Whatever the reasoning it's taken a while to recover during which we've been denied some of the most novel and sonically promising amps out there. Until now: KR are back and the sonic by Roy Gregory

results are just as impressive as before while the numbers equate to more conventional standards too.

The company's roots lie in the Czech Republic, where they were engaged in valve production and development for the Soviet military. As well as the aforementioned vacuum-transistor, they also produce a whole range of familiar tubes as well as higher powered equivalents for types such as the 300B. It's one of these that's employed in the output stage of the Antares, dubbed the KR842VHD and delivering 20 singleended Watts a side, it's conceptually (if not electrically) equivalent to its more famous brethren. For those demanding even more power and happy to juggle with 1250 Volts, there are similar 211 derivatives too.

Being a stereo chassis the Antares places its two output tubes at the frontedge of its familiar, elongated footprint. Being a hybrid design that's all the glassware you get, the input and driver circuits being solid-state, the whole thing being devoid of global feedback. Cathode biasing the valves means that they effectively self-adjust and removes the need for a fixed-biasing arrangement or meter. Further enhancing the sense of deja-vu, the massive tubes are encased in a finned block that protects them and presumably helps dissipate their considerable thermal output. Behind

this, two black, heptagonal enclosures conceal the power supply elements while an elongated octagon at the rear covers the output transformers. The open plan layout is supported on a stainless steel chassis, the polished top-plate providing the only relief from the otherwise matt-black finish. The front-panel offers a single LED for stand-by/operate and a soft-touch

switch to toggle between the two. The end result probably wouldn't even register on the average bling-meter, but it's not unattractive in a purposeful, squat, powerful kind of way. More importantly, the rear panel connections are equally simple but far more impressive, at least as far as component quality goes. The large on/off switch is accompanied by discrete covers that allow access to anode fuses and the panel for optimising output impedance. There is a pair of good quality phono input sockets (no balanced option) and each channel gets a pair of WBT binding posts for its outputs. Otherwise, that's your lot at least as far as external features goes. Internal

construction is neat and tidy with

 \triangleright



considerable care going into the selection of components and their layout. This is sound engineering (in every sense of the phrase) rather than male jewellery. In that respect it's more akin to the Lamm amplifiers than anything else. Just like them, there's no attempt to impress with flashy appearance; it's purely the sound that matters. Fit, finish and presentation are neat and tidy, but about as far from ostentatious as you can get.

the OBXs, it seemed rude not to! Whilst we might not normally associate \$4000 amplifiers with \$34000 speaker systems, used on its own terms, that's exactly what you can do with the Antares. Its strengths are considerable and if they match your needs it could be a marriage made in heaven. different bass instruments, each given its own distinct space and identity. But it's the ability to centre a note's energy that keeps things moving and prevents all that weight becoming a stodgy embarrassment. The life and purpose in the music's nether regions never holds up or confuses proceedings. Even the dense, roiling bass lines that propel 'A Forest' (The Cure, *Seventeen Seconds* Deluxe Edition) are kept

> separate and distinct, driving the track's momentum and wonderful sense of inevitability. There's so much going on down there that many an amp has struggled to keep a balance

between resolving the information and maintaining the forward urge; pull it apart too far and the whole track simply grinds to a halt. The KR treads a gloriously

joyous line between the two; you can hear just what's happening and you sure as shooting know why. This track should be truly compelling – with the Antares at the helm it is.

If you want absolute resolution, focus and transparency it's unlikely you'll be looking at a zero-feedback, single-ended design anyway, but the Antares does a better job than most of its ilk. The mid-band is open and relaxed with clear tonal separation of voices and instruments. Spatially things are not quite so distinct, so the air around and between instruments and sounds is not as apparent as it is with an amp like the RADIA. Instead there's a velvety haze that inhabits the spaces within the soundstage. Compared to the Hovland or the Linear Bs it comes as quite a shock, but actually, compared to the vast majority of midpriced valve amps, it's about par for the course. It's easy to hear that and blame it for a softness, or roundness that you also hear but you'd be wrong. In fact, despite first impressions and unless you want to start plumbing the limits of

word of warning; don't be lulled into a false sense of security. Pick the Antares up and you'll discover that, as subdued as it appears, its 38kg weight is sure to make an impression. But the best bit I've kept for last. By now you'll have

However, one

I've kept for last. By now you'll have gathered that this is a lot of amplifier, at least physically. It doesn't disappoint sonically either, but the whole thing, delivery crate and all, will only set you back \$2995. I know that's not exactly pocket money but, hey, take a look at the competition!

20 Watts is just about perfect for the Living Voice OBX-R2s and a single Antares makes a superb team with these speakers. But with the Nola Pegasus on hand with its 88dB efficiency I requested a second amp. Indeed, given the results achieved with

If I was expecting the speed and clarity of the vacuum-transistor design of old then I was in for a surprise. The sound of this KR amplifier is characterized by its meaty substance and presence, down in no small part to the bass weight, mobility and energy that it generates. But if you are expecting that lush, floaty, midprominent mess that passes for music with so many triode driven systems then you are in for another surprise. Lower registers on the Antares are powerful and substantial, driving the music forward when called to, but equally capable of under-pinning and filling in a subtle foundation when required. The expressive quality of the bass is a result of its impressive pitch, tonal and textural qualities. There's no tendency to collapse or muddle

leading edge resolution, the Antares isn't soft – it's simply devoid of the edge that so often makes electronics sound quick and exciting. But play something with real attack and bite and you'll soon discover that the KR delivers in full, midrange dynamics jumping from the firm foundation provided by the solid bottom end. The result is relaxed, natural and gentle, but bold and imposing when called for, which makes

long-term listening an absolute pleasure.

Roll these things together and combine them with impressive top-end air and energy and you have a sound that works equally well with rock as it does with the large-scale classical repertoire. The Starker Dvorak Cello Concerto, recently re-issued by Speakers Corner has tremendous, sweeping power that carries you with it, colour, drama and an almost palpable physical presence. The soundstage supported by the KR is a little narrow and deep, but it adds a compact sense of concentrated energy and life to the piece, which really drives it along. More thoughtful works like the Sibelius symphonies fare just as well, and if the slightly narrower soundstage robs them of just a little expanse and bleak reflection, the superbly natural tonality enjoyed by the amps makes the most of the stark contrasts in instrumental mood and colour.

If the Antares falls down it's in the realm of intimacy and immediacy. If it's small scale singer/songwriter type music, then there are amps that will put you closer to the performer. If you want to now how something is being played then there are amps that deliver more detail. But if it's just the what that you want, the message, loud and clear, then the VA320 will do that, all day long. Nor is it phased by power demands. Loud passages, electric or acoustic are handled with grace and no loss of pace or solidity. Really push things (up around danger levels – to both equipment and health) and the top-end starts to get glassy and a bit shrill.

and pace. The KR amp never sounds pushed or flustered and never trips over itself as a result. Instead, performances flow at their own pace and in their own time, fast and frantic or slow and languorous as the music demands. It's a temporal dimension that makes many other amps sound expressively two-dimensional - not an accusation you can level at the Antares. Involving and exciting or in more relaxed mode, it's an amplifier that lets the music speak for itself. Sonically invisible it isn't, but its smooth, engaging character makes for long-term pleasure as opposed to short-term fireworks.

It's a shame more amps don't follow its lead.

But that's pushing really, really hard.

Back in the real world where things like neighbours and young children place a necessary limit on excess, there's plenty of headroom to be had from the Antares. Indeed, playing loud is actually when it's happiest. It's not a case of a volume threshold below which it doesn't really wake up. It just seems to relish the sheer power it can bring to appropriate programme material. Yet, at the same time it can caresse a chord or phrase with an easy gentleness that's quite beguiling. That ease is what lies at the core of this amplifier; ease when it comes to power, ease when it comes to timing

TECHNICAL SPECIFICATIONS

Type:	Single-ended hybrid power
	amplifier
Valve Complement:	2x KR842VHD
Input Sensitivity:	1V
Input Impedance:	47kOhms
Output Power:	20 Watts/ch
Output Impedance:	4 or 8 Ohms
Damping Factor:	c2.8
Dimensions (WxHxD)): 385 x 255 x 550mm
Weight:	38kg
Price:	£2995

UK Distributor:

Audiophile Club Tel. E-mail.



The Prima Luna Prologue 3 Pre-amp and Prologue 5 Power Amp

by Jimmy Hughes

It was back in Issue 35 that I reviewed the Prima Luna Prologue 2 integrated valve amplifier. And very good it was too. I loved its warm lush sound and smooth mellow richness. Sonically, it was unmistakeably 'tube' in the best sense of the word, with all that implies. Not only was it an excellent amplifier in terms of sound quality, build, and finish, it was reasonably priced and very good value. I really liked it, and was sad to see it go.

The Prologue 3 pre-amp and Prologue 5 power amp represent the next stage on, so to speak, and (without thinking) I just assumed a two-box version would be more powerful. In actual fact, the difference in specification is not so great. Both models offer around 40W per channel, and more or less similar bandwidth and distortion figures. The difference is a new Driver and Phase-Splitter circuit, which allows the Prologue 5 to operate without global negative feedback.

Most amplifiers have a degree of negative feedback to help reduce distortion. The idea is to feed back a part of the signal so that additive distortions are cancelled out. It works superbly well on steady-state predictable signals (like test tones), and greatly improves measured performance. Trouble is, music is not steady-state and predictable! While negative feedback can be used to make a poor amplifier look good on paper, it definitely won't create an amp that sounds as good as it measures. presentation, with increased depth and spaciousness.

Like the Prologue 2, the Prologue 3 and 5 produce an exceptionally rich tonality. The bottom end is full and weighty, with an unusually rich mid-band and smooth sweet treble. The presentation is distinctly warm and honeyed – the classic way a tube

amp is supposed to sound, but all too rarely does. This may take a little getting used to especially if you're more accustomed to listening to tight well-damped transistor amplifiers - the sonic equivalent of moving from Canada to Florida! Once you do get used to it, there's little doubt as to which sounds more real and true-to-life. At least that's my take on it. You get more of that weighty woody warmth and bloom on instruments like acoustic double bass, and the result

is very believable. There's something very inviting and beguiling about this amplifier. It's so smooth and refined. Note the beautifully sweet top-end and deliciously liquid mid-range – absolutely gorgeous. In short, extremely clean and effortless, yet not without point or incident.

For all its warmth and refinement, the musical presentation is

The Prologue 3 pre-amp also runs without negative feedback, and does not have the usual Cathode Follower outputs – it's Anode out. It also features tube rectifiers, rather than solid state ones. While the difference on paper between the integrated Prologue 2 and the separate pre/power Prologue 3 and 5 is quite small, the net result sonically seems to be a noticeably bigger and more holographic musical actually quite vivid and dynamic, with excellent attack and immediacy. As the Prologue 2 was no long around, I couldn't directly compare it to the Prologue 3 and 5 combination. But my sense is that the two-box amps sound noticeably more three-dimensional and holographic. There's a much greater depth and range to the sound, with increased width and spaciousness.

Now 40W is not an especially high output. But don't pre-judge the Prologue 5; it actually sounds very gutsy and powerful – as though it had a couple of hundred Watts in reserve and was just idling along. My Impulse H-1 horns are fairly efficient, but by no means exceptionally so. Yet the Prologue 5 had power in reserve to drive them as hard as I would ever want – or so it seemed. There was that sense of ease and effortlessness one associates with big amplifiers.

And, because the musical presentation had such holographic dimensional qualities, voices and instruments were projected into the room with a tangibility that didn't

rely on muscle alone to create a big roomfilling effect. The sound was big and full-bodied. Even when played quietly the music had a commanding presence and energy. Clarity was excellent, and so too was pitch definition. Even during complex pieces, the Prologue 3 and 5 retained poise and control.

Although there's no more power available, the two-box amp definitely sounds as though it has more in reserve than the Prologue 2. As well as appearing subjectively more powerful, the Prologue 3 and 5 also sounds more delicate – more finely nuanced - with a lovely honeyed richness that's very attractive. You can hear these qualities on pretty much all types of music.

Of course classical music and naturally-recorded acoustic jazz are perfectly not adding its own edge and aggressiveness – helps create an impression of refinement and control. The Prologue 3 and 5 sound very civilised without being boring or bland. The top-end is very well integrated with the midband, meaning that sources have to be really rough and abrasive to provoke

harshness. Yet there's no sense of things being artificially smoothedover or prettied up. Indeed, the opposite is

true – the sound is unusually vibrant and colourful, with vivid detail and brilliant clarity.

Timing is excellent, and there's good rhythmic drive and forward momentum. I liked the way the Prologue 3 and 5 gave you 'time' time to listen and assimilate the music. I'm not sure you'd call this a fast amplifier; the full bottom end makes sure that bass lines are

properly weighty so they really under-pin the music, as they should. This in turn can give the impression of things happening with greater poise and deliberation. The 'speed' of an amplifier is a contentious issue anyway, since no one has ever related measurable things like transient rise time with the subjective impression of the music moving quickly. In my experience, the absence of bass is the main thing that creates a (false) impression of speed. Put another way, the Prologue 3 and 5 do not create a welter of fast but unrelated leading edges that can sound superficially impressive, but soon tires the ear. Presentation is always coherent and

integrated.

served.

But so too are recordings of electronically-created sounds and aggressive brightlyrecorded pop albums. With the latter, there's no lack of brilliance or bite, but at the same time the amplifier - by

The power amp offers a choice of 4 Ohm and 8 Ohm outputs so you can achieve a good match with your loudspeakers. The correct match gives the highest output, but I selected the 4 Ohm option because (with my speakers) this gave a slightly 'darker' richer tonality, with better control. You lose a small amount of power as a result, but this is not serious. Try both vourself before deciding.

Like the other Prima Luna amplifiers, the Prologue 3 and 5 feature something called Soft Start, which reduces stress to the tubes when the amp is first switched on. The circuits do not run to the tubes to the edge, meaning longer tube life and less deterioration over long periods of use. When the time comes to replace the tubes,

and 5 are unusually quiet in terms of residual noise, and this seems to be the case. While I could just detect a little hum and buzz with my ear close to the speakers when testing the Prologue 2. I could hear nothing with the Prologue 3 and 5. It seems to be pin-drop silent - or thereabouts! Problems with residual noise can be an issue for those with abnormally efficient speakers like Lowthers. But on this showing the Prologue 3 and 5 will pass even this stiff test. Good, affordable tube amps are becoming something of a Chinese speciality. This is one I could certainly see out the rest of my days with. It's a gorgeous amplifier that sooths, charms and beguiles, while stimulating the senses. What's more important, its qualities grow on you; the more you hear it, the more you like it. There's never any sense of the amp drawing attention to itself and away from the music.

Prima Luna claim the Prologue 3

The result is natural and realsounding, yet friendly and relaxing. It may not be as big a bargain as the integrated, but it more than justifies the difference in cost. If you thought the Prologue 2 was good, wait until you hear these... ▶♠

TECHNICAL SPECIFICATIONS

Prologue 3 Pre-amp

Type:	Valve rectified,
	vacuum tube line-stage
Valve Complement:	2x 12AX7
	2x 12AU7
	2x 5AR4
Inputs:	4 x single-ended line-level
Input Sensitivity:	200mV
Outputs:	2 x single-ended line-level
	1 x single-ended tape out
Output Impedance:	3.5KOhm
Overall Gain:	11.5dB
Dimensions (WxHxD)): 280 x 190 x 395mm
Weight:	10.6Kg
Finishes:	Black, Silver, Champagne
Price:	£1099
Prologue 5 Power A	mp
Type:	Push-pull, zero-feedback
	vacuum tube power amp
Valve Complement:	2x 12AX7
	2x 12AU7
	4x KT88
Input Sensitivity:	810mV
Input Impedance:	100 KOhms
Power Output:	40 Watts/8 Ohms
Dimensions (WxHxD): 280 x 190 x 395mm	
Finishes:	Black, Silver, Champagne
Price:	£1099
UK Distributor:	

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The Big Mac Eating Out With McCormack's Beefed Up UDP-1

Virginia based McCormack Audio's single box McCormack UDP-1 is a universal disc player delivering CD, SACD, DVD-A and DVD Video formats. The founder and audio designer, Steve McCormack, developed it from substantially modified Pioneer disc technology. In this basic guise it is

a versatile machine that also offers high quality reproduction and good perceived value for your money. As McCormack themselves are fond of saying, "...beyond your expectations,

within your reach." Well.

within mine anyway, as I've been relying on the UDP-1 for high-res disc replay for the last year. So, as far as I'm concerned, taking this player forward along the upgrade trail is an intriguing proposition.

Of course, having some familiarity with the original UDP-1 (reviewed by AS in Issue 33) is essential to formulating an informed opinion of the up-rated player's performance. I also agree with much of what Alan Sircom has previously said about the machine. However, in the Parry household, it has primarily been used to play SACDs and CDs rather than as a gateway to DVD Audio replay which might be considered its best suit. For me the DVD options are definitely a bonus but were never the priority. It is an extremely useful CD player, rewarding those who want to hear an open, warm and neutral sound while still having several other formats at their fingertips.

by Reuben Parry

Yes, of course, the "one size fits all" and being "all things to all men" philosophy means that there have to be some technical compromises along the way. They become most apparent when playing CDs - where there is a subtly soft underbelly to the UDP-1's musical presentation. Crucially, in some ways, this can still be regarded as an asset because there is none of

CORMACK

the tiresome

vibrancy heard in the human voice. So, having made such positive statements of my own, I'm minded to ask a pertinent question "...if it isn't broke why fix it?"

Well, the answers to that hoary old chestnut, and there are more than one or two, should be of interest. Firstly, the McCormack Audio Corporation has since the 1990s been a subsidiary of that other Virginia based Hi-Fi company, conrad-johnson. The latter's ambitions for a high-end universal player have

> not yet fully materialised, with the AVP-1 still in its development phase – missing their proposed release date of late last year. Yet the "matching" sixchannel pre-amp is already available, while the five-channel power amp is well on the way. Enter the

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"Big Mac". This beefed up (internally modified) and re-named conrad-johnson Edition (CJE) version of the standard McCormack UDP-1 gives them an instant market presence. It also publicly confirms their future commitment to universal disc technology and, indirectly, to SACD as the premier digital audio format. Secondly, the McCormack clearly has untapped potential; the kind of potential that can easily and economically be realised through internal component changes which breathe fresh life into an extremely solid, reliable and proven design. Thirdly, it makes good commercial sense to offer these improvements "in house"

edginess

or constriction found in lesser performers. Consequently, as a CD player, it excels during extended listening sessions, especially with symphonies, concertos and operas, when its unforced yet accurate depiction of the music is such a valuable tool in handling of these compositionally complex works.

Turning to my McCormack's SACD credentials, I would have to say that I've been totally won over by the instrumental naturalness and through the focus, clarity and spaciousness it brings to acoustic spaces. Bold and distinctive orchestral colours are brought to the fore with enough body, depth and separation to distil a realistic sense of scale and proportion. The UDP-1 is also an expressive advocate for the range and before one or more of the audio hot rod chop shops fashionably goes out and "pimps their ride". I can think of a few original production models that have already been re-tuned, most notably the much loved budget Philips 963SA universal player which underwent an expensive series of internal upgrades, eventually trebling the asking price by the end of this process. It's questionable whether that kind of price increase is merited and (thankfully) this does not occur with the enhanced McCormack variants. The conrad-johnson Edition (or its equivalent UDP-1 Deluxe version in McCormack speak and finish) commands a modest \$500 premium over the standard model. There'll also be an upgrade kit available in due course for existing UDP-1 owners, although the price of that is yet to be decided.

Externally, the only discernible difference to the already excellent build quality is a champagne gold finished front plate bearing the conradjohnson name. Personally, I prefer the original McCormack's brushed aluminium aesthetic, with its machined insignia, but then I don't own any other c-j pieces. Fortunately,

that's exactly what you get if you buy the UDP-1 Deluxe. Reassuringly, the panel facia control layout, outer casing, WBT phono connectors to the rear, neoprene feet, remote control unit and even the instruction manual all remain unchanged. So the money has been spent on the electronics – the place where it should truly count.

Internally, the investment has gone into the audio and power supply circuitry. The machine has developed a rash of CJD proprietry polystyrene bypass caps, as well as upgraded electrolytics in the main power supply. In the most sensitive of circuit locations, customised metal foil resistors are now employed. So, no radical changes to the circuitry, but a major lift in critical component quality which incrementally combines to redefine sound reproduction and boost the McCormack's credentials as a CD or SACD player in its own right.

The sonic re-evaluation of the McCormack UDP-1 dressed in its brand new CJE livery is certainly illuminating. Starting with a standard compact disc, I slid an extremely enjoyable, smartly produced and musically rewarding Jennifer Warnes album, *The Well* (SDR SD8960), into the drawer. When played on the original UDP-1 her lovely, carefully paced and emotionally charged vocals in the opening title track had previously sounded quite open but perhaps a little

too soft.

That gave

her voice a slightly sluggish and almost self-conscious sounding delivery. Switching over to the CJE you notice straight away that Jenny's singing, while retaining all of its sumptuous delicacy and intensity, is now cleaner and clearly better defined. In searching for an appropriate analogy, I'd compare it to beginning the restoration of a portrait painting. The new circuitry acts like turpentine used sparingly to strip away layers of accumulated grime until previously hidden tonal hues are revealed, reinvigorating the whole musical canvas. The phrasing gains a rhythmic snappiness and genuine

flowing momentum, improvements that give her upper register singing that feel of a smooth, seamless and unforced lyrical progression. Supporting musicians on acoustic lead and rhythm guitars, along with the bass and keyboard parts are all equally well presented. Compared to a standard UDP-1 player the CJE's sense of interplay and timing is better. An initial impression that was sustained throughout later songs like 'Prairie Melancholy' and 'The Nightingale' where both vocal and instrumental continuity leads to a more satisfying set of performances overall.

Moving on into familiar SACD territory was another rewarding experience. This format's superb organisational properties can

> occasionally over-shadow its musicality, although to be fair to the UDP-1, its inherent accuracy and subtlety means that this isn't an accusation that can be levelled at it in either version. Using the CJE on bigger productions showcases its ability to recreate a beautifully regimented, spacious and yet coherent soundstage. It really comes into its own on works like the Saint-Saens "Organ" Symphony (the particular account I have in mind being the original three-track tape engineered by Richard Mohr and Lewis Layton back

in 1959 for RCA Living Stereo). This exemplary Sound/Mirror Inc re-master highlights the marvellous playing from the BSO under Charles Munch's erudite baton. It's tempting to say that the recreation of the hall's ambient acoustic properties, that delicious warmth it brings to the midrange strings and individual instrumental separation in general, could rarely have been so convincingly portrayed – certainly not at this price point. The careful tonal delineation between woodwind, brass and strings; that powerful and

105

sonorous full range realisation of the organ part (where there's less of an improvement) eloquently displays the *Third Symphony's* vivacious colour schemes and the deeply romantic poetry that lies beneath the score.

By comparison the basic model's SACD replay sounds a little clouded and less precise - although at the bottom end it's not so obvious. The differences are not life changing, but they are telling enough to suggest a clear preference for the "Big Mac". Whereas the UDP-1 is a skilled, firm handed and transparent performer, the Deluxe Edition possesses real finesse. Images are rock solid and secure in space and time. It makes diaphanous, dynamic shifts seem crisper and that subtle low-level information, like a gentle brush of cymbals or barely detectible kiss of bow on strings more apparent. Ultimately, music like this is all a question of degrees, and the CJE has more at its disposal.

On smaller scale SACDs, the CJE has some equally worthwhile things to say. Take the individual brilliance of Howlin' Wolf's Mississippi born guitarist, Hubert Sumlin, as a good example. Barely heard of outside a closely-knit circle, he's a musician who has had a profound influence upon the likes of Clapton, Page and Stevie Ray Vaughan. His 1990 album, Blues Guitar Boss, recorded in London for JSP Records (JSP5110) has recently been remixed to SACD, and it shows you why he's so admired. Infectious, imaginative and exciting lead guitar grooves and Hubert Sumlin's old grizzled voice, unusually softened by emotion, ensure this disc is quite the killer. Ten memorable songs including 'All I Can Do', 'Pickin' ', 'Still Playing The Blues' and 'I've Stopped Crying' make it impossible to passively sit back and simply consume a dollop of the foot tapping Sumlin tinted blues. A captivating and involving set recreates the immediacy of the moment, with all facets of this performance being enhanced by the conrad-johnson upgrades. In particularly, I like the precision with which it develops the moments of intimacy and drama that underpin this type of session. It builds upon the recording's strengths, providing yet more evidence, as if you needed it, of a sophisticated, unfussy and perceptively crafted design.

Universal players as a species are often assumed to be, by their very nature, jacks-of-all-trades and masters of

none. Yet, in this instance, seldom could that statement have proven to be farther from the truth. Capable of playing any disc any way you want it to, the CJE is in at least one respect, masterful indeed. This Deluxe/Edition player truly immerses you in the compelling, multilayered sonic possibilities of SACD. In doing so it rams home the format's sonic superiority over previous digital options. On old-school discs its subtlety, rhythmic flow, vibrant colours and easy clarity more than stand comparison with the CD-only competition. Indeed, many a customer will choose it on those grounds alone. But playing SACD it climbs to dizzy heights. Quietly impressive in its standard guise, the upgrades make way more than a \$500 difference, turning a solid grower into an out and out bargain and a tantalising glimpse of what might be.

Price: \$3900

UK Distributor: Audiofreaks Tel. (44)(0)20 8948 4153 Net. www.audiofreaks.co.uk

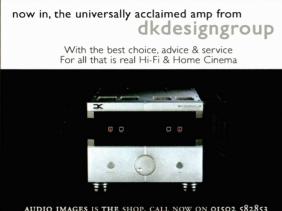
Gettin' Jiggy Wit' It... The Cartridgeman's Isolator

It must have been nigh on ten years ago that someone came up with the seemingly hair-brained idea of putting two bubblewrap bubbles between his (it was definitely a he) cartridge and headshell. He fixed the various bits together using wool for its natural compliance but adequate strength. Inevitably you had to be careful

• by Jason Kennedy

not to knock the cartridge otherwise it would fall out of alignment but the results were apparently very gratifying.

I'm not sure if Len 'The Cartridgeman' Gregory was aware of this, but if he was it might well have set him off on a quest to turn the idea into a practical means of keeping arm resonances out of cartridges, and thence into a product that could be sold to the more outgoing analogue enthusiasts he has been nurturing with his cartridge modifications over the years. The Cartridgeman Isolator achieves pretty much the same as the bubbles and wool but is significantly more practical and a bit less compliant. It uses closed



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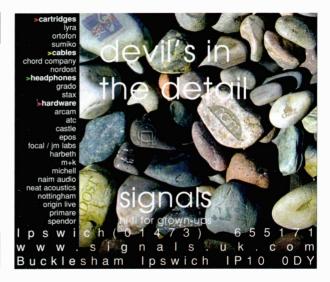
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cell foam to decouple the cartridge from the arm across the range of frequencies at which a tonearm will be inclined to resonate.

The Isolator uses stainless steel plates glued to the foam to form a sandwich with fixings top and bottom. There are bolt studs for mounting it in the headshell and the cartridge is attached using doublesided tape - albeit not the standard variety. Two locating pins are fitted so that it goes on square and two sizes of pin are available to accommodate cartridges with and without threaded inserts. The approximately 5mm thickness of this sandwich means that you need to raise the tonearm by this amount to maintain correct VTA which will be an issue on Rega arms that don't have a third party adjustment system, but most arms can easily be raised to suit. The Isolator does add mass but only 3grams and that includes the nuts and bolts so the overall increase is minimal.

I first tried the Isolator with Len's MusicMaker 3 moving iron cartridge and the result this achieved in combination with a Hadcock 242 tonearm and EAR's superb Disc

Master turntable was nothing short of revelatory. The quality of the turntable is of course the biggest factor, but in terms of cleanness and perceived distortion this set up was on a par with the same turntable in combination with an SME V and van den Hul Condor at over three times the price. This is partly because the MM3 has smoother treble but there was no getting away from the power and the glory that the set up extracted from Pure Pleasure's

latest pressing of *Couldn't Stand the Weather* (Stevie Ray Vaughan & Double Trouble); this album has never sounded as good.

It was certainly good enough to encourage me to take the plunge and affix an

Isolator to the Condor, a scary thought given the lack of any body or stylus protection on that needle, but not actually a palaver in practice. The result was a significant increase in relaxation to what already seemed a pretty refined sound but which, with the Isolator, took a distinct turn for the better. Now I could play louder without discomfort

and hear more of the acoustic space in each recording. The midrange is the most obviously transformed part of the band; it is clearly less hard-edged which is not a result that will suit all

tastes but would seem to

me to indicate a reduction in distortion, and that is what we should be striving for in high fidelity systems after all. That and some enjoyment, occasionally.

The bass also seemed to be a little

more articulate and possibly powerful too, which is a result of the extra resolution that the Isolator coaxes out. You don't get quite as much slam but the picture is fuller and more revealing. Highs meanwhile reveal a sparkle which is very appealing and seems entirely natural.

All in all the Isolator would seem to be a pretty significant innovation for the vinyl enthusiast. I imagine there will be those who prefer the harder edged sound of standard mounting but many more for whom the sense of ease that comes with the foam wafer will be most welcome. At \$85 it seems a little

> expensive in perceptual terms but sonically

it's worth quite a lot more if you already have a nice cartridge, and it's got to be easier than tying the thing on with wool and bubblewrap.

Price: §85

Contact: The Cartridgeman Tel. (44)(0)20 8688 6565 Net. www.thecatridgeman.com

Something old is new again ...at least to me

by Richard S. Foster

Right after the great Rocky Mountain Audio Fest last fall, I drove over the mountains with a friend. I was going to spend a few days with Mike Malone in Hotchkiss, Colorado.

Malone is as nuts about all things audio as any of us and since he just moved to Colorado a few months earlier, there was still some elbow room left

to move components around and try and tweak a little more from his already great system. Mike is a hard core vinyl addict - like yours truly - but he will listen to those silver/gold discs when there is music he can't obtain on a righteous format. One afternoon we were listening to a CD and Malone said, "...wait a minute, this one's not treated." My response, not surprisingly was, "What do you mean by 'not treated'?"

He took me into his back room and there, sitting surrounded by slivers of plastic swarf, was the Audio Desk Systeme Gläss CD Sound Improver. Now I have seen this device at a number of shows and thought it was an interesting idea but, with my predilection for those big black discs, I never got beyond that initial glance. Now I got to hear the before and after results for myself: I was totally floored with what I heard! Being the cynic that I am, I said to myself, "Nah, this can't be real." Well, after a half dozen playbacks, I arrived at the belated conclusion that this machine is phenomenally good and proceeded to 'Improve' all the CDs

and SACDs I had brought with me to use at RMAF

When I returned to Toronto, I contacted the manufacturer, Reiner Gläss in Germany, intent on obtaining a machine for myself, and reviewing it for the magazine. Jody Hickson of with a black felt (magic marker type) pen. There is one supplied with the CD Improver, along with a couple of plain clear plastic discs to practice with and a spare belt for the turntable. Once you've removed the packaging the machine is basically plug and play. You open the top lid of the Improver and this gives you access to a large knurled screw. Turn the screw counter clockwise and you lift a round plate. The plate sits on a 'turntable' – both the plate and

the turntable are narrower in diameter then your

standard CD. You place the CD on the turntable, label facing down. Then place the plate on the CD and screw the knurled knob hand tight. You do not have to go overboard and finger tight is just fine. Turn the switch on the lathe (it's a combination on/off ch and speed control) and then

switch and speed control) and then you simply pull the handle slowly until it stops cutting the disc. The arm is adjusted at the factory and comprehensive instructions come with the Improver should you want to adjust this further or ever need to change the blade. The edge should easily trim 2000 CDs so it's not something you're going to need right away. Of course, this action generates a spiral of hair fine plastic scrim. The Improver comes with a brush to use to keep things somewhat neat and tidy, but for me, the easiest way of keeping all the slivered bits in tow, was the hole in the rear of the Improver. This is there for you to connect a 3

Globe Audio Marketing, the Canadian distributor duly obliged and I'm now the proud owner of my own CD Sound Improver, paid for (note) from my own paltry funds.

Quite simply the CD Improver is a lathe. It shaves the edge of a disc (anything 12cm and optical) creating a 36° bevelled angle. This involves a manual swingarm with a tungsten carbide blade. You then 'seal' the disc



vacuum cleaner hose. Just hook it up and, turn your vacuum on before activating the lathe. As soon as the disc is trimmed, shut your vacuum cleaner off. While the lathe is still spinning – and you can reduce the speed – take the felt pen and 'seal' the edge of the disc. While you wait a couple of minutes for the disc to dry, you can remove the knurled knob and the plate. If you've done this properly, you'll barely be able to see a minute black line around your CD. The edge of the CD has lost only 0.2mm!

Now, as I've said, the treated discs sound audibly superior, but what on earth is going on? Well, there may be several things. First and foremost I believe that most CDs and SACDs are NOT round. Clearly this means the laser, laser mechanism, vibrational jitter and error correction are all working overtime to deliver the music through your SACD/CD player. This is picked up in playback. By making the disc round as well as beveling the 36° angle, you are minimizing dramatically the movement of the laser while reducing error correcting as well as the absorption of extraneous laser light because of the black marker.

Yes, it all sounds like Voodoo.. but that's the real joy of what this accessory does. It makes your CDs sound more like real music with sound stages that all of a sudden become deep and wide. Focus and control of instruments improve greatly and the solidity of images is tremendously enhanced. All of a sudden, so many artifacts we attribute to the digital format seem to vanish. Let me also make this clear: whilst a poorly recorded CD/SACD will sound better, but this product cannot make a silk purse from a sow's ear.

I've tried this with SACDs as well as CDs and none have suffered any damage. Recorded material which I though was a little bit too sibilant for my tastes all of a sudden became wonderfully crystal clear and clean. On a copy of one of my favorite SACDs, the RCA Living Stereo of the St. Säens *Symphony No. 3*, particularly the

4th movement, I could, as never before, plainly hear the piano accom-panying the organ - the piano in its own space - where before, when I heard the piano, it was buried somewhere in the middle left of the stage. Now it stood alone. I also found, that this particular SACD, when placed on the improver as it started to spin, was about the shape of an egg!

non-improved counterpart. I have also found that I definitely prefer 'Improving' a blank CD-R before I use it to copy

> some of my personal selections for playback at home or away. I've experimented with copying tracks first on an improved blank disc and also on a regular disc that was then improved. I opt now, to treat my blank discs prior to storing information on them, another indicator that the concentricity of discs is an issue.

This is a "must have" product for anyone really interested in maximizing the potential of their CD/SACD collection.

The price is reasonable and the construction and presentation of the product is outstanding. The results are simply quite staggering.

There is no doubt this product does

what it claims to do and while it may not be new to many of you, it was to me; if, like me you were unaware of its benefits then you need to get acquainted – it really is that good.

I took several CDs and SACDs to CES. For fun in a variety of rooms, I asked people to tell me which one sounded 'better.' Having done this comparison for at least 100 different people in well over a dozen various rooms, the opinions were unanimous: All the listeners in all the rooms, with all the varying setups and different components, always picked the 'Improved' SACD or CD over the Audio Desk Systeme Gläss CD Sound Improve Net: http://www.audiodesksysteme.de/

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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:- Dave Ayers, Tim Britt, Mark Childs, Richard Clews, Dave Davies, Dennis D. Davis, Peter Downard, Richard S. Foster, Roy Gregory, Simon Groome, Jason Hector, Andrew Hobbs, James Michael Hughes, Reuben Parry.

Key to Icons

CD	CD
CD	Gold CD
HD	HDCD
XR	XRCD
CD	Double Disc
DVD	DVD
SA	SACD
SACD	Hybrid SACD
SA ^{5,1}	Multi-Channel
1209	120g LP
1509	150g LP
180g	180g LP
-	15 50
45	45rpm EP

Vinyl Double Album



Hard-Fi

Stars of CCTV

Necessary Records 5050467 8691 2 7 (CD)



14

Stars of CCTV is another of last year's releases that has sat on my shelf awaiting a final verdict, and based on the time it spends out of its case it seems it deserves a mention.

Hard-Fi blend the current hard-nosed garage sound with slightly more adventurous ska and funk elements. It's a style of messy music that has become über-fashionable recently, but it's interesting to note that Hard-Fi have kept their production clean and sophisticated. On Stars of CCTV fuzzed up bass lines and samples mix carefully with guitars and vocals so that the whole thing doesn't simply end up as a dirty mash of noise. Hard-Fi have all the same individual components as the current rash of wannabes that crowd the tabloids, but have used them to create an album that will stand the test of time. Stars of CCTV doesn't just manage to create an exciting blend of garage and funk that is married to relevant and incisive lyrics, but also manages, at the same time, to be honest and powerful. This record oozes a kind of dirty glamour. The band stick faithfully to their roots and sing almost exclusively about their experience of growing up in Staines. They tackle their material with a combination of toughness and pride that gives the mundane a certain gloss, but it's their one ballad that really shines through.

MC

RECORDING MUSIC





Ladysmith Black Mambazo

Long Way To Freedom

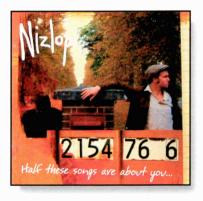
Heads Up Records HUCD3109 (CD) (SACD)

Believe it or not, it's been almost 20 years since Paul Simon unleashed the groundbreaking Graceland on a grateful public. With its heady mix of African musicians and western influences it became an important milestone for World music and introduced Ladysmith Black Mambazo to a much wider audience. This fantastic group went on to achieve success on their own with the Grammy winner 'Shaka Zulu' and on this new release it's the turn of western musicians to be the quests. It's a project that works splendidly, one that brings out some memorable performances and one that captures the deep spirituality inherent in the Ladysmiths' rich musical heritage. 12 of the 13 tracks are re-recordings from their considerable repertoire, the only new song being 'Thula Thula'. sung solo by the group's leader Joseph Shabalala. Two Graceland songs are covered: 'Diamonds On The Soles Of Her Shoes' which features Melissa Etheridge and 'Homeless', where Sarah Mclachlan's ethereal voice blends beautifully with those of the choir. Also lending a hand are Natalie Merchant on 'Rain Rain, Beautiful Rain' and Taj Mahal, who contributes typical earthy guitar to 'Mbube'. Albums containing high profile guests are two a penny and a lot of them just cover up a lack of quality material, but that's not a criticism that can be levelled at Long Walk To Freedom.

AH



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Nizlopi

Half These Songs Are About You

FDM Records FDMNIZ002 (CD)

Just a few weeks before Christmas a video started doing the rounds on the internet. Featuring a small child driving round with his Dad on a JCB the video was perfectly accompanied by a great, catchy little tune. The JCB song' then climbed from nowhere to top the charts and only narrowly missed the Christmas number one. You can imagine my surprise then, when I found that their album is (honestly) really good.

I'm no fan of jazz, so the sound of a double bass and jazz drums on the opening track nearly finished this album off for me before it had even started. But what follows is surprising, eleven solid songs, well written and gently orchestrated. *Half these songs...* does however suffer from a common affliction: that of being created by people with far too much technical skill, so that sometimes too much care has been taken to make the music precise and accurate, and not enough to making it spontaneous and exciting. But even in its lows the record is lifted by the graceful vocal talent of singer, Luke Concannon, who articulates a nostalgic longing and regret.

Half these songs... is an amazing debut, made even more so by its meteoric rise. It's relaxed and pleasingly sentimental, it's not going to offend anyone nor set the world alight, but it will make the world feel like a better place for forty minutes. MC







David Hoffbrand

To The Sound Of A Different Drum

Branded Music BMCD 1270 (CD)

As soon as the first chords of 'The Reason Why' erupt from the speakers it becomes abundantly clear we're in for a treat. David Hoffbrand's songs are mini works of art and they'e powered along by a band who are tighter than Scrooge's purse strings. Make no mistake, this is a singer who knows how to grab your attention, someone with a deep understanding of the song writing craft who is able to keep a song right there in the pocket. Hoffbrand has many influences; Zappa, Waits, Hank Williams, The Velvet Underground ... the list is endless. Personally, he reminds me of my all time favourite singer Peter Himmelman, not so much vocally but in the arrangements and his intelligent use of the musicians, particularly the bass player. Just when you think you know where a song's going he throws in a musical diversion whilst somehow always managing to maintain the thread -'Delta' being a case in point. It threatens as a country song, wanders down a bluesy river and then bursts its banks as a funky strut - it shouldn't work, but trust me, it works a treat! It's a little early in the year to be thinking about which album to put at number one but I tell you, it's going to take a monumental effort to shake this from the top spot.-

AH





Amy Allison

Everything And Nothing Too

Spit and Polish SPIT027 (CD)

Amy Allison, daughter of the great Mose Allison, might well have one of the most striking voices ever. At times it sounds like it was concocted in the studio by filtering it through some strange device and it takes a bit of getting used to, but once over the initial shock it's quite endearing in a quirky kind of way.

But there's no denving she knows how to write a song, a fact not lost on Elvis Costello who included a previous album (The Maudlin Years) in his list of the 'Top 500 Albums Of All Time' in Vanity Fair's music issue of 2000. It makes no difference what she applies that voice to, be it an up tempo country rock number or a tender, affecting ballad like the beautiful 'Hearts Of London', everything comes out sounding decidedly unique. Allison's influences are incredibly diverse, ranging from Loretta Lynn and Billie Holiday to Elvis Costello and... er, Morrissey. For reasons only a Morrissey fan could explain she covers The Smiths' 'Everyday Is Like Sunday', and although she takes it on a totally different journey it still comes out sounding like dirge. (I might be biased here, as I thought The Smiths were utter tripe.) We'll allow her that minor aberration though, as the rest is bloody marvellous.

AH





Jose Gonzales

Veneer

Peacefrog Music PFG066CD (CD)

OK, let's get this clear straight away: you have heard Jose Gonzales before, on that Sony advert with the bouncing balls. With a guitar and very little else he makes music that is so soft and delicate you can barely allow yourself to breathe lest you miss something. Keeping his tracks deadly minimal he rarely uses more than a dual tracked vocal and acoustic guitar, occasionally allowing a light percussive rhythm to bleed through. On the face of it this album is a perfect winner. but alas there's something not guite right here. On listening to this record I was immediately reminded of his musical peers, people like Beth Orton, Turin Brakes and Kings of Convenience. Veneer certainly manages to strip down the songs to their most basic components, and is undoubtedly beautiful and moving. But the album is also incredibly dry, the looping guitar themes grow tiring after a while and the songs often lack direction. The record lacks the humour that other, similar, bands manage to add to their music. Jose Gonzales plays all his songs straight, each one just as righteous and earnest as the last. Veneer is beautiful and moving but just a little boring. This record is so close to being perfect, and yet fails somewhere along the way. So much about it

yet fails somewhere along the way. So much about it is simply superb that it should be worth every penny, but somehow I just can't get excited about it.

MC





Rosanne Cash

Black Cadillac

Capitol Records 094634873802 (CD)

The last two years have been particularly unkind to Rosanne Cash; she has had to come to terms with the deaths of her mother Vivian, her stepmother June Carter Cash and her father Johnny, people who have had a profound effect on her, personally and professionally. *Black Cadillac* was written in amongst all the turmoil and stands as a remarkable testament to her lost family members. Half of the album was recorded in Los Angeles with Bill Bottrell, a producer noted for his work with Sheryl Crow and Shelby Lynne, and the rest with husband Jon Leventhal in New York, where she now resides.

Taking into account the circumstances surrounding this album it could have been a maudlin affair, but thankfully nothing is further from the truth; the lyrics are sensitive and thoughtful and woven around some of her most affecting melodies.

Rosanne is one of country music's better lyricists and really excels here, especially on the title track, written six-weeks before her stepmother passed away. The album asks thought provoking questions on life, life after death and the struggle in between, and is so personal that at times it almost feels like an intrusion to be listening, but that is where its charm lies. Earlier Rosanne albums have just been re-released by Sony and are worth checking out, but this one probably stands as her finest moment and is indispensable.

AH

RECORDING MUSIC





Editors

The Back Room

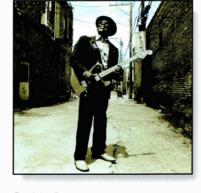
Kitchenware Records KWCD34 (CD)

The Back Room seems to ooze style, from the black and white minimalist sleeve art to the succinct song titles. Editors have obviously put some thought into what they do. Their restrained, highly controlled style of music should not therefore come as a surprise. Their music is dark and claustrophobic. There are shades of early U2 in their guitar lines and more than a hint of bands like Joy Division throughout but, most of all, they bring to mind Interpol, From the instrumental break-downs, dual guitar codas and distinctive vocals you could almost forget that this isn't Turn on the bright lights or Antics. Not, I should hasten to add, that this is a bad thing. But The Back Room has more than enough credibility to stand on its own merits. Editors songs kick off right from the start, with pounding drum lines and histrionic guitars, so songs like 'Munich' and 'Bullets' have a punch that is Editors very own. That punch makes this record instantly accessible but emotionally cold. It's an album for posturing. the musical equivalent of a black limo, it looks great, but gives very little indication of what goes on behind the façade.

The Back Room contains a handful of brittle rock classics that make the whole thing worthwhile, but you can't escape the feeling that they need to let go before they can fulfil their true promise.

MC





Buddy Guy

Bring 'em In

Silvertone Records: (CD)

The bright orange sticker on the front of Buddy Guy's new album delights in telling us that he has been inducted into the Rock 'n' Roll Hall of Fame. It's well deserved recognition for what he has brought to the blues in a long and illustrious career, but if this is the sort of stuff he's going to churn out from now on, I'd rather he'd remained anonymous and under appreciated. In truth, the star-studded, slap-on-the-back format has become tired and predictable. It worked for John Lee Hooker, thrusting him back into the public's imagination at a time when his career badly needed a boost, but then The Healer wasn't just Hooker going through the motions but a fine album in its own right. This one is not. There are some fine performances here, notably

Guy's duet with Tracy Chapman on 'Ain't No Sunshine' and his scintillating playing on 'The Price You Gotta Pay', where he gets a helping hand from the human riff himself Sir Keef Of Richards, but the rest is a bit blues by numbers, to say the least. Buddy Guy is an amazing guitarist and a damn good singer, and if it sounds like I'm being a tad hard on him it's because I know he can do a lot better than this. John Lee must be shaking his head with the shame of it all.

AH





Fink

Biscuits For Breakfast



Fink, or Finian Greenall as his mum knows him, has made two albums for Ninja Tune, but if you weren't told you'd never know they were by the same guy. 2000's *Fresh Produce* was a trip hop/ambient dub album that's very much in the Ninja style and good with it. *Biscuits For Breakfast* on the other hand is a stylistic volte face; the samples and turntables have been ditched and real instruments and a microphone have taken their place.

This album has a new folk sound with a pared down feel and some excellent songwriting that feels as if it describes a life rather than being the soundtrack for a life. Some have compared his style to John Martyn but while the voice has a similar warmth and the guitar is acoustic this album has an urban feel that you won't hear on classic Martyn. The music is essentially bluesy with acoustic guitar taking centre stage next to the voice, this combo being underpinned with some subtle and atmospheric keyboards, drum and bass. Highlights include 'All Cried Out' and the sultry 'Hush' with Tina Grace on vox, on which the backing band sounds like it came straight out of the swamp rather than a studio in Brighton. The sound is up front and real but warm with it so there are no hard edges, earthy in fact.

JK







Becky Owen

The Singer Kicks

Fairy Snuff FAIRYSR002 (CD)

Writing songs that have immense emotional resonance, possessing a voice that laps over you with heart rending beauty and playing the most melancholic of piano lines to constantly probe and pull you ever onward through ballads, pop, jazz and rock arrangements should be enough to demonstrate what amazing talent Becky Owen has at her fingertips. Strikingly intimate tracks like 'Caterpillar' and its opening lyrics "My mama bled when I was born" or vocal threads such as "I wanna echo through you like a song on the breeze when I'm gone you live well and stay calm" heard in 'Sighs' more than hint at the underlying fragility, yearning, defiance, hope and sadness of her muse. True, Owen is not yet the finished article. Occasionally her writing comes up short: "I had the emotional monopoly whilst you couldn't even pass go" ('Mention') sounds forced and too contrived. making certain journalistic comparisons to Carole King and Kate Bush more than a little premature. However, there is enough urgency, confidence, integrity, and warmth here to predict greater artistic successes in the future. For now, The Singer Kicks can perhaps best be thought of as a marvellously flawed album; a work in progress where stylistic shifts, ambitious, intriguing and richly varied musical textures seem to vie with one another as Owen searches out an identity.

Supplier: www.hotrecords.uk.com

RP





Wild Strawberries

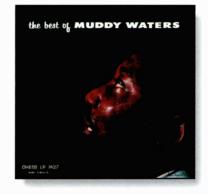
The Gods Are Shining

Luna Records StrwbCD 001L (CD)

Scottish music is in rude health. The Wild Strawberries, with their lyrical simplicity, emotional drive and edgy Gordon Macdonald vocals so reminiscent of the '80s "indie" scene championed by the likes of the Cherry Red label, are an exciting and diversely influenced four-piece band who deserve recognition beyond Edinburgh's city walls. A moody and brooding opener in 'Faster' sets the tone. Instead of verbosely picking the bones of a failed relationship, Macdonald gives an expressive and guite dramatic outpouring of feelings that leak through the jagged fissures of his broken heart. The Bob Hewerdine production and grungy Ross Cockburn quitar reinforce that sense of desperation. pain and disbelief. Repetition of vocal lines in tracks such as 'Bitten Dust' and 'Be My Muse' and the uncomplicated straight talking song writing found on 'Don't Let My Dreaming' and 'Of All My Desires' propels you quickly through this wreckage. Not exactly uncharted choppy waters. I know, but the execution is really determined, the sentiments heartfelt and the insights so dramatically delivered that even the most commonplace of observations remain firmly anchored in your mind long after the last note fades away

Supplier: frontieruk@btconnect.com RP

RECORDING MUSIC



The Best of Muddy Waters

Speakers Corner/Chess LP 1427 180g



While you might assume that a "Best of" release is a compilation from previous albums, this is a first-time issue comprised of various 45rpm releases by Muddy Waters and the stable of Chess house musicians some of whom were in the Muddy Waters Band. The musicians read like a veritable whose who of the 1950's blues scene in Chicago including such greats as Willie Dixon, Otis Spann, Jimmy Rogers, Little Walter and Big Walter Horton to name a few. The hits on this record include the famous 'Hoochie Coochie Man', written by Dixon for Waters, Also included are the great, 'I Just Want To Make Love To You', 'Honey Bee', 'Rollin' Stone'.

This has always been one of my favorite blues records and although the original sound on the early Chess 45's is variable, this is another treat for those who love The Blues. You can clearly hear how sensual and heart-felt Waters is as he belts these tunes out and just listening to the first cut on side 1, 'I Just Want To Make Love To You' is totally outrageous. If you think girls swooned over Elvis... I can assure you that Muddy Waters was in that same league. Original U.S. issues of this record can easily hit the \$1000 mark and for the price of this admission, Speakers Corner has delivered another bargain with a capital "B".

Supplier: Pure Pleasure Records RSF







Roger Askew

Big Fire

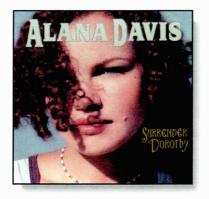
Sho-de-Bop Recordings SDB 05 (CD)

Askew both as a performer and producer is probably better known for his work alongside the likes of Christy Moore and Brian Kennedy. Big Fire, his second album, has a deeper acoustic grain running through it than did his debut disc Scarab Moon. However, both of these CDs showcase a lucid and engaging style, one overflowing with descriptive songs whose storytelling blossoms when allied to that light and soulful Askew vocal thread. This lyricism is thoughtful and quietly witty rather than raw and acerbic. Characters like 'Little Shorty' are imbued with knowing charm and even when he drops a gear on '21st Century Blues' or 'Into The Flame' there's still that undisquised warmth. His strength of purpose, genuine optimism and collective moral certainty resonate within songs such as 'Let Me Be A River', 'After The Harvest' and 'Keep You In My Heart'. The musicianship is equally secure. Roger's guitar and keyboards and assured core contributions by Olly Blanchflower (double bass), Phoene Cave (vocals) and Peter Baron (drums) contrasting with colourful quest spots for the Henry Lowther's flugel horn, Ben Tyzack slide guitar and those delicately sweet touches of Clare Lindley's violin and viola

Supplier: frontieruk@btconnect.com RP







Alana Davis

Surrender Dorothy

Tigress Records CD85508 (CD)

In 1998 a little known singer by the name of Alana Davis unleashed her solo album on the world to rapturous acclaim from the music press. She was hailed by Time Magazine as a "major new talent" and Entertainment Weekly called her " the most promising newcomer of 1998".

Signed to a major label, everything was in place for a long and fruitful career, but by the time her second album came out relations with her label Elektra had plummeted to an all time low. They tried to mould her into an R'n'B singer but that wasn't how she saw herself, so artist and label had a parting of the ways.

Surrender Dorothy is the album she always wanted to make and the one she is most proud of. Two of the 11 songs are covers, Blue Oyster Cult's '(Don't Fear) The Reaper' and a little known Bob Marley track 'Nice Time', the rest being Alana originals. She has surrounded herself with a bunch of top class musicians who slip effortlessly into whatever style she asks of them, be it slick urban soul, rock with a funky twist or smooth, sensitive ballads. Vocally she sounds like a cross between Shelby Lynne and Joss Stone, the music having a soft Steely Dan centre wrapped in a Sade outer coating. Artistic credibility wins the day for once.

AH





Kathleen Edwards

Live From The Bowery Ballroom

Zoe Records 01143-2004-2 CD (DVD)

Three audio tracks running to fifteen minutes and two DVD videos on this double-sided disc recorded live at the Bowery Ballroom in New York on June 13th 2003 is a sparse but truly intriguing offering from an authentic and individual singer songwriter. Live, Kathleen exhibits vocal power, poise and those familiar qualities that attractively clip or shorten the lyric thread. Her backing musicians move away from the soft opening chords of 'National Steel' to ply a slick and grungy electric guitar backed sound courtesy of Colin Cripps - one that's strongly supported by a solid Kevin McCarragher bass line and Joel Anderson's rhythmic presence on drums. All three songs serve up the heavier brand of Americana, a kind which really suits the surprising Kathleen Edwards cover of AC/DCs anthem 'Money Talks'. This is a plucky choice of material smartly carried off with no little passion and punch. The filling for this threetrack sandwich is the song 'Hockey Skates'. It's an Edwards penned original that moves through tight descriptive lyrics about the swish of blades on ice to take forward her much more pointed views on life. The grainy guitar licks oil the passage of these penetrating observations and that etched and clinical quality present in this acoustic does a revealing job.

RP





The Maryhillbillys

Meet The Maryhillbillys

Luna Records MhbCD0001L (CD)

Child of the Sixties, guitarist, songwriter and lead vocalist Scott Richardson hails from Maryhill in Scotland - his hard drinking bunch of Aussie musician mates (is there any other kind) from the St Kilda district of Melbourne. Richardson's journey to a different hemisphere, his love of country music and its unlikely fruition in a hillbilly band is quite a tale one almost as tall as some of those marvellous stories told in a dozen songs on this album. Fuelled by booze, and dry, one-eyed observations, nearly every track leaves you with either a knowing smile or one of those broad grins as words twist and turn to a lyrical tour de force. Even a final instrumental entitled 'Words Fail Me' has that unspoken laughter behind it. Elsewhere the humour surfaces through bold characterisation, genuine wit and the smart injection of dobro, mandolin, fiddle, harmonica and double bass. Though your ears are always drawn back to Richardson's fluid delivery of lines like "You're in my face and you're in my hair and all my friends as well. You're a mad ass manic crazy psychopathic bitch from hell", ('Mad Ass Manic'). Or the wonderfully pictorial, "He's the king of karaoke. He likes his burgers and his fries. He's got a funny lip he likes to swing his hips. He can make all the ladies cry". ('Goddam He Thinks He's Elvis').

Supplier: frontieruk@btconnect.com RP

RECORDING						
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Acoustic Triangle

Resonance

Audio B ABCD 5017 (CD)

Recorded during Acoustic Triangle's critically acclaimed UK Tour of Sacred Places in 2005 this set was captured during performances at Romsey Abbey, Hampshire and Dorchester Abbey, Oxfordshire. Tim Garland is quoted in the notes as saying that "The building is the fourth member of our trio". How right he is. An arrangement of Allegri's 'Miserere Mei', opens with delicate bowed bass from Malcolm Creese, Garland's soprano sax soaring heavenwards conveying the spacious acoustic of Dorchester Abbey. The trio's version of Kenny Wheeler's 'Everyone's Song But My Own' showcases the band's virtuosity, opening with a dexterous bass solo from Creese, before Garland kicks in with a breathy and quite beautiful tenor solo before handing the reins to Gwilym Silcock for some exquisite piano. The bands strength is that they are all masters of their instruments and of subtle interplay which they demonstrate throughout this set, yet never resort to overt showmanship, gaining strength from this subtlety of approach. The set closes with a lovely reading of Stan Tracey's 'Under Milk Wood' that can easily hold up its head alongside the original. It's that good. The two previous releases from this gifted trio have been hugely rewarding. This lovely set is no exception and is their strongest recorded work to date.

Supplier: www.acoustictriangle.com DD





Laughing Clowns

Cruel But Fair



How best to describe the Clowns? Does "avant guard collision of progressive guitar, trumpet and sax" adequately encapsulate the coarse-grained and experimental feel of their music?" Probably not. Another question? Does Ed Kuepper's primordial voice, so thorny, wild and off key, offer any kind of solace to a non-believer? Again, the answer is, probably not. A quarter of a century on, and these are still the scariest most singular clowns imaginable, an undisguised explosion of antiestablishment energy flowing through their veins. And unless you've heard them before nothing can possibly prepare you for the unique shock. There is a palpable sharp intake of breath when you're sliced and diced by such challenging and innovative tracks as the 'Year Of The Bloated Goat', 'Eternally Yours' or 'Everything That Flies'. Understandably, at the time they helped to place Australia on the rock music map - even if it was way out there at the very fringes of the audience's experiences and expectations. Yes, Cruel But Fair is an acquired taste, but this remarkable collection presenting every Laughing Clowns recording made between 1979 and 1984 remains a frighteningly powerful and intriguing legacy.

Supplier: www.hotrecords.uk.com RP





A bargain hunter's guide to buying the Decca SXL classical records. How to save a pound or two – or even a hundred...

I've been having fun with finding the best of the best for a long time. I've learned a lot from people and have shared information with many. It's been a great voyage and now it's time for me to share some of this knowledge with you. However, before you read this article, you should study the sidebar and look at the pictures of the labels. All the information you need to become your own Decca sleuth is pretty much in there.

Decca classical records, especially the early wide-band. original recording, deep groove SXLs are highly sought after for their sonic properties, collectibility and for some absolutely wonderful performances. The problem today is the supply has begun to dry up... and when I say this I mean for stone, cold mint records. Unfortunately, many dealers today, especially those on ebay, wouldn't know a mint record if it came out and smacked them in the face. A mint record is precisely that: mint. No marks on the vinyl. No spindle trails on the label.

That's about it. If you play it, it will have

no surface noise. However people are always saying things like, "Mint except for a few paper scuffs". Well sorry, that's not mint. It's something else. Okay, I'm finished with the rant.

The way it really should work, from a pricing point-of-view, is that the earlier the record, the more expensive it will be, given that earlier pressings sound better. Unfortunately what should be and what actually occurs are two very different things. If a collector is not armed with the proper information, sooner or later they are going to spend more money on a given item then they should. Given the price commanded by some of these titles that could be a very expensive mistake.

The most important thing you can do is to create a want

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list of recordings and works that you really desire. I've always been a big believer in research before I spend my money. The best way to create a list of records is either going to a research library at a university or look for a reference library in a major city. If you're looking for English records there is a very good chance you'll find complete *Gramophone* magazines from the

> 1950's through the 1980's. You may also look for the nine volume series of The Stereo Record Guide by Ivan March, Dennis Stevens and Edward Greenfield. These are pre-cursors to the five volumes of the various Penguin Record Guides that contain vinyl. I remember when I first began collecting, I knew nothing about performance. I composed a list from one of the Penguins based upon the reviewers giving the record three stars or a rosette. (Hey, you have to start somewhere!) I compiled this list and then based upon the thimbleful of knowledge I had, began to start looking for

record dealers in the UK. This turned out to

be quite an expensive process. I didn't know repertoire and I certainly didn't know about the various pressings. Anybody who has read my column in the past will know that I'm kind of obsessive when it comes to pressings – but that is now and this was then. With each purchase I accumulated more and more knowledge about labels, matrix numbers and all the other arcane indicators of a record's true pedigree. It quickly became clear just how little I'd known at the start! Consequently, I think I've purchased most of the Decca and EMI catalogue at least twice. Maybe you'll be smarter.

Let's say you've put together your list of records. One of these you are extremely interested in is SXL6287, Raphael Frübeck de Burgos' performance of

2



Decca SXL2000 labels

The first thing you must do is get familiar with the various labels. I am going to use the Mikrokosmos Labelography (see separate note) notations to save time when we discuss this. Here is a brief explanation of what this coding means, arranged in chronological order. I'm also referring only to UK issues.

ED1 - "Original Recording by" at the 10 o'clock position and "Made in England" at the 6 o'clock position on the label. Deep groove (pressing ring indentation approximately located at the outer 1 inch portion of the label.)[The SXL 2000 series and to approximately SXL 6200 (there are exceptions)]

ED2 – "Made in England" at the 10 o'clock position on the label. Deep groove. [From approximately SXL6200 until SXL 6368 (there are a few exceptions)]

ED3 – "Made in England" at the 10 o'clock position on the label. No groove. [From approximately SXL 6369 through SXL 6448 (note: 6448 is the LAST wideband issued and there are no exceptions.)

ED4 – "Narrow band label" 'Decca' in a box (SXL 6449 through at least SXL 6900). There are variations of this label...however this is a generalized primer and by and large these are not the expensive issues.



▶ de Falla's *El Amor Brujo* (Love, the magician) with Granados' *Goyescas* and Ravel's *Alborado del Gracioso*. This is a wonderful record that was first issued with the ED2 label. You can purchase this through a reputable dealer for approximately \$125. If you find one with an ED3 label, the cost would probably be about half that. Moving further on down the chain, to an ED4, the record will probably cost you \$30. Given the opportunity to discuss matrix information with a dealer, you may find, as I have, earlier information exists on the ED4 than on the ED3. This is because Decca had more than one pressing plant! Armed with that knowledge you can save yourself at least \$30 and obtain a better sounding record!

Another of your favourites is SXL 2012, Øvin Fjeldstad's masterpiece of Grieg's *Music from Peer Gynt.* Now, original blue-bordered yellow front covered ED1 issues of this record are comfortably going to cost you \$350+. Non blue-bordered issues with either the yellow cover or second, darker coloured picture on the cover might only cost you \$250. You could purchase an ED2 issue for about\$175 and you could definitely get an ED3 for \$100 pounds. But, if I was buying this rather than skimping and going for an ED3 I'd look for an EW1 of SDD 111 and get at least 90% of the sonic virtues of this record for 10% of the price! So, what would you do?

One of my favourite Decca recordings is SXL 2252. It's Jean Martinon conducting the Paris Conservatory Orchestra in an all French program consisting of Bizet's Jeux D'Enfants, Ibert's Divertissement and St. Säens' Dance Macabre and Le Rouet D'Omphale. This is one of the exceptional, magical Decca recordings that was recorded in Paris at the Salle Wagram. Not only is the sound to die for, you get the added benefit of superb performances. The moment the stylus hits the grooves you know you're in for an atmospheric recording, the hallmark of early Decca sound. When side one begins, you're about to hear one of the finest Divertissement's ever recorded. And you get the added bonus of a reference performance of Dance Macabre to boot! Oh, did I mention how impossible this record is to find? Sorry about that. Sure, eventually you might find an ED1 for the measly price of approximately \$250... if you are lucky. I've only seen two copies appear in the last three years. You'll actually pay close to that for an ED2 copy... that's how rare this

What the sleeves tell you...

In the Decca 2000 series, up to approximately SXL2113, many of the scalloped-back jackets came with a blue border and sometimes coloured type face for the title. Second jackets would drop the blue border jacket and keep the coloured type face. Later issues may either have a scalloped back or a straight across flap with no colour at all. Eventually the latest issues had no flaps at all.





record is today. What to do, what to do? I'll tell you what to do; find yourself an EW2 SDD 144 for maybe \$25! I think you're beginning to get the picture.

There are also some strange anomalies out there. Take for example the wonderful SXL 2027 – Debussy's *Jeux* and Dukas' *La Péri* with Ernest Ansermet and L'Orchestre de la Suisse Romande. An original blue bordered, red lettered original is a comfortable \$350 +. Moving down the ladder to the non-blue bordered, red lettered ED1 will only set you back approximately \$250. You could be happy with a plain scalloped jacket copy for a mere \$200 or an ED2 copy for little more than \$150. I'm not sure I've seen this in an ED3 but that doesn't mean it doesn't exist. What does exist however is EW4 SDD 375 which adds one of the Debussy *Nocturnes* from SXL 2062. Yes, the sound is not as great as the early release, but from a price

The Numbers, Letters and what they mean:

for example: 2 B, 3C, 4D, etc.

There are three places in the dead wax area of the record that are important. If you've learned the labeling identities I've already outlined, the following is the key information for sound quality nirvana. We can generalize

very strongly and say the earlier these alphanumerics are, the better the sound quality. Let's use the following as an example: Decca SXL 2001. This is the *1812 overture* conducted by Kenneth Alwyn and the London Symphony Orchestra with the Band of the Grenadier Guards.

Looking on Side 1 at the 6 o'clock position you will see a series of letters and numbers that may look like: ZAL – 3975 -1W. In the 9 o'clock position you will see what appears to be a number, "1". At the 3 o'clock position you will see a letter (or group of letters), in this case "B".

Here we go:

ZAL means this is a Decca recorded stereo production.

3975 means this is the tape number of this performance and is for internal archival filing purposes (It has no other purposes in determining sound quality – all copies of this record will have this number on side 1)

"1" means this is a first lacquer

"W" is the initial that stands for the cutting engineer of this record, in this case it's Harry Fisher. (Different initials will absolutely cause the record to sound different)

In the 9 o'clock position you have the number "1". This means this is the first mother produced. Later issues will have numbers and letters,

In the 3 o'clock position we have the letter "B". This is the stamper number code and "B" means that it is a first stamper. The stamper number codes spell out the

word B-U-C-K-I-N-G-H-A-M, where "B" = 1 and "M" = 10. Double letters, for example "BK" would mean the 14th stamper, "UG" would be the 27th stamper. Again, this is a generalization as the company did not, especially in the early days, follow these guidelines completely. Sometimes they would skip numbers in increments of 5 so people in the production department would not press the wrong stamper. This would occur when the engineers who cut the lacquers, were having problems in the mother/lacquer/ stamper manufacturing process (i.e., over or under modulated passages, etc).

Tax code information: Another way to date some of these records, especially between 1958 and 1972 is by the tax code letter system – RT through JT. This is

> 1962 1967/69

relatively unimportant as far as I'm concerned. I am aware that some people put stock in this but I don't because I have found the matrix numbers (mother/lacquer/stamper) really determine the earliest pressings and I've often found the tax code information to not coincide with this. I have found a number of records with later matrix information and earlier tax code information. Sometimes these codes were put on the labels and sometimes in the dead wax area. The tax code information ceased some time in 1972 with JT being the last lettered code used and normally found at the 12 o'clock position in the dead wax. For those interested, I include the following tax code information:

RT = 1958/59	ET = 1960/61	ZT =
OT = 1963/64	MT = 1965/66	KT =
IT _ 1060/72		

Sources Of Information...

The *Mikrokosmos Labelography* is an invaluable source of information when it comes to identifying label variations and chronology. Based on half life-size photographs of actual examples, assembled rather like a collection of square cigarette cards displayed in a pocketed folder, it provides an instantaneous and comprehensive reference source.

For further information about the *Mikrokosmos Labelography*, please visit: Net: http://mikrokosmos.com/labelography.html 314 Churchill Ave, Toronto, Ontario, M2R 1E7 Canada Tel: (1) 416 224 1956 Fax: (1) 416 224 2964 E-mail: mikro@interlog.com For cross-referencing Decca/Ace-of-Diamond pressings the best guide available is by Phil Rees. Be advised there are some inaccuracies and some of the material is from other sources, but this is also a good tool to have available. *The Audiophile Record Collector's Handbook* is available from: Net: http://dspace.dial.pipex.com/town/parade/fb22/framebook.htm

Bear in mind that the book covers other labels such as RCA, EMI and Mercury, but the Decca portion is where the good stuff lives. Public health warning – remember that this book was written by a second-hand record dealer!



Ace-of-Diamonds Labels

Generally considered the first mid-price re-issue label after the full-priced SXL series.

EW1 – Grooved with Decca logo (see above for 'grooved' definition) and Full Frequency Range Recording from 10 o'clock until 2 o'clock at the outer portion of the label

EW2 – Grooved – no Decca logo and Full Frequency Range Recording from 10 o'clock until 2 o'clock at the outer portion of the label

EW3 - Flat – no groove and Full Frequency Range Recording from 10 o'clock until 2 o'clock at the outer portion of the label

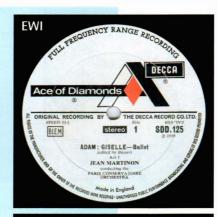
Last FFRR recording is approximately SDD 180-ish.

EW4 – Later issue label (from approximately 180 through mid 400)

An important fact to note is that there are some original issues in the early Ace-of-Diamond catalogue, however there are not only very few but they tend to be unimportant records. There are, however, numerous recordings in the 300, 400 and 500 series that are original first issue recordings. These can generally be identified easily by looking on the back of the jacket as the recording engineer, producer and sometimes, recording venue will be listed. This never occurs if the record is a re-issue.

All of the information given for the Decca alphanumeric coding is the same for the Ace-of-Diamond issues.

There are two budget labels from Decca: Eclipse and SPA. There are numerous recordings on the Eclipse label that are first time stereo releases as well as some first time issues from the RCA Living Stereo Decca recordings. The SPA label is the last of the super budget labels. These, hopefully, will be covered sometime in the future.









▶ point-of-view, the record will cost you no more than \$10! What would you do now that you know the first re-issue of 2027 is AoD SDD 375!

I definitely think it makes good sense to look for later copies based upon the stratospheric prices the originals command. There are hundreds of SXL 2000 and 6000 series records that may have started life as an ED1, ED2 or ED3 but are also available with the ED4 label. Armed with the information from the side bar, you have an opportunity to have the performances with, generally speaking, exceptionally good sound at a vast saving. The dealers are going to love me. I once mentioned in one of the U.S. Mercury articles that I felt it was a smart move for collector's to buy the latest pressings they could obtain because that offered the opportunity to hear and assess the unusual repertoire that is often not available elsewhere. Once they heard the performance, they could rest assured that if they liked the music, they could find an original early pressing and know the sound quality would be greatly improved. While this is definitely true for the Mercury catalogue, Decca UK did such an outstanding job with their mid-price Ace-of-Diamond issues, especially in the very early days, that these much cheaper alternatives to early pressings are extremely worthwhile in their own right. Yes, an early ED1 SXL will be better, but the cost makes them the preserve of primo performances only. The Ace-of-Diamonds label began around 1965 and this is why you won't see too many of the 2000 series in the ED4 label; they were moved over to the AoD camp almost immediately.

I hope you understand this is really just a primer to get your 'collectors' gears going so that when you're out at the stores, the boot sale or flea markets, you can consider potential purchases with a little more knowledge before you reach for your wallet. Hopefully you'll avoid a few of the pits I fell in! Good luck and happy hunting.

MUSIC REVIEW AUDIOPHILE



Richard and Linda Thompson

Shoot Out the Lights

4 Men With Beards 4M139 180g

Originally released in 1982 just ahead of the couple's divorce this superb album has long been considered Richard Thomson's finest hour (well, 39 minutes or so) on record. No slouch in its original release on Hannibal, this cherished set now receives the 4 Men with Beards treatment. Very nicely pressed on a slab of 180g virgin vinyl, it's in every respect an improvement over my original copy. A brief listen to the title track on both versions is enough to convince. In its new pressing the bass gains in depth and impact, percussion has more attack with a more solidly three-dimensional Mr Thompson placed dead centre of a more spacious stage. And so it goes through the many iconic tracks here, 'Wall of Death' comes over sounding less studio bound. The lovely ballad 'Just the Motion' gains from that bit more clarity around the delivery of Linda's delicate vocals. 'Walking on a Wire' allows Linda's vocal to soar underpinned by Dave Mattacks' powerful percussion and offset by Richard's harmony and outstanding guitar like never before.

After being somewhat disappointed with the recent SACD re-issue this great album now has the quality treatment it deserves, sounding much closer to the way you really need to experience Richard Thompson which is of course live. Don't hesitate to snap up a copy.

Supplier: www.vivante.co.uk





Antonio Vivaldi La Stavaganza (12 Violin Concertos)

Rachel Podger, vln, Arte Dei Suonatori Baroque Orch. Channel Classics CCS SA 19503 (SACD)

Contrary to popular belief, Vivaldi did write more than one violin concerto. Many people feel almost everything he wrote sounds the same, but I can assure you that these 12 concertos will allow you to see how diverse his talents were and how timeless his music is. Rachel Podger's first solo recordings were released in 1999. Not only is she an extremely accomplished recitalist, she is Professor of Baroque Violin at The Guildhall School of Music and Drama in London as well as a teacher at the Internationale Sommer Akademie in Innsbruck, Austria. These are very spirited performances, offering delightful interpretations of these well-known works. Comparing this set to my previous references, The Academy of St. Martin with Neville Marriner on Argo and the individual Philips Hi-Fi Stereo issues by I Musici, I was captivated by these new performances. There is great musicianship here, with verve, panache and plenty of fire and insight. The sound quality of the multi-channel hybrid discs was thoroughly enjoyable through my two-channel set-up and again, the fine sound offered on the down converted CD layer was equally enjoyable. I cannot recommend this set enough. It's wonderful music and the playing is brilliant. I'm thoroughly delighted by this set and I think you will be as well.

Supplier: www.channelclassics.com

RSF





Wagner for Band

Fennell cond. Eastman Wind Ensemble,

Speakers Corner/Mercury Records SR90276. 180g

Recorded in October 1959 at the Eastman Theatre in Rochester, NY, this was one of the first Mercury Records | never purchased when | first started buying originals well over twenty years ago. I originally purchased Mercury and RCAs from David Nemzer of New York. David is a personal friend now, but at that time we were complete strangers. After we concluded our business he handed me this original and said to me, "As your system gets better, this record will sound better." Boy, was he ever right. No one I know was able to capture the sound of brass instruments better than Robert Fine and his Mercury team. There is a warm glow and a roundness that just sounds so right, and whilst Wagner might not be your first choice material, Fennell's transcriptions are masterful, making this an all out musical and audiophile treat. Original U.S. issues of this recording have always been hard to find and this is a welcome edition. Starting off with the Prelude to Act III, and Bridal Chorus from Lohengrin we are quickly moved to the spectacular Entry of the Gods into Valhalla from Das Rheingold. Speakers Corner has once again delivered the sonic goods and I can now rest my original and not feel I'm compromising the sound quality one bit.

Contact: Pure Pleasure Records RSF

RECORDING MUSIC



MUSIC REVIEW AUDIOPHILE



Locatelli Concertos Nos. 11, 5 and 12 (L'Arte del Violino, opera omnia III) Jans cond. Latvian PCO. Cantoreggi, violin.

Turtle Records TRSA0018 (SA)

Turtle Records is World famous for offering outstanding sound quality and some very interesting recordings. On a recent trip to Holland, I met Bert van der Wolf, Turtle's recording engineer. In this case Bert is working with Fir Suidema and they've provided this sound spectacular in twochannel and multi-channel DSD as well as a down converted CD layer.

I have very little Locatelli in my collection and this is an extremely welcome addition. The composer paints with a broad brush using a large, rich palette of vibrant colour and I am really impressed with the playing of Cantoreggi and Jans' Latvian Philharmonic. The music is light but extremely complex. There are shades of Tartini, Vivaldi, Corelli and Vitali amongst others in these works. Not having anything to compare the performance to except one concerto on an old Philips I Musici disc, I certainly feel the artists have rendered an involving and exceptional vivacious performance. I've listened to this recording at least a dozen times since my return and I must tell you that I discover something new every time I hear it. The CD layer is extremely enjoyable if you are not able to enjoy the fruits of SACD playback

Supplier: www.turtlerecords.com RSF



Moussorgsky Pictures At An Exhibition (original version) – Byron Janis, piano Pictures At An Exhibition (orchestrated by Maurice Ravel) Dorati Minneapolis SO. Speakers Corner/Mercury SR90217

While the Dorati version of this recording was never one of my all time favorite Mercuries, there are things about this new re-issue that I like a lot. Willem Makkee has done a fabulous job with the remastering of this warhorse and while it may not suit everyone's tastes, I think Dorati brings a fine sense of drama and pace to the work. While I've always been partial to Reiner on RCA, the Dorati performance is the finest sounding re-issue available on vinyl today.

However, the jewel, and I mean jewel of this two record set, is the 45RPM issue of Byron Janis' wonderful performance first recorded in Fine Studios in September, 1961. Lost or forgotten for over 35 years, it first saw the light of day as part of a Mercury CD. I liked that performance from the time I first heard it and am absolutely delighted to have this on vinyl in glorious 100% analogue sound. This is a majestic performance and Janis really understands the music. Strength of character and exceptional fingering are Janis' great strengths and they're clearly audible in this production. Hats off to Kai Seemann for having the vision to release this dual set.

Contact: Pure Pleasure Records RSF



		Sec.			





Richard Thompson

Some Enchanted Evening



I've lost count of the number of times I've seen the incomparable Mr Thompson live, but it's always great to have a reminder of the experience. In this 45rpm EP format however fidelity may be improved but at the cost of a more complete concert experience. Churlish maybe but whilst the five numbers here do include three of Thompson's more iconic numbers in 'From Galway to Graceland', '1952 Vincent Black Lightning' and 'Shoot Out The Lights', the addition of 'Oops I Did It Again' and 'It Won't Be Long' whilst great fun in concert and here, could so easily have been substituted by 'Beeswing' or 'Ghosts In The Wind' to think of but two, if sticking to the EP format. Better still a live double album of a single complete concert would deliver the scope to include a much better representation of the Thompson live experience, novelty numbers and all. For me the most enjoyable number here is the oldest, a 1985 version of 'Shoot Out The Lights' with Thompson delivering a characteristically splenetic solo accompanied by Christine Collister, Clive Gregson, Rory McFarlane and Gerry Conway. The recording quality is good throughout if not the stellar experience I was hoping it might be, lacking that last degree of solidity and convincing presence. For all my curmudgeonly points above this is a very enjoyable selection which you shouldn't hesitate to add to your collection.

Supplier: www.vivante.co.uk



Louis Armstrong' Golden Years...

by Dennis D. Davis

Imagine the recorded jazz legacy we would be enjoying today if the major labels had competed with each other to produce jazz titles during the 1950s and 1960s. For example, what if Decca had actively recruited top jazz talent and assigned Kenneth Wilkinson to do the recording? What if EMI had recruited John Coltrane to record for the label, rather

than leaving this sacred duty to independents Impulse! and Atlantic? I'm not being greedy here, and acknowledge that independent labels such as Blue Note, Prestige, Riverside and Contemporary left us with a treasure trove of fine recordings, despite the vagaries of shoestring recording budgets. Sometimes, however, the mind does wander and wonder what if

At other times, I am humbled at how

fortunate we have been to have some of our greatest jazz talent preserved in amazing fidelity against the odds imposed by the economics of the recording industry. One particularly fortuitous juxtaposition of art and science is found in Louis Armstrong's numerous recordings from the late 1950s and early 1960's on a hotch-potch of smaller labels after he left Columbia. I've already mentioned the two audiophile masterpieces on Columbia, *Louis Armstong Plays W. C. Handy* and *Satch Plays Fats* in prior issues. Fortunately, he did not stop producing well-recorded albums when he left Columbia.

George Avakian produced the blockbuster *Plays W.C. Handy*, followed up by the *Plays Fats*, with plans to continue recording a series of albums in this vein. Unfortunately, art and commerce did not coalesce to bring these projects to fruition. Armstrong's contract with Columbia was up for renegotiation in 1956 and he left all business matters to his agent Joe "What Have You Done For Me Today" Glaser. Notwithstanding the fact that Columbia had brought Armstrong back from the brink of

> anonymity by recording these standout records, Glaser elected to cut a deal for more money with Verve. Avakian's plans for Armstrong went up in smoke. However, during 1956 and 1957, Armstrong's relationship with Verve resulted in the production of several albums of outstanding artistic merit with sound to match.

I recently pulled out all my favorite Armstrong records as a reward for the hard work of crawling under my house

> to pull out my decade old Wireworld speaker cable and install new Valhalla Frey cables running from the equipment/record room, through the floor, then through the crawl space and back up into the listening room. Before this spelunking expedition, I had burnt the cable in for several days on my wife's solid-state system (until she was tired of

hearing burn-in tones every time she walked into her work room). So I was ready to sit down and listen to music straight away, if not ready for the improvement wrought in my system. I had read RG's review of the cables, and ▶ listened to them being demonstrated at CES. Yet I was not prepared for just how dramatic a difference they made in freeing up the image from the speakers, throwing a larger soundstage and making the music sound like a weight had been lifted from its shoulders. After an initial few hours of listening to a wide range of music to confirm that my imagination was not running ahead of me, the changes wrought sent me running to look for old favorites to see what new surprises they held in store for me.

Chief among Armstrong's Verve releases are three LPs teaming him with Ella Fitzgerald. The first, Ella & Louis (Verve MG V-4003) is a classy affair with

backing from Oscar THE GREAT REUNION Peterson, Ray Brown, Herb Ellis and Buddy Rich. While this congregation of talent seems no big deal to us today, it must be viewed in the context of Armstrong's career at the time, driven by manager Glaser to the fringes of pop music. Traditional jazz musicians and accompanists past their prime more often than not supported Armstrong on tour and on recordings. Whether these choices were made to keep the spotlight on Armstrong, to support a grueling touring schedule or to keep costs down, they resulted in an erosion of Armstrong's reputation that was refurbished by the Columbia and Verve recordings. In this first collaboration, recorded in August of 1956, Armstrong and Fitzgerald share the spotlight on eleven standards, including a healthy dose of Gershwin and Irving Berlin tunes. Armstrong was struggling with a lip injury brought on by constant touring, so the emphasis is on his singing, and magnificent singing it is. The second release, Ella & Louis Again (Verve MGV 4006-2) was recorded a year later and is spread across two LPs. The album was originally issued as a double and then later released as two singles. The backing group is the same except for the substitution of drummer Louis Bellson for Rich. Although both sets are indispensable, the song

selection and performances on the 1957 recordings are even better than the first set, with 19 cuts featuring Makin' Whoopee, Autumn In New York, Let's Do It (Let's Fall In Love), I Won't Dance, Willow Weep For Me and A Fine *Romance*. Original pressings of these records are not rare

or particularly expensive. First pressings bear the caption "Long Playing Microgoove Verve Records, Inc. - Made In U.S.A." along the bottom of the black label, and will have a deep groove impression in the label. The 4000 series did not have the trumpeter logo; so do not hold out for it (that logo is found on early 8000 series Verve releases). There was no stereo release of these LPs. Speakers Corner has released MG V-4003 and it is an excellent version of the album, helped by pristine quiet vinyl.

Armstrong tried another collaboration in Louis Armstrong

STEREO *

GREAT REUNION OF LOUIS ARMSTRONG

& DUKE ELLINGTON

SP-52103-A

STEREO

SIDE 1

Meets Oscar Peterson (Verve MG V-8322). For my tastes, this album does not compare to the Fitzgerald albums, as Armstrong and Peterson were not well suited to each other and Peterson seems to be pulling off in his own direction to the detriment of the album concept. The group is exactly the same as in the second Ella Fitzgerald set, except without Ella. It is, however, Louis Armstrong, and still worth exploring, even if not the ideal place to start. An excellent re-issue is again available from Speakers Corner. More successful from a musical standpoint are two out of three of the remaining Verve Armstrong albums, each of which has an orchestral backed from Russell Garcia. The standout album in this group is another Ella Fitzgerald outing, Porgy and Bess (Verve MG V-4011-2 mono; MG VS-6040-2 stereo) recorded in August 1957. This may be the best sounding

Verve Armstrong release, despite the strong competition. The stereo

is outstanding, and its one of those few albums where I've kept both stereo and mono copies, unable to decide which I like best. This album has long been sought out as an audiophile treasure. There is no high-quality re-issue -Classic Records announced their intention to release *Porgy* and Bess many years ago, but found that the tapes had deteriorated and duly abandoned the project. While the original mono is found in a deep groove version, I have yet to find a deep groove of the later (1960) stereo release. The final two Verve Armstrong projects, Under The Stars (MG V-4012) and I've Got The World On A String

(Verve MG V-4035) are both available in stereo re-issues by Classic Records. I enjoy Stars but prefer the mono original. For my tastes, World on a String is a little too pop oriented and I don't think the sound measures up as well either.

Perhaps the most "audiophile" of all Armstrong recordings is Satchmo Plays King Oliver on Audio Fidelity (AFSD 5930 stereo; AFLP 1930 mono) recorded in 1960. Long before this record was touted in the audiophile press, it had a reputation in the jazz community as a hauntingly real sounding recording.

DYNAMIC STERED

LOUIS ARMSTRONG

& DUKE ELLINGTO

RECORDING TOGETHER FOR THE FIRST TIME

In April of 1961, Armstrong went into the studio with Duke Ellington and a unit of all stars from the Ellington band. Armstrong and Ellington were quite different in temperament and style, but you would never guess it from these wonderful recordings. They recorded this session for the Roulette label, outside their own recording contracts. Morris Levy, who had ties to organized crime, ran Roulette, and his reputation may have forestalled any complaints by the artists' contractual labels. The seventeen numbers recorded in that one day were produced by Bob Thiele and released as Louis Armstrong & Duke Ellington: Recording Together For The OULET

LOUIS ARMSTRONG & DUKE ELLINGTON

STEREO

completists and Dixieland fans.

a regular 33-RPM release and in a 45-RPM single format.

originals, they lose out when harmonic texture and detail

are counted into the mix. Original stereo copies have a

silver label while mono copies have a gold label. Either

should have a deep groove impression. If your copy does

not, you are in possession of a later pressing. Armstrong

also recorded Louie And The Dukes Of Dixieland on the Audio Fidelity label (AFSD 5924). This one is best left for

I've left my favorite, and perhaps the best, for last.

While these re-issues have guieter surfaces than the

First Time (SR52074) and The Great Reunion (SR52103). These are magnificent performances and recordings. I've owned a mono pressing of the first record, but found the stereo version much more involving. I'm still looking for another mono copy, on the chance the less than stellar sound of my original copy was due to a pressing defect I could not detect. Forget about the Mobile Fidelity release that sells for high prices, and keep your eye out for

originals, which go for a fraction of the price of the audiophile re-issue - they sound better. SR52074 was first released on the "color bar" label. The earliest pressing of the record had red vinyl and are scarce (although not expensive when found), but black vinyl copies are plentiful. SR 52103 was first issued with an orange and red label. Both albums are common as dust in the later "roulette wheel" label. Even in these later common pressings, the sound of these records is to die for.

These are all indispensable releases, and for the most part offer marvelous sound. This is jazz that can be appreciated by the complete jazz novice, yet holds interest for the most ardent connoisseur. From a sound and artistic standpoint, Armstrong never again matched the sessions he recorded between 1955 and 1961. But, then again, who did? ⊳₽

Louis Armstrong's voice has that "you are there" quality that has made this a long time collector's item. There are several problems with the NDICO THIN' TILL YOU HEAR FROM ME 2 record, however. A Dixieland group backs Armstrong and when he is not @ ROULETTE RECORDS. INC singing, the music sounds like, well, Dixieland band music. Furthermore, as mastering engineer guru Stan Ricker has pointed out, someone apparently had some of the microphone cables hooked up out of phase. On some of the numbers, the trombone is out of phase and on others the trumpet is out of phase. As a result, while the vocal recording is first-rate, the sound of the instruments is more a mixed bag. Nonetheless, I regularly pull this record off the shelf for the thrill of hearing Louis warble his larynx on 'St. James Infirmary'. I own two copies in stereo and one in mono, and have sampled many others. Two of my copies were purchased sealed, which in this case means that the inner plastic bag with the Audio Fidelity logo was still sealed. Despite decades of searching, I've yet to find a perfectly quiet copy, probably due to the long-term exposure to the very plastic bag designed to protect the surfaces. Classic Records has released this record in both

warning.

the use of Nordost cables may induce a thoroughly undignified desire to dance.

Analog Interconnects Digital Interconnects Loudspeaker Cables Power Cords Video Cables

Whatever the budget Whatever the system



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