

# HIFICRITIC



AUDIO REVIEW JOURNAL

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Does the Slimdevices Transporter deliver audiophile quality music from computer to hi-fi?

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Focal, ART and Haliaetus: three seriously upmarket, totally dissimilar stand-mount speakers

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**MUSIC & MORE**



## ART EMOTION MONITOR SIGNATURE

The *Emotion Monitor Signature* is about as conventional looking as they come. Robustly constructed from 18mm birch ply, with a double thickness front panel, it exemplifies a no compromise approach to a classic two-way box that has nothing particularly ground breaking in terms of technology or design, although the fact that the stand is integral to the enclosure is slightly unusual. This removes a certain amount of guesswork (and extra cost) when it comes to finding a suitable support. It also allows the use of a downward firing port, thus defining the boundary against which it works, which could offer a greater degree of flexibility when it comes to room positioning. The cabinetwork is very well finished in a high quality veneer, with sculpted hardwood trim around the front.

ART has been making loudspeakers in Scotland for the last twelve years or so, under the auspices of Derek and Ramsay Dunlop, whose father Peter was the man behind the Systemdek range of turntables. The *Emotion Monitor* is in fact the smaller, younger brother of the *Emotion*, a much larger two-way design (unusually) employing a ten-inch bass unit. The *Monitor* came about as a solution for those who did not have the space for the larger model.

Available in three versions, the *Emotion Monitor* starts at £4000, while this *Signature* version substitutes costly audiophile Jensen components for the standard crossover components, specifically low resistance flat-wound inductors and paper-in-oil capacitors, together with Caddock non-inductive resistors and Kondo internal wiring, taking the price up to £7000. Finally, should you desire it, all of the crossover and cabling can be in silver wire or foil, for a not inconsiderable total of £15,000. Since the enclosure and drivers are common throughout, factory upgrades to higher levels are available.

Both drivers are sourced from Norwegian specialist SEAS. The bass/mid driver is a nominal 180mm unit built on a cast open frame chassis with a doped paper cone incorporating a slight flare. The high frequency unit is SEAS' costly *Crescendo* model, combining a 29mm soft fabric dome diaphragm, rare earth magnets and a thick front plate, sculpted to provide a small flare around the diaphragm. All components are hard-wired onto a board that occupies the whole back panel of the cabinet, which is screwed rather than glued in place. A solitary pair of high quality WBT binding posts is used to apply signal.

Compared with the hi-tech glamour of the Focal and Haliaetus models, the prospect of spending time with the ARTs seemed rather boring. Another variation on the well worn theme of a conventional two-way box, which would seem to have nothing very different to offer apart from some specialised crossover components: where's the fun in that? However, despite the lack of bells and whistles, the *Signatures* turned out to be rather interesting. There was no particular aspect of their performance that one could point to and judge as outstanding: instead they just presented a very cohesive view of the music that I was listening to. They seemed remarkably tolerant of room positioning, with only small changes in bass performance as I moved them around, and only a mild thickening of the upper bass as they got close to the wall.

Making no special demands from the amplifier, they were more than happy running with the Radford *STA25*, where they exhibited the kind of midrange performance that valve enthusiasts would die for, but were equally at home being driven by the Densen *B350s*, to demonstrate a reasonably tight and agile bass performance. Power handling was adequate rather than exceptional, and uncompressed drums caused the bass unit to emit alarming signs of impending death, but fortunately the *Signatures* are not loudspeakers that have to be driven hard to be satisfying: if anything the converse is true, as they did not seem to miss anything out when operating at very low levels. And maybe I was expecting too much from a single seven-inch bass unit. The top end could not match the Focal beryllium unit for sheer clean unadulterated detail, but made up for it by sounding incredibly natural, and (much as I hate the term) 'sweet', while integration with the midrange was pretty much seamless. Together there was a subtle delicacy that worked to great effect on a wide range of music, and went a long way in explaining what the *Signature* does so well.

Years ago, I remember the Snell *Type J* and the Spica *TC50* challenged my perceptions about what made a great loudspeaker. Much like the ARTs, there seemed nothing much to write home about in terms of designs that used average units in basic enclosures, but something about them made them very rewarding to listen to. The *Signatures* seemed to manage a similar trick: an element of coherence somehow bypasses traditional hi-fi values, so you end up enjoying what you are listening to rather than questioning it. The highlight for me was using them with some more interesting valve amplifiers: a Leak *Stereo 20*, for example, worked brilliantly with the ARTs, rekindling

a degree of intimacy that had been missing from my system for some time. While unlikely to blow out any windows with the seismic reproduction of dance music, the sense of being closer to performers with small-scale string works or simply recorded vocals was highly engaging. Imaging and soundstage reproduction were pretty good on the whole, and while they didn't do the full holographic thing, they showed an uncanny knack in presenting a sense of scale that was wholly commensurate with the type of music being played, which again helped make performances that much more believable.

### Lab Report

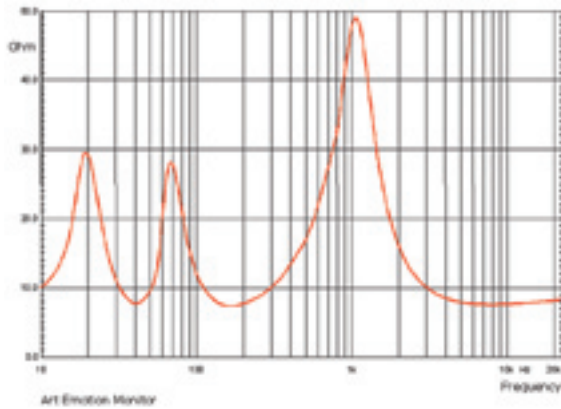
Pair matching was excellent, indicating the tight manufacturing tolerances expected from an expensive, quality design such as this. The impedance curve shows a very easy-to-drive load, with a minimum of 7.4 ohms at 170Hz (*ie* nominal 10 ohms overall). The sensitivity measured 87dB/W at 1m, which is a little less than that claimed, but should still be able to combine convincingly and provide respectable sound levels with the vast majority of amplifiers, including valve types. ART suggests a minimum compatible power of 8W, but with so little power a pair will deliver only around 92dB in room.



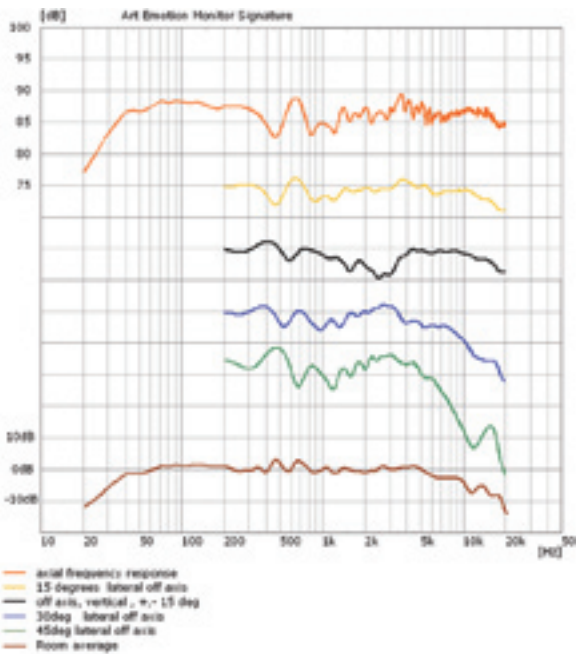
### TEST RESULTS and SPECIFICATIONS Art Emotion Signature

Axial Frequency Response	30Hz-20kHz	+/-2dB
Off axis responses	Vertical axis good	Lateral axis very good
Impedance	7.4 ohm minimum at 170Hz	Average 10 ohms
Amplifier load rating	Reactive	Very Good
Sensitivity, 8 ohms watt at 1m	87dB/W	Average
Bass Extension (-6dB)	28Hz (-6dB)	Very Good
Maximum in-room loudness	105dB	Good
Energy storage		Very good
Estimated power Handling	250 W	Very good
Compatible amplifier rating	Maximum 200W	Minimum 25 W
Tweeter Diameter	29mm	
Bass/Mid diameter	180mm	Voice coil 39mm
Loading	Single port	Bass reflex
Internal Volume	50 litres	
Weight	32kg	
Engineering and build quality		Very Good
Size (WxHxD)	26.5 x 96 x 27 cms	
Price (pair)	£7,000 inc integral stands	
Contacts	www.loudspeaker-art.com	
UK Distributor	ART Loudspeakers Ltd	01292 319416

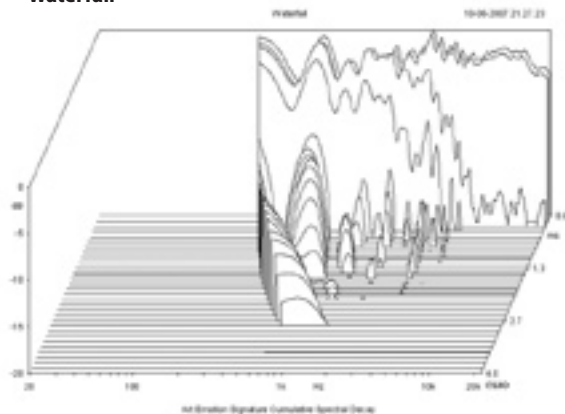
**Impedance**



**Frequency Response**



**Waterfall**



I was impressed with the flatness of the frequency response extending up to 20kHz, and this met ART's specification of +/-2dB above 50Hz. ART claims that the bass response extends to 35Hz within the +/-2dB limits, while our measurements show linear bass down to 40Hz. Some on-axis midrange unevenness is also visible, which could be a reflection from the inside back of the enclosure.

The relatively simple crossover was well integrated which is clearly shown by the 1/3-octave weighted off-axis responses. A moderate notch started to appear at the crossover point when measured at 15 degrees below and above axis, but in all this is a very good result.

Feeding power into the bass is always instructive to test the behaviour of the driver and cabinet, and the combination handled this assault without objection, producing no sign of doubling or noticeable port chuffing if kept within the limits of the bass driver. It must be remembered that this is a relatively small bass/mid driver which can't be expected to produce thunderous high level bass: it's equalized to go quite deep (below 30Hz), but should not be asked to deliver high levels at these frequencies.

At the other end of the frequency range the 29mm tweeter with its neodymium magnet system proved very well behaved, its sensitivity matched using high-grade metal film Caddock power resistors. The waterfall result in the mid and treble was very good, showing rapid early decay that should result in perceived fast transient response. Technically, this is a carefully engineered loudspeaker with a good set of measured results.

**Conclusions**

While there is nothing to get wildly excited about in strict hi-fi terms, the *Signature* proved very satisfying in other ways. I like full range loudspeakers, which the ART is not. I like to occasionally wind the volume up and scare the hell out of myself; I would have an expensive bill for replacement drive units. But the *Signature* is both beguiling and seductive – do you really need to turn the volume up? Such is their engaging nature, you do not have to generate excitement artificially. If it's there in the recording you will hear it. Is it enough? The reasonable sensitivity coupled with a very easy load offers a relatively unrestricted choice of partnering amplification, and for once, I can imagine that single-ended triode amps might prove an interesting match. Personally, I would start looking for a modern equivalent to the Leak *Stereo 20* and go from there.

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Because HIFICRITIC will be entirely funded by its readers, the subscription cost will necessarily be higher than magazines subsidised by advertising revenue. But we'll keep this as low as possible, by operating entirely with freelancers (and choosing the very best of these), and by concentrating our resources on the researching and writing. Our independence from product advertising will allow us to criticise and comment without fear or favour. Our intention is to scrutinise internationally important equipment in depth and detail, technically and subjectively, and to provide comprehensive investigations into the key issues and developments that are facing hi-fi today.

Paul Messenger, Editor

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Back in 2003 I encountered a company with the unlikely name of Vertex AQ, which has developed a broad range of accessory components – cables, platforms etc – designed to control and absorb mechanical vibrations that occur in and around the hi-fi system. Two things impressed me about this kit: first, it was designed to operate in a distributed way throughout the system; secondly, it actually seemed to work as advertised, in a sector which is plagued by myth and magic.

The company is led by Steve Elford, who was originally inspired by working with ultrasonic testing in the aerospace industry, and the realisation that mechanical vibrations travelled through metals (including cables) far further than was generally appreciated. From a beginning in 1999, it has grown slowly and organically, but the word is spreading, as is the dealer base, while Vertex itself is steadily refining and expanding its range. Because of the way the elements are distributed throughout the system, it's hard to know where to start, but the most popular components are the *Kinabalu* platforms and *Jaya* mains shunt filters, both of which have been recently upgraded.

I'm reluctant to endorse mains treatments because of their unpredictability, but the *Jaya* did seem to lower background hash under my conditions, and the *Silver Jaya* did so more obviously, without seeming to interfere with the music signal.

I'm more confident about the *Kinabalu*, a granite support platform for any individual component that sits, via squishy rubber feet, on any convenient shelf or surface. The component itself is placed two rubber-tipped cones and a single hardened-steel tripod spike (the same height as the cones). The idea is that the granite acts as a 'sink', absorbing vibration from the component via the tripod spike.

I didn't expect it would work, since the Naim CD player I was using had independent internal spring-decoupled circuit board and transport. I was therefore rather shocked to hear a clear and obvious improvement, with greater clarity and freedom from 'grain' and low level 'hash'. Since that original encounter I've learned how to spell the name of the tallest mountain on Borneo, the *Kinabalu* has undergone three major upgrades, and each step has offered further and clearly audible improvements along similar lines to the original. The ultimate '*Hi-Res*' package is remarkably free from the sort of amusical artefacts that still somehow conspire to make CD sound more artificial than vinyl.

The kit isn't cheap. The basic *Kinabalu* platform with least costly component supports now costs from £327.50, while the complete top-of-the-line *Hi-Res Kinabalu* is a much more substantial £927.50. But in the context of my upmarket reference CD player (*CDS3/555PS*) it's a very obvious and worthwhile upgrade, and I've also had positive results putting pre-amps and turntables on *Kinabalus*.

Besides mains shunts and platforms, Vertex AQ also does mains leads, interconnects and speaker cables, all of which have chunky little metal boxes somewhere along their length to prevent mechanical vibrations from being passed between components. The conductors run continuously through the boxes, which merely act as vibration absorbers. My particular favourite is the DIN-to-DIN lead I use between CD player and pre-amp.

We know very little about the effects of low level mechanical vibrations in hi-fi systems, but I suspect this could well become an issue in time, especially as Vertex AQ isn't the only company taking it seriously. A year ago Naim introduced a quite elaborate *Hi-Line* interconnect, alongside its new 'flagship' *CD555* CD player. It didn't use absorber boxes along its length, but it did feature complex new multi-part DIN plugs with decoupled pins, expressly designed to reduce mechanical interaction between player and pre-amp. I daresay it won't be long before the accessory guys realise that a new game is afoot.