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**Sonus Faber Liuto Monitor – BBC Music** (September 2009)

*"There is a graceful musicality about this speaker that marks it out as special"*

**Sonus Faber Liuto Monitor – Hi-Fi Choice** (August 2009)

*For such bijou speakers, the Toy's audio performance is immense"*

**Sonus Faber Toy – BBC Music, Best Loudspeaker of 2008**

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## The Toy collection

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**A**lthough we re-worked the look of the magazine radically last year, you should never stand back to admire your work too long. Looking back at the results of our survey just prior to the change, I noticed something. Many readers pointed to different sections as important within the magazine, but it always came back to the same mantra; reviews, reviews, reviews. So, by way of a little experiment, this issue plays to our inner Jerry Lee Lewis – welcome to the *Hi-Fi Plus* 'All Killer, No Filler' edition!

We've deliberately stripped the magazine back to review, after review, after review for this issue. Apart from a few columns and your letters and emails, it's all review this month; there are no special features about new technologies or old, no interviews with musicians you've never heard of. Nothing.

The idea came to me at the very fine Cool Gales *Take Five* event in central Bath. This day-long micro show, featured three systems stripped back to the very marrow of music. Turntable, CD, amp, speakers... three different, yet each excellent, ways of making these building blocks of audio sing. Aside from Diverse Vinyl's stand and a few sarnies from M&S, the show delivered and needed nothing else, no high-pressure selling or timed demonstrations, just good music played in relaxed surroundings. Oh, and a raffle to raise some money for Brake, the road safety charity.

Looking back to that survey we ran last year, it was clear that audiophiles (like the ones at the Cool Gales show) want to know about good sound and not much else. But is a magazine of reviews enough? Surveys tell us a lot, but tell us a lot about those who fill in surveys. We want to know more. Tell us what you think of a feature-free *Plus*.

If it's features you want though, we have a special deal lined up. In our recent office move, we happened upon some long-lost back issues (we also found that packet of half-eaten Custard Creams that we last saw in 2004, but decided they were probably best thrown away). We even found some issues that we thought were sold out. Normally, our back rate is £6 per issue, but to celebrate our new-found stash, we're practically giving them away at £4 each, or three issues for just £10! Naturally, this is on a strictly first-come, first-served basis, but turn to page 94 to help plug those gaps in your collection of classic copies of *Hi-Fi Plus*.

Alan Sircom  
editor@hifiplus.com



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# contents ISSUE 73 EQUIPMENT+

## COMMENT

- 5** **ALAN SIRCOM**  
Music Matters
- 6** **PAUL MESSENGER**  
Speakers Corner
- 8** **JIMMY HUGHES**  
Classic 'Chi-Fi'
- 10** **INCOMING**  
Your letters and emails

## MUSIC

- 82** **CONTEMPORARY**
- 87** **AUDIOPHILE AND JAZZ**
- 91** **CLASSICAL**
- 96** **EVERY HOME SHOULD HAVE ONE**  
Magic Sam  
West Side Soul



- 86** **ADVERTISER INDEX**
- 90** **SUBSCRIPTIONS**
- 94** **BACK ISSUES**

- 12** **PMC FACT 8**  
floorstanding loudspeaker
- 18** **PURE SOUND L300**  
line-level preamplifier
- 24** **QUANTUM QB6/NORDOST SORT KONES**  
power distribution block and cones
- 31** **dCS PUCCINI U-CLOCK**  
digital clock and USB receiver
- 37** **FONEL EMOTION**  
integrated amplifier
- 43** **MAGNUM-DYNALAB MD-107T**  
FM tuner
- 46** **RAIDHO EBEN C2**  
floorstanding loudspeaker
- 52** **SONUS FABER LIUTO TOWER**  
floorstanding loudspeaker
- 60** **QUAD II CLASSIC INTEGRATED**  
integrated amplifier
- 65** **DELTEC DPA-CA1 AND DPA-MA1**  
line preamplifier and mono power amps
- 71** **KEITH MONKS RUBY**  
record cleaning system
- 76** **ORIGIN LIVE RESOLUTION/ILLUSTRIOUS**  
turntable and tonearm
- 80** **PERFECTING SOUND FOREVER**  
the story of recorded music

## FEATURE

- 17** **MEET YOUR MAKER**  
Pete Thomas – PMC



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- Roy Gregory, Editor/HiFi+

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**AUDIOFREAKS**

## Back To Basics IV – Standing Firm

# music matters

by Alan Sircom

### LET'S RECAP. ARE CABLES AND TABLES REALLY ALL THEY ARE CRACKED UP TO BE, SOUND-WISE?

After some consideration, we should test this premise using two different systems and we propose that a test capable of discerning relatively two similar versions of the same piece of music should be refined enough to identify differences in equipment. Ideally, a small army of readers also doing the same experimentation should support these statements.

That's where the plan goes awry. So far, I've seen lots of comments, but no results from personal experimentation. This weakens the force of any conclusions drawn here, because they simply return to the say-so of one man.

Fortunately, the first part of the first set of listening tests is well-accepted in most circles. Raising the loudspeakers from floor until the tweeters are roughly at ear height makes a profound and significant difference to the performance of the loudspeaker. Angling the speakers upwards on the floor helps somewhat, but the proximity to the floor and the change to the first-reflection points floor and ceiling makes this a less than ideal solution.

But there are stands, and stands; some light, others almost impossible to lift on one's own. We tried three sets of stands on two speakers; the heavy, made-for-the-job Atacamas designed for the ProAc Response DTwo, the new Quadraspire QV60 medium mass wooden stands and light, unfilled column stands designed for the Linn Magik 109 speakers. Using the ProAcs on anything other than the bloody heavy Atacama stands was not a good idea, as loudspeaker sounded like a three-way design that someone forgot to wire in the bass driver. Strangely, the reverse was true in part for the KEF iQ10 – it gelled perfectly with the Quadraspire, was perfectly comfy in the support of the Linn, but sounded edgy, light and once again 'clanky' on the Atacama design. Way more investigation is needed (which is a polite call for comments from you, the readers and their own investigations) and I'm not willing to say something sweeping like 'all thin-walled cabinets need heavy stands', but it seems that the bass and upper mid performance can determine how a speaker is working on any given stand. Listen out for bass lightness, but especially listen for a dull ringing to the upper midrange.

Now, on to the equipment itself. Differences here are less immediate, but no less fascinating. I moved from floor to wooden chair to several different types of equipment support, product stacked on product at first. From this, I concluded that I don't think tables have an intrinsic 'sound', but they do have an effect on the system performance. Out of a Quadraspire,

Townshend and Torlyte trio, the Quadraspire was the most musically sustaining in my room.

Then I started 'tweaking'. First, by adding three Jenga blocks under each component and then Vertex AQ Super Kinabalu supports to the Quadraspire table. The blocks worked surprisingly well, for the lack of money involved. Neither changed the tone of the equipment, but they did seem to reduce the audio equivalents of bad hair days. In the case of the Kinabalus, they also improved the cohesiveness of the music. Changing Vertex AQ for Stillpoints redrew the 'shape' of the music; more immediacy, and a different take on coherence.

Unlike the speaker stands, 'as above, so below'; the changes brought about by the Quadraspire, Jenga, Vertex AQ and Stillpoints equipment were of a similar nature and intensity on both systems. There was more convergence when using Vertex AQ and Stillpoints – the Cambridge Audio duo and the Lyndorf/Sugden system sounded more alike than different.

I suggest it's possible these components work to better align the system in a particular and common musical direction, and once you find a musical alignment that suits, stick with it.

How big a difference these things play on the sound of a system? This is dynamic, because your perceptions of how important these components are changes the more time you spend using them and listening to your system through them. Two-minute tests tell you nothing! This becomes all the more apparent at their removal; as you suddenly seem to be adrift in the music, rather than lost in it.

All of which means despite my efforts to 'put these things to the sword', the buggers are fighting back! +

Pre-war hi-fi still has a lot to offer

# Speakers Corner

by Paul Messenger

## WHEN I STARTED MY CAREER IN MAGAZINE

**JOURNALISM, BACK IN THE MID-1970S**, hi-fi was very much the sharp edge of consumer electronics developments. For the next decade or so I followed the evolution of technology with at least sympathy, even some enthusiasm. But as time has passed I've become increasingly disenchanted by what is sometimes laughingly called 'technological progress'.

But the one factor that has done most to confirm my Luddite inclination has arisen from recent explorations into the early history of hi-fi. I recently purchased a new pair of prototype monoblock power amplifiers – a single-ended triode design based on a solitary PX-4 output valve which first appeared way back in 1929 (alongside Stevens & Billington transformers). This might only develop a maximum power output of 3.5W, which might sound very meagre, but I strongly believe in the old adage: "the first watt is the most important", and am surprised to find that 3.5W is ample for most day-to-day listening, even with average sensitivity speakers.

The bottom line is that the fundamental sound quality of this ultra-simple, low-power, zero-feedback amplifier is absolutely delightful: fast, beautifully sweet tonally, and with great dynamic expression and realism. For when one wants to rattle the windows, either substitute a high power solid state power amp, or opt for high sensitivity speakers.

However, the real meat of this column, was the opportunity to try a legendary pre-WWII speaker. The Voigt Domestic Corner Horn, originally introduced in 1934, was arguably the very first hi-fi speaker, and I managed to borrow a pair from Lowther-Voigt enthusiast and Audiojumble proprietor John Howes.

Back in the 1930s, sources were limited and strictly mono, and amplifiers had very little power, so speakers really needed high sensitivity – the Voigt measures around 100dB/W, and is also a very easy 8 ohm amplifier load. Developments in home hi-fi tended to ride on the back of cinema sound systems, and Voigt's Domestic speaker was a quarter-section corner horn variation on his earlier 4ft Tractrix PA speaker.

It's a large loudspeaker, but because it fits into a corner, it's less intrusive than designs that need to be kept well clear of walls. The horn is driven by one of Voigt's original full-range twin-cone high-flux driver – very much the predecessor to the Lowther units that are still made today – though being a pre-WWII it was also pre-permanent magnets, instead using electromagnetic 'field coils'.

Spending a month with a pair of Corner Horns was fascinating, though not entirely positive. Much of the audio

band was handled with great coherence and dynamic expression, but that venerable Voigt driver did suffer a significant lack of presence energy, so the overall tonal balance was very laid back. That meant it never sounded aggressive even at very high levels, which can be very pleasant, especially with orchestral material, but it was quite difficult to interpret speech and lyrics when playing the system quietly.

Substituting various more recent permanent magnet Lowther drivers showed that this limitation was down to that ancient driver rather than the corner horn enclosure. The latter did show a couple of weaknesses, but these are comfortably outweighed by its very real strengths.

Because the Voigt was intended for mono operation, it avoids the pinpoint imaging of stereophony. Instead, the sound somehow integrates into the room, giving a lovely spread of sound that seems to fill the whole wall from a horn mouth 3-5ft above the floor – not unlike a concert hall experience, it must be said.

Like all devices based on a single full-range driver, there are limitations at the extremes of the audio band, and the mid-bass does thump a bit too (an unfortunate coincidence between a major room mode and the tuning of the column loading the rear of the driver). But careful driver selection can give a remarkably impressive experience, with all the dynamic grip and drama of horn loading, alongside a fine tonal balance and remarkably little coloration.

Modern speakers might be smaller, and indeed deliver sound rather differently, but it's quite obvious that they're not necessarily significantly better than this 75 year old design. While I'll happily concede that many music sources have improved significantly, it's hardly surprising I've developed a healthy cynicism towards much new technology, and feel impelled to wrap the word 'progress' in inverted commas. +



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Vintage hi-fi – not just a Western obsession

# Classic ‘chi-fi’

by Jimmy Hughes



*“In the 1970s and 1980s, the Chinese home market for expensive imported hi-fi would have been practically zero.”*

**MEET LI ZHEN LIAN.** For Audiophiles, she’s quite possibly the perfect woman. She’s not just interested in hi-fi, she actually collects it! That’s right – a woman who collects hi-fi! I met her in Guangzhou, China, where she runs a small hi-fi shop with her husband (rats - there had to be a downside...).

Her tiny shop is in a large department-store type building in the Dong Shan Kou district. This has multiple shop units spread over three or four floors. The first couple of floors are devoted to modern consumer electronics items like mobile phones and iPods, but on the third floor you enter a magical world of vintage hi-fi and audio.

I was amazed by what I found there. Vintage amps and receivers from the 1970s and 1980s, big reel-to-reel tape recorders and cassette decks, plus old valve table radios, and even the odd CD player; it was like a retirement home for classic bits of old hi-fi; some good, some not so good. I kept encountering all sorts of things I hadn’t seen for years.

Much of the kit was American – brands like Marantz, Scott, SAE, Fisher, Wollensak, Ampex, McIntosh – and (of course) Japanese makes – were well represented. But there was British stuff too – Arcam, Cambridge Audio, Quad, Tannoy; even some Linn and Naim items.

What I couldn’t understand was how and why all this stuff had ended up in Guangzhou. Back in the 1970s and 1980s, the Chinese home market

for expensive imported hi-fi would have been practically zero, so – how had it got there? Turns out, much of the gear had come from places like Hong Kong.

These days, modern hi-fi doesn't excite me over-much. I enjoy listening to it, but looking at it doesn't turn me on any more. Perhaps I'm growing old, but now hi-fi really is just a means to an end – the end being the enjoyment of music. So while I love listening to music, the actual kit itself is not something I drool over.

But, seeing all this vintage stuff left me feeling excited and enthusiastic again – a kid in a candy store. It was like I'd died and met all my old friends again in heaven! I kept seeing kit I'd long forgotten about – as well as things I'd only ever read about (or seen pictures of) but never encountered in-the-flesh. And prices were quite reasonable too.

I think what really got me going again was something that might be called the 'knob factor'. Unlike most modern kit, which is Spartan to an extreme, these old amps and receivers were festooned with knobs, buttons, and dials. Seeing all this old stuff reminded me of how much fun hi-fi used to be. Big Boy's toys!

There were massive tuners with illuminated displays that would give Blackpool competition, and power amps with big VU meters. I even found a few large table radios from the 1950s and 1960s in handsome polished wooden cabinets, plus large expensive portable transistor radios from the 1960s – like Grundig's now seemingly disturbingly named 'Yacht Boy'.

Some dealers had large horn loudspeakers, though most of the shops were far too small to house such things. Li Zhen had a pair of big Tannoy monitors with 15in drive units in her



*“Unlike most modern kit, which is Spartan to an extreme, these old amps and receivers were festooned with knobs and dials.”*

tiny shop. She said she wasn't crazy about their sound, though; her favourites were some huge Altec-Lansing horns she had at home!.

Best of all were the big reel to reel tape recorders. I always had a soft spot for these. I'd forgotten how large and heavy many of them were – and how extravagantly engineered. The head assemblies, for example; all those azimuth alignment screws carefully lacquered in place. Works of industrial art, no less...

Amazing place! I didn't want to leave - it was all so fascinating. +

Please send your letters to Hi-Fi Plus, Unit 22, Sandleheath Industrial Estate, Sandleheath, Hampshire, SP6 1PA, United Kingdom.  
Or email them to [editor@hifiplus.com](mailto:editor@hifiplus.com)

# incoming

## Telephone Poll

As we are all well aware, most households have many more electronic gadgets, gizmos and mobile phones than you can shake a stick at. We also know that these can have an effect on what we hear through our systems. The one thing that bothers me most is the mobile phone. Lots of times whilst listening to music there is the electronic buzzing coming through the speakers several seconds before the text or call arrives, even if the phone is in the next room or sometimes it's the next door neighbour's phone.

Can the equipment be damaged in any way by the call or text coming through? Short of switching the phone off, can this be stopped?

Also, I enjoy reading the back issues and found the contributor profiles on their systems in issue 43 very interesting. Is this likely to be featured again?

**Pascal Diamond, via email**

*The bleeping interference sound you describe is your mobile phone 'polling' its cell. It's an audible example of the electromagnetic interference that WiFi, mobile phones, Bluetooth headsets and more put into their surroundings. The four ways of getting rid of this are switching the phone off, putting the phone in some kind of faraday cage (the sort of electrostatic bags computer cards come packaged in is ideal) – which effectively turns the phone off, placing your system in some kind of faraday cage, or finding out which component or cable is picking up the interference and replacing it - Ed.*

## And the walls came tumbling down!

Thank you for publishing my email 'HELP, HELP, HELP' in issue 72 and for your comprehensive advice. I also found your article 'Small room, big sound' very interesting and helpful. Rather than add further bass treatment, purchase a better amplifier or experiment with speaker placement, I decided to take drastic action.

Much to the amazement of my friends and family I bit the bullet and with club hammer in one hand and chisel in the other I demolished two stud-partition walls thereby making three bedrooms open plan. This has provided a listening environment of 67.7 cubic metres, 16.7 cubic metres more than my present listening room. The new room is still L shaped, but I am now able to place the speakers in the leg of the L, ensuring equal distance from the side walls. My single bed will reside in foot of the leg, hidden probably with a full width and full height roller blind.

Applying the Cardas formula for speaker placement locates the tweeters 1.9 metres from the front wall (approximately one third down the room) and 1.1 metres from the side walls. The distance between the speakers will be as they are now, 2 metres. I can almost hear you shouting, 'what does the bloody system sound like?'

Unfortunately I cannot answer that question at the moment. Presently I am staring at two large DIY volumes placed on the floor where the speakers will be placed, but I am impressed simply by the size of free space the speakers will enjoy. While I am not building myself up too much, I do hope for an all round improvement in sound particularly in imagery as sometimes a solo violinist can move around. I believe this is due to the influence of my present listening room.

As soon as I repair the gaps left in the ceiling and floor where the walls used, redecorate and take a well earned holiday, I will get down to the more important stuff.

**David Bond, via email**

## Computer correction

I'd like to point out a minor error in the with regard to asynchronous USB. In the review of our products, you state that "...asynchronous USB essentially causes the output of the computer to be clock-locked by the DAC".

'Clock-locked' is a description of another, low jitter interface, one that slaves the source to the clock of the converter, however, this is not a description of an asynchronous interface, rather it implies a synchronous one with a redefinition of the master and slave devices. In as much as asynchronous transfer protocol as used in a USB product pairing functions in a completely different manner, a bit of explanation of the process is provided as a reference. As a point of reference, think of a transport / DAC pairing. If connected

by S/PDIF or any of the other flavors of bi-phase interfaces, the transport supplies to the DAC the clock (incorporated with the data) so the transport is the master and the DAC is the slave. If the DAC supplies to the transport a clock that the transport utilizes then the transport becomes the slave and DAC becomes the master. Despite the later being a much lower jitter interface, both are synchronous ones as both ends are under the control of a single clock.

The term asynchronous (or 'not' synchronous) defines that neither the clock within the host (computer) nor within the device (Streamer in this case) are synchronized at all. Both are free running and while they may be close in terms of frequency (or just as easily may not be very close), there is no fundamental control of either over the other. The clock generated by the host is typically a very poor one as it is subject to many sources of modulation from both hardware and software constraints. Using it in any way virtually guarantees that large levels of jitter will be imparted on audio stream. The asynchronous approach allows both ends to operate independently and via a communication mechanism the device (Streamer) is polled by the host (computer) on a predetermined interval for a 'feedback' value that the device calculates and supplies to the host. The host then modifies its data payload and sends either more or less samples in subsequent data packet(s). This allows the data rate on average to match yet frees the device from the poor clock performance of the host. The actual mechanism for calculating and supplying this feedback data to the host (and handling errors of the host) is very complex and well beyond what can be conveyed in a limited amount of space (and time) but the concept is, at the surface level, very easy to understand.

Let me give you an example.

Say that the host clock is intended to be supplying audio at 44,100 Hz (CD data rate) but due to its very poor nature is actually running at an average frequency of 44,099 Hz. In this example, the device is generating an accurate, and more importantly low jitter, clock that is exactly 44,100 Hz for driving its audio circuits. This 1 Hz difference would quickly cause the two ends to drift apart and the data packets would become corrupt and a complete loss of function would result. Since the data comes in packets and the number of audio samples in the packet is under control of the software, the device sends to the host (in response to a request from the host) a value that describes the difference between the two data rates. This information defines the difference is called the feedback value. In this example, the hosts clock is .0022676% slower than it should be; and after a matter of just a few thousand frames, the two ends would be hopelessly apart and the result would be something that would be described to as completely random noise, not audio.

In a Full Speed (USB 1.1) streaming audio application the data is sent in packets that arrive once ever millisecond (1/1000 of a second or 1000 data packets per second). Each packet would need to contain 44.1 samples, but only whole samples can be sent, so the host will send 44

samples for 9 frames (a total of 396 samples) and then on the 10th frame, it will send 45 samples. This makes a total of 441 samples in 10 frames and then the process is repeated during the next 10 frames. Since in my example the host is running slower than it should, eventually, the device's buffer would underflow (run out of data) and the whole system would crash, but with the device calculating the error of the host, it can request that one data packet have an additional sample to keep the two ends in relative synchronization but still allowing their clocks to run completely independently. As long as the buffer neither underflows (runs out of data) nor overflows (runs out of space), then the system works perfectly.

For a situation where the host is running faster than the device, the device sends feedback data that reduces the number of samples in the occasional frame. Again, the system stays intact via the feedback mechanism. Consider the situation where the host generates a very poor clock interval (due to task handling, hardware design or as is nearly always the case, a combination of both) and each sample arrives either on time, early or late, this is exactly what happens and the result is classic jitter. Since the device (Streamer) is independent of this, there is zero impact on the conversion performance since our device operates only from its own locally generated clock. The difference in jitter levels is typically (with most computers) a factor from 100 to 1000 times lower for an asynchronous approach when contrasted to any of the other protocols available to an audio streaming (isochronous or constant interval) task.

Hopefully, this brief explanation helps explain how an asynchronous transfer protocol system can be completely independent in terms of their clocks, but still provide a mechanism to maintain relative alignment between the two ends.

**Kevin Halverson, HRT**

# EQUIPMENT REVIEW

## PMC Fact 8

by Jason Kennedy

Once in a while a component comes along that really twists your melon, as some hop heads from 'Madchester' once proclaimed. These things realign your expectations and make life rather dull when the manufacturer wants them back again. January is a long dull month with a tax bill to pay at the end of it and a deficit of sunlight but this year, my January was enlightened in no small manner by two pieces of equipment, the Rega Isis CD player that was eulogised recently and the PMC Fact 8. Now, I like PMC speakers, they are usually good, if not very good, for their given price points and some – specifically the pro models – are near the top of the 'if I won the lottery' wish list. But it's been a while since a pair of those has come my way and you forget what you're missing after a while and adjust to the far from scrappy results of coming out of the regular speakers. Then PMC brings out a new a rather different speaker, something that is distinctly more elegant than most thanks to the cleanest cabinet design to hit this business in a long time. It's also different because of the way it sounds, which is quite hard to put your finger on until you hear another good speaker and wonder why it sounds a bit thick.

The Fact 8 is a new breed of PMC. It has the company's trademark ATL or Advanced Transmission Line, but in other respects does not resemble anything that Luton's finest audio equipment manufacturer has built before. For a start it has a perfectly rectilinear, sharp edged cabinet, which doesn't sit on a plinth but rests on two chrome plated bars. These extend the footprint to provide greater stability and are threaded to accept equally shiny 6mm spikes, but not ordinary examples of the breed. The spikes have a rounded end as well, so that you can place them on a hard floor without leaving holes. And if you really want to protect the floor there are plastic caps to put over the 'spikes'. It's a neat and surprisingly thoughtful addition.



The all-important drive units do not seem all that special at a glance, but look at a whole bass driver and you will see that the 140mm bass unit has an unusually substantial magnet on the back of its cast alloy chassis. The cone itself appears to be about 95mm in diameter and is coated with what PMC describes as a 'feather light stiff-matte doping process'; this is combined with an 'excursion braking system' (a spider?) that controls maximum excursion. Despite the existence of three drive units, the Fact 8 is a two-way, itself quite unusual because this sort of configuration is generally used in two and half way designs. More unusual, in fact downright radical, is the 1.7kHz crossover point that designer Pete Thomas has chosen. This is around a kilohertz below the norm and leaves the tweeter with a lot of bandwidth to cover, it's not therefore your run of the mill 25mm dome. Rather it's a drive unit with a 19mm central dome and a large roll-surround that brings the overall diameter up to 34mm, a combination of characteristics that when combined with high quality engineering allows it to go wide and to cope with power handling that PMC expects of its designs.

*"It looks simple enough, but if the speed and resolution in the bass on this speaker is anything to go by, it works well."*

While PMC doesn't manufacture drive units, it does all the R&D work on them and has them built to its specifications so the tweeter on this speaker is not one you'll find elsewhere. It has a large enclosure on the back that damps any resonance and the dome itself is made of Sonomex. Putting that name into Google brings up the SEAS Excel range of tweeters, which have a similar construction but different specs alongside prices that start at £84. That is already expensive, but factor in the custom build requirement and the margins for distributors and dealers and it becomes apparent why this speaker costs what it does.

The crossover has to be pretty cleverly put together to cope with the challenges of taking the tweeter down so low. It runs a 24dB/octave slope as a low-pass roll off for the bass units and a 32dB/octave one to bring the tweeter in above them. The latter is not a slope I've heard of before, but is presumably required to take the tweeter low enough without letting it get to its resonant frequency. The actual crossover board sits on a lozenge shaped PCB behind the terminal block on the speaker. Alongside the beautiful 'Fact Ag' silver plated binding posts, there are switches that allow you to control the output of the bass and treble sections of the speaker. Treble or HF can be increased or decreased by 2dB while bass can be reduced by 3dB or 6dB. If you want to increase bass output you merely put the speakers closer to the rear wall. I found them pretty easy to site, results did vary and it was fairly easy to tune the bass output to a desirable level with the wall about half a metre behind them.

As is the PMC way bass output is augmented by a transmission line that starts behind the bass drivers and vents through a slot at the front in phase with the output from the drivers. In the Fact 8, an extra chamber has been added above the vent and behind the front baffle. This chamber absorbs any upper bass harmonics that remain and damps them out. It looks (and sounds) simple enough, but if the speed and resolution in the bass on this speaker is anything to go by, it works well. In (ahem) fact, the whole thing works rather well.

This is the most open box speaker I have ever encountered and it's phenomenally



▶ revealing too; to call it a wolf in sheep's clothing is an understatement. How can something this elegant produce both high precision imaging in all three dimensions as well as proper bass? The latter is perhaps the most impressive given the box and driver size. After all, a narrow baffle and compact drivers are proven quantities if you want great imaging, but it's rare to hear such well extended, well timed and effortless low frequencies from something so discreet. But it shouldn't be a surprise, PMC is renowned for getting its speakers to deliver uncannily clean and effortless bass and in the fact 8 it has refined the ATL system that is largely responsible for this reputation. It's not a wall shaker in the style of the EB and PB models I've tried but it certainly delivers gravitas, and unlike its bigger stable-mates does so in an unusually unboxy fashion – this cabinet is clearly stiff where it needs to be.

The degree of resolution on offer makes it very easy to differentiate between partnering components, it was clear for instance that the Rega Osiris amplifier is not as high in terms of fidelity as a Classé pre/power. The latter delivering a lot more of the space, depth and realism of a recording while the integrated Rega times rather better and draws you into the music more effectively. When combined with the Isis CD player this system is uncannily musical, drawing out the tunes from all manner of material in effortless fashion. The result with Mimetism's 20.1 CDP and 15.2 integrated was far more dynamic, extremely fleet of foot and natural. This pairing comes in at about £10k yet seemed very well matched to the Fact 8s, which fight well above their weight in terms of imaging and coherence. I didn't have any of the Bryston amplification that PMC distributes to hand but imagine that it's bigger amps with their effortless power would really get this speaker jumping. Power handling is good as you'd expect of PMC and better than you expect of the drive units. But appearances are deceptive. This may be a smooth looking design with normal looking drive units, but if you've read this far you'll know better.

The combination of qualities on offer here is significantly greater than the sum of its parts, the phenomenally open character reveals nuances and

*“This is the most open box speaker I have ever encountered and it's phenomenally revealing too.”*

details that more expensive designs miss and these combine to give a far fuller musical and more three dimensional picture than most. More importantly it lets guitarists like Henry Kaiser deliver his licks in truly blistering style. Make no mistake, this speaker is the real deal; the fact that it looks so good is a just a distraction.

See our interview with PMC head honcho Pete Thomas over the page for some of the reasoning behind the Fact 8. [+](#)

## TECHNICAL SPECIFICATIONS

**System:** 2-way ATL

**Tweeter:** 19mm Sonomex dome with 34mm surround

**Bass driver:** 140mm paper cone x2

**Sensitivity:** 88dB

**Impedance:** 8 ohms

**Dimensions HxWxD:** 103x15.5x38cm

**Weight:** 20kg

Bass and treble output level switching  
Magnetic grille

**Finishes:** rich walnut, natural oak, tiger ebony, graphite poplar

**Price:** £4,600 per pair

**Manufacturer:**

PMC Ltd

Tel: 0870 444 1044

Web: [www.pmc-speakers.com](http://www.pmc-speakers.com)





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# Meet your maker

by Jason Kennedy

**I spoke to PMC founder and designer Pete Thomas about the FACT 8.**

**JK: What inspired you to put the tweeter crossover point as low as you have?**

**PT:** That was because we developed an active two-way speaker about 10 years ago called the AML1, which crossed over at 1.5kHz. The main reason for it is because it's hard to get a wide off-axis response from a two-way in the midband, the midrange dispersion gets very narrow. As you go up in frequency with the bass unit, the dispersion narrows and when you cross over to the tweeter it goes wide again. If you don't match the dispersion of the woofer to the tweeter, even if the on-axis response is perfect, the off-axis has a big bump.

You get some designers who will optimise the on-axis response at the expense of the off-axis, but I'd rather have a less 'flat' on-axis response to make sure the off-axis is flat as well. If the output from the speakers isn't flat then the reflections from the walls won't be flat and your ear can recognise that.

**JK: The Fact is a passive speaker. Are they easier to design than actives?**

**PT:** The current theory is that you should crossover an octave away from the resonant frequency of the driver, so either you need a tweeter with a very low resonant frequency, which that tweeter does, and you need to start doing things to the crossover which push up cost. With active it's a lot easier because you haven't got the problems of a resonant passive crossover, you're connecting the speaker directly to the amplifier so you're controlling the drivers hidden nasties. You don't have that luxury with a passive you've got to work with the resonances of the drive unit. It's a much more difficult choice. The other thing is that the whole reason for two small woofers was to get that dispersion back and being able to use a very narrow cabinet. All efforts to get the off-axis response very, very good.

The tweeter is a large diameter but the actual dome is only 19mm but with a large roll surround. That means it goes low so that you can push it down as far as we have here (1.7kHz). We've damped the chassis with rubbery polymer caps to kill resonances in the drive unit.

**JK: You say that panel flex has been eradicated, how has this been achieved?**

**PT:** It's really just improving the construction of the cabinet. We've upped the grade of the actual MDF to HDF and are using thicker panels, the bottom panel is 40mm thick. We've always accepted that the transmission line, because of all the bracing, is good enough but there were areas that could be improved, so there are extra braces, specifically across the top panel and down the back.



**JK: Have you considered using alternative materials?**

**PT:** I can't say that I'd go down that avenue. There's more to be done with laminates. The inside of the FACT cabinet is veneered as well so you have sandwich of HDF and veneer on either side, we've experimented with that and you can improve the rigidity by increasing the number of laminations so probably in the future that's where I'd go, with multiple laminations.

**JK: Why use a paper bass cone?**

**PT:** It's not just paper, it's plastic doped on both sides, it's the only way you can get a good top end and stiffness at the bottom end. There are other ways of

doing it but they offer different problems that you've got to solve as a designer.

**JK: In what way does an 'excursion braking system' differ from a regular spider?**

**PT:** It's the two surrounds, the spider and the surround on the perimeter of the cone. With most drive units, there's very little done as the coil assembly reaches its maximum excursion. Surprisingly, more than 70% of drive units will just hit their end-stops when they're overdriven. And that's either a horrible bottoming noise that damages the unit or an enormous amount of distortion. People spend a lot of time on the linear part of the excursion, but fail to prevent it from damaging itself for those odd transients.

The spider on the FACT driver is a highly developed design that actually brakes the coil assembly just before it hits the back assembly which took quite a long time to get right on a five inch. It's relatively easy on a big driver but on smaller woofers where you need a really long throw but you don't want it to damage itself it gets more interesting. +



## EQUIPMENT REVIEW

# Pure Sound L300 Line-Stage Preamplifier

by Roy Gregory

**H**ow many really good line-stages are there? My personal list starts to run out at about the same time I exhaust the fingers on one hand – and most of those products are seriously expensive. Well, now there's a new addition to that list and, given the company it's keeping, I have to say that it's £5K price looks mighty attractive...

The Pure Sound L300 distinctive appearance, dimensions (210mm tall and fully 500mm deep!) and the 300B tube sticking through its top panel all set it apart from the crowd. And those differences are just the ones that you can see... Try on a transformer-coupled output stage, no fewer than ten tubes and no remote control for size. But there's a powerful logic at work here – one that ticks many of the 'what makes a good preamp' boxes. The circuit is essentially built around two, direct couple gain stages, the second one feeding an output transformer, a topology that delivers plenty of gain\*, both single-ended and balanced outputs and a very low output impedance (without resorting to negative feedback) making it largely impervious to cable length and insensitive to the input impedance of the matching power amp. Source selection is located directly behind the inputs in order to keep the signal path as short as physically possible, while the entire circuit is hard wired: So far so very good.

Someone who knows an awful lot about the subject once told me that the output transformers are 80% of a valve power amp, while the volume control is 80% of any preamp. While using the best volume control in the world won't guarantee preamp greatness, a poor one pretty much guarantees failure. Pure Sound designer Guy Sergeant eschews the fashionable conventional stepped attenuator or passive control, for reasons clear, cogent, and on his web-site. Perhaps more surprisingly, given the L300's chosen output topology, he also shies away from the notion of a tapped transformer volume control, but again, the clearly laid out reasoning is hard to fault. Instead, he employs a simple precision film attenuator, favouring the infinite adjustment it provides, consistent sound quality and the absence of those issues associated with motorised controls or banks of remotely operated relays. It's hard to argue with the results and as I feel remotes cause sonic havoc, their absence is entirely positive.

\* In fact there is sufficient gain available from the L300 that those with high-gain power amps, CD players with excessive output levels or very efficient speakers would be well advised to check its use in their own system context. It shouldn't be a problem, but it's worth making sure...

Of course, as with any preamp, the other key factor will be the power-supply and once again, the Pure Sound doesn't disappoint, with a heavily choke smoothed, valve rectified and 300B regulated topology that occupies most of the chassis space. There's a gas voltage reference tube to ensure absolute stability of the HT supply, and the filament supplies are also fully regulated to keep the noise levels low.

On a practical level, you get five single-ended inputs, two pairs of single-ended outputs and two pairs of balanced outputs (selected via a rear panel toggle switch). Sockets are of excellent quality and power arrives via a standard 13 Amp IEC. There's a front panel on/off switch, source select and the centrally mounted volume control. Construction is first class, with a substantial internal deck separating the tubes and transformers from the other components and eliminating any danger of flex in what is a very large chassis. The heavily shaped front-panel certainly makes a statement; it fitted right in with the dCS Pagannini and the arrival of matching power amps will do no harm. I was pleased to find the chassis equipped with four shallow, conical aluminium feet, a set up that meets my criteria for both mechanical coupling and material consistency. When it comes to accommodation, you'll need to make sure that you've got sufficient height and depth to house the L300 without excessive front or rear overhang, and you can get additional focus, transparency and dynamic range with superior, aftermarket couplers like the Stillpoints or Symposium RollerBlocks, both working well.

As soon as I heard the L300 in anger I was reminded of the first, jaw dropping time I was exposed to the Audio Research SP10 preamp – and believe me when I say that in audio terms, that was definitely one of my formative experiences. What the two-box ARC delivered was a sense of sheer power and presence, coupled to a majestic musical authority. No matter how big the drum, how big the orchestra, you just knew the preamp was going to deliver the full, unvarnished wallop and scale, right there, right then and without any strain whatsoever! It might not have been the ultimate in resolution or detail, but this was a preamp that could make you fear for your speakers.

The L300 has that same power, presence and stability, an unstoppable momentum that literally seems to drive the musical energy and performance physically into the room. You'll never want for drama listening to a system

with the Pure Sound in the chain. But the similarities run deeper than that. After all, what was the standard high-end solution all those years ago? A tube preamp in combination with a solid-state power amp. There's nothing like learning the same old lessons over again, this time with the L300 singing through the Gamut M250 monos, the Hovland RADIA and the Primare A33.2 power amps!

As well as the amps mentioned above, the L300 saw action with the Berning Quadrature Zs (which almost count as solid-state, sonically at least) the Citation Sound 2 monos (push-pull 6550s) and my recently refurbished Jadis JA30s. Front-ends included various Wadias, the three-box dCS, VPI Classic and Kuzma Stabi XL4. Speakers included the Gamut and Avalon Time models recently reviewed, as well as the new Focal Stella Utopia EM (one down from the Grande, with a smaller EM bass unit and no tilting mechanism). That's some pretty demanding company and the Pure Sound was never less than comfortable, simply slotting in and getting on with the job, a sure indicator of both its class and its utterly unflappable versatility. Electrically speaking, matching is not going to be an issue with the L300. However, sonically it's another matter and this unit has character to match its power and presence.

A recent, pleasant discovery has been the range of Philharmonia concert recordings on Signum Classics. Nice to have ▶



▶ recordings of your 'home' orchestra in familiar venues, but nicer still when they really capture the sense of performance that escapes so many, technically hamstrung modern classical recordings. It's a quality that the L300 fastens on and pushes well to the fore by preserving precisely the chemistry between conductor and orchestra that shapes the performance, mapping the demands for musical energy that Davis places on his players and then delivering them in full measure; no sparing the horses here! The sense of musical substance and orchestral sweep is palpable. The pulsing phrases of the woodwinds contrast beautifully with the pizzicato playing of the strings, the whole vignette driven to its triumphant conclusion by the power of the brass and percussion.

It would be easy to conclude from the description above that this is a typically rich and powerful sounding valve line-stage, but one that pays for that power with a lack of agility and dynamic finesse, weighed down by extra colour and harmonic padding. But in practice, nothing could be further from the truth, although personally I'd hesitate to mate the L300 with the warm and wooly sound that typifies so many triode coupled power amps; not so much a case of too much of a good thing, more hiding its light under a bushel, masking how responsive the Pure Sound is to shifts in tempo and musical density.

It's this way that the Pure Sound has of effortlessly mirroring the energy distribution, the musical flow and instrumental density of a performance that makes it so engaging and enjoyable to listen to. In this regard (and in my experience) it lies second only to the Lyra Connoisseur, a product that betters the L300 for harmonic and textural resolution and dynamic discrimination but can't match its sheer power and the absolute, rock solidity of its bottom end –

*“The real virtue of the L300 lies in the breadth of material and recording quality it so enthusiastically embraces.”*

all the while costing you well over three times the price for the pleasure! Just listen to the Philharmonia's percussion on the *Enigma* – or even better, the storming *Serenade For Strings* that shares the disc – and you'll hear exactly what I mean. Real drums in real space have a complexity and independence, a carry that allows them to provide a solid footing beneath even the most frenetic orchestral crescendo. The L300 captures that quality perfectly, not just letting you hear the drums, but giving you a new level of insight into their tuning and the subtleties that go into their playing.

And it's not just great recordings and performances that benefit. In fact, the real virtue of the L300 lies in the breadth of material and recording quality it so enthusiastically embraces. If there's a performance in there, you can be sure that this line-stage will dig it out. So whether you are talking the recent spate of 'live from the desk' concert discs that have emerged from the vaults of everyone from Neil Young to Elvis Costello, or just the kind of murky, impenetrable digital morass that characterizes so much mid-'80s pop, the Pure Sound line-stage does an uncannily effective job of sorting the musical wheat from the recorded chaff, elevating the bits you want above the mess that obscures.

The longer I listened to the L300, the more fascinated I became with the question of just why it works so well. What makes it so remarkably effective when so many far more costly designs fail? The answer is that we have become so obsessed with resolution, detail and definition that we are sacrificing other, musically more significant virtues to achieve those goals. Yes, the harmonic resolution and instrumental texture I referred to earlier is important, but it's also the surface that rests on an underlying structure.

Just like a CD player, all the microdynamic detail and texture in the world is no use if it's not positioned correctly in space and time. In this respect, the Pure Sound gets its priorities spot on too. But there's more to its success than just good bones. ▶



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sound too, but therein lies its appeal. When so much of this industry is charging down a high-resolution, flat frequency response blind-alley, a step back onto the musical straight and narrow is no bad thing. In reality, the Pure Sound simply presents a different set of musical priorities, the demands of hi-fi fashion subordinated to the musical demands of structure and the artistic demands of the performers. On first listen, the L300 might come as of a shock, but you might rediscover what got you into hi-fi in the first place.

I have no hesitation in elevating the L300 to the most select list in hi-fi – the list of musically great line-stages. It's not perfect, and those line-stages that surpass it offer greater resolution, harmonic texture and dynamic discrimination – at a price. But put the Pure Sound L300 in your system, and just like those few other units that make that list, you'll be taking a significant step towards listening to more music and less hi-fi. Listen and enjoy – it's hard not too!+

► The L300 allows recordings to retain their own character. Each disc sounds different from the one before, your system is subordinate to the recording rather than the other way round – and that's exactly how it should be. Scale, tonality, the character of the acoustic, the deft touch of the producer or the heavy hand at the mixing desk, each is equally apparent. Where so many modern line-stages impose their own character on proceedings, the Pure Sound lives up to its name, with each disc sounding just like itself. Why? Because the L300's flaws are entirely subtractive in nature, rather than additive; it presents the musical ingredients naked, where so many units season everything with too much spice, and the same spice all the time.

The question is, how much subtraction is acceptable? Once again, that depends on fashion and our current tastes and obsessions distort our view. The hoary old debate about stereo, focus and resolution needs to be had in another place, but since the arrival of the L300 I've been paying far more attention to the way an orchestra actually presents in a live acoustic and I've come to the conclusion that seating position and repertoire can introduce a bigger variation than you'll hear between the Pure Sound and Connoisseur line-stages. In the Festival Hall where I hear much of my live orchestral music I favour row F: row D is noticeably more detailed and immediate, but lacks overall orchestral coherence, while row J is already well towards a classic mid-hall balance, long on warmth and holistic qualities, but with far less separation of individual instruments and less dynamic impact. At ROH there's no substitute for the front two rows, but that's very different repertoire, while preferences at the RFH also shift according to the programme, Concerto as opposed to Symphony, Mozart as opposed to Shostokovich, violin as opposed to piano. But in all of this it's interesting to note one thing; of the various seats I have discussed, row D are both the cheapest and the ones that most resemble the sound of current, high definition hi-fi.

The Pure Sound L300 is old fashioned in both its choice of tubes and the way it chooses to use them. You could argue that it's old fashioned in its

## TECHNICAL SPECIFICATIONS

**Type:** Transformer-coupled valve line-stage

**Valve Complement:**

Audio Circuit

4 x 12AU7 (ecc82)

Regulated Power Supply

1 x 5AR4 rectifier

1 x 300B

2 x 12AU7 (ecc82)

1 x 6922 (ecc88)

1 x VR150

**Inputs:** 5x single-ended line-level RCA/phono

**Input Impedance:** 100k ohms

**Outputs:** 2x single-ended RCA/phono

2x balanced XLR

**Output Impedance:** less than 20 ohms

**Dimensions (WxHxD):** 42x22x53cm

**Weight:** 20 kg

**Price:** £4,795

**Manufacturer:** Pure Sound

**Tel:** +44(0)1822 612449

**Web:** www.puresound.info



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*Ken Kessler Review – Hi-Fi News. March 2009*

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## EQUIPMENT REVIEW

# Quantum Qbase QB6 and Nordost Sort Kones

by Chris Thomas

**F**or years it was cables, but these days there is little that rattles the cage of the committed audio puritan like mains conditioners and equipment support cones. Reviews of either is almost bound to elicit a rise in blood pressure and a trip to the keyboard to fire off an indignant mail to some audio forum or other. As for tiny, resonating metal bowls that sit on the wall? Don't even go there. Personally I think it is better to keep an open mind until you have at least had a listen. If you consider your electronics and speakers as just part of the overall installation, then providing them with the environment to perform is the way to keep a system working at the top of its curve. I am talking about system-building here which is a simple strategy aimed at releasing the full musical potential of your hi-fi by giving it the mains quality, equipment support and cabling advantages to do just that.

Quantum Resonant Technology (QRT) have close links with Nordost who also distribute their products. They design and manufacture interesting and unusual mains conditioners, although exactly how their 'field generator' technology works has always been beyond my scientific understanding. My ears however tell me that musically it does work; though with such products there will always be claims that the King has no clothes. That's a fine and healthy situation because when I first became involved in audio there were some prominent and respected pundits who insisted that all turntables sounded the same and the only differences between them were to be found on the spec sheet. It is perhaps fortunate that not

everybody subscribed to those views. Time changes all things.

Nordost have recently introduced a range of individual equipment supports that they call Sort Kones. Sort means 'black' in Danish, though this refers to the nature of the musical backgrounds they achieve rather than their colour. They are considerably more sophisticated in construction than the old Pulsar Points, with different design aims. Sort Kones come in various material combinations and can best be described as resonance control devices. Internally, they incorporate a mechanically tuned, loosely coupled, three-element design. A circular base with a cut-out houses a coupling ball supporting a pivot post that rises upwards to make direct contact with the equipment via a soft curved edge. The whole unit is contained within a black casing marked on the outside with the

*“Sort means ‘black’ in Danish, though this refers to the nature of the musical backgrounds they achieve.”*

particular configuration of metals. There are four different types available. The AS comprises an aluminium post and base with a steel ball, the AC adds a silicon-nitride ceramic ball, the BC utilises a bronze post and base while the most expensive, the TC, comprises a titanium post and base separated by a ceramic ball. These can all be employed in groups of three, four or even greater numbers. For the benefit of this review, I limited myself to the AS and TC versions. But why are they so tall? Sort Kones are about 58mm in height which means that, where shelf space is tight, they may be impractical. The ratio between the Sort Kones' height and their base-width is not arbitrary and the constructional elements, especially the dimensions, are absolutely critical to the performance of both the Nordost and Quantum products.

QRT are can supply their new Qbase mains distribution block in optional plug configurations for US, UK and European markets. These have no Quantum technology inside them. Initially I found this puzzling before I understood that the Qbase is one component of a modular system. Including Quantum in the package would have increased its cost considerably and individual or collective Quantum units can always be added later. But there is also the issue of placement to consider. Where the mains distribution block would tend to sit outside or at the periphery of the system to allow for cable dressing the Quantum units must be sited physically at its heart to be at their most influential. This is an in-line mains distribution block containing no active components and certainly no filtering. The star-earthed system has the marked preamp outlet firmly at its centre. A very small lift in the earth impedance of every socket, except this one, routes the earth both to the centre of the star and also to the external connector fitted for use with supplementary grounding, like a sunken copper rod in the garden. As with Nordost, it became clear when speaking to Quantum that the QBase is also a mechanically tuned device. Even the size and shape of the small raised lip the unit sits on has been carefully chosen and in many ways mirrors the prominent base contact edge of the Sort Kones. It is superbly finished and not surprisingly incorporates Nordost cabling internally.



I decided to look at both the Sort Kones and the QB6 (six outlets, UK-socket) distribution block together. I did not want to just slip them into my home system because of the confusing interactions that would certainly occur between them and the extensive resonance control technology that I already use. To this end I thought it most informative to assemble a 'clean' system using an entirely different set of components and incorporate the Qbase and Sort Kones in stages. I used an Ayre C-5xe mp multidisc CD player and a pair of Focal's Diablo Utopia loudspeakers on their own stands. The amplifier choice was admittedly unusual. I chose a Carat A57 integrated amplifier because it is a very good low-cost amplifier that would never usually be deemed an adequate partner for the Focals. But I wanted to see how far the influence of the QRT and Nordost components could lift the system generally and the amplifier in particular toward a musical viability that I certainly doubted at the outset.

To level the playing field even more I sat the electronics on two acrylic sheets straight onto the floor to remove the influence of another support system and used Chord Company Rumour cabling.

Obviously I listened to a lot of music over the time of the review but I want to illustrate the way things progressed by highlighting Ella Fitzgerald and Louis Armstrong's *Ella and Louis* CD (Verve) and the track 'Moonlight In Vermont'. This is a great recording, dating from 1956, produced by Norman Granz with only a high level of tape hiss to betray its age. Now, I confess I can listen to Ella any time and enjoy it. Even on an AM station in the car her tone, warmth and beautiful phrasing will always fascinate me. So even with a cold system unceremoniously strewn on the floor I needed no convincing as to her greatness. She embraces and dominates this song by ▶

▶ making the lyric, pace and the phrasing all her own. With the untreated system the tape hiss was painfully prominent though and she sounded like a small woman, singing from her throat, through her nose, while Oscar Peterson's piano played a distinctly background role of fiddly embellishment rather than being involved in the song's progression. Armstrong's trumpet was thin, sour, shrill and uncomfortable. It made me want to turn the volume down and see what was on TV. The Diablo's tweeter gave the instrument full rein and also ensured that the glaringly obvious tape hiss became annoyingly intrusive as listening progressed. Evaluating this system at this stage I would say that the balance was wrong and that the amplifier was way out of its depth. I certainly couldn't have lived with it as it was. It promised much but cruelly failed to deliver anything approaching a satisfying musical performance. Time for the first change then so the Qbase was installed using the standard mains leads that are supplied with the equipment. The sound immediately took a massive leap upwards in quality. There was a new solidity and more powerful resolution, as if a serious amplifier upgrade had occurred. Now there was a feeling of weight to the piano that took a step forward to become part of the song. Ella's vocal is still a bit breathy though, but now with a tonal richness and depth that was previously absent. The rasp of Louis' trumpet no longer had me reaching for the volume control but it was still astringent and came as a shock every time it burst in. Overall though, the improvements were hardly subtle and the system now had a feeling of musical harmony that it never got close to before. So I began to add Sort Kones. I started with the basic AC models and slipped three beneath the Ayre CD player. First I felt the weight to ascertain where the transformer was and mounted one Kone directly beneath it and then balanced the unit with two others. Ok, the tape hiss was still there but it seemed to have detached itself from the music, making it easier to ignore. The

*“The Qbase QB6 had brought a growing feeling of Ella's control and the addition of the Kones firmly established that fact.”*

body of the sound had increased still further and the separation was much improved. The Qbase QB6 had brought a growing feeling of Ella's control and the addition of the Kones firmly established that fact; she has amazing breath control. I installed another three AC Kones beneath the amplifier using the same positioning method and the system sounded unrecognisable from earlier. Now that beryllium tweeter became an asset instead of a liability. The trumpet still had enormous impact when it arrived, but now it was part of the flavour of the song and it too had grown in colour and tone. It was still strident, but no longer painful. Oscar Peterson was now doing a lot more work. Earlier he was embellishing with floral lines but now his chords were underpinning and lighting the shape and direction of the song. His playing is a joy and so beautifully tasteful. The noise floor dropped and that tape hiss was becoming less and less noticeable.

At this stage I spent quite a while fiddling with positioning the Kones and found that this is critical to the performance you can wring from the components. I tried using four and then five under both CD player and amplifier. Up to five you can achieve really noticeable improvements with positional experimentation but I have to warn you not to rush this as it can become confusing and ▶



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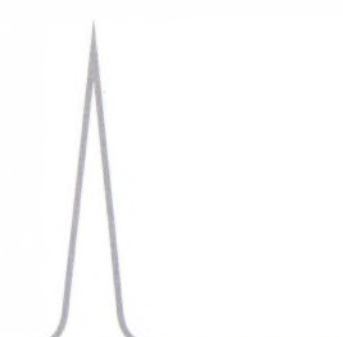
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- Brentwood** - Audio T - Tel: 01277 264730
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*“It became clear that the Qbase QB6 is the rock upon which the other improvements are founded.”*

- ▶ three Kones does look more elegant. It was time to swap the AC Kones for the Titanium-shafted variety. Wow, the improvements were much greater than I had expected and Nordost’s prophesy of black backgrounds was coming true. The sheer range of that amazing voice now had a gentle sweetness and the drops and rises in pitch had a fascination of their own. The tonal inflections and way she shapes her words, flowing some into each other, leaving others resonating by themselves brought home with a bang why she was one of the greatest female singers ever. Now you can appreciate that her tasteful vibrato, gently caressing and modulating the tails of the lyric is nothing short of magnificent because, at this level, you become very aware of her breathing and physicality. The music itself had grown, but, in true Nordost tradition, it was also obvious that the system’s presence and balance had also become a lot more full on. The aluminium/ceramic Kones are good but these are way better in every way. Slipping four inverted TC Kones between the floor and the speaker’s stand bases detached the soundstage from within the confines of the Diablos and stretched the depth too, bringing Ella even closer while knitting the band together as a firmer, even more concentrated unit.

Then finally I hooked the garden earth to its dedicated connector on the Qbase. The tape hiss magically fell away and the noise floor went with it. The system was a now million miles from where it started and the amplifier seems more than up to the job I doubted it was capable of. Then I started to

disassemble the system to check the results backwards. I removed the Qbase first and the music immediately began to unravel. It became clear that the QB6 is the rock upon which the other improvements are founded. I started with a great song, ill served by an audio system and ended up with a real performance and that was a massive leap to take. And remember that all this was without the aid of any dedicated racks or superior cabling. The Qbase QB6 is something of a bargain because system building from the mains socket not only works but I believe is fundamental and a really worthwhile musical asset to systems of all levels, even more so if you have a dedicated external earth. It has replaced the Thor in my own system. The AC Sort Kones too are excellent and will musically pay back their modest cost. The TC versions are expensive but the improvements they bring are not subtle. These are things you need to hear for yourself. +

## TECHNICAL SPECIFICATIONS

Quantum Resonant Technology:

**QB6 Distribution Block:** £850.00 (UK only)

Four socket QB4 and eight socket QB8 also available (US and EU only)

**Net:** [www.quantumqrt.com](http://www.quantumqrt.com)

Nordost Sort Kones:

**AS** – Aluminium/ Steel £49.99 each

**AC** –Aluminium/ Ceramic £59.99 each

**BC** –Bronze /Ceramic £99.99 each

**TC** –Titanium /Ceramic £259.99 each

**Net:** [www.nordost.com](http://www.nordost.com)

**UK Distributor for Nordost and QRT:**

Atacama Audio:

**Tel:** 01455 283251

**Net:** [www.nordost-cables.co.uk](http://www.nordost-cables.co.uk)

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## EQUIPMENT REVIEW

# dCS Puccini U-Clock

by Steve Dickinson

**H**igh accuracy clocks for your CD player? Sold to mugs with more money than sense. Obviously. A bit like exotic cables, really.

A few moments' thought should tell you, though, why the addition of a highly accurate clock to a CD player is a Good Thing. The digital data is reassembled by a DAC into a musical signal in 'slices' which should be of equal thickness, each slice being one sample. The thickness is determined by the sample frequency, 44.1 kHz for CD, and controlled by the word-clock built in to the DAC. These are usually crystal oscillators, not dissimilar to those in a quartz watch, and any variation in the thickness of each slice, or unevenness in their spacing will distort the shape of the waveform created. Imagine making a Lego house out of irregularly-sized bricks. The distortions may be more subtle than those encountered further down the chain but no less musically important and, once introduced, no amount of fiddling with the rest of the system can repair the damage.

Actually, I expected great things from the addition of an external word clock to the dCS Puccini reviewed in issue 65. Quite what I had expected I didn't presume to anticipate, but there is plenty of written and anecdotal evidence to suggest that the addition of a highly-accurate clocking signal to a good CD player has the potential to significantly elevate the performance.

Interestingly, the results, while spectacular, have not been in the areas I might have envisaged. You see 'clock', you think 'timing', right?

Timing is indeed further improved but as the dCS player was already firmly in the front rank in that regard this is, at least to some extent, of lesser importance – rather like adding a spot of makeup to Audrey Hepburn, you notice the enhancement but you'd happily live with the original. Rather more interestingly, the U-Clock elevates the performance of the Puccini most significantly in the one area I found it possible to criticise in the earlier review: the sense of a natural, organic flow and liquid phrasing. I had speculated that the Puccini's analogue output stage might be the cause, (and I still wonder if it has more to give) but, in all honesty, the question is largely sidelined by the addition of the U-Clock.

Where the dCS Puccini reveals the bone structure, muscle and sinew

of a piece of music, the U-Clock adds more body and flesh tones. Even the most musically invertebrate pieces, such as Brian Eno's 'Ascent, (an ending)' from *Apollo* is revealed by the Puccini to have a firm underlying structure. The U-Clock applies a healthy glow, a layer of lusciousness, to that structure without compromising any of the vital essence revealed by the Puccini player. Taking a particularly revealing result from the Puccini review, 'Hard Fairy' played by Simon Haram and the Duke Quartet on the album *Frame*, the Puccini made sense of this piece, for the first time, by simply exquisite timing. With the U-Clock added into the mix, it was also possible to appreciate the full extent of Haram's superb phrasing and breathing control, a further dimension to the piece revealed to its significant benefit.

This is a neat trick and it is where the further enhanced timing brought about by the U-Clock matters. It would be easy to wrap the sound in a wash of loveliness, to the ▶

*“An interesting test is to compare the sound of a ripped CD disc to the same played on the Puccini itself; it’s very hard to tell them apart.”*

- ▶ detriment of the musical message. Players tend to fall into two camps, the liquid, organic brigade or the structure and timing faction. Like Montagues and Capulets, they seldom come together with much success but if the Puccini is the east, then the U-Clock is the sun (we won’t dwell on the end of the play, this review is an altogether happier place).

It seems clear enough, then, that a significant amount of what we perceive as timbre, phrasing and the other ‘analogue’ attributes of music is contained in the infinitesimally fine detail of the signal, and it is all too easy to lose that detail by careless treatment at the early stages.

It is probably why some beautifully luscious-sounding players can make wonderful noises, but lack the essential musicality of a truly rewarding performance. Other improvements, to soundstaging, the sense of acoustic space, timbre, body and shape of instruments and all the other micro-cues which combine to produce a suitably real musical event, are also significantly elevated by the re-clocking of the digital signal.

And here’s a strange thing: cables, yet again, make a significant difference. Using the U-Clock with the freebie clock cable supplied, courtesy of dCS, the benefits of improved tonal colour, phrasing and flow were instantly clear, but the addition of a comparatively inexpensive (around £130) Wyrewizard Shaman digital cable brought exactly the sort of benefits I’d associate with a better interconnect: more tangibility, tactility, a freer

## THE COMPUTER CONNECTION PUCCINI U-CLOCK USB REPLAY

The Puccini U-Clock has a nace up its sleeve. Alongside timing controls, there’s a USB input. This allows a Puccini owner to add digital audio to the line-up. All you need is to take a USB output from a computer, and an S/PDIF link from the U-Clock back to the Puccini player ‘proper’.

The USB input is asynchronous, dCS being one of the first companies to develop the technology from a blank sheet. Its USB input is smart enough to be automatically recognised by PCs and Macs alike, so no need to download special drivers to use it properly. And I have no need to describe asynchronous USB’s action any further, because Kevin Halverson of Muse Electronics described it so extensively on page 10 of this issue. In addition, dCS has amassed a wealth of information about how to give good computer audio and I’m hoping to either publish this or link to it in a later issue.

Perhaps the big question now is ‘why’? You’ve already got one of the very best CD and SACD playing products in the Puccini and the U-Clock makes it considerably better, so what’s the point of adding computer audio? Put simply, streaming and music that’s becoming hard to find on other sources. Good internet radio and streaming offer a ‘music discovery’ service that no conventional broadcaster could match – you have access to more or less the entire musical canon without too much surfing. In addition, there are some albums that are only available online now (Mose Allison’s excellent *Back Country Suite*, for example, is no longer on any physical format) and this can only become more of an issue in the future.

Fortunately, as an avenue into computer audio, the U-Clock is one of the best. The sound is taut and direct and makes many USB solutions sound almost ‘soggy’ and ill-controlled by comparison. Meanwhile, dCS’s excellent digital conversion is precise, detailed and temporally accurate. An interesting test is to compare the sound of a ripped CD disc to the same played on the Puccini itself; it’s very hard to tell them apart, which shows both how good that CD player is (some prefer the sound of files stored on a computer drive than spinning live from a CD; I think done properly they are functionally identical) and how good the U-Clock is at extracting music from a computer.

I compared a few CDs playing through the Puccini to ripped versions of the same (stored as ALAC and AIFF files in iTunes) through the USB input of the U-Clock. Detail levels were virtually identical throughout, but in terms of musical precision and enjoyment, the computer files through the U-Clock sounded better than the CD replay through the Puccini on its own. The sound of the CD through the combination of Puccini and U-Clock was best, but the fact the computer side scored an ace against the basic Puccini shows just how good the U-Clock is. Whether as an upgrade to the basic player, or to take advantage of the changes in the music business, the U-Clock is a must-have for Puccini owners. It strikes me as something of a win-win situation.

**Alan Sircom**

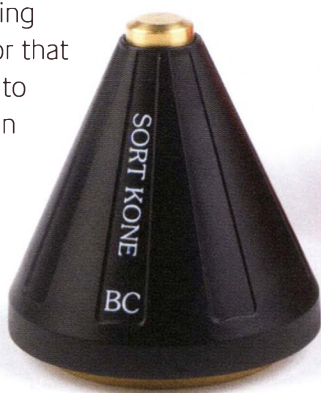


# Meet The Ancestors...



The hi-fi industry refers to racks and other equipment supports as “isolation devices”, going to great lengths to describe how these products protect electronic components from the outside world. Unfortunately, structure born mechanical energy is the least of your system’s mechanical problems!

In fact, the greatest damage to sound quality is done by vibration generated within the equipment itself; from the mains transformer, the power supply caps charging and discharging, every resistor or transistor that passes the signal. And although that vibration might be small, it’s also right where the fragile audio signal is, right where it can do most damage. And to make matters worse, most of your equipment comes with soft rubber feet, meaning there’s nowhere for that vibrational energy to go. It just carries on circulating round the unit’s internals until it finally dissipates. That’s why hard cones or couplers work under audio equipment; they offer an exit route for that energy, so that it can dissipate in the supporting surface.



But not all cones are created equal...

Nordost’s new Sort Kones offer a superior solution to the problem of evacuating unwanted microphonic or vibrational energy from your audio components. They employ functionally optimized, mechanically tuned construction and carefully selected materials to provide a low impedance exit path. These different materials provide four distinct price and performance levels to suit all systems. And because every piece of equipment has a different structure, there’s an extensive user guide to ensure that you achieve the best possible performance from your Kones,

your components and even your speakers, so...



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MAKING THE CONNECTION

▶ sense of flow and dynamic range. Given that this is 'merely' a clocking signal, I hadn't expected to gain as much as I did. Moving still further upmarket to a Nordost Valhalla clock cable was salutary. If I was impressed by the benefits of the Wyrewizard cable, the Valhalla did its usual trick of imposing a hitherto unsuspected level of authority on proceedings. Once installed, it is hard to go back.

Fret not, cable sceptics, this isn't going to morph into a cable review, but even I, a convert to the cable cause, was surprised that upgrading something which carries, essentially, a control signal, not a musical one could produce such results. I'd expected subtle improvements. They weren't.

dCS also provides a dither function for the U-Clock. This provides a

*"If you buy a U-Clock and don't use dither, you're only using half its capabilities. I'm not sure why dCS bother with a defeat."*

minute amount of, controlled, variation in the timing signal, which keeps the phase locked loop busy doing what it does and thereby helps control jitter. I tried the Puccini/U-Clock combination with, and without the dither selected. The dCS manual is a little coy about the effect. I suspect they know they don't have to spell it out, users will quickly get the point but, frankly, if you buy a U-Clock and don't use dither, you're only using half its capabilities. In fact, I'm not sure why dCS bother with a defeat switch for the dither, at all.

I only dabbled in the computer audio capabilities of the U-Clock. Knowing that AS was looking into this in more depth, I simply hooked up a friend's laptop via the USB connection and experimented. The results were interesting, if inconclusive. Suffice to say, I'm not yet a convert, but aware of the possibilities. One thing, however was abundantly clear. Cables, again. I know, yadda yadda, blah, blah. But, moving from the freebie USB cable courtesy of dCS, to friend's own decent-quality-for-sane-money USB, to a £1,500 Crystal Dreamline USB interconnect, the improvements at every stage were obvious, and musically vital. Suffice to say, if you are serious about using USB connections for computer audio, you need to think very carefully about the quality of the USB cable you choose. But you knew I'd say that, didn't you? +

## TECHNICAL SPECIFICATIONS

### dCS Puccini U-Clock

**Type:** Word clock with USB input

**Accuracy:** Better than  $\pm 1$ ppm.

**Inputs:** 1 USB (B-type), will accept up to 24-bit PCM at 32, 44.1, 49 or 96 kHz, asynchronous mode.

**Outputs:** 4 word clock outputs on 75 Ohm BNC connectors

2 S/PDIF on RCA Phono connectors

**Output frequency:** 44.1 or 48 kHz

**Dimensions (WxHxD):** 460 x 58 x 408 mm

**Weight:** 7.6 Kg

**Available finishes:** Silver or black

**Price:** £3,000

### Manufacturer:

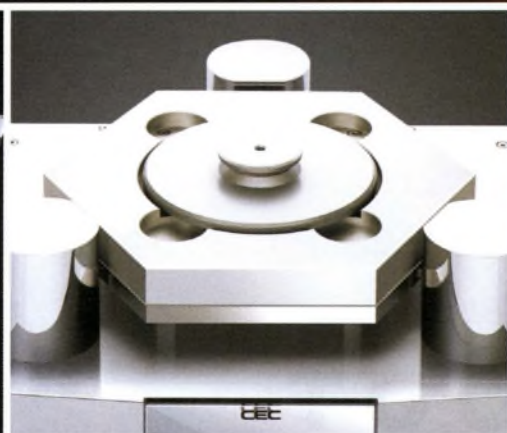
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## EQUIPMENT REVIEW

# Fonel Emotion

by Paul Messenger

**R**ight up until the early 1980s, wood was still occasionally found decorating hi-fi electronics – remember Arcam's original and very popular A60 with a wooden sleeve covering a metal chassis? But the writing had been on the wall since the late-1960s, when the Japanese brands first started appearing with their shiny silver fronts and steel cases.

Barring loudspeakers, turntables and some Italian brands, metalwork remains the dominant feature of virtually every component on the hi-fi market today. Which is maybe a pity, but it does provide one solid reason for welcoming the arrival of equipment from Fonel Audio, which features some beautiful lacquer-finished wood strips around the visual periphery. And there's a matching remote control handset that's as easy on the eyes as it is on the hands.

That's not the only thing that's unusual about this integrated amplifier. In fact I'd go so far as to describe this £5,525 Emotion as downright idiosyncratic, but that of course makes reviewing it all the more interesting!

To start with, it has mixed parentage. But in this case it isn't the usual 'designed in some European country and made in China' gestation. Instead the unit is actually made in Berlin but apparently has some design input from the Ukraine, which is probably a unique combination in the world of hi-fi (and elsewhere!)

I'll freely admit I know absolutely nothing of the Ukraine hi-fi scene, and can't make head nor tail of the Slavic Ukrainian language (complete with Cyrillic alphabet) which is the alternative to German or English on the website. Frankly, and at least in its English translation, the website is not all that helpful; its 'about us' section was aspirational rather than informative.

That probably unique heritage is by no means the only unusual thing about the Emotion. It comes in two distinct versions – a Class AB version that can deliver 300W/channel from MOSFET output pairs, and a hybrid (thermionic/solid state) Class A version that is rated at just 25W. Both share the same impressively solidly built casework, the control surfaces and pre-amplifier; our sample was one of the low power Class A examples.

It would have been nice to have been able to examine the innards and give some indication of the contents, but unfortunately, the lid resisted all attempts to remove it. My Torx bit happily removed seven of the securing bolts, but had absolutely no effect on the eighth. Black mark to QC; short of brutally bending the lid or drilling the bolt, there was no way of getting the lid off. Peeking inside I could see at least one glowing valve, though there was no sign of an output transformer.

Although the brochure's details are no more useful than the website, the user manual proved considerably more informative, though its regular lapses into

*“The good news is that this is a very pleasant amplifier to use, thanks largely to a remote handset that’s nice to the touch.”*

- Deulisch (the German equivalent of Français) was sometimes baffling. The reason I got the manual was because I wanted to find out how to adjust the front panel illumination. The relevant (verbatim cut’n’pasted) part of the manual reads as follows:

*“After approximately 10 sec. scolded you the power switch at the back, and keep you pressed thereby the key at the front side: IN 1 - to program around the brightness of the volume indicators or to program IN 2-um the remaining light emitting diodes. The control system goes into the attitude, with which the brightness of the light emitting diodes at the volume indicator indicates the level to the brightness of the light emitting diodes which can be programmed.”*

I therefore decided not to try and adjust the display brightness.

Happily there were also a few clues about the basic ingredients that allow some educated guesswork. The whole thing operates under microprocessor logic control, and is free from global negative feedback. The pre-amplifier has gold-contact relays, and an Alps electronic volume Engine, while valve drivers feed FET output stages.

Although the ergonomics are generally rather good, one obvious criticism is that, in my opinion at least, there simply aren’t enough inputs for many people in the modern world. There are just four line inputs, which in itself may be rather limiting, but only two are regular RCA phono pairs; another pair has balanced XLR sockets; and the final pair (on RCA phonos) by-pass the volume control and feed the power amp directly at full gain (a connection type normally expected to be used in conjunction with an AV processor). Whether that very limited complement of inputs will be sufficient will naturally depend

on how many sources the system uses, but I have to admit it wouldn’t be enough for my needs.

If that’s the bad news, the good news is that this is a very pleasant amplifier to use, thanks largely to a remote handset that’s nice to the touch and refreshingly simple. There’s no volume knob as such, but a circular pattern of around 30 LEDs covering about 240 degrees provides good visual feedback, as do little LED telltales above the various front panel buttons. One might complain of some oversimplification: there’s neither mono switch nor balance control, two useful features that are all too often omitted from today’s equipment in my opinion. There’s no mute button either, and the controls and telltales on the amplifier itself are just below the thick wooden trim, so are difficult to see when standing in front. However, the best feature of all is that the actual law of the volume control is exceptionally good, allowing plenty of scope for delicate and fine adjustments at the quiet end of its operating range.

Besides the inputs, the rear panel has two switchable pairs of multi-way speaker socket/binders, plus (surprisingly) a 6.3mm ►







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Successors to the throne, sons **Derek and Ramsay Dunlop's** vast experience of building award winning analogue products alongside their father has resulted in a **groundbreaking 3-point suspended precision turntable**

Going back to the drawing board with a clean sheet, the **Systemdek 3D** utilizes some **extraordinarily clever engineering** to ensure it is as **free from external feedback** as is currently possible.

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**imaginable** allowing you to match your **Systemdek 3D turntable** to your particular surroundings or taste.

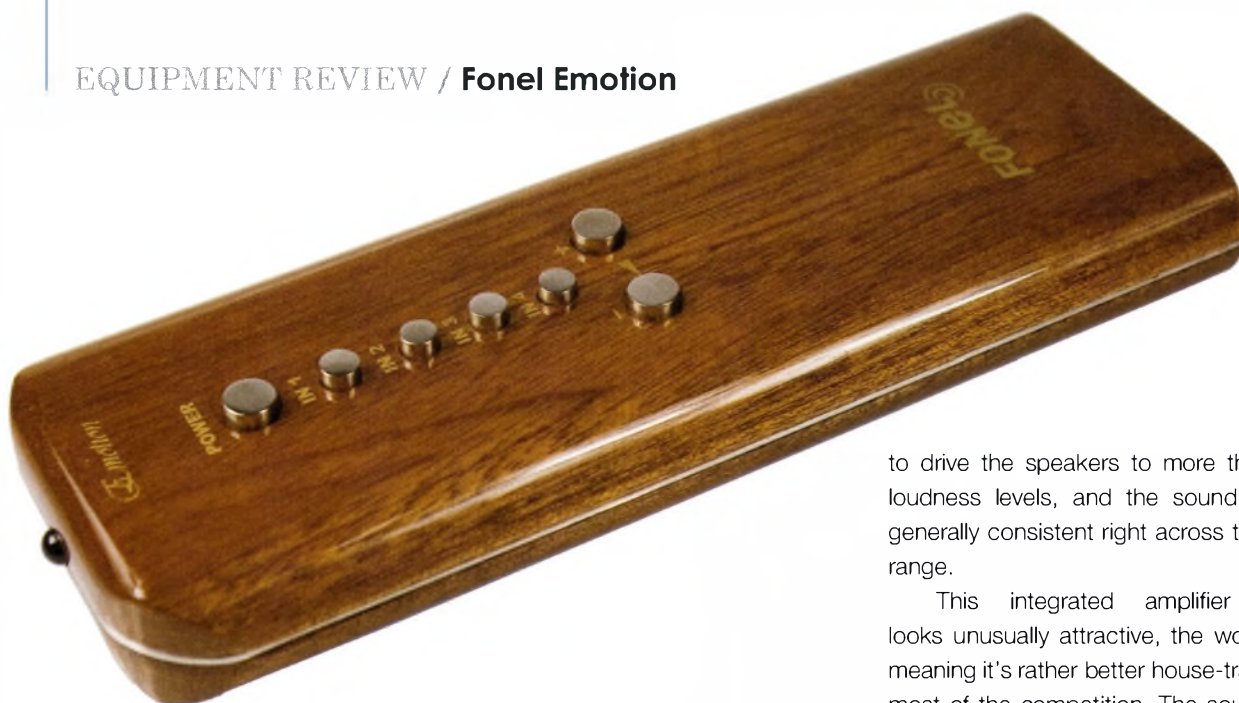
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▶ headphone socket. Switch-on is followed by a 45sec delay while things stabilise, while achieving full performance takes a further 15-20 minutes. The Class A output inevitably means that the unit generates a fair amount of heat, but power consumption is quoted at a reasonably modest <150W, and even that is conservative as 120W was measured in practice.

The Emotion was very easy to install, and was connected up to a pair of PMC IB2i speakers using Vertex Moncayo speaker cable. Sources were a Naim CDS3/555PS CD player, a Magnum Dynalab MD106T tuner (via balanced), a Linn/Rega/Soundsmith record player (variable output direct to power amp). Because of the limited number of inputs, TV and Mac/DAC sources were switched via a Naim NAC552 pre-amp record-out.

*“That midband is certainly its best feature, with fine expression and plenty of subtle textural detail. Voices are reproduced well.”*

While it doesn't set any new standards in absolute terms, the sound quality is really rather good, especially in an integrated amplifier context. Its character is essentially sweet and open, if just a little forward and 'shiny', tending to emphasise the midband somewhat ahead of the extremes.

That midband is certainly its best feature, with fine expression and plenty of subtle textural detail. Voices are reproduced particularly well, making it relatively easy to distinguish and follow song lyrics, and the emotional messages come through very well.

The bass end of things is handled pretty well. It hangs on in there OK, with good basic timing and decent weight, but punch, authority and drive do seem a little softened. While there's no untidiness at the top end, it does seem to lack a little delicacy and ultimate transparency here. Interestingly, this seemed more obvious via the single-ended (phono) inputs than the balanced input. Conversely, although it wasn't possible to ensure a true like-for-like comparison, the sound via the 'direct-to-power-amp' did seem a little harsher than the others.

The IB2i isn't the most sensitive of loudspeakers, and Class A operation means relatively low power output, yet there seemed to be plenty available

to drive the speakers to more than ample loudness levels, and the sound remained generally consistent right across the volume range.

This integrated amplifier certainly looks unusually attractive, the wooden trim meaning it's rather better house-trained than most of the competition. The sound quality is very satisfactory, and indeed satisfying. While it does slightly favour the midband, that midband is sweet and expressive, while the modest power output seemed more than adequate. The ergonomics are mostly excellent, so the only real complaint is that the four rather mixed inputs might not be enough for many users in today's multi-source world. +

## TECHNICAL SPECIFICATIONS

**Inputs:** 2x RCA phono line level

1x RCA phono direct-to-power-amp

1xXLR balanced

**Outputs:** 2x speaker pairs (switchable)

1x headphones (6.3mm)

**Output power:** 2x25W

**THD:** < 0.02% (rated power)

< 0.005% (1W)

**Power consumption:** < 150 W

**Signal-to-noise ratio:** -98 dB

**Input resistance:** 47kohm

**Dimensions (WxHxD):** 430x132x432mm

**Weight:** 29.2kg

**Price:** £5,525

**UK Distributor:**

Ikon Audio Consultants

**Tel:** 01473 217 853

**URL:** [www.ikonaudioconsultants.com](http://www.ikonaudioconsultants.com)

**Manufacturer:**

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

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— Chris Thomas HiFi+March 2010



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



The hybrid Atlas power amplifier completes the amplification line-up. All units have elegant styling, cool and understated. And at our recent Bath hi-fi show, Jim introduced to the UK his first source component, the Romulus CD player, with a valve output stage. Look for the launch later this year, when reviewers again will struggle with superlatives.

Well, it will come as no surprise to frequent visitors here that Aesthetix electronics often feature in our main system. Designed and manufactured in California, Aesthetix components are based on valve (tube) technology, with microprocessor controls for ultimate configuration capability and remote control convenience. In a market where many competitors strive for high resolution above all else, sometimes painfully so, Jim White, Aesthetix founder and chief designer, manages the rarest of balancing acts: without forgoing any musical detail, he offers tone, tone, and more tone.

The Aesthetix Rhea and Rhea Signature phono stages, often the starting point for our Aesthetix customers, typify the experience. *The Absolute Sound* described the Rhea with three words, "open," "transparent," and "uncoloured", adding that it imparts "a sense of palpability and immediacy that recalls the magic of live music."

Of the Aesthetix Calypso and Calypso Signature linestages, *Stereophile* said simply, "That's how live music sounds."

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## EQUIPMENT REVIEW

# Magnum Dynalab MD-107T tuner

by Alan Sircom

**T**he Magnum Dynalab MD-106T, that mainstay of top-notch FM tuner performance, is no more. Perhaps in the face of analogue radio beacons blinking out around the world over the coming years, that's not surprising. What is surprising is that the replacement – the MD-107T – is every bit as uncompromisingly FM-only as its predecessor. Only this time with a twist.

A lot of MD-106T goes into the new tuner; a very fine foundation upon which to build the last, best range of FM tuners. The MD-106T, which dates back to 2003, was the first Magnum Dynalab tuner to feature a triode-based output stage, found current flagship series of tuners. From the outside, the two are very different, even though the basic layout of meters and dials remains nearly identical. However, the MD-107T now features the thick faceplate with the cutaway sides first seen on the MD-109 flagship tuner and the MD-309 integrated amplifier reviewed last year.

Like all its flagship tuner range, Magnum Dynalab builds every aspect of the tuner from the ground up, including a custom-made, five stage RF front end. As opposed to many tuners (now reduced to an off-the-shelf chipset in most cases), the MD-107T separates out the RF and analogue stages of the tuner completely, and hand selects key components to help improve sensitivity and lower distortion. This is a common mantra among high-end brands, but in tuners with a hand built front-end, this careful matching really does make a difference.

The front-end goes into a hybrid, zero-feedback amplifier stage, designed by resident guru Zdenko Zivkovic and sporting a pair of Bugle Boy 6922 double triode tubes.

As before, tremendous care has been paid to the ground path, as stray earthing is one of the best ways of ruining the subtlety of a good tuner. The circuit allows for balanced XLR and single-ended phono outputs. The intervening years see a subtle redesign of this circuit; gently nudging the performance upwards, while ensuring 'if it ain't broke, don't fix it' still applies.

The 107T also retains one of the key elements of its predecessor; the 6E5 'magic eye' tube smack in the centre of the front panel. This is one of the best visual methods of getting a bead on a good signal; the better the signal strength, the brighter the glow of the magic eye tube (it has a sensor to prevent the tuner eye from being powered up permanently). This is a system that was popular with classic tuners like the Leak Troughline (the 'scope tuning used on Day Sequerra and Marantz 10Bs uses a similar tuning method) and is a joy to use. It's replacement – FM synthesis and Phase Locked Loops – allow for greater signal stability and rapid station change, at the expense of never being completely 'on signal'; a station might be closer to 95.803kHz instead of 95.8 and if a synthesizer tuner jumps from 95.80 to 95.81kHz, it will always be slightly compromised. The MD-107T can tune with disturbing accuracy thanks to the

- ▶ LED readout, the signal strength and multipath meters and the magic eye... and it makes a difference (the bottom of the front panel sports five toggle switches, for power, muting, stereo/mono, two different kinds of IF bandwidth and a central dimmer switch).

Going without a phase locked loop also makes the tuner drift for the first half hour or so after power-up, and drift still more when fresh out the box. This is more of an observation than a concern and applied to any PLL-free tuner; anyone set to find this a hurdle to stop them from buying a MD-107T would find that hurdle entirely overcome when listening to radio stations.

Now, about that 'twist' mentioned earlier. The leftmost dial on the front panel — that used to select a choice of two aerial inputs in the previous model (the rightmost still is the tuning dial) — does nothing in the 107T's standard guise. At the rear, one of those aerial inputs has gone away, leaving just the one F-type socket. Where the second input used to be are a trio of blanking plugs, marked 'digital inputs'. Magnum Dynalab offers a digital input module upgrade. This brings two conventional and one USB digital sources into the MD-107T; these are switched using that leftmost dial on the front panel, and the three digital sources get the benefit of passing through the MD-107T's sweet sounding triode output stage. This is a natural and obvious bonus for an FM tuner. When (and, sadly, it is 'when', not 'if' even if the 2015 FM switch-off date looks ambitious right now, the format is likely to see stays of execution rather than a reprieve) our analogue channels go to the great studio in the sky, the MD-107T doesn't have to become a doorstop. A remote control is the only other optional extra at £350, but a useful one at that.

As with its predecessor, the MD-107T opens up FM radio, and there's no such thing as 'background' listening through this tuner. It makes you appreciate

*“The MD-107T opens up FM radio, and there's no such thing as 'background' listening through this tuner.”*

paying the license fee for Radios Three and Four, natch, but it also makes you grow to love the more bland parts of the airwaves. Heart and Magic FM's mediocre and limited palette of pop hits from the last 25 years is revealed like a precious jewel, even to the point of getting the point of Shakira, without needing to watch Her Bendiness' videos at the same time.

It gets you into the studio, or – in the case of those weekend radio plays on Radio Four – in the midst of the action. If that whole Orson Welles *War of the Worlds* play was re-run today and I happened upon it by accident while listening through the MD-107T, I'd be found running through the streets, screaming “They're coming! Run for your lives!”





Like many British folk, I have a guilty secret – a passion for the Shipping Forecast, especially the late-night forecast, preceded by Ronald Binge's *Sailing By* at a quarter to one every morning. The combination of the soothing light music (Jarvis Cocker famously chose it as one of his Desert Island Discs, because it had wafted him off to sleep so often) followed by the Melville of Met Office is somehow captivating even through a car radio, but through the MD-107T it becomes high drama. First comes the reassurance that all is well in Blighty followed by a Hemmingwayesque image of man against mighty forces. "Malin. Southeast veering southwest gale 8 to severe gale 9, occasionally storm 10. Rain, then thundery showers. Poor, becoming moderate or good" ceases to be simply a list of meteorological conditions on the 107T.

As you might expect, it does retain the 106T's uncanny ability to listen into broadcasted sound, including the repetition of sheep-related FX in *The Archers*. And yes, you can pick out individual sheep baa sounds all over again. I'd expect nothing less; in all fairness, the basic elements of the previous model were already beyond reproach and the addition of an improved output stage and a thicker front panel would be unlikely to amount to a significant downgrade in performance. Progress has been achieved and this is a better tuner than its predecessor, but this is not about 'upgrades' as much as 'continued use'. Come FM-bye-bye the 107T has a potential future that its predecessor simply does not share.

I'm certain if any company can make DAB/DAB+ acceptable in the future, it'll be Magnum Dynalab. I'm also convinced that many of the people leading the charge in getting audiophile sound out of the replacement to FM will be users of MD-107T tuners. And, personally I can't think of a better way to see out FM's twilight years and herald in Digital Britain's future than with this tuner. For as long as we have FM, you'll have sublime sound, and with the digital module in the wings, it seems like you'll have the same long after other FM tuners become a distant memory.

And yet, it's as an FM tuner that the MD-107T really shines. I've been having a recurrent dream, that goes something like this: the big-wigs in 'Digital Britain' walk into my room, hear a few minutes of Radio Three or Four through the MD-107T and say to themselves "My God, what have we done?", walk out heads hung in shame, only to cancel the FM switch-off. If they heard it, they would change it – the MD-107T really is that good. +

## TECHNICAL SPECIFICATIONS

Magnum Dynalab MD-107T tuner

**Type:** All-analogue FM tuner

**Input:** 1x 300ohm F-type connector, optional digital inputs, including USB

**Outputs:** 1x pair single-ended, 1x pair balanced

**Output Levels:** 1V single ended  
2.2V balanced

**Signal/noise ratio:** 80dB

**THD mono/stereo:** 0.10%/0.18%

**Stereo separation:** 50dB

**AM suppression:** 70dB

**SCA & IF rejection:** 80dB

**19kHz/38kHz pilot tone rejection:** 75dB

**Frequency response ( $\pm 1$ dB):** 15Hz-17kHz

**Dimensions (HxWxD):** 11x48x34cm

**Weight:** 7.96kg

**Price:** £4,100 (silver or gold finish +£200)

**Manufactured by:** Magnum Dynalab

**URL:** [www.magnumdynalab.com](http://www.magnumdynalab.com)

**UK Distributor:**

Audiofreaks

**Tel:** +44(0)20 8948 4153

**URL:** [www.audiofreaks.co.uk](http://www.audiofreaks.co.uk)

# EQUIPMENT REVIEW

## Raidho Eben C2 Loudspeakers

By Chris Thomas

**R**aidho's Eben C1, with its quirky, wobbly stand is one of my all time favourite loudspeakers. Its voice is one of musical eloquence, subtlety and cohesion way beyond what its diminutive size would initially suggest. It is a hungry device though and will gobble up and respond to just about all the quality you care to pour into it and this certainly helps in making it, to my ears, a landmark product. Its elegance and economy of design typifies everything a small, high-cost stand-mount should be. But it then goes way beyond that by plugging you straight into the realm of pure musicianship and expression. Hi-Fi-wise, that's where I want to be. But it is very small and, although it produces quite surprising extension and clarity at lower frequencies, it will never have the scale and bandwidth that some situations and tastes demand – and this is where the C2 comes into the equation. It could be



thought of as a C1, with an extra driver, in a floor standing cabinet and certainly has Eben DNA running right through it. That much is obvious when you first hear it. The caveat here is that it is another one of those speakers that takes an age to run-in and it can sound quite ordinary straight from the box. So great are the improvements that come as the weeks and months pass, that this warning bears repeating as often as possible.

This is an elegantly proportioned and quite beautifully constructed speaker. It incorporates a pair of 115mm custom-built drivers, like the one found in the C1, in a two and a half way design where the lower unit is employed as a subwoofer. Raidho's approach with this driver was to remove the magnet from its conventional position at the rear of the speaker and replace it with an array of 10 Neodymium rod magnets, isolated from the minimal chassis by soft iron spacers and sited around the circumference, fore and aft of the voice coil in a patented push/pull design. The chassis is replaced by stand-offs that attach the driver to the 20 mm aluminium baffle sections and the entire superstructure of the unit has been greatly minimised with the area behind the cone being left open. Designer Michael Boerresen wanted no clutter here to eliminate both reflection back into the driver and any thermal or mechanical compression. This thinking has been carried through to the cabinet design where each driver section is rear-vented and these holes in the aluminium rear plate should not be thought of as conventional ports but rather ▶

*“Raidho's approach with this driver was to remove the magnet... and replace it with an array of 10 Neodymium rod magnets.”*



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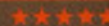


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April 2010

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▶ as an extension of the breathing-driver design aims. The cones themselves are an ingenious sandwich construction formed by immersing an ultra-lightweight aluminium cone into a bath and subjecting it to a plasma/electrolysis process that converts two thirds of the surface into ceramic. This is a patented procedure that eliminates the associated problems of consistency of cooling that bedevils all-ceramic cone designs. The result is an extremely accurate shape that provides Eben with the true pistononic driver they envisaged, able to take full advantage of the lack of reflection that the radical rear end shape provides.

Each of these units is mounted on its own baffle/module and slotted into the cabinet. The top driver is essentially a midrange unit while the lower one handles everything below 140Hz, down to about 40 Hz. The large enclosure beneath this is used to load the driver through a series of strategically positioned vents and also contains the crossover. As with other Eben speakers, all internal wiring is Nordost and a single pair of gold-plated WBT terminals provides amplifier connection. The Raidho-built ribbon tweeter is also the same as that found in the C1 and is an edge-constrained sealed unit with an ultra-lightweight membrane weighing only 0.01 gram. This is another exceptional performer with the speed and transparency that typifies good ribbons, but is also notable for a lack of HF beaming that is so endemic in such designs. You will not find yourself locked into a narrow sweet-spot listening position in an effort to hear the speaker's full bandwidth.

Superbly finished in a deep, highly polished burr-walnut veneer for the review pair, the cabinet, sits on the same base as the C1 stand and this means that there is resonance-control technology in the shape of a decoupling bearing system fitted within. The weight of the C2 means that it doesn't sway through the alarming angles that the C1 does when pushed, but there is still compliance in the installation and this is very much a part of the design concept of the Eben C-range. The slim aluminium baffle is 200mm across at the front and the cabinet tapers to the back where it measures a mere 85mm. The manufacturers claim that at 89dB efficiency and with impedance curve that does not fall below 4.5 ohms the C2 is technically an easier proposition for amplifiers than its baby brother. When you first install them they sound more like 87-88 db but it seems that efficiency increases with use and although the impedance may be somewhat benign, this is another one of those speakers that will punish mediocrity in partnering equipment. They reward excellence and the results, when you provide it, are absolutely stunning. But there is a meticulous installation process to be gone through first that involves three phases to be undertaken with music and perhaps supplemented with a good test disc. Rear wall spacing, as they like to operate in free air, distance apart and then toe-in are all critical and should be progressively measured. Don't be surprised if the listening angles take a few days to finalise. A word of advice is to start with them facing directly forward and introduce just a degree or so at a time.

Initially you are struck with both the lack of any cabinet in the sound and the finely etched sonic picture of the soundstage. Michael Boerresen's ambition to free the driver's from reflection and internal energy storage is surely the reason for the way the music has so much vitality and refuses to be constrained within the boxes. Close your eyes and point to where the instruments are located and you will be amazed at how broad, free and full-scaled the view of the music is. Each instrument or voice has a palpable sense of dynamic freedom about it and this gives them a really solid and exciting sense of vitality and movement.

But this is not a speaker that adds any superfluous flesh throughout its bandwidth. Overall it shares certain leanness with the C1 and you can feel this, especially in the bass. An upright string bass or cello will never have the full, rich and weighty presence that you would get with the big paper cone of say, a Wilson Duette. The bandwidth is there but the Eben concentrates its energies on speed, focus and clarity. This makes them one of the few floor-standing speakers I have heard that will sit quite happily in smaller rooms where a high quality stand mount might be the initial and obvious consideration. Having mentioned the word speed in relation to the C2 I think that it is at the heart of much that they do so well. Not only do they gain energy quickly but they lose it just as impressively, leaving no sonic trace. The backgrounds against which the music plays is remarkable for its blackness, bringing an added feeling of dramatic contrast. But there are also the rhythmic benefits that such sensitivity allows and there are few speakers as 'to the point' where tempo is concerned, as the Ebens. I was listening to *The New Bossa Nova* by Luciana Souza when I started to think more deeply about the whole flavour and nature of Bossa Nova music. The combination of the swaying rhythms, counter-pointed by gently suggested offbeat chord shifts from the guitar were all so subtle and understated that it intrigued me. That distinctive vocal style, free of big dynamic swings and overt expression, sat just above the brushed snare and washing cymbals and the more I listened the more I became aware that the Ebens were superb at revealing an incredibly ▶

► complex collaboration of elements. Her lyrical approach, which I had heard sound so flat on other systems, now felt full of expression and were sung with a care and precision that I hadn't fully appreciated before. She uses her approach to long and short phrasing as a link in time that spans the tempo and with subtlety and colour changes she pushes gently at the lyric, sitting its emphasis in different places on and around the beat. This *New Bossa Nova* is a sensibility with a communicative edge that is completely dependent on the brilliance of her performance. With some speakers, you just sit back and watch the music happening in front of you. The Eben, when pumped full of potential, is an open window that lets you walk right into the middle of the mix to have a look around and explore.

Like the C1, their top to bottom coherence is strikingly good and they really have no obvious preference when it comes to musical genre. Those who are looking for serious chest-cavity rattling levels of bass energy will certainly notice the lack of ultimate low frequency weight and power, though personally, I never found it a problem at all. And while I am looking under stones for criticisms, I might also mention that perhaps they could do with a little more air at high frequencies and a touch more obvious presence up here might be nice too. But these are also remarks that I made about the C1 and are more to do with personal taste. At the risk of labouring another point I must also say that the requirements to push the speakers to the heights they can achieve means that the electronics must be of notable quality but, perhaps even more importantly, so **must** the quality of installation and set-up and this is something I hope to return to in issues to come.

When I get involved in a very fine and explicit recording like 'A Remark You Made' by Jerry Douglas from his *The Best Kept Secret* album, I can't help but think that the Eben C2 is one of the most engaging small floor-standing designs I have heard. They have a near perfect tonal balance, so the bite and fabulous tonal warmth of the slide guitar alongside the violin, played together in unison over a string bass, feel like voices speaking to you. Three textural, fretless instruments brimming with harmonics and shimmering overtones, all superbly controlled in space and time by the C2 are just one of one of the joys

## TECHNICAL SPECIFICATIONS

**Type:** 2.5-way floor standing.

**Drivers:** 2 x 115mm Raidho aluminium/ceramic driver, 1 x Raidho sealed Ribbon

**Freq Resp:** 40Hz-50KHz

**Sensitivity:** 89dB

**Dimensions (HxWxD):** 1160x200x520mm

**Weight:** 50.5Kg (2)

**Finishes available:** Piano Black, Walnut Burr and all possible paint colours (to order)

**Price:** £13,995 per pair

**Manufactured by**

Raidho Acoustics

**URL:** [www.raidho.dk](http://www.raidho.dk)

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## EQUIPMENT REVIEW

# Sonus Faber Liuto Tower loudspeaker

by Alan Sircom



**S**onus faber's Liuto range, the replacement for the popular Domus line, stands between the entry level Toy range (not the best name; they aren't Toys but legitimate loudspeakers in their own right) and the Classic series and the Homage series above that. There are a standmount, a floorstander and a centre channel in the Liuto series, and the standmount and floorstander are available in two finishes. We looked at the wood-finish tower speaker.

Sonus faber is well-known and well respected for its finish and the company has been very shrewd about the way these ranges are put together. The Toy series is leather-wrapped, but a smooth, box or barred black leather. The leather finish on the other ranges is embossed, almost like a Morocco grain. The Liuto series adds natural walnut or black piano gloss finish, the Classic brings lacquer to the party and the Homage series shows what happens when you tell musical instrument makers to make a piano lacquer finish. Each range is beautifully finished in its own right, but if you spend more, you get more. Of all the speakers in the current lines (except, of course, for the Minima Vintage), the Liuto wood speakers look most like classic Sonus fabers.

Everything about this speaker bespeaks class and luxury. The speakers coming in their own covers inside the box, the elegantly laid out kit of parts, the overall fit and finish of even the single set of custom-made multi-type speaker terminals... all of this sets the speaker apart from the norm. It's a loudspeaker that your friends will look appreciatively on and comment on how fine (and expensive) it looks.

The Liuto lines are of 'restrained elegance'. Liuto is 'lute' in Italian and the speaker shares the distinctive lute-shaped panels (ribbed internally for added stiffness and listening pleasure, double entendre ►

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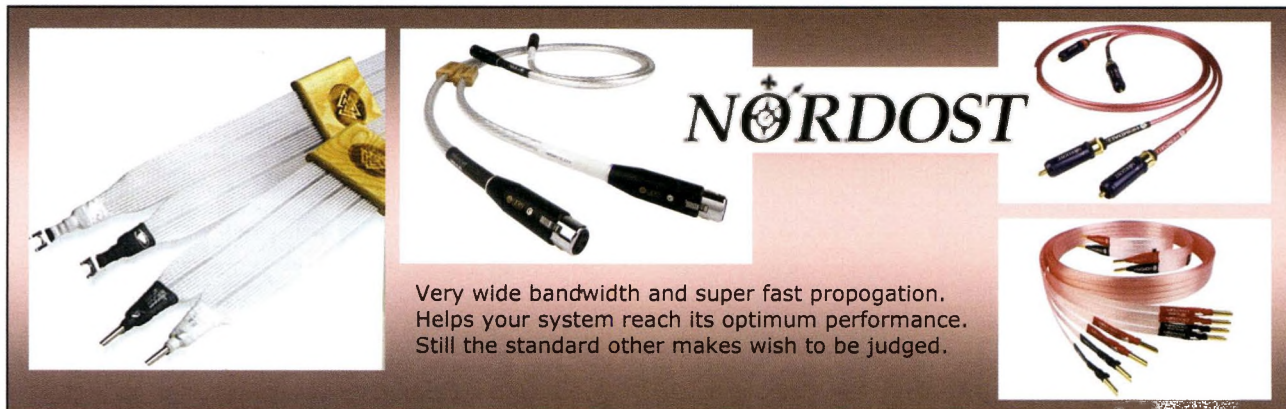
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▶ entirely intended) of many Sonus faber designs, but its fine proportions and overall fit and finish will make it acceptable in homes where a glossy lacquered cherry or maple finish could look garish. The piano black is refined while the natural walnut finish blends well with furniture that doesn't feature on the cover of *Homes & Gardens*. The rear outrigger to hold the back set of spikes is the only line-breaker, but even this doesn't ruin the overall look.

*“Good imaging and a big soundstage are Sonus faber family traits, but the Liuto shines even by those standards.”*

The Liuto Tower is a rear ported three-way design, using drive units built to the company's specifications. All three drivers call on a different material specification; the 25mm tweeter is a soft fabric dome, the midrange is a 150mm polypropylene/textile cone and the 220mm bass unit is an aluminium/magnesium affair, complete with 'coaxial anti-compressor' or flattened phase-plug finished in an elegant golden-brass. Recently, Sonus faber has been using smaller ring radiator tweeters in its models, but the low crossover point on that fast woofer (350Hz) meant the midrange driver reaches its upper limits sooner and the larger 25mm tweeter has to kick in at around 3kHz, a tough call for the smaller tweeter. Sonus faber uses a second-order crossover design, with a claimed accent on time alignment. The result is a loudspeaker with a relatively high sensitivity (89dB suggested) a nominal impedance of eight ohms, and in use it seemed to be delightfully untroubled in flirting with integrations and power amps of all shapes and sizes. Sonus suggests amps with less than 40W and more than 250W on tap should be avoided and I'd agree with those ratings. This isn't the loudspeaker for flea-powered triode or Tripath amps.

The speaker is domestically friendly, in that it needs a good set-up, but doesn't demand micrometer precision installations. That said, the speakers work best when carefully leveled and it seems particularly important to get tweeter height uniform. A good trick here is to use the front baffle as guide, as the top plate is gently curved. Where the Liuto towers get demanding is in room size. They need a deceptively large room to come to life, as they seem to need a lot of distance from side walls. Curiously for a rear-ported speaker, distance to the wall behind the speakers is less important (a metre or less is fine) but the Liutos appear to require a good 3m between the speakers and about 1.5m from the side walls.

There's a reason or two for so much air needed around the speakers. The first is the soundstage. It's vast and family friendly. This has the sort of off-axis performance usually found in coaxial drive units, meaning the Liuto isn't the sort of speaker that confines you the driver's seat. Get up, walk around, dance, invite friends and family into the Audio Lair... everyone gets the good

▶ stereo soundstage. Good imaging and a big soundstage are Sonus faber family traits, but the Liuto shines even by those standards.

The Liuto are not your typical Sonus faber loudspeaker in other ways, too. Or at least, they are not your typical current Sonus faber loudspeaker. They have a touch of the old school Sonus about the presentation, in all the right ways. Early model Sonus speakers had a 'how does it do that?' ability with the bass; a grip, drive and depth that made people grow passionate about models like the Elector Amator and the Extrema. That a mini monitor could deliver so much bottom end energy came as something of a shock.

▶ Same here.

In most cases, once you make a pair of loudspeakers that have useful energy below 40Hz, the size – and cost of the enclosure – rises while the ability to keep time falls. In other words, bottom octave bass demands big, slow and expensive loudspeakers. While the Liuto are not exactly Poundstretcher speakers, the speakers overall size in no way suggests there's a lot of tight, deep bass on tap. Even the spec sheet points to 40Hz as the bottom of the frequency response. But there's real earthmoving stuff going on here; the kind of bass that makes you reach for Dub Syndicate and Leftfield tracks, and even some bad-boy KLF beats. Oh boy – subterranean, gut-churning, powerful, deep, deep bass. The sort of bass that either comes with a health warning, or is a part of a far bigger, more expensive speaker design. Full range? Not quite, but close enough for most people.

This inexorably leads to the other big feather in the Liuto's fretboard. The Liuto's bass unleashes the animal in you, and it doesn't disappoint. Out come the sturm und drang albums, Mahler's Eighth, Bach's organ works, BBC Sessions of John Bonham beating merry hell out of a drum kit while the rest of Led Zep try to hold on, Basie's orchestra playing at maximum tightness, maximum energy. The stuff that's almost a guilty pleasure, because you play it loud and play it to show off your system, even if only to yourself.

Pretty soon, you find yourself air guitaring along to AC/DC and singing to Guns 'n' Roses 'Paradise City'. Then you stop and take stock... this is a Sonus faber you've just spent a few merry hours headbanging along with. And Sonus faber speakers are warm and polite, aren't they? Well, that's the point. The Liutos can do warm and polite if you give them warm and polite, or they can play to your animal side. Or both.

Closer analysis (when the monkey lord is put back in his place) reveals the reason why they do both so well is because the balance is rich and dynamic enough to make delicate sounds charming and make loud sound 'natural' instead of 'raucous'. Note that I said *sound* natural instead of just natural; put up against a pair of neutral transducers on a par with the Liutos and you'll hear where the bass trades depth for accuracy and where it gets out of line. You'll also probably become more aware of the Liuto Tower's driver crossover points, because those accurate speakers will possibly have better integration across the board; the Liuto is very good from speaker to speaker, but you can hear better. However, the net result of any such comparison with the notionally 'more accurate transducer' in most cases would be to put it back and rock out with the Liutos.

What's truly remarkable about the Sonus faber Liuto Tower is that fun factor never wanes. You'll always want to come back for more and one track will inevitably lead on to the next. If you want to fill a big room with big sound but don't need a huge speaker, the Liuto is as sound as a pound (but preferably not sterling). +

## TECHNICAL SPECIFICATIONS

**Type:** Three-way vented box

**Drivers:** 25mm fabric dome tweeter, 150mm polypropylene/textile midrange dome, 200mm aluminium/magnesium alloy woofer

**Frequency response:** 40Hz–25kHz

**Sensitivity:** 89dB

**Impedance:** 8 ohm

**Dimensions (HxWxD):** 103.1x23.6x41.3cm

**Weight:** 30kg

**Price:** £3,371 per pair

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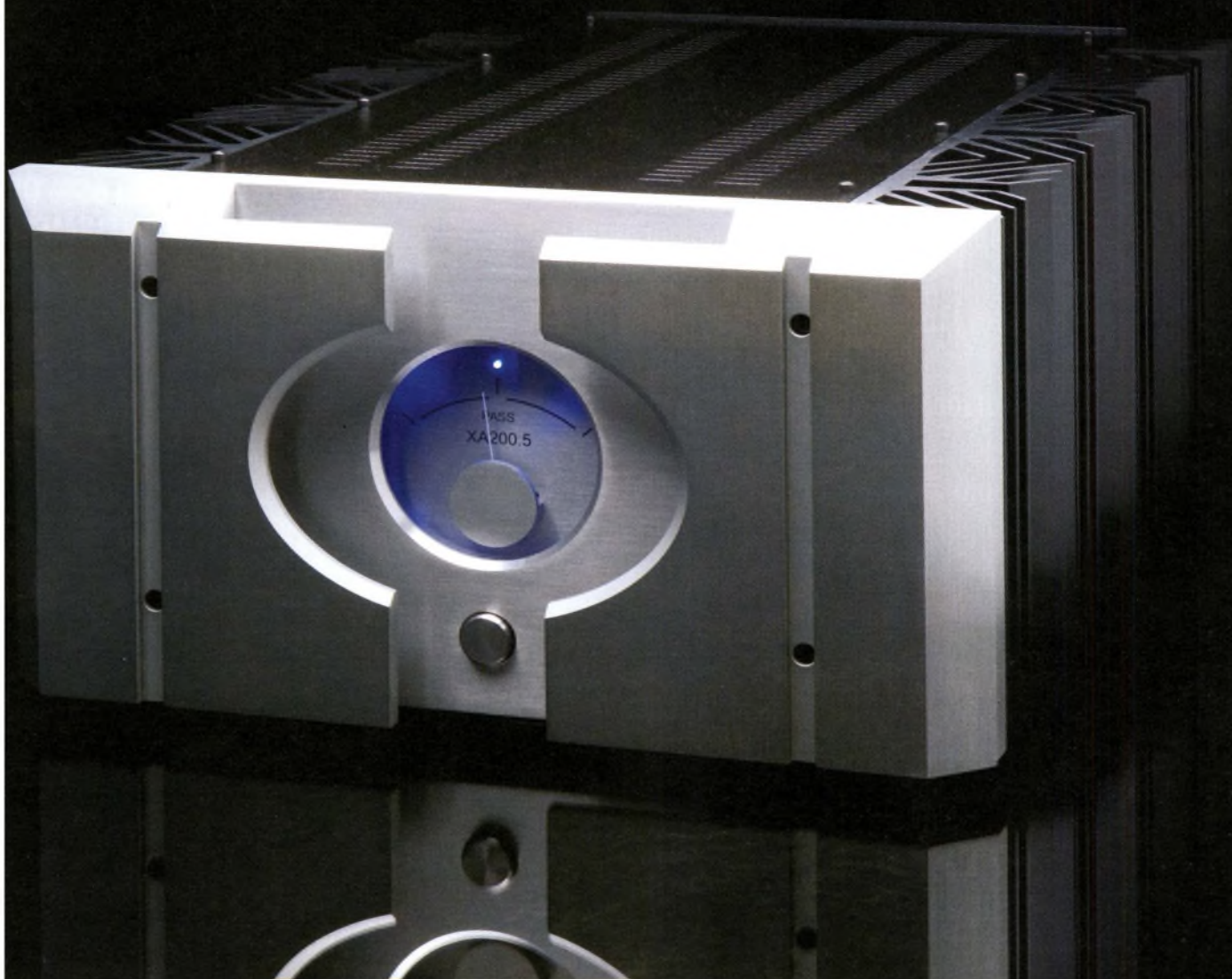


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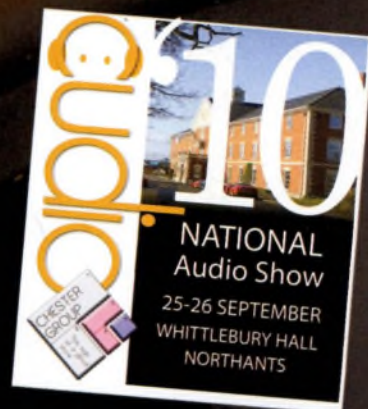


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## EQUIPMENT REVIEW

# Quad II Classic Integrated

by Jason Kennedy

**T**he original Quad II mono amplifiers must be one of the most popular pieces of vintage audio going. They command high prices when condition is good and they continue to give remarkable service for a product that can be over fifty years old. When Quad was still an independent company, it wasn't interested in reviving the Quad II – or making valve amplifiers at all – but rather wanted to push the frontiers, albeit in a not too pushy way. What's more it's service department did a sterling job of keeping original amps and ESL speakers going well past retirement age.

Now that Quad is under auspices of IAG, its owners have had the sense to revive the Quad II and have produced more up to date variants upon it such as the II-Eighty power amp. The latest addition to the family is not actually a revival – there never was a Quad II integrated – but it is built along the same lines as that amplifier. It's probably no bigger than two Quad IIs placed side by side and has a very similar valve complement with the added bonus of a preamplifier and phono stage onboard.

As per the rest of the Quad valve amp range today, design was done not by company founder the late Peter Walker but another company founder, that of EAR-Yoshino, Tim de Paravicini. Tim brought the Quad II monoblock up to date, so it made sense for him to conceive the company's first valve integrated. While it uses the same output valves as the original II, the integrated

manages to deliver an extra ten watts per channel according to spec and a little more in practice. Tim achieved this by increasing HT while lowering the voltage to screen grid in order to enhance reliability, which is useful because it should mean more hours of listening before a valve change is required. With the exception of the phono stage, this is an all-valve design with four ECC88s and two ECC83s in its circuit and all of which are protected by a neat cage cover, something that you can remove for maximum visual thrills and possibly a bit more sonic subtlety as well.

It has the same single tap output transformers as a II and these are happiest driving an eight ohm load, power drops off when that impedance halves as it can with many speakers at a certain point in the band. Something that might explain the relatively uneven response I encountered with some material, most of the time this proved to be a remarkable capable amplifier, driving a pair of B&W 802D speakers with apparent



ease. But the occasional track did sound a little odd tonally and possibly the speaker's tricky phase angles had something to do with this. But it was a happy combination nonetheless and one that delivered an awful lot of beguiling music in a fashion that while not unlike other valve amps is clearly in its own class. There is good dose of old skool Quad sound, pipe and slippers as it were but this is combined with Paravicini style muscle to create a strong but smooth result that makes for engrossing music.

The styling is pretty distinctive too, Tim has used the front panel shape of the QC-twentyfour preamplifier, but replaced the input buttons with a variation on the balance control from that model, even though this amp does not offer balance adjustment. The last button is monitor tape, the available selection of three line inputs being augmented by a tape loop and a phono stage for MM and MC cartridges. It would have been nice to have included a preamp out for bi-amping but that's not something that happens much with glass audio.

Build quality is extremely high and fit and finish likewise, it truly does live up to the standards of the original and in many ways exceeds them. Paint finishes were never this good and gold plated socketry was never on the agenda back in the fifties. You even get a small but long Phillips screwdriver to remove the valve cover with should you feel the urge to see the glassware in all its glowing glory. The only omission of note is the remote; something that's completely authentic, but a bit of a shock for those us used to solid state amplifiers that rarely dispense with this luxury.

I had the luxury of using this amp over several months, a period when a number of loudspeakers passed through the listening room so I had the opportunity to put it through its paces with different loads. First up was the Epos Encore 50, the company's attempt to build a speaker that will go loud enough for the American market. This has good sensitivity, but a three ohm impedance dip at 110Hz so is not the perfect speaker for the Quad. Yet, as a pairing I found it rather enjoyable. The Quad produces an expansive soundstage with a lot of material and is not entirely even in tonal terms, and these qualities offset the Encore 50's rather grey presentation extremely well. The amp brings out tonal richness in everything you play, which makes instruments seem that

much more real and vital. It's a quality that seems like a colouration to a solid state user, but it certainly puts back what the recording seems to lose as it goes the process of becoming a finished disc.

There is also a slight midrange emphasis that makes lyrics easier to understand and enhances the communication skills of this slightly restrained speaker. The bass is lovely and ripe, and puts the heart back in the music yet manages to extend well without loss of power. Of all the amps I had on hand with which to test the Encore 50s, this was the most successful.

The Quad did remarkably well with the B&W 802D, aforementioned comments notwithstanding. Pick a good recording such as Keith Jarrett's last solo effort **London/Paris Testament** on ECM and the extra timbral lushness it brings to bear makes the piano sound strong and vibrant and allows the player to produce a groove of insight and fluidity that got me a little carried away. The ▶

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## TECHNICAL SPECIFICATIONS

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**Inputs:** 3 line, tape in/out, phono  
**Phono stage sensitivity:** MM – 2mV RMS,  
 MC – 200µV RMS  
**Output power:** 25 watts/8 ohms  
**Dimensions (HxWxD):** 20x21x38cm  
**Weight:** 19kg

**Price:** £4,500

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- ▶ playing on this album is extremely good no doubt about it, but I've rarely been inspired to describe it as a pure channelling of a vital musical force that gives you access to a higher plane of consciousness before. Must have been something in the coffee! But there's something in the combination of this amp's dynamic character and the intrinsic humanity of its balance that lets you hear through the barrier of time and space that separates the listening from the original performance. The important aspects of that performance are placed in your room to be enjoyed, all you have to do is let it in.

As the Quad accommodates MC cartridges, I hooked up the venerable SME 20A with a van den Hul Colibri onboard and gave some vinyl a spin. The combination of this highly refined cartridge, smooth turntable and all that glass produced a lush sound that got positively sensuous when female vocals were in the mix. Both Rickie Lee Jones and Yolanda Quartey (of Phantom Limb) made me weak at the knees. The sound is distinctly relaxed compared even to a Trichord Dino+ through the same amp – which odd because the Quad's stage is also solid state – but the highs are a lot sweeter and more fluid. One possible reason is gain, it has just about enough for this 0.45mV output MC but the Dino+ has a lot more and provides a stronger image alongside better defined bass. Yet the onboard option is by far the most appealing, there's less wire in the way for one thing.

Back with silver discs and the arrival of a new and extremely capable loudspeaker, namely the Hart Audio EVO-1. I will be telling you all about this unusual new design next issue, but for now the salient facts are that it has active bass driven via high level signal, ie the Quad's speaker outputs, and a dual concentric mid treble in the Tannoy style. It's spec'ed as being 97dB – which sounds a little optimistic – but you don't actually drive the eight bass drivers (yes 8) so it shouldn't be a challenging load. The bass still reflects the slightly soft bass of the amplifier but has more grip than the tubes alone as you'd hope the mid meanwhile is beautifully open and can be played at higher levels thanks to that sensitivity. It made the sort of sound that you can listen to for hours given the opportunity and while I could get greater resolution out of the rather more expensive Digital Do Main B-1a, it's doubtful whether musical gratification could be bettered.

By valve standards the Quad sits in between the delicate fragility of SETs and the powerhouse grunt of the bigger push-pull designs, it's naturally closer to the latter but is a little more refined and dare I say it romantic. There is a

warmth and bodaciousness that while not high fidelity in the true sense does result in highly enchanting results with the right speakers. I only found one speaker that it didn't seem to suit, that being the PMC GB1i; this is an unlikely partner it's true, but it's one loudspeaker that I usually enjoy come what may. I suspect this was possibly something about the loudspeaker's load and admittedly low-ish sensitivity makes it a bad choice with the Quad.

Overall this is an extremely engaging and musical amplifier, it's not the fastest nor the most precise but with a sympathetic speaker it gets under the skin rather well and makes you want to hear more which is clearly a good thing. +

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## EQUIPMENT REVIEW

# Deltec Precision Audio CA1 preamp and MA1 mono power amps

by Alan Sircom

It's like the last decade or two didn't happen, but in a good way. Deltec was the poster boy of high technology audio electronics that fell foul of the ups and downs of the audio business. When it was at its peak, the company had the full attention of the measurement-led part of the business, because its highly accurate amplifiers also delivered textbook lab performance. Then it went away, in part because the audiophile zeitgeist at the time started looking backwards to vinyl and valve systems.

Deltec Precision Audio is back, with half the original design duo team of Adrian Walker (Rob Watts – the other link in the chain – now works for Chord Electronics). The product line-up currently comprises a line preamp and 60W mono power amps (the DFA-CA1 and DFA-MA1 tested here), a 39W stereo DFA-SA1 power amp, an RF filter, a glass and aluminium modular stand and a complete set of cables (Black Slink interconnect and speaker cables plus a RF shielding power cord). From the outside at least, the painted and lacquered aluminium-cased amps look identical to those

last seen in the late 1990s, complete with rounded finish that makes an interesting 'clank' (think putting the lid on a loo cistern) when fed a set of knuckles.

The CA1 has six line inputs and a tape record and monitor circuit, and then there's a Penny & Giles volume knob. That's it... Deltec was always down with the minimalism ideal, but in the intervening decade we've grown lazy and fat and there will be those who carp on about the lack of a remote control. Let them; one of the reasons why this preamp sounds so good is the circuit strips out all the excess. The CA1 keeps the signal path very short, with only that pot, one coupling capacitor and its own custom DH-OA37 hybrid op-amp acting as voltage amplifier between source and power amp. There are two outputs, so you could bi-amp. Everything on the preamp – and power amps – is single-ended now.

One of the many things Deltec got right in the old days – but we hardly noticed at the time – was keeping RF at bay. The



▶ development of its thick-film hybrid op-amp and its pioneering use of surface-mount devices (commonplace today... unheard of from a small manufacturer 20 years ago) was an expression of that desire to keep interference low. This is echoed in the latest products; the CA1 having a fully regulated dual PSU, with filtering on all the power supply lines, in addition to taking RF into account on the inputs and outputs. Good thing too; 21<sup>st</sup> Century Deltec has to deal with WiFi routers, cheapo switch-mode PSUs in computers and mobile phones polling their nearest cellular mast.

Arguably even more technologically impressive, the DFA-MA1 is a 60w mono amp that is claimed to perfectly double its power as the impedance halves (so, it's a 120W amp into a four ohm load). This is a sure sign of good things, although I suspect if you reach down into the world of insane loudspeaker impedances, the lack of fist-sized capacitors and transformers as large as a drum kit will exclude the MA1s from your list of amp-hopefuls.

Deltec uses what it calls Current Mode Class A in the MA1. This means a high-speed Class A amplifier design is used in partnership with a current amplifier to provide the grunt, which is not that far removed from Quad's Current Dumping circuit. Once again, Deltec's DH-OA37 op-amps are used, because their wide-bandwidth design is claimed to make high-frequency amp nasties a thing of the past. This becomes especially important when using loudspeakers with metal dome tweeters. A neat set of WBT connectors hook the amp to the speakers.

Those with long memories might recall some of the best in DPA amps of the past having some really mind-bending technology, like the ability to listen to the sound of an amplifier with the loudspeaker cables out of the audio chain. This made it possible to blind test loudspeaker cables without having to make any accommodation for synergy. The CA1/MA1 climbs off that lofty plateau, perhaps in part because this meant for amplifiers that were punishingly expensive and 'twitchy' when it comes to reliability. Instead, what we have left is a more conventional design in outward terms, but a design of such high resolution and insight, it's difficult to avoid being highly impressed by the whole package.

Those 60 watts may double into a four-ohm load, but the amplifiers seem happiest driving high quality monitors, rather than amp-crushing behemoths. I used them to excellent effect driving the fast-becoming-resident ProAc Response D Two, the Von Schweikert UniField 1 (tested next issue) and the Gradient Helsinki 1.5 from issue 71. The Deltecs aren't particularly cable

fussy, either; although Deltec also reissued its Black Slink leads, they didn't come with the amps, but anything from DNM to Cardas Clear Beyond were coped with well, not masking their characteristics, but not radically changing the sound because of a 'mere' cable.

This is not your normal amplifier sound. What both Deltecs manage to do is combine warmth and transparency. These are curious bedfellows, because usually warmth comes at the expense of insight and transparency off comes in a very cool package. Not here; you get the sweetness and dynamics of well-sorted tubes coupled with the neutrality and energy of solid-state. Even more curious, the two parts of the whole have the same character when used with other electronics, but when combined their signature combines to make things better, not worse (so often, the combination of warm-sounding pre and warm-sounding power ends in something so warm and polite, it could make Napalm Death sound like Bing Crosby... well, almost). ▶

*“One of the many things Deltec got right in the old days – but we hardly noticed at the time – was keeping RF at bay.”*



Blue Horizon is a design and manufacturing company specialising in professional-grade audio accessories. The Proburn cable burn-in accelerator is the first in a new range of audio products from Blue Horizon, developed for music lovers who enjoy high-quality sound and wish to achieve an even greater level of sonic performance.

Blue Horizon's unique products are engineered to the highest possible standard and designed by a highly qualified, award-winning team with over 70 years combined experience in specialist audio.

### **CABLE BURN-IN** **An acknowledged problem in need of better solution.**

It is a well-known fact that high-quality audio and video cables improve over time when used in a hi-fi or home cinema system. A hard, closed-in sound with a distinct lack of bass are the qualities most noted when a cable is new; a cable that has been 'burned-in' will sound more open, extended and three-dimensional, with a more natural, less sterile performance overall.

Unfortunately, most high-quality specialist cables only get close to realising their full potential after months of use. Playing wide-bandwidth music gradually improves the performance of speaker and interconnect cables, yet technically they will never reach optimum performance with music signals alone.

The problem is quite simple. Real music has very little high-frequency energy, and thus will have a limited ability to improve a cable. Research shows that musical instruments may produce energy above 20kHz, but there is little sound energy above 40kHz. Also, most microphones do not pick up sound at much over 20kHz.

Furthermore, even the best burn-in CDs have a limited effect, owing to the limited frequency range of a CD player. A typical CD player has a sampling rate of 44.1kHz (Red Book standard). Digital theory (Nyquist) suggests a maximum frequency of 22.05kHz; the highest frequency is always half the sampling frequency. In reality, 20kHz is about the maximum because of the need to filter within the replay device.

Therefore, while it is accepted that sound, be it composed music or carefully generated frequencies played through an audio system, will improve a cable's performance over time, it must also be accepted that the overall effect is limited technically. Cables conditioned in



**Blue Horizon Proburn Cable Burn in machine**

*"I have absolutely no idea why it does what it does, but it does it all the same." "...the conditioned set sounded like they'd grown more base, the soundstage increased in width and the treble seemed more alive."*

**Hi>Fi+**

this way will never reach their true performance potential. Thus, an alternative method is required. The challenge is two-fold: burn in time and burn in effectiveness. How can a cable be fully conditioned, and the time required to undertake this conditioning decreased from several months to just one day?

Proburn's patent-pending technique fully prepares cables for audio or video use in a way that no amount of music ever can. To put this into context, Proburn produces 10,000 times the upper frequency limit of a typical CD player, which not only dramatically reduces the burn-in time for new cables but also fully prepares and conditions your existing cables. Proburn will also keep your cables performing to their full potential; condition them for 24 hours every six to eight weeks and your cables will remain free from negative charges and static problems.

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▶ This combination does not make music any more alluring; it's not so warm as to smooth over the compressed sound of many modern albums. It's truly WYSIWYG, with the music played being an honest and accurate representation of what's on the disc. It just has more ability to allow you to sit longer in front of it than something that eviscerates the CD. It's one of those products where anyone who's heard it likes it; not in the immediate, instant gratification way, but in that sort of softly and gently confirming just how good an amp you are listening to type of way.

It's the imagery that gets some people, the transparency others and the natural dynamics grab a third set. Each is right, the trio are good at all these things. They are also good at all these things combined. You keep coming back to the Deltec sound; effortlessly natural and very honest. And that applies just as much to George Gershwin as it does to George Michael, or George Frideric Handel.

There's not much these Deltec amps do badly. Which is good ol' British understatement for they sound pretty damn good whatever you use. OK, they are not powerhouses and back 20 years ago, they were often dismissed by the Flat Earth brigade for sounding 'clinical'. But, in a way, Deltec has the last laugh, because the modern Flat Earth sound is more in line with Deltec's presentation than the euphonic, beaty sound of the early 1990s.

Back then, the word 'clean' would be almost a dismissal, summoning up images of a sound bereft of musical satisfaction. But the Deltec sound is a clean sound; like a freshly laundered shirt, not half a capful of bleach. A refined clean that makes even grimy White Stripes and Black Keys albums retain their lo-fi charms but not make them unlistenable. As to good recordings... 'The Daily Growl' from Lambchop's *Is A Woman* raises goosebumps, and they stay there until the end of the album. All those string squeaks and easy, laid back rhythms are overlaid extremely well. This is powerful stuff.

Splitting the two up is no disappointment on either side. Both preamp and power amps have the same clean, neutral and inviting character with most equipment, unless you partner them to something so strongly flavoured it overpowers the Deltec charms. At that point, clean can become 'bright' and neutral can become 'bland'. But that's not the Deltec's fault.

Back two decades ago, Deltec came along and delivered products so good, there was really nothing to come close in sound quality terms. Today, that's a harder goal to achieve; products and technologies in the intervening years have raised the bar. However, what's truly disturbing about the re-launch of Deltec is just how little that bar has been raised in outright terms; the new amps are still near the top of the audio tree. They just sound 'right' and it's an enjoyable rightness, too. +

## TECHNICAL SPECIFICATIONS

DPA-CA1 Stereo Pre Amplifier

**Inputs:** Tape, Source ~0.5V, 10K Ohm, direct, all RCA single-ended

**Tape Output:** As source

**Line Output:** 1Vrms @ 0.16Vrms input

**Distortion @ 0dB:** below -96dB

**Frequency Response:** 20Hz-20kHz ±0.5dB

**Dimensions (WxHxD):** 46x12x35cm

DPA-MA1 mono power amplifier

**Input Sensitivity:** 1Vrms for 60Wrms output (Gain +26.5dB)

**Power Output:** >60W 8ohms, 120W 4ohms

**Distortion @ 1kHz:** <0.005% @ 60W

**Damping Factor:** 20Hz to 20kHz ±0.5dB

**Dimensions (WxHxD):** 46x12x35cm

**Price:** £2,650 (CA1), £2,600 (MA1)

**Manufactured by:** Deltec Precision Audio Ltd

Berkeley House,  
South Marston Park,  
Swindon,  
SN3 4TG

**Tel:** +44 (0)1793 238085

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**MyClapton** sound different to the norm - and in variety of extremely positive ways. In a nutshell, they're very big, bouncy and engaging performers which throw an almost holographic soundstage into a room, appearing themselves to dissolve into the middle distance.



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Placed 30cm in front of my rear walls the Grand MMs nearly knocked me off my sofa. These speakers punched a massive soundstage into the room, one which far outstrips no small number of larger floorstanders; it was almost as if someone had pressed a secret 'stereowide' button...

There's no discernable phase differences between top, mid and bottom and the result that everything emerges out of the speakers at the same time in a seamless, effortless way. Inside this capacious soundstage, instruments are located with great precision..... those co-axial drive units, with their particular expertise at hanging instruments in space precisely, also loved classical music.....

Instruments were all tidily put in their place in the recorded acoustic, and all played effortlessly along with one another. Massed strings sounded beautifully breathy, with real body coming from cellos, yet violins were devoid of screech. The speed of the Grand MMs was dizzying; they injected classical music with a gait that made it a seat of the pants experience. The music sounded positively electrifying, in both a visceral hi-fi way and a lucid musical sense.....

David Price  
HI-FI WORLD July 2010



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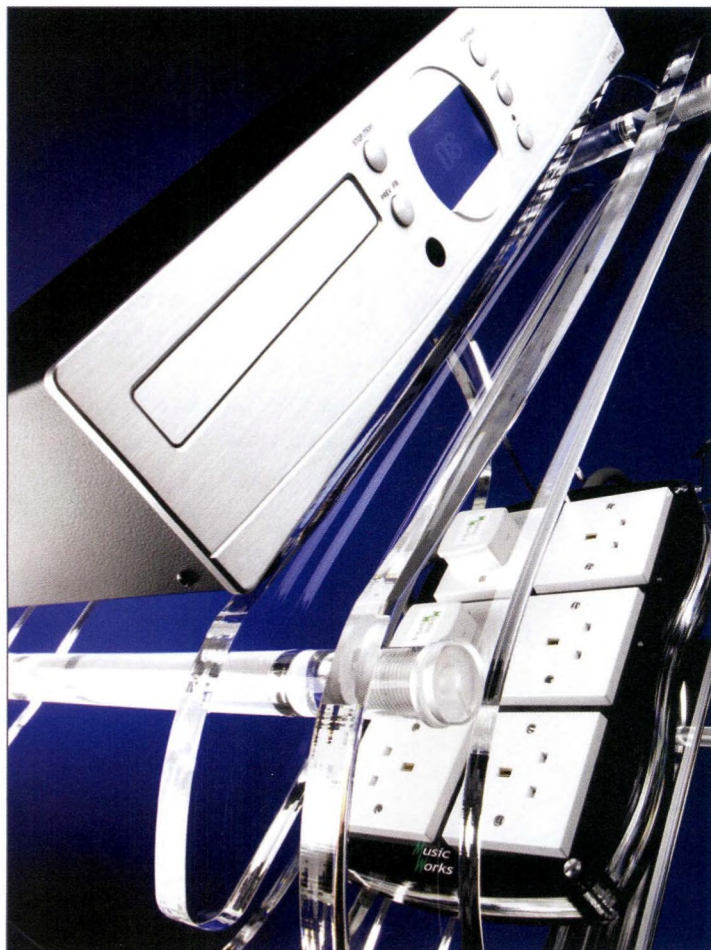
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## EQUIPMENT REVIEW

# Keith Monks Ruby

by Malcolm Steward

**T**he Keith Monks Ruby is a limited edition version of the Omni RCM that was launched in 2009. Unlike the Omni, however, there will only ever be 40 produced to celebrate the 40<sup>th</sup> anniversary of the first machines Keith Monks produced.

Apart from its sumptuous ruby red paintwork, the Ruby features a new VacuGauge suction monitoring system that enables users to keep a constant check on the performance of the famous Monks vacuum system. The chrome-rimmed dial sits alongside the traditional Mini Cooper windscreen washer pump button, giving the control panel a nostalgic 1960s' automotive appearance.

The whole package is delightfully retro. It gives a true feel of user-involvement that one misses with Compact Disc and computer audio. Posting discs into a slot or pushing keys on a keyboard is nowhere near as satisfying as operating genuine machinery: the Ruby feels more like a Meccano construction or a Mamod steam engine. If he were to encounter one, I am certain that James May would want to make one of his enthusiastic, chap-ish TV programmes about it.

Beneath the main operating surface of the device you will find what I reckon is the first major contradiction in the construction of the Ruby. The top plate, where the platter and all the washing and vacuuming gubbins reside, is heavy and needs to be supported whenever maintenance is required: changing cleaning fluids or renewing the thread on the vacuum arm, for example. You might expect a hydraulic assembly, or a simple bonnet prop, to perform this task. But you get The Stick, which, as its name strongly intimates, is a stick with a P-clip on it. This quite effectively acts as prop but it does not give you the satisfaction that something a little more substantial and mechanical perhaps might.

That is about the only legitimate criticism of the build that I can muster. The vacuum pump, that sucks the dirt-filled cleaning fluid

▶ off the record, is the polar opposite of The Stick. Its normal home is inside a kidney dialysis machine, so I reckon that reliability is not likely to be any cause for concern here. The pump almost certainly represents engineering overkill. The same pump is used throughout the Keith Monks range, so if you purchase a less expensive model you still get top quality suckage.

Looking at the machine from a user's standpoint, one faces the gently sloping control panel – or perhaps I should call it the dashboard – sitting on the front lip of the top plate. On the left there is that windscreen washer pump button from the Leyland Mini: this operates the mechanism that dispenses Monk's proprietary cleaning fluid through the deck-mounted gantry and brush system. I know some people are wary of RCMs because they have damaged records through cleaning them. I understand their reservations but I think that the days of damaging records by cleaning are long gone: the wise no longer use alcohol-based cleaning fluids, for example, because alcohol – even diluted – and vinyl do not make comfortable bed-fellows. The Keith Monks fluids contain no alcohol, and no chemicals. Tested by the University of Southampton, they contain nothing other than what the company refers to as 'pure botanicals' (I am sure it rejected the phrase 'plant extracts' because it sounded too shampoo-like) and triple-filtered distilled water.

*“The same pump is used throughout the range, so if you purchase a less expensive model you still get top-quality suckage.”*

The next item, sitting just to the right of the washer button is the chrome-rimmed VacuGauge suction monitoring system that indicates whether all is well with the vacuum arm assembly that slurps all the muck, grime and fluid from your now shiny record. This is worth a close look because it is more than a simple miniature vacuum cleaner hose. A nylon thread emerges about half-an-inch behind the vacuum nozzle into which it then disappears and travels along the vacuum piping within the arm. This thread, chosen for its softness and resilience, comes from a motorised feed beneath the top plate and provides a buffer between the record and the suction nozzle tip, protecting both and ensuring that the tiny gap between them is maintained to optimise the suction available. The arrangement also ensures that the one component that touches the playing surface is always new and uncontaminated. The record also, obviously, touches the platter mat upon which it rests but even this is designed to minimise contact and ensure cleanliness. Tiny pyramids that support the record while allowing any remaining fluid to drain away, and keep the playing surface clear of any fallen detritus.

On the right hand side of the dash there are two small indicator lights and a three-position toggle switch. This puts the machine into washing mode, by activating the turntable motor that rotates the platter, or drying mode, by additionally activating the vacuum pump and the thread motor. Operation is simple: place the record on the platter; prime the recording cleaning brush; rotate the gantry until it and the brush are sitting across the record's groove; depress the washer button a couple of times; flick the *Wash* switch and watch the brush spread fluid around the record.

Push the washer button again if the record needs more fluid; then rotate the gantry to its rest position. Leave everything alone for a few seconds then flick the switch to *Dry* and position the suction nozzle on the record label from where it will gently track back to the lead-in groove, collecting dirt and fluid as it progresses. Monks now supplies the Dewdrop accessory to catch any excess of fluid that attempts to drip off the edge of the record. My alternative and preferred solution is a piece of kitchen roll.

At times, the Ruby seemed a glorious contradiction. I would sometimes look at it and think, 'Heath Robinson'. Later I would look at it again and think, 'ingenious.' The most important consideration, though, is it does its job better than any other cleaner I have encountered, and, it has never damaged one of my LPs.

To test this theory, I went to a local charity shop and purchased a random selection of discarded LPs that, by some twist of fate, included EMI/HMV's *The Enjoyment of Stereo & How to get the best out of your record playing equipment* by none other than John Borwick. This collection of classical tracks along with John's mellifluous Scottish voice accent intoning “If my voice ▶





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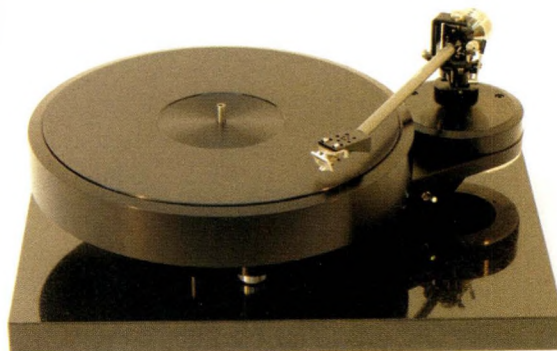
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# AUDIO WORKSHOP NORWICH

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## Workshop Notes 13: A Tale of Two Turntables. British Brio versus German control.....

It is an irony, 30 years after it was laid to rest, that vinyl sounds better than ever. Brilliant, if fanatical, designers like Conrad Mas and Helmut Brinkmann have pushed the performance envelope so far that vinyl still gives even the very best of digital not just a run for its money, but very often a good kicking. And that's before we factor in the thousands of LPs we vinylistas still own and the very special magic of it all. **AVID** have perfected the suspended, belt-driven design and their new SP spec double belts and upgraded power supplies are way ahead of anything else on offer. Joining the fray is a particularly interesting turntable from Germany the **Brinkmann Bardo** – no belts, no suspension, direct drive, mass loaded & with electronic speed control. Unsurprisingly, they sound markedly different. Which is better? That is for you to decide. These two outstanding, fresh-off-the-drawing-board designs are at Audio Workshop Norwich raring to go and eager for your attention. Please don't disappoint them.....Call me, Julian Musgrave, and hear the best that vinyl can offer.

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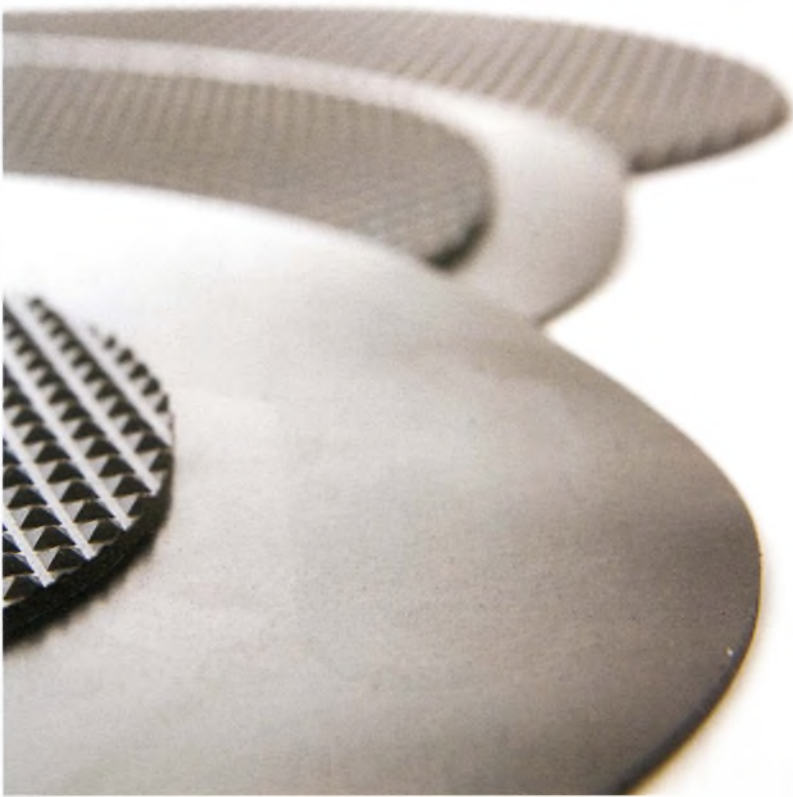
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▶ and the wine glass are not in the left loudspeaker, then your speakers are not in phase,” sounded well-cared for but a wee bit gritty and vague straight out of its sleeve. After a session with Ruby the sound was near that of CD: very little background noise and with remarkable purity of tone, enhanced detail and near-perfect clarity. Dynamics were quite startling and the low-end of the various orchestras had true weight and authority. Moreover, the sound of that wine glass being struck had astonishing realism.

Equally rewarding was the effect that Ruby had on a Decca LP, *The Instruments of the Orchestra introduced by Sir Malcolm Sargent*, who also provided occasional accompaniments on the pianoforte. An excess of sibilance unfortunately tinged his voice and much of the instrumentation had an edgy, unstable quality on the unwashed LP. Violin, in particular, appeared to verge on the edge of mistracking. After Ruby’s ministrations, Sargent’s voice lost its hissy overtone and the strings exhibited a much purer tonality with no suggestion of insipid stylus misbehaviour. The percussion tracks also benefitted from a welcome sense of enhanced solidity and security, and throughout there was a greatly reduced noise floor from which dynamic range enjoyed marked improvements.

The improvements were not confined solely to old classical albums such as those I have just mentioned – the newest of which dates back to 1970 – but extended to more recent albums from the likes of Joni Mitchell that were purchased new. After Ruby gave them a quick wash and brush-up they revealed previously undiscovered information that had been hiding behind grime and waiting to be set free. Guitars and voices sounded more vibrant, fuller and harmonically richer – often to a degree that was quite startling. The Ruby was not just eliminating record noise; it was discovering more music in those grooves. What is more, and contrary to what one might expect, this magic even worked with as yet unplayed new discs.

There is also a special Keith Monks’ discOvery BreakTheMold™ pre-wash fluid that seems ideal for the task of heavily soiled discs, because it

helps remove mould – that is mold in the USA – and other grime that has established a secure foothold. It rescued an ancient Elgar mono LP and made it sound as though it had been produced yesterday.

The Ruby is a sure-fire winner but I would suggest you buy one only if you crave exclusivity and want to own something that only 39 other people on the planet ever will... and have a numbered owner’s certificate. Other interested souls can save themselves a considerable sum by buying a Classic. Your records will emerge just as clean and you can spend the money you have saved on vinyl treasures that others have discarded, and help a few local charities while you are about it. +

## SPECIFICATIONS

Keith Monks Ruby

**Limited Edition:** 40 units manufactured

**Record sizes supported:** 7", 10", 12"

**Features:** 'Mini Cooper windscreen pump' retro controls, DewDrop splashguard, Pyr/\Mat record mat, hospital grade kidney dialysis vacuum pump, special front panel and certificate of authenticity.

**Finishes:** red lacquer/eggshell black, with hand-polished components

**Price:** £3,995

**Manufacturer:**

Keith Monks Audio Works

Units 3-9 Westcliff Park

Ventnor

Isle of Wight, PO38 2YR

Great Britain

**Tel:** +44 (0)1983 857079

**URL:** www.keithmonks-rcm.co.uk



## Origin Live Resolution turntable and Illustrious arm

by Alan Sircom

**O** rigin Live started out as a hot-rodder of tonearms, a business it still engages in to this day. But, somewhere down the line, Mark Baker hit the end-stops of what he could do to the Rega arms he was tweaking and he started building his own. The natural progression was to turntables. The system we're looking at today is the second-top turntable – the Resolution Mk 2 – mated to the third-place Illustrious Mk 3C tonearm. There's a distinct ships-of-the-line nomenclature to Origin Live products; Sovereign, Conqueror, Encounter, Enterprise, Aurora, Calypso... it wouldn't surprise me to see an Ark Royal 12" tonearm soon.

The Resolution is an exercise in acrylic and chrome, a circular plinth with two circular front risers, a rear riser for the tonearm and a separate motor housing. This uses the DC200 DC motor in its own acrylic block. Speed is controlled from a switch in the motor block, and two speed control screws on the side of the pod sit next to the power supply inlet. An upgradable plugtop PSU comes with the motor as standard.

You do need to be careful to ensure the pod does not touch the plinth and is just the right distance from the rest of the deck, and some experimentation is in order to ensure the speed is stable and the belt isn't wobbling or too taut. Origin Live recommends setting the speed with the pulley 212mm from the spindle

The deck features an acrylic platter, with a standard bearing, which rests on a subchassis that itself sits on an inertia disc. The

subchassis and disc are already fitted to the deck, you just add the correct amount of oil into the bearing housing, fit your platter and arm and you are away. The deck itself sits on three adjustable feet, two metal and one plastic, which must be clear of the plinth before you play.

The Illustrious arm shows itself as a distant cousin many times removed from the Rega arms Mark Baker cut his teeth on. It uses the traditional Rega arm base and geometry that was seen in the likes of the RB250 and RB300, and the headshell looks similar too. Everywhere else, it has as much in common with Rega designs as humans have with bananas; probably less, as we share 50% of our DNA with bananas. Externally at least, the combination of chrome and high-gloss black makes the arm distinctive. But look closer and you'll see the real gems. The headshell is a high-grade alloy, to prevent flexion and torsion over time. The armtube is a carbon-fibre composite. Then there's the yoke, and the bearings within. This yoke is designed to increase inertia in the vertical



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## Enjoy the Music.com Readers Say

I really enjoy your website and find it very informative (and read it every day).

— Richard Holbrook

I have never replied to online audio reviews but wanted you to know that I have enjoyed several articles.

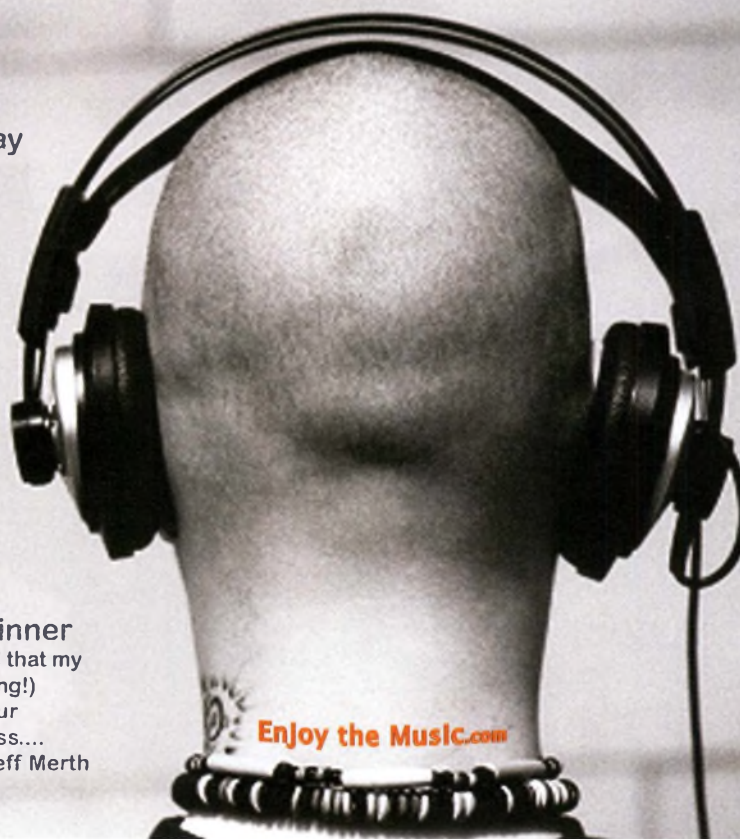
— Craig Mattice

What a great review! — Paul Kittingerk

## Enjoy the Music.com Contest Winner

In fact, the Axiom Audio EP500 works so well that my wife and I both stood mouths open (not kidding!) as it shook the rafters and window glass in our house. Amazing! Love that palpable, tight bass....

Thank you again for the awesome prize! — Jeff Merth



▶ plane (to keep the cartridge stable) but minimise inertia in the horizontal to allow better cartridge tracking. It can do that because it uses a high-spec multiple bearing assembly. Horizontal movement is covered by the arm's conventional gimbal bearings, while vertical movement is handled by the dual pivot design. This last behaves like a pair of point-in-cup unipivots, either side of the wide yoke. The arm comes supplied with a set of transit screws, to free up the dual pivots, and a set of Linear Flow 2 tonearm leads.

The upshot of this in terms of feel is an arm that behaves like a conventional bearing in set-up, use and bass performance, with the transparency and detail of a unipivot. The small amount of play in the yoke might petrify any passing SME V owner, but is a deliberate aspect of the product design. On the subject of SME, the overall fit and finish of the Illustrious is not in the same league as the Steyning arm... but you could say the same of about most arms. It's not got the 'wow' factor of a Graham Phantom but neither does it have the tractor-chic of a Kuzma Stogi.

If your idea of constructing a turntable package is taking it out of the box, look elsewhere; some building is required, especially when it comes to the arm. A whole tool kit of parts are supplied and it seems the 'one bolt fits all' approach is not in effect here. But, in fairness, the deck's a doddle to build and there's no need to call for an engineer unless you are truly ham-fisted.

Once you have a working deck and arm (and have fitted an appropriate cartridge – we used the excellent Cartridgeman Music Maker Classic moving iron design to keep things suitably British and slightly left field, and also to challenge the high effective mass of the arm), you need to give the deck a good three days running in before it starts to perform properly. This seems to let the speed control stabilize, perhaps due to the bearing lubricating itself, the DC motor settling down and stopping hunting or a combination of these things. However, after about 48 hours, the deck suddenly becomes one of the least tweaky products out there and merely plays music at 33 or 45, quickly, accurately and without fuss. Being a deck without a suspension, it does rely on the support of a good table or wall-shelf, but the usual 'light, rigid and not prone to footfall' will suffice. Those who cannot live without some kind of adjustment are not left wanting though; there's always the special mat and

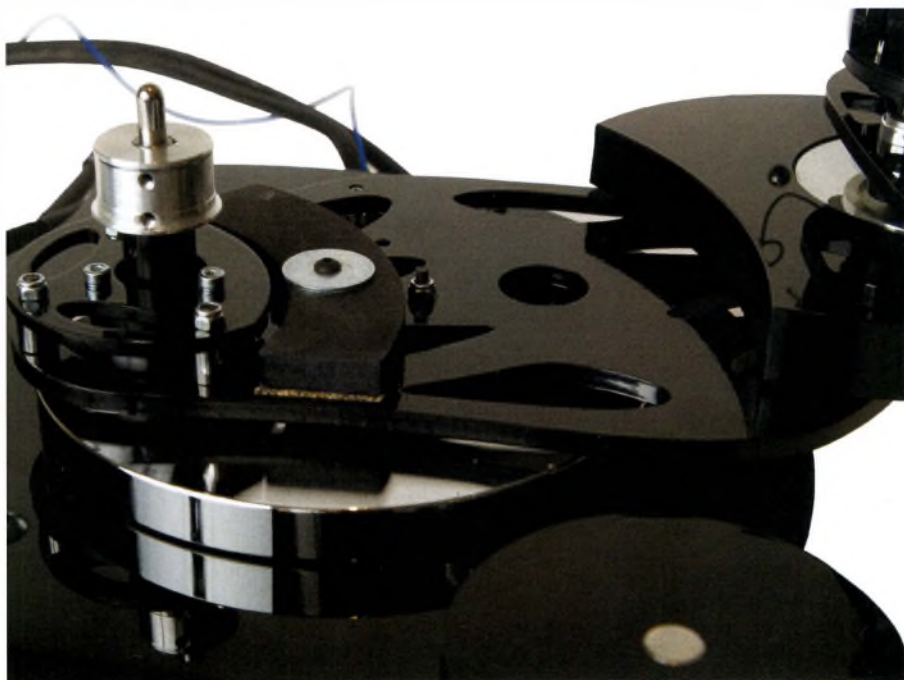


an upgraded transformer for £195. Aside from playing around with tightening the arm mounting, that's it.

Well, not quite. The Illustrious has an ace up its armtube that few UK arms can offer; on the fly VTA adjustment. OK, so the adjustment really entails popping an Allen key in the hole in the armbase, so 'on the fly' is a touch enthusiastic, but it works well.

I made my reviewer bones by being one of the first 'Flat Earthers' to see beyond the Linn LP12 and buy a Pink Triangle Anniversary. That deck has long gone, and an SME 10 does the vinyl spinning now, but many of the things that worked so well with that Pink Triangle turntable work with the Origin Live. What I liked about the Anni was that it got out of the way more than most decks, leaving the dynamics and the tonal balance of the record untouched. It also had an ability to deliver transients with a pace and poise that nothing else I had heard could match... although it was dogged by problems in the long term.

The Resolution has the upsides of the Anni with none of the down. It comes closer than many decks in not having an intrinsic sound, except for what's on the vinyl. It has blistering dynamics (if they are on the LP), transients and transparency. The name's fitting too; it has a lot of resolution, and this comes across when listening to surprising things, like the way the snare spring resonates in time with Mike Bloomfield's playing on 'Stop' on the legendary *Super Session* album







(180g Speakers Corner/Columbia). This little piece of throwaway sound helps to root the musicians in the studio and gives a live feel; on many decks, this merely blends into the music as an occasional buzz, but here this snare rattle rings out fast and true when Bloomfield plays a chord. Other pieces highlight the dynamics and naturalness of the deck (Band of Horses, for example), but that little snare sound is the clincher, it sounds like a jam session.

There was a golden synergy going on here. From experience of acrylic plattered decks, they can sound thin and light in the bass. But not here, thanks to the arm. There was no boom, but there was bass – tight, deep and controlled bass. Neither was there any kind of tizz at the other end or ringing or any of the other issues that's the sound of a good deck being held back by a bad arm. And none of the blurring of transients or speed anomalies of a good arm being held back by a bad deck either. The whole package sang sweetly and accurately. Having just liberated the cartridge from a parallel tracker, I was expecting disappointment, what I got was energy and accuracy. OK, so I also got more end of side distortion, but I can live with that.

There's an peculiar English lightness to the sound, one that has its roots in generations of people loving Pinks and Systemdeks and their kin. This won't challenge a Basis or a full-blooded VPI in bass weight and slam, but those who want speed and precision at the expense of bottom-end heft will find a lot to like in the Resolution/Illustrious combo.

In truth, the Origin Live wowed me more than I expected it to. I anticipated hearing something good but a bit Heath Robinson (in part because of Mark Baker's Rega-rodding service) and what I heard was one of the best British decks around. Don't let your vinyl miss out on this gem. +

## TECHNICAL SPECIFICATIONS

Origin Live Resolution Mk 2 turntable

DC motor power supply: 33.45rpm

Belt driven, off board motor

Acrylic platter

No suspension

Dimensions (WxDxH): 49x16x40cm

Weight: 9Kg

Price: £2,300

Origin Live Illustrious Mk 3C

Carbon composite arm tube

Effective length: 240mm

Overhang: 17.24mm

Offset angle: 23°

Mounting distance: 223mm

Effective mass: 14g

Weight: 830g

Price: £1,770

Manufacturer:

Origin Live

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

Tel: +44(0)2380 578877

# Perfecting Sound Forever

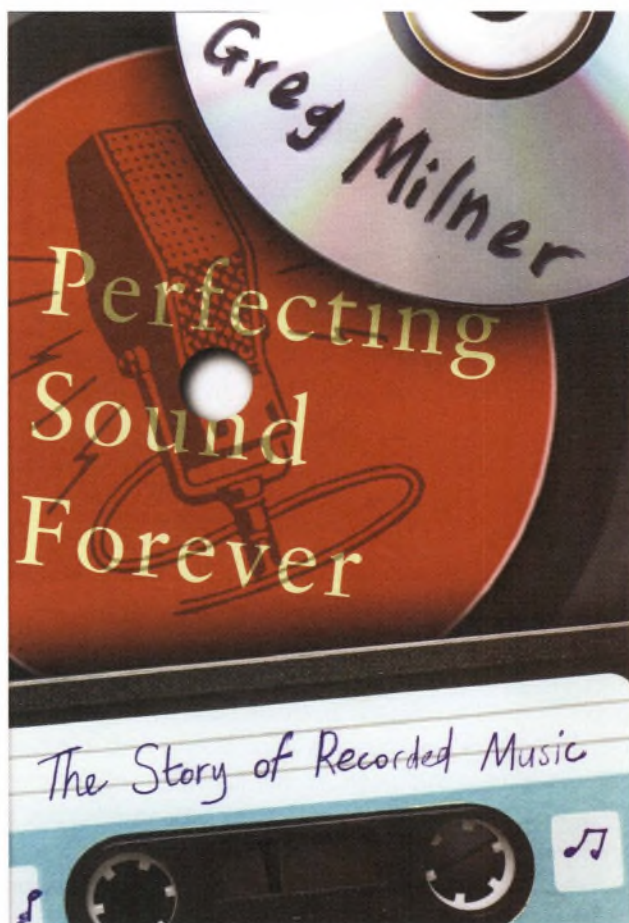
by Greg Milner

**W**hat we seek as hi-fi nuts, the holy grail of high fidelity, is a myth. It doesn't exist because there is no absolute sound. What is stored in the grooves of our records and the pits of our CDs is a fabrication, a construct that has taken the place of the original sound. In practice this sound is reality, the finished recording is what counts not the sound that was made in the studio. This is the fundamental tenet of a fascinating book whose subtitle is 'A history of recorded sound'. It goes right back to the very beginning when Edison, who was clearly the first audiophile, hit upon the cylinder or phonograph and went about selling it as a talking machine. Edison's company did eventually produce discs, but the man himself was never convinced that they equalled cylinders, which he continued to refine long after their obsolescence.

Greg Milner makes a lot of salient points, but one of the most interesting explains the effect that the Solid State Logic mixing desk had on the recording world. It was the first desk to be manufactured and sold to multiple studios and this meant that engineers and producers were no longer tied to a particular studio where they knew how to drive the desk. It also offered features that were previously undreamt of, like automatic fading – things that increased the potential for changing the sound far beyond what had been possible before. The 1980s sound that seems to be enjoying a revival of late was almost entirely a result of the flexibility offered by the SSL desk. Ever since then – and to an extent prior to it – studio technology has been designed not to increase fidelity, but to increase the potential to edit what's recorded.

This book gives a fascinating insight into the evolution of recording technology and thus the sound of recorded music, it doesn't attempt to give a complete picture but focuses on key technological breakthroughs and their effect on the way records were made. So you learn about the first format war; disc versus cylinder then the equally contentious battle of acoustic versus electric recording right through to how Pro Tools has enabled the demo to become the source for the final record. It's intriguing to read about the birth of digital audio, invented by Tom Stockham who used a 50Hz sampling rate in the 1970s, and the fact that it's always had its detractors, including a doctor who attempted to prove to the august and conservative Audio Engineering Society that music lost its therapeutic qualities when recorded digitally.

In a chapter entitled 'The band that clipped itself to death' Milner investigates the loudness wars as they affected both studio and radio



sound, the band referred to is the Red Hot Chili Peppers whose **Californication** album put the issue of loudness on the map. There are a number examples of how the sound on various well-known records were made, including the way Les Paul pioneered layering multiple takes before multitrack recording existed.

For those of us who spend our lives seeking the absolute sound, this book is a goldmine of information presented in an engaging and interesting fashion. If you want to know why your records sound the way they do... it's indispensable.

+

Jason Kennedy

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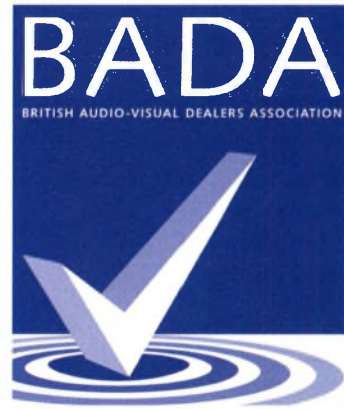
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# record reviews

## How To Read Them

The information contained in the record reviews is presented in the following way. Albums are identified by label and – where possible – 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.

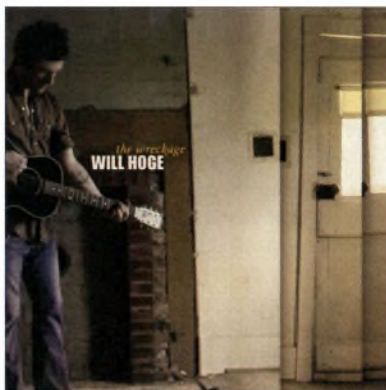
The ratings at the bottom of each review reflect the reviewer's opinion of the recording quality, and musical merits of the album. You'll soon realise that a great many musically significant albums offer less than wonderful sound. Don't let it put you off! For your information, the scale rates a standard,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

*This issue's featured reviewers are:*

- DD** – Dennis Davis
- RSF** – Richard S. Foster
- DH** – Drew Hobbs
- JK** – Jason Kennedy
- AS** – Alan Sircom

### Key to Icons

	CD		120g LP
	Gold CD		150g LP
	HDCD		180g LP
	XRCD		200g LP
	Double Disc		10" LP
	DVD		Availability As S/H LP
	SACD		Vinyl Double Album
	Hybrid SACD		Multi-Channel



### Will Hoge

#### The Wreckage

Rykodisc: RCD310990



Certain albums are born to rock radio, where every track's an anthem, a turning of the page. *The Wreckage* is one such record made by a true survivor, an artist who transcended tragedy and heartbreak and wove it into a personal landscape of timeless rock 'n' roll. Will Hoge tasted pain in the form of a motorbike accident that almost claimed his life. At the time he was working on *The Wreckage*; when he managed to get back on track to complete it eight months had passed.

There are fist-clenching, hit-the-ground running, high-octane rockers in the vein of Bruce Springsteen and Tom Petty on display but there's also an element of street punk. Then there's the title track, brooding, bleeding and heartbroken, where the central character feels 'lonely as a tomb' as he remembers 'the smell of that cheap downstore perfume, the kind that never seems to wash off at all'. Rarely has missing someone been so devastatingly portrayed as it is here. Hoge claims he couldn't have sung the song before the accident. I guess tragedy has its plusses.

*The Wreckage* is for anyone who ever loved rock music that matters, rock music that can lift the dampened spirit. This man deserves to be heard.

**DH**

RECORDING  
MUSIC



### Joe Bonamassa

#### Black Rock

Provogue Records: PRD7300-2



It might seem to the uninitiated that Joe Bonamassa is an overnight success, but although he's only in his early thirties he's already completed 20 years in the business. A sparkling guitarist and a better than average singer he most definitely is, and his recorded work has many highlights too, not least the double live *From Nowhere In Particular* and the sensational 'Sloe Gin'.

His last release, *The Ballad Of John Henry* was a patchy affair, but this one's much more like it! Recorded at Black Rock studios with the help of stellar Greek musicians, *Black Rock* is testament to an artist refusing to rest on his laurels. Joe's pushing boundaries and here they can be found on Leonard Cohen's 'Bird On A Wire' and his own composition, the lovely 'Athens To Athens', replete with bouzouki and clarino. Blues aficionados need not fret; there's plenty of his trademark plank spanking on offer, including a rasping duet with one of his mentors, BB King on the rousing 'Night Life'.

Great guitarists have their own sound and style and Bonamassa's instantly recognisable from his. This is a 'must have' recording, no question.

**DH**

RECORDING  
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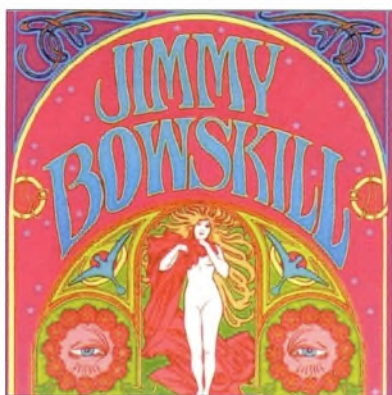
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**Jimmy Bowskill**

Live

Ruf Records: RUF1158



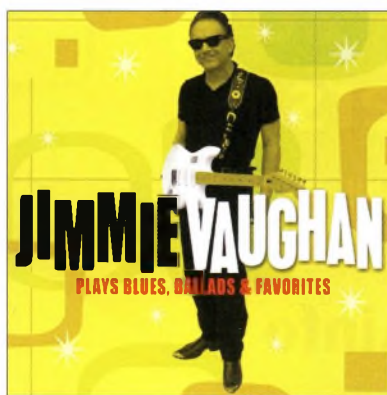
The blues is a form of music that will never die. Yes, if it is to gain a bigger foothold it needs to reinvent itself every now and again, and with artists like Oli Brown, Joanne Shaw Taylor, Mitch Laddie and Scott Mckean it's doing exactly that, but it can still be a hugely intoxicating force when it stays true to its roots. What's also truly inspiring is when it comes via an 18 year old with talent oozing from every pore, one who clearly grew up listening to the greats. That's the greats from the blues and rock worlds, for what we have here is a hybrid, a highly toxic talent by the name of Jimmy Bowskill who even has the great Paul Rodgers foaming at the mouth. Rodgers likens Bowskill's guitar skills to Paul Kossoff, remarking that "he's almost his spitting image" – and that's from one of the greatest rock singers that ever lived!

Bowskill's chosen to make his first Ruf release a live album and that could have backfired, but this young gun clearly has balls of steel to go with everything else he possesses. Fireworks abound, the guitar sizzles and shakes and his voice belies its tender age. Restrained is not his middle name, but Bowskill knows how to wow an audience and plays with the same fury and intensity of that man, Kossoff. He'll go far. **DH**

RECORDING



MUSIC



**Jimmie Vaughan**

Plays Blues, Ballads and Favourites

Proper Records: PRPCD062



I'm sure there are quite a few Stevie Ray Vaughan worshippers who are blissfully unaware he has an older brother, who has carved out a successful career in the blues as a solo artist and with bands like the Fabulous Thunderbirds.

Jimmie's style is nothing like Stevie Ray's; there's a cleaner, more precise sound that comes off his guitar, but he has plenty to offer and knows how to get the party started – as so many Texan players do.

This latest album is a mixture of bluesy rock 'n' roll, horn-laden shuffles and pumping jump-blues with a couple of late night, lighters out ballads thrown in. The band really sound like they're having a blast across the 15 tracks, with the horn section of Kaz Kazenoff and Greg Piccollo the perfect foil for Jimmie's swinging guitar playing.

Also along for the ride is legendary Texan singer Lou Ann Barton. She busts a lung on Little Richard's 'Send Me Some Loving' and duets handsomely with Vaughan throughout the Fats Domino-inspired 'I'm Leavin' It Up To You'.

This might not go down a storm with the SRV fans but it's a real Saturday night, in-the-mood record, and it's buckets of fun! Try it. **DH**

RECORDING



MUSIC



**Beth Nielsen Chapman**

Back To Love

BNC Records: BNCCD003



Some people travel hard roads and have painful lessons to learn and one might say becoming a musician brings both to the table. The rock 'n' roll road is littered with casualties, but if talent alone was enough then a lot of musicians would be much better off and lauded for their efforts, and conversely much of what travels the airwaves would end up in the bin. Beth Nielsen Chapman is successful and talented, but she's had it hard in other ways. *Sand And Water*, one of the great singer/songwriter albums of our time, was a tribute to her late husband who died of cancer. She herself fought a war with the evil disease and won both times.

One of those fights occurred during the making of this record when she was diagnosed with a benign brain tumour, which makes the end result all the more remarkable. *Back To Love* is uplifting, joyous, non-judgmental and a blast of fresh air in an increasingly miserable world, and it's also a lasting testament to the durability and strength of the human spirit. As a lyricist she's up there with the best, and she sings with an open heart and without bitterness and regret, and as a woman who knows the true value of life she is close to incomparable. This record is a celebration and a triumph. **DH**

RECORDING



MUSIC

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## hi-fi+ ADVERTISING INDEX

Absolute Analogue.....	81	Blue Horizons.....	67	Emille.....	21	Origin Live.....	70
Absolute Sounds.....	IFC	Border Patrol.....	83	Enjoythemusic.com.....	77	PMC.....	48
Analogue Seduction.....	85	Cabasse.....	69	Focal JMLabs.....	47	Quad.....	15
Argento Audio.....	16	Chester Group.....	58 & 59	Furutech Co. Ltd.....	41	Rayleigh Hi-Fi.....	83
Audio Destination.....	83	Classic LPs.....	85	Guru.....	83	Select Audio.....	57
Audio Emotion.....	53	Cloney Audio.....	73	High End Cables.....	54	SME Ltd.....	23
Audio Images.....	93	Coherent Systems.....	36	Infidelity.....	93	Synergy AV Ltd.....	85
Audio Reference.....	74	Cool Gales Ltd.....	42	Isotek.....	51	The Audio Works.....	70
Audio Salon.....	77	Crystal Cable EV.....	2	Jordan Acoustics.....	39	The Cartridge Man.....	81
Audio T.....	95	Custom Electronic Design..	73	Manger Audio.....	64 & 86	The Chord Company.....	28
Audio Workshop Norwich..	74	DCS Ltd.....	27	Metropolis Music/Sounds of	89	Vienna Acoustics.....	30
.....	74	Definitive Audio.....	35	Music.....	89		
Audiofreaks.....	4	Diverse Vinyl.....	86	Musical Fidelity.....	62		
Audiography Ltd.....	85	Eclipse.....	IBC	My Audio Design.....	69		
B&W.....	7	Electrocompaniet.....	OBC	Nordost Corporation.....	33		
BADA.....	81			Oranges and Lemons.....	93		





**Simon & Garfunkel**  
**Sounds of Silence**



Audio Fidelity AFZ 080

Simon & Garfunkel were still tinkering with a formula for success with their second album for Columbia in 1966. They had reworked what became the title song and it was a huge hit single, so they anchored a new album with it along with 'April Come She Will', 'I Am A Rock' and eight other cuts Simon compositions.

It's only in retrospect that this album disappoints. Even Paul Simon must cringe a little listening to 'We've Got A Groovy Thing Goin' ' but the rest of the album has aged well, after letting go the notion that each S & G album should be as good as *Bridge Over Troubled Waters*. I find myself popping this gold CD back in the player over and over again. The LP was recorded by legend Roy Halee, but you wouldn't recognize the wonderful sound of original S & G albums from earlier CD reissues. Not so with Kevin Gray of AcousTech Mastering's splendid remastering work on this issue and his equally fine work on *Parsley, Sage...* also released by Audio Fidelity. It's so good I'll set aside my 1966 LP version for the convenience of hitting the skip button at 'Groovy Thing'. The booklet includes the original cover photo and lyrics. Hopefully, *Bridge Over Troubled Waters* is not far behind. **DD**

RECORDING  
MUSIC



**Food**  
**Quiet Inlet**



ECM ECM 2163

Food is the duo of saxophonist Iain Ballamy and Thomas Strønen on drums and electronics and this is their sixth album, albeit the first for ECM. They are joined by much vaunted trumpet player Nils Petter Molvaer and Christian Fennesz on guitar and electronics. A typically pan European ECM line-up and one which majors in artfully constructed soundscapes over which the horns players have free range to scatter their thoughts. It might be the presence of two Scandinavians but there is a tendency toward sparseness on many of the numbers on this seven track album. It's interestingly spare however, the combination of percussion and electronics making for a good degree of contrast with the acoustic of the drums offsetting the relatively flat nature of synthesized sounds.

This album was recorded over two dates in Norway but the sound is not obviously live. It's got the ECM feel and is very clean and strong on both atmosphere and depth but it's not overly manicured.

Musically it takes a bit of time to get into and some tracks are a lot stronger than others but the quality of playing is strong yet restrained. Molvaer in particular lives up to his reputation without the bombast of his solo productions. **JK**

RECORDING  
MUSIC



**Lee Morgan**  
**Lee Morgan Vol. 3**



Blue Note/Music Matters 1557

Music Matters continues with its impressive release schedule of Blue Note titles. Lee Morgan is joined here by Gigi Gryce, Benny Golson, Wynton Kelly, Paul Chambers and Charlie Persip playing compositions and arrangements by Benny Golson. Recorded in March of 1957 in Hackensack, New Jersey, only four months after Morgan's first recorded session, the teenage Morgan had been playing with Dizzy Gillespie's big band and most of the sidemen come from that band.

While this is as much Golson's album as Morgan's, it contains some of my favorite Lee Morgan. Two cuts 'Hasaan's Dream' and 'I Remember Clifford' are some of the most beautiful cuts in the Blue Note catalog. And the sound is to die for—for my money, Rudy Van Gelder's best recording work was done in his parent's Hackensack living room before he started recording in stereo.

Fortunately, the master tapes seem to have survived well, as the sound here is amazing. If all you've heard before is a CD or Japanese vinyl reissue of this music, this will be revelation. A record to die for. **DD**

RECORDING  
MUSIC





**Supertramp**

180g

**Crime of the Century**

A&M/Speakers Corner SP 3647

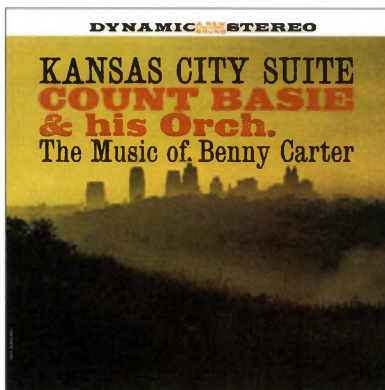
Released in 1974, this album put Supertramp on the map. *Crime of the Century* is a mix of prog and pop of a quality that is rarely encountered, it has a touch of 10cc in its English theatricality and no small amount of Pink Floyd in its less than optimistic outlook.

One thing that marks it out is the use of real world samples to create atmosphere, the track 'School' has children shouting in a playground while another stand out, 'Rudy', features platform announcements that are clear enough to wet any train spotters nostalgia gland. But it's the use of dynamics and light and shade that gives this band their impact. There is great use of pathos too especially on the latter song, which is about missed opportunities. This combined with a great sound from keyboards, guitar and orchestration make this an audiophile delight

While the hits were 'Dreamer' and 'Bloody Well Right', it's the aforementioned tunes and title track which are the most inventive and inspiring. As ever, Speakers Corner has done a sterling job at bringing out the dynamics and nuances of this fine record, the life and vitality on offer is remarkable considering its vintage.

**JK**

RECORDING  
MUSIC



**Count Basie**

180g

**Kansas City Suite—The Music Of Benny Carter**

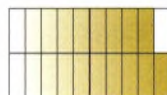
Roulette/Pure Pleasure SR-52056

Count Basie released a couple of dozen superb LPs for the Roulette label, but this is one of the best. It has everything — Benny Carter compositions, an all-star band and top-flight sound. The session was recorded in September 1960 by Wally Heider at the legendary United Recorders in Los Angeles, which later became part of United Western and then Ocean Way Studios. Heider made some outstanding recordings in these studios and *Kansas City Suite* is near the top of the pack.

Fifteen great musicians, including Thad Jones, Marshall Royal and Freddie Green swing in 1960 as though it was still the 1930s. Couple this with *The Atomic Mr Basie*, with its Neal Hefti arrangements from 1958 and you have some of the best big band music of the era. While original pressings of this LP carry the benefit of being pressed by a mobster-owned label, this new reissue by Pure Pleasure compensates with superior vinyl. Remastered by Sean Magee of Abbey Road Studios and pressed by Pallas, the sound shines like never before. Released on CD in 1990, this title went out of print, so vinyl rules!

**DD**

RECORDING  
MUSIC



**Keith Jarrett/Charlie Haden**

CD

**Jasmine**

ECM ECM 2165

This is one of those rare albums where egos have been repressed in order to let the tunes take centre stage. When Keith Jarrett's playing standards with his trio – Gary Peacock on bass, Jack De Johnette on drums – there's a sense of the band stamping its authority on the song. The liner notes explain that this was the idea: "These are great love songs played by players who are trying, mostly, to keep the message intact."

Of course there will always be a degree of interpretation with material that originally featured a lyric and some numbers are more successful than others, but on the whole this is the best 'standards' album I have heard from Jarrett in a long time. The recording is not live but was made in Jarrett's home studio with the minimum of rehearsal in order to keep things fresh. This seems to have been a successful approach and results in a mature and effortless sound where the musicians relax and concentrate on the tune, not having an audience must make this somewhat easier.

Charlie Haden has played with most of the greats in his time, but until now I've not understood his appeal. This reunion with Jarrett reveals why his understated playing has been so successful. **JK**

RECORDING  
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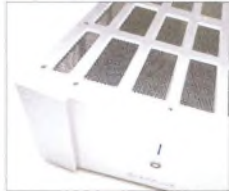
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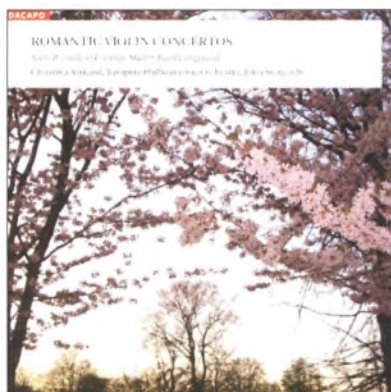
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**Romantic Violin Concertos: Gade, Lange-Müller, Langgaard. Christina Åstrand (violin); Tampere Philharmonic Orchestra, John Storgårds (cond).**

SA<sup>(5.1)</sup>

Dacapo 6.220562

These are three Danish composers who have much to say and a very fine way of saying it.

I knew nothing of Christina Åstrand and I have been very impressed with her exquisite playing. She was appointed leader of the Danish National Symphony Orchestra at the age of 22, a position she has held for 13 years.

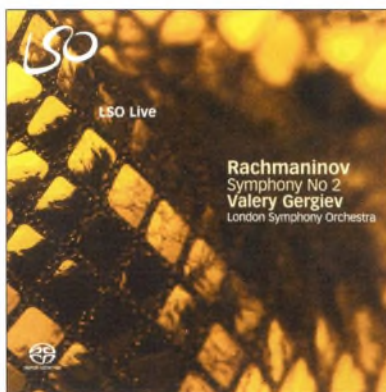
Niels W. Gade's work was written in 1880 and a superbly orchestrated work in the traditional sense. There is much to like in this composition with poetic lyricism, a beautiful romantic second movement and a soaring climax.

Peter Erasmus Lange-Müller is best known for his vocal and stage works. This is a very expressive and warm recording and the soloist and orchestra perform quite admirably.

Rued Langgaard avoids the classical concerto format. The soloist is used differently but the lyrical and tuneful sense come through. Very lovely music on this disc and it's something you should explore. The sound is very acceptable. **RSF**

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RECORDING  
MUSIC



**Sergei Rachmaninov: Symphony No. 2 in E minor, Op. 27. London Symphony Orchestra, Valery Gergiev (cond).**

SA<sup>(5.1)</sup>

LSO0677

Recorded live in September of 2008 at the Barbican in London, Gergiev steers the full forces of the wonderful LSO in a full-blooded romantic performance of the most popular of the three Rachmaninov symphonies.

Gergiev's pace is not rushed, but at 61 minutes, he does not linger either. The recording team of Neil Hutchinson and Jonathan Stokes with producer James Mallinson deliver a disc with great sound quality and demonstrate the expansive nature of this orchestra with this recording. I think the conductor is perfectly suited for these works and he is able to flesh out the heart and soul of this symphony.

There are many lovely moments on this disc—from the ravishing string sound to the clarinet solo in the slow movement. While his introduction is measured, he builds the tension until the main theme (Allegro moderato) arrives. His finale is a cacophony of explosive textures that are never muddled or congested. This is a disc you will enjoy on repeated playing. Highly recommended. **RSF**

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RECORDING  
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**Wolfgang Amadeus Mozart: Mozart in Vienna; Gottlieb Wallisch (piano).**

SA<sup>(5.1)</sup>

Linn CKD 352

Gottlieb Wallisch has been performing on the World stage for over a decade. He's played with the Vienna Philharmonic, the Royal Liverpool Philharmonic Orchestra and the London Philharmonic Youth orchestra to name but a few. The programs on this disc are from some of Mozart's most fruitful period of composition and are some of his best-loved works.

The period in Vienna is 1781-1791. Sonata No. 18, K.576 is very well known as is the very short Fantasy in D minor, K.397. Sonata 17, K.570 is a wonderful intro to the last works here, the Rondo in A, K.511 and a stunning Ten Variations in G major, K. 455. Wallisch, born into a family of musicians, plies his craft with aplomb and demonstrates his competition prizewinning ways in the truest sense of the Viennese piano tradition. His tone is clear, precise with excellent fingering techniques that are sure to captivate the listener. Linn has given us some of the finest Steinway piano sounds I have ever heard. This is a disc that offers a true window into the genius of Mozart through exceptional talent. An intimate, lifelike endeavor.

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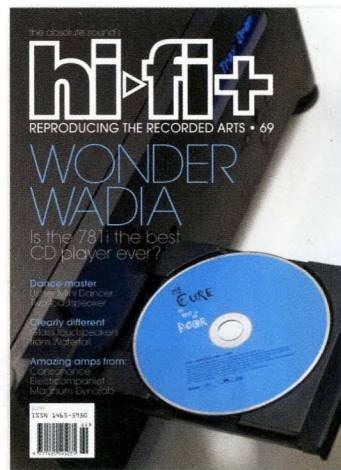
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# West Side Soul – Magic Sam

# every home should have one

by Alan Sircom

## THE BLUES HAS AN ALARMING HABIT OF TAKING ITS BEST YOUNG.

Duane Allman, Blind Boy Fuller, Robert Johnson, Guitar Slim, Stevie Ray Vaughan... all died in their 20s and 30s. But there's something about Samuel 'Magic Sam' Maghett, who died of a heart attack aged just 32, that seems so poignant; his first – and best-known – album, made less than two years before his death, just brims over with life.

*West Side Soul* might not have been the first electric blues album and Magic Sam certainly wasn't the first Chicago blues musician, but the album created a template that remains essentially unchanged to this day. Unchallenged too; only the Robert Johnson's *King of the Delta Blues Singers* and Albert King's *Born Under A Bad Sign* come close to achieving anything like as complete a package.

Of course, back in 1967, some blues purists didn't initially see things this way. Magic Sam's blend of soulful, powerful, almost aggressive singing and mid-60s Stax-like guitar arrangements were not popular with the "Woke up this mornin'" set, but with Mighty Joe Young bringing up rhythm guitar to Sam's lead, such criticism was quickly swept aside.

The 11 track (12 on the CD) album is a mix of Magic Sam originals ('All Of Your Love' written with Otis Rush) with covers of blues standards, including BB King's 'I Need You So Bad'. But it's Robert Johnson's 'Sweet Home Chicago' that is the real standout track. No-one before or since has 'owned' the track as much as Magic Sam (the track was dedicated to Magic Sam when it was played in the first *Blues Brothers* movie) despite it being a standard. On the other hand, 'Mama, Mama – Talk To Your Daughter' – which is played as straight rock 'n' roll – lacks some of the poise found by later musicians like Robben Ford.

*West Side Soul's* format is deceptively simple, with Magic Sam's piercing Les Paul solo lines in the right channel, Mighty Joe's in the pocket 12-bar blues and the rest of the band in the right and the strident, powerful vox in the middle of the image. Any one of a thousand blues albums could call on the same format, and sometimes Magic Sam's powerful voice overawes the microphone. Yet, there's a raw enthusiasm and an excitement to the overall mix that transcends recording technique. It's a very 1960s blues sound – think Otis Redding fronting the Yardbirds – but with no desire to make chart-friendly single cuts, the album is as untouched today as it was more than 40 years ago. Although the sound is dated by today's standards, the music loses none of its charm and energy, and people will probably keep buying the album for as

long as people love music.

Perhaps one of the greatest achievements of *West Side Soul* is that it's still sold on the Delmark label, 43 years after it was originally released. Delmark, one of the oldest independent record labels in the USA, is still run by its founder, Bob Koester, who also continues to run the Jazz Record Mart, arguably the best jazz and blues record shop on the planet, out of its East Illinois Street store. Chicago blues, from a Chicago label that still remains fiercely independent after more than five decades – that's so cool, it's windy +



### MAGIC SAM - WEST SIDE SOUL

Recorded: July 12 and October 25, 1967

Produced by: Robert G. Koester

Delmark DD-615 (CD, LP, download)

#### Musicians Featured

Magic Sam – vocals, guitar  
Mighty Joe Young – guitar  
Stockholm Slim – piano  
Earnest Johnson – bass  
Odie Payne – drums

#### Track Listing

1. "That's All I Need" - (Magic Sam) – 3:40
2. "I Need You So Bad" - (B.B. King/Sam Ling) – 4:51
3. "I Feel So Good (I Wanna Boogie)" – 4:36
4. "All Your Love" - (Magic Sam/Otis Rush) – 3:43
5. "I Don't Want No Woman" - (Don Robey) – 3:38
6. "Sweet Home Chicago" - (Robert Johnson) – 4:11
7. "I Found a New Love" – 4:03
8. "Every Night and Every Day" - (Jimmy McCracklin) – 2:19
9. "Lookin' Good [instrumental]" - (Magic Sam) – 3:11
10. "My Love Will Never Die" – 4:04
11. "Mama Talk to Your Daughter" - (J. B. Lenoir) – 2:40
12. "I Don't Want No Woman [alternate take]" - (Don Robey) – 3:30

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