

hi-fi+

Quadrature Z



# Stretching Your Horizons...

## The David Berning Quadrature Z Mono Power Amplifiers

by Chris Thomas

I think the Beatles said it best when they sang, "Oh that magic feeling, nowhere to go". And it is true, for me anyway, that having absolutely nothing to do and nowhere to go is indeed magical. I have never been able to understand those people who are always going on about how they just HAVE to be doing something or they would go mad. The idea that, upon waking, the day stretches before me, is entirely my own and requires no contact with the outside world is blissful indeed. Sometimes I can spend hours with my guitars or effects pedals, simply playing the day away.

But recently things have changed. Whereas I would normally begin my listening sometime during the early afternoon, increasingly often I have found myself perched on the sofa as early as 8.30 AM intrigued by some musical fascination. And of late I have often stayed there for hours on end, rising only to change the music or make tea. I have begun to realise that, somewhere deep within my previous appalling slovenliness, there was a kind of routine. An order of things that is probably linked to a kind of deeply anal Virgoan fastidiousness that is completely out of my control (although RG would say it's because I am just a recluse at heart). Fortunately I will not have to seek help for my present condition. It will pass quite naturally, for I have realized who is responsible; I point the finger across

the Atlantic at David Berning of Maryland in the USA, as it is his mono-bloc amplifiers that have had me totally hooked and continually capture my musical fascination in a way that so few products ever have.

For days before sitting down to write any review I try to format the task stretching before me in my head.



What am I going to say and how will I say it? But, every now and again, when an absolutely brilliant piece of audio hardware comes along I can't help fantasising about submitting a piece that has the name of the component and just a few words beneath which say something like "Totally amazing amplifier, if you have the system for it and can afford it, then buy it". It's succinct, to the point and encapsulates how I feel, but it doesn't give you the

\*Technologically speaking these are like no amplifier you've ever seen (or heard). There is so much unique thinking in the circuit and its execution that it is a) beyond the understanding of most mere mortals, and b) well beyond the scope of this review. We do have an interview with David Berning which we will hopefully publish in due course, but in the meantime, those looking for technological insight should look at the Berning website.

full story does it? In fact it will be very difficult for me to give you anything other than a very partial glimpse of the technology behind these amplifiers and the steps that David Berning has taken to address the well-known limitations associated with OTL amplifiers. I am no amplifier designer and have little comprehension of the finer points of audio design and even less where valves are concerned. But what I will say is that as humans, we like to

compartmentalize and as audio and music lovers we also have a strong tendency to fit various types of component into neat little slots.

Hence the widely held belief that solid-state amplifiers are fast, a little lean but have grip and control. Valve amplifiers on the other hand, are warm and more colourful, but slow and a bit soft. If you are even a general subscriber to these stereotypes (no pun intended) then time spent with David Berning's amplifiers will be the audio equivalent of a cattle-prod in the nether regions because, despite being an all-valve design, and OTL to boot, the Quadrature Z amplifiers will shake your preconceptions to the core\*. They'll open your ears to the sheer beauty of music. Experience them and you'll not give a hoot whether they ►

▶ are valve, solid-state or made from recycled washing machines. With these amplifiers the music is the message and the method of delivery is awesome.

The absence of output transformers and the fact that they eschew battleship build too, makes these amplifiers deceptively light in weight; no “hewn from solid billet” casework here. The fascia is a simple alloy plate with extensive grilles to cover the innards. So if you judge by appearance alone you might well wonder just where all the money went. Internally though, the amplifiers are superbly constructed and point-to-point wired. You just know that this is no mass produced component. As I mentioned before, the solutions arrived at have eliminated the problems usually associated with OTL

designs, yet have preserved all those things that commend them, such as their astonishing openness and transparency. And valve life is very impressive too, at a projected 20,000 hours.

The Quadrature Z amplifiers utilize embedded Stillpoints resonance control devices in each of their four feet, but you can take this a stage further by bolting a four-legged Stillpoints Component Stand to each amp in place of Mini Inverse Riser feet to give a total of eight resonance control devices for each mono amplifier – a very smart move indeed. The same importer deals with both products and I strongly suggest that you factor in the cost of this installation when taking delivery (£1590pr.). There are also other requirements that simply

must be met if you are really going to hear what these amplifiers are capable of. These begin at the mains socket on the wall and include everything from the equipment supports to the hardware. Finding a pre-amplifier of sufficient quality is not going to be easy and you can probably count the candidates on the fingers of one hand. Fortunately the Lyra Connoisseur 4.2L SE works absolutely superbly with the Bernings. Your source too needs to be impeccable, as does the cable loom. I used the Naim CD 555 and the

the speakers used, but it is extremely easy to hear the differences between each position. Switch the amps on and the status LED glows red while they self-bias, and after a minute or so switches to green. They don't take long to warm up either. The first time I fired them up I was not expecting too much for the first hour or so and expected to leave them gently cooking on CD repeat while I did other things. But they hooked me from the first few bars of music and that's when I realized that I was

dealing with something quite different and very special.

At the heart of their brilliance lies quite astonishing sensitivity of response, coupled with great speed. When you listen to some amplifiers

you cannot help but notice the sheer blistering pace of the music. Notes have a leading-edge compression blister and instantaneous impact with a “now you see it, now you don't” quality and this gives an impression of control and grip that many people describe as great timing. Their beat-to-beat sense of impact and drama inevitably leads toward these conclusions and on any music in straight 4/4 time they appear tremendously concise and to the point. But I have always believed that true command of time and space runs far, far deeper than being able to tap your feet to an even tempo. There is no better amplifier to illustrate this than the Quadrature Z, which has the distinction of being not only the fastest power amplifier I have ever heard but also the amplifier that makes no show of the fact by over accentuating the leading edge of the note or the percussive element that marks the beat. These amplifiers are one of the very, very few products whose performance is completely ▶



Burmester CD 001, while the cabling was Nordost Odin for both interconnects and speaker cables, with Valhalla, Quantum and Thor for the mains.

Everything was isolated on the Stillpoints ESS rack. For speakers I used both the JMLabs Micro Utopia Be and the exceptional Eben C1 (reviewed elsewhere in this issue). I would have enjoyed using them in a wider bandwidth system, but fear not, RG will be doing that in the next issue.

Externally at least, the Berning amps are simplicity itself. On the back panel there are inputs for RCA/phono and balanced XLR connection and a single pair of binding posts. The IEC input sits in a machined well that allows you to fit even the largest mains leads. The front-panel offers only a status indicator and a three-position feedback switch. Which setting you prefer will depend on

► music-led, making it very difficult to describe in hi-fi terms. You might ask the standard questions. Is it fast? Is it tight in the bass? Is it well controlled in the treble? Does it image? But the answer is that it can be all these things, but only as and when the music demands. In my experience, this in itself is rare, as most electronics have a distinct flavour and a recurring picture of the music that lies deep within their own design. So when you think about most amplifier manufacturers, you can describe their in-house sound or the way in which their equipment portrays music, as it does this regardless of what you play through it.

The Bernings are utterly articulate when dealing with music and as fast as they needs to be for any given musical situation. You will never, ever hear these amplifiers smear time or tempo. They bring no pre-formed view of the musical picture and do not impose their view of the world on every piece of music you ask them to play. Each disc, be it digital or vinyl, sounds as different as the musicians, producer and engineers who made it, the studio or venue where it was recorded.

These amplifiers can demystify complexity as well as illuminate it. Their stunning transparency allows you to see from the front to the back of the soundstage, pausing to examine the bond between space, time and every musical detail along the way. Listening becomes an event to look forward to and I found that, throughout my time with them, there was a certain mystique to the experience. Not based in mystery itself, but a voyage of discovery through music, sound and beyond, sometimes ending up in that magical space where the world falls away

and you become at one with the music: and there are very, very few components that have ever taken me there. Perhaps you are with me here and perhaps not, but I had many listening hours with these amplifiers that bordered on the spiritual. When I listened to the title track from Vicente Amigo's latest collection, *Un Momento En El Sonido* I felt myself move beyond being a distant observer. The intimacy and tonal warmth that he caresses from that instrument infected me emotionally and I found myself

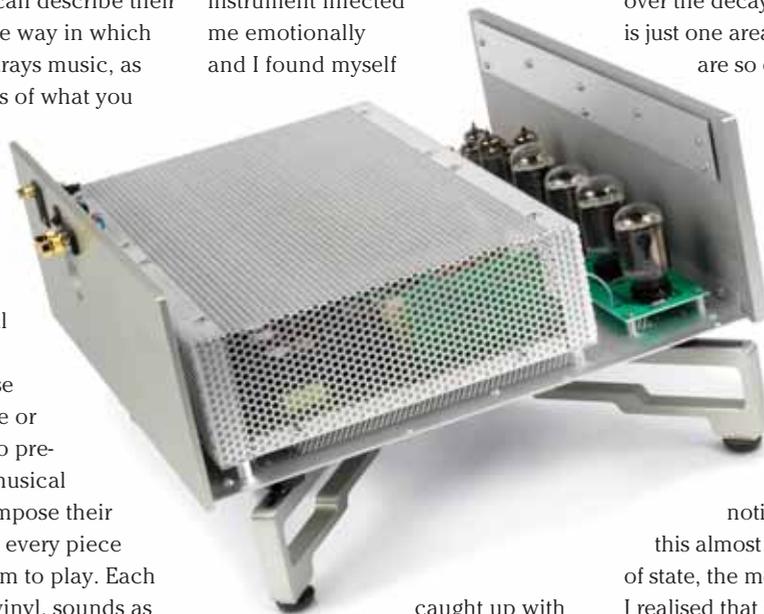
interested in the vast spectrum of tonal colour and character of instrument or voice, then listen some more and the superlatives will flow. The more time you spend with them, the more insight you gain, but one of the things that kept ramming itself home when I was trying to get to the bottom of why they are so special is the moments of transition between notes – and I don't limit this to just the way that leading edges are dealt with. That special moment of birth as a new note grows over the decay of what went before is just one area where the Bernings are so compelling and so real.

Take a really close listen to the way that most hi-fi systems deal with this. There is a kind of on/off mechanical crudeness that is only really highlighted by the alternate beauty of the Berning amplifiers.

As I began to understand this

notion of musical flow, this almost legato-esque change of state, the more it intrigued me and I realised that it was linked to their speed. It was so very evident on the Vicente album as Flamenco players of his stature strive for years to perfect the way the notes roll from the fingers through the complexity of two hands addressing the strings.

Let's elaborate further with *The Joni Letters*, a Herbie Hancock album that features some of the world's great musicians and some of the most beautiful playing I have heard for a while. It also has a very passable recording of a piano, if you have a system well sorted enough to realize it. The opening track is a magical construct of Joni Mitchell's song 'Court And Spark'. Norah Jones sings and Hancock, Dave Holland, Wayne Shorter and ►



caught up with each note and

the explosive power of every one of his trademark rasquedos; it left me breathless and hanging on each tiny rhythmic paraphrase. This is where great hi-fi should take you.

Yet trying to explain just how the DB amplifiers manage this level of connection is elusive. They are the most completely textured and delicately shaded of amplifiers for sure, brimming with impossibly fine resolution and responsive to the tiniest of dynamic inflections. If you want to understand just what makes a great musician and how physical command of the instrument is so visceral then listen to Vicente Amigo through a pair of Quadrature Z amplifiers. If you are

▶ Vinnie Coliauto create an ever-shifting web of a backing track that ebbs and flows in and out of the original chord framework. During the instrumental middle section, three of them wander off and do their own thing. There is harmonic connection but it is gradually deconstructed, then re-joined. This passage just passes you by on most systems as a short interlude between verses but the Berning amplifiers never lose focus or a single strand for a moment. The music just draws you further and further in. Hancock's piano is confident and wonderful as he shows us what real touch sensitivity is. There is a stillness at the heart of his playing, as if he is feeling out and shaping each note. Every small change in pressure, every carefully crafted tonal colour is an extension of his sensitivity – and the piano, with its ten billion possibilities, is his instrument of expression. The Bernings take you there, right to his fingertips, to the hammer on the string and to the colourful harmonic signature of the piano as a whole. They are marvellously commanding and confident in the way that they allow the instruments to breathe the fundamentals and harmonics with no trace of system artifice to get in the way and have a clarity against a background of silence that is, in my experience, unique. The track 'Solitude' also highlights the DB amplifiers' formidable abilities with textural contrasts and their wondrous realization of space and transparency as they bring an almost surreal feeling of atmosphere, delicacy and scale to the piece. Piano, drums and string bass, each so different in colour and shape yet combined here in a delicious recipe of ripe expressions. You think you have heard uncompressed, colourful texture coupled with serious power? And do you know how far reaching

the term resolution can really be? I thought I had a pretty good idea of these things, but the Quadrature Z has redefined my notion of what a power amplifier can do. To speak of it in terms of grip, bass weight, bandwidth and detail is meaningless and if you judge equipment at this level by those yardsticks then you will find that you (like me) need to rethink a whole new vocabulary to describe these amplifiers.

Regardless of what level of performance you are used to you will be amazed at the purity of musical energy available. At two hundred watts per channel the DB amplifiers have power in abundance, but this is no Tsunami of sheer volume, as they employ it with discretion and quite breathtaking vitality at whatever level you require. I have never heard a soundstage so animated and alive with dynamic movement. The music appears in the room with a freedom that really needs to be experienced to be appreciated. It certainly makes so much other high-end amplification sound over-damped, electronically reconstructed and it has to be said, contrived. I actually found myself listening at lower levels than usual for much of the time as the Quadrature Z maintains its stellar performance and uncanny stability regardless.

As you have probably guessed by now, these are certainly the best amps I have heard. I feel privileged to have spent time with them and they have redefined my concept of what power amplifiers can bring to a system. They are masters of time and space. Remember though that to hear what the Bernings can do you are going to need a serious system that is thoroughly sorted. I doubt I would have enjoyed such a memorable time without the contributions of the Stillpoints ESS rack, the Quantum QX4 and Nordost's Thor and cabling, to say nothing of the accompanying electronics themselves, because,

in a system of this potential, every detail matters. I have had so many great listening experiences with these amps that it is going to be a terrible wrench to see them go and I may get quite broody for a while. These are extremely special and important products that represent the culmination and apex of a whole year of audio discovery for me, almost like a musical mystery tour. I am not even going to try and justify the high cost of these amplifiers except to say that the only downside I could find is that I can't afford them. If I could, I would buy them tomorrow because a love and involvement with music can be a lifelong spiritual journey. Give yourself up to it. It's amazing where it will take you. ▶+

#### TECHNICAL SPECIFICATIONS

Type:	OTL valve mono-bloc amplifiers.
Input Impedance:	35-50kOhms (depending on feedback)
Inputs:	1x single-ended RCA/ phono 1x balanced XLR
Outputs:	1pr binding posts/ch
Output stage:	Triode
Rated Output:	200 watts-8 ohms, 270 watts-4 ohms.
Feedback:	3x user adjustable settings
Dimensions (WxD):	480 x 200 x 480mm
Weight:	15kg ea.
Finish:	Silver or black fascia, grey top and sides
Price:	£22500 pr.

#### Manufacturer:

The David Berning Company  
Net. [www.davidberning.com](http://www.davidberning.com)