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HIFI REVIEWS

Atmo Sfera Platterless Turntable

Elipson Omega 100 RIAA BT

Turntable

Stemfoort SF-200 Passive Line

Amplifier

Onix DNA-50 Amplifier

Lab 12 Pe 1 Valve Preamplifier

Rupert Neve RNHP Headphone Amp

Trafomatic Audio Head 2 Headphone

Amp

ExaSound e32 DAC

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Audio Vector QR1 Loudspeakers

Tannoy Revolution XT6 Loudspeakers

Ziro Audio Disclosure Power Cord

Ghostwire "Silver Heart"

Loudspeaker Cable

Townshend Audio Engineering

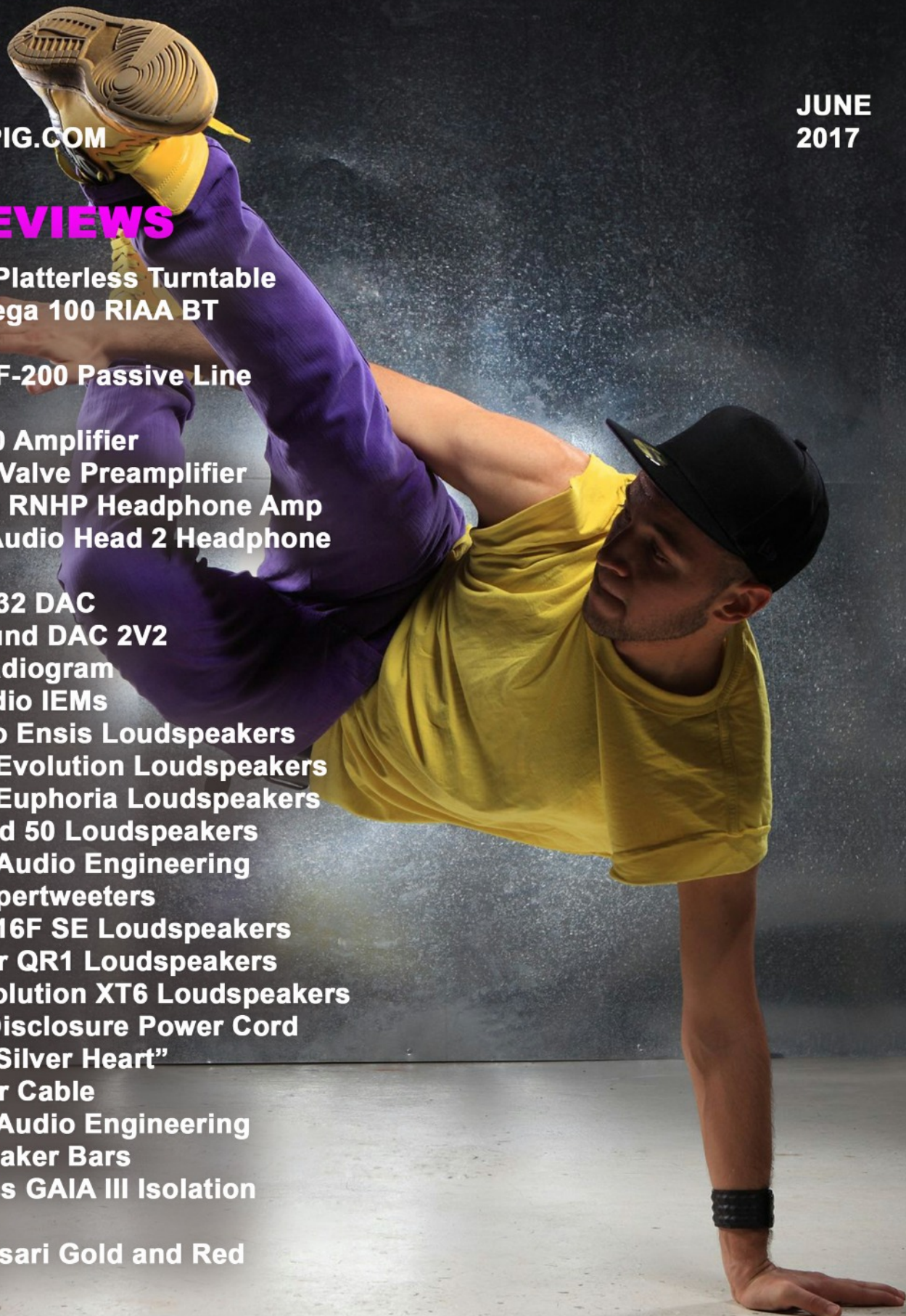
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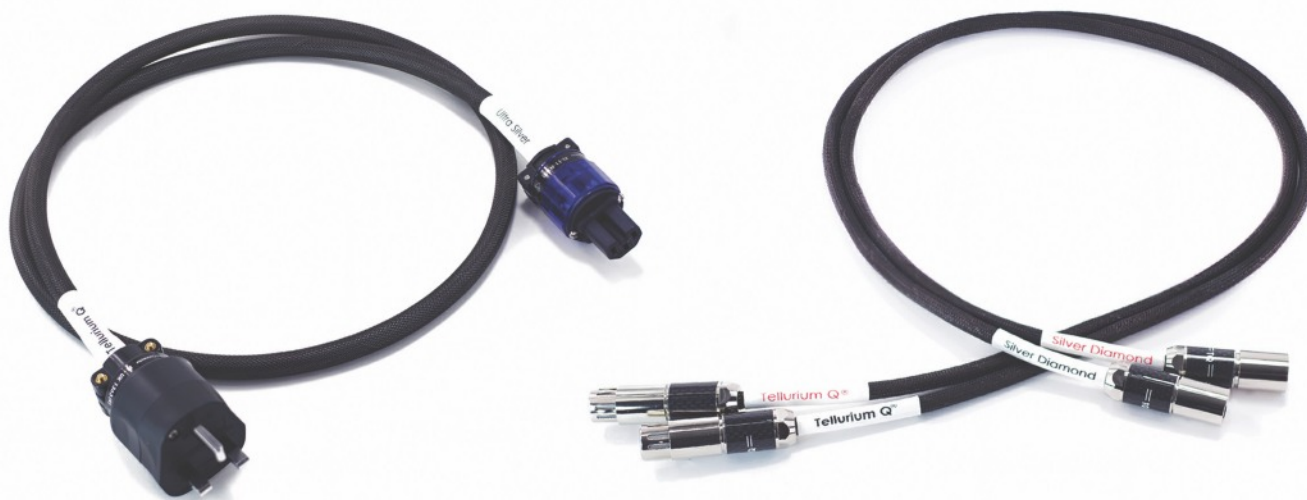


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In this edition of Hifi Pig you'll find a whole host of reviews carried over the last couple of months. The magazine took a small break in the late spring and early summer to allow us to get some new systems in place, both online and with the e-magazine, but going forward readers can expect a much more responsive and speedy website due to us moving the whole site to new and better servers and some other cosmetic changes that will improve the viewing experience. You'll still be able to enjoy all the great content you have always had with Hifi Pig but expect more of everything including more news, more reviews, a better and more comprehensive music section plus we've launched Hifi Pig Television on our YouTube channel, so expect to see more video coverage of shows and video reviews too.

We're constantly looking for ways to improve Hifi Pig and always happy to get feedback from readers to please don't hesitate to get in touch with us.

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Atmo Sfera Platterless Turntable High End Edition

By Ian Ringstead

The Atmo Sfera Platterless turntable certainly raised a few eyebrows on social media when we announced we would be reviewing it, it's just like nothing else out there! Ian Ringstead checks out this Italian oddity costing £3500 including arm and cartridge.



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I first heard about this unique design when I saw the press release for it on Hifi Pigs news pages (dated 31st March 2016). The date is significant because as the following day was the first of April, I immediately thought it was an April fool's day wind up. This is not a criticism of the design but my reaction to such a radically different looking turntable and approach to achieve high end sound. On first seeing the turntable I thought what on earth was the designer Paolo Caviglia thinking of when he came up with the concept? To look at, it reminded me of a tower crane (which represents the arm and cartridge) next to a domed building such as the Sistine Chapel in Rome. The model I received for review was in a fetching gold and black finish with an Ortofon Quintet Bronze moving coil cartridge. The Atmo Sfera has been funded by a Kickstarter project (95 backers pledged €61,509 to help bring this project to life).

Putting Things Into Context.

Having attended The Munich High End Show last year I was amazed by the plethora of extraordinary turntable designs on show and the incredible prices of some which were gargantuan in size and price (£100,000 plus). Now I have seen many designs of turntables over the last 45 years and some have been truly incredible to look at and listen to. Ira Gale's Perspex turntable from the seventies was a sight to behold and then the amazing Oracle Delphi, which I had the pleasure of selling and setting up for a customer in the eighties with a Fidelity Research FR-64S tone arm and Koetsu Black moving coil cartridge. (Nice !!!!) Oracle burst on the scene in 1979 with the Delphi turntable, and to many, set a new benchmark for analogue playback. The Oracle also blazed a new trail for turntable aesthetics; its open suspended chassis and clear acrylic plinth dramatically contrasted with those of the then-voguish British turntables. The audio magazines loved it. After forking out £2,000 and adding a tonearm, many listeners (including yours truly) found themselves in analogue bliss. However, back

then, £2,000 represented a lot of money to spend on a turntable; my first house was only worth £15,000 in 1982.

The Design Philosophy.

Atmo sfera literally means steam and sphere. The idea behind the name is therefore an analogy of the design where the cup and clamp form the sphere and the steam is the air supporting the record. Modern design and materials allow the designer to think out of the box far more than they ever imagined they could a couple of decades or so ago. To revolutionize the classic turntable design with all its drawbacks, such as heavy weight, size, playing mechanism and vulnerability to vibration and to achieve the highest sound quality, Audio Deva, the company behind the Atmo Sfera concentrated on only the key components, using high-quality materials.

The result is an engineering masterpiece producing playback audio quality, that Audio Deva feels surpasses even the most sought after turntables. In the Atmo Sfera turntable there are no gimmicky accessories, it is solely focused on music-making components.

The Atmo Sfera Turntable is designed primarily for being a beautiful piece of design and is fully designed around a small circle (the design originator), with the diameter of an LP label. This gives to Atmo Sfera a shape directly related to its function. Audio Deva didn't create a platterless turntable for the sake of the platterless design, but the creation of the platterless design was a side effect of creating a beautiful turntable. The Atmo Sfera shape is not, however, primarily dictated by the designer's taste, but it is ruled by the technical and sonic features they had in mind.

"The first design rule of a mechanical or electrical engineer should be: if it is made of an elastic material, it stores energy...

...and the second rule is: if it stores energy, it releases such energy, sooner or later." Say

The arm is another interesting part of the design which is different to any other arm I have seen or used

the company, continuing "The uncontrolled energy, stored and released, causes distortion of the sound, in an average turntable. Mass is one way to try and control the sound in a turntable, but the concept of (huge) mass in a turntable is completely meaningless, unless you consider also how this mass is distributed. Damping is another method, but damping actually means spreading the stored energy of the physical body all around the audio spectrum, with bad results".

So, how is the Atmo Sfera different: Every man-made turntable has an elastic behaviour, so Audio Deva chose to put all "resonances" (the effects of the energy release) in a part of the audio band in which they cannot be very harmful.

First thing first: they chose to make the entire Atmo Sfera body in Anticorodal aluminium; aluminium is stiff and has a pretty isotropic structure; the behaviour of the aluminium is fully predictable. Second, but a very important, issue: the shape of the turntable base and of the LP disc support are designed to show a series of natural vibration modes far away from the audio band or from the vinyl resonances.

Take, for example, the small reverse cup that holds the vinyl record: the cup and the record screw down clamp form a hemisphere, that is a solid with controlled and predictable vibration modes. Audio Deva fix the turntable motor directly to the base, without the use of damping material.

Next step for a turntable design: how to guarantee a rotation free of wow and flutter, especially with a low mass platter which can't rely on inertia. Audio Deva say the secret is simple: "Imagine you have two different drive belts for your turntable: the first made of rectified silicone rubber, like those used in many British turntables, the second belt made by a rubber band used for closing small packets. Should an audiophile choose one of them for his turntable, he will undoubtedly choose the rectified silicone rubber belt without any doubt". Paolo Caviglia, instead, chose the rubber band,

because it helped him get the results he was after.

Audio Deva really tested the rectified silicone etc. against a rubber band and the rubber band performed better in their design, from a point of view of wow and flutter ratio.

The arm is another interesting part of the design which is different to any other arm I have seen or used. Audio Deva are very serious about this design and are keen to make use of the turntable and arm as simple as possible. This means the arm generally comes set up for use by the dealer and is a plug and play design where all the end user has to do is plug it into their system, place a record on the mini platter, screw the clamp down and place the stylus on the record. The arm has no obvious means for adjustments (as this is done by the dealer after the relevant training) and Audio Deva don't supply any instructions for the customer to try it themselves. I asked Duncan Saul of Intimate Audio, the UK importer why this was the case? He replied that Audio Deva felt that the customer shouldn't have to worry about set up as most customers expect or are happy to let their dealer do this for them. As a very experienced turntable installer I would have liked to have been able to experiment myself, but I respect Audio Deva's approach as they want to take all the hard work out of the equation for the customer, who should just enjoy the end results. One of the first things I observed about the arm is that there is no cueing device or obvious arm rest. Instead the user must manually place the stylus on the record and take it off at the end. So, steady hands are an absolute must. The arm is cleverly held in the rest position by a magnet built into a second pillar behind the main arm pillar that holds the arm securely. At first this seems strange, but with use I soon got the hang of it.

The record clamp which is a critical part of the decks design and function is beautifully engineered and screws down on to the record via the threaded centre spindle. This isn't a new idea of course, but it was at this



ATMO SFERA PLATTERLESS TURNTABLE HIGH END EDITION

point that I got frustrated because the finger hold on the clamp is very smooth with just two small grooves cut into its vertical surface for grip. Now I haven't got large fingers by any means but I found gripping and screwing the clamp on or off quite a fiddly process and once off I had to be careful not to drop the clamp. I spoke to Duncan about this issue and he came up with a solution by sending me a couple of rubber O-rings that fitted very snugly into the grooves on the clamp and made gripping and using it far more practical. I applaud beautiful design but it needs to be practical. Look at some of the beautiful pieces of furniture out there such as chairs. It's no good them looking superb if they are terribly uncomfortable to sit in or get out of.

The turntable is actually very compact in size due to the lack of the usual 12"/30cm platter and the plinth supporting the motor, record cup and arm sits on three inverted metal cups with rubber feet that are sprung. The bearing spindle shaft is made from Ergal aka alloy 7075 which has been the standard workhorse 7XXX series alloy within the aerospace industry since 1943.

The power supply is kept separately away from the turntable in either a neat highly machined metal elliptical case or the cheaper plastic box which I had. Connection is made by an RJ45 Ethernet cable. Speed change is on one rocker switch and power on another switch. There is also a power switch on the turntable plinth under the arm assembly.

Connection to the amplifier or phono stage is by a separate RCA cable of good quality and length, with a separate fixed earth cable that is terminated with a spade connector. This does mean if you want to experiment with different arm leads you can. I tried my Way silver interconnects and had good results. That's the theory and design quirks. Does it work?

The Sound

Everyone I spoke to or who saw the turntable in the flesh said how can it work and it wouldn't have any bass due to such a small platter and no support for the record. Well how wrong they were!! I was as sceptical as anyone, but as a reviewer I need to be open minded. You must admire the lateral thinking that has gone into this turntable. Duncan Saul of Intimate Audio (The UK Distributor) was so impressed by Audio Deva's passion and the care and attention they take, that when he went for a factory visit in Italy, he was convinced to import the turntable and distribute it here. Of course, the sound had to be exceptional and Duncan loved what he

heard. A light, airy, tight and fast sound is how Duncan summed up the Atmo Sfera. Once you acclimatise yourself to the presentation it's rather good. The Ortofon Quintet Bronze supplied (and recommended by Duncan and Audio Deva) is similar in sound to my Quintet Black, so within reason I could compare the Atmo Sfera against my Project Extension 9, which is about half the price, to see how it fared. The first record I tried was an old favourite, Peter Gabriel's fourth album. "Shock the Monkey" and "Lay Your Hands On Me" are classic tracks which are both superb musically and have great dynamics. Both turntables turned in a very creditable performance with clear well defined bass and great dynamics on the drums in both tracks. The difference between the turntables wasn't big considering the price gap. The Project 9 had slightly deeper bass and more slam with a seemingly better extended treble, but the Atmo Sfera was still very clear with well-defined bass, an open midrange and a duller treble. Now these are my observations and I would say the Atmo Sfera has a light and airy sound with good pace, therefore some may perceive this as duller. Whether it's because it's controlling the top end better and being less coloured I can't say. Bearing in mind that the two Ortofon cartridges are different and the top end of the Quintet Black is better, without being able to swap cartridges over, (which wasn't possible as mentioned earlier) then I suspect both turntables were showing the capabilities of the cartridges faithfully. I know Audio Deva has experimented with many cartridge combinations and they like what the Quintet Bronze does partnered with their turntable.

After the comparison, I concentrated on the Italian job (pun intended) and tried a wide range of music with London Grammar's double album (45rpm) "If You Wait" and the opening track "Hey Now". I know this album is an overplayed show favourite due to its excellent recording quality and superb songs, but I really like it and make no excuses for playing it. The haunting lyrics and voice of Hannah Reid really shone and when the bass kicked in I had a big smile on my face. This album was recorded and mixed at several studios, but it really works well as modern digital technology allows artists and engineers to be on different sides of the world and still put a great album together.

I spent a couple of months getting to know the Atmo Sfera and it is not without its quirks. Due to the low mass and inertia of the cup and motor torque the record will start up very quickly and reach speed within a revolution, whereas my Project takes a few revolutions

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due to the platter mass. When you try to clean a record with a carbon fibre brush as the record rotates the record will stop rotating unless the pressure of the brush is very light. Also, because there is no platter you can see the record with all its imperfections bobbing up and down as it rotates. No record is perfectly flat as I discovered years ago, and the Atmo Sfera clearly points this out. I must point out that apart from looking peculiar it has no effect on the sound or performance of the arm and cartridge. In fact, I believe the arms clever design aids the tracking ability because the cartridge is mounted below the bearing housing rather than being in line with it when you look at it sideways on. Apparently, Duncan said when he visited the Audio Deva they played a record that looked like a force ten gale at sea as the arm moved up and down so much but still managed to play the record successfully.

If you get over the idiosyncrasies of this design and let's be honest most high end designs have them (look at Ferrari cars; beautiful to look at and drive brilliantly on the right roads, but are not practical around urban areas in busy traffic or taking the kids and wife shopping, you get my drift), then it offers a radical alternative to other turntable designs. It's neat and compact, easy to use and requires very little set up.

I admire Audio Deva's belief in this product and taking a very brave step in designing and manufacturing something out of the ordinary. The turntable comes in a variety of finishes – base colour black, silver or orange. Accent colour silver or gold.

Build Quality: Excellent precision engineering beautifully finished

Sound Quality: Very good with a light, airy, tight and fast rhythm that is easy on the ear

Value for Money: Relatively expensive against its rivals but there is nothing like this in the marketplace currently

Pros:

Fit and finish are excellent and generally easy to use with virtually no set up required. Very compact footprint and easy to transport.

Cons:

The lack of a cueing lever makes putting the arm on and off a delicate matter that some may find tricky. Personally, I urge Audio Deva to rethink having a cueing lever as not having one may put people off. Its looks will polarise opinions, like Marmite you'll either love it or hate it.

Price:

Atmo Sfera 'Hi-End Edition' Turntable (including matching, machined aluminium controller). – £3100.00.

Ortofon Quintet Bronze (fitted) – £400.00

Atmo Sfera 'Hi-End Edition' Turntable (plastic controller as per the review example) – £2700.00.

Ortofon Quintet Bronze (fitted) – £400.00

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AT A GLANCE

Ian Ringstead



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Elipson Omega 100 RIAA BT Turntable

By Janine Elliot

The vinyl revival refuses to slow and as such more and more turntables are coming to market at the budget end of the spectrum and with more features that will appeal to a younger audience. The Elipson Omega 100 RIAA BT costing a penny shy of £500 comes with a built in phonostage, USB out to digitise your records and even aptX Bluetooth for wireless use. Janine Elliot gives it a spin for Hifi Pig.

ELIPSON OMEGA 100 RIAA BT TURNTABLE



Elipson are a unique French company founded in 1938 and well known for their distinctive loudspeakers of unusual spherical shape, but their pedigree is more than just what we see at HiFi shows. Not only have their speakers been used by then French national radio station ORTF since its beginnings in 1949 but their loudspeakers were also taken up by the French experimental Musique Concrète music research group GRM (Groupe de Recherches Musicales) made famous by important French composers such as Pierre Henry and Pierre Schaeffer. These pioneers of sound experimented with tape recorders and electronic wizardry long before the BBC radiophonic workshop. They needed an array of speakers to create a vast sound-space that were able to perform a trusty portrayal of the complex sounds in their music. Just as the electroacoustic music itself could be described as 'sound sculptures', the unique Elipson products could similarly be labelled, being unique works of art that you will either love or hate; a bit like the music. Founder Joseph Leon tried lots of different shapes of spheres and reflectors predominantly using reinforced plaster, until he could create the best sound, and ever since then the Elipson engineers maintain that the best results for the sound is attained by using spherical shaped boxes, something that has remained an emblem of the brand, and not just with their loudspeakers. The new turntable up for review here is similarly curved at the edges, as well as having a round platter – of course.

Elipson have extended their portfolio to include a gorgeous Sound Tree (multiple suspended speakers), and new areas such as a circular music centre, cables, and now two turntables. The turntables, named the Alpha and Omega look very similar and offer similar features. The cheaper Alpha has a matt black PVC chassis whereas the Omega has a PMMA chassis (polymethyl methacrylate, also known as Perspex or acrylic) available in red, black or white.

Under the solid plinth are the electronics and the unit effectively has 4 feet, with the front two isolating vibrations, though not adjustable so it is necessary to ensure the platform for the turntable is level before using the turntable. Both models come complete with Ortofon OM10 cartridge and whereas the Alpha uses an aluminium version of their OTT (Orbital Tension Tonearm) arm, the Omega arm is made of carbon fibre, a good feature for a turntable at this price point. The basic Omega and Alpha 100 have conventional RCA socketry, version 100 RIAA is equipped with a MM/MC phono preamp so it can be connected direct to a line input of your amplifier, and the 100 RIAA BT has, in addition to the phono-stage, a Bluetooth with aptX transmitter which allows better audio than the basic Bluetooth.

Importantly for many, this model also has a USB output compatible with Mac and Windows allowing you to record your favourite discs at 24bit/192kHz resolution. Where turntables with built in RIAA phono-stage isn't a new idea, several other manufacturers are beginning to add USB and Bluetooth. The Teac TN-400BT also has aptX Bluetooth but only 16bit/48kHz USB output and moving magnet phono-stage, and the Sony PS-HX500 that became big news in 2016 has DSD 5.6MHz as native conversion or up to 16bit/192kHz Wav but no Bluetooth.

What singles out the Elipson model as special for me are the excellent dual MC/MM phono-stage, the good S/N ratio, and that it decodes as 24/192 wav files. It does require you to have a system of editing on your pc, which is fiddly, but worth doing if you want your vinyl 'on the move' at a later date. Nothing is done automatically, as in the Convert Technologies Plato, which I reviewed last year. You will need to edit the start and end of each track manually.

What was particularly exciting and relevant for today's 'look, no wires' hifi audiophile is the fact you can play your records directly to your Bluetooth speaker. This is particularly relevant for the younger generation and

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If convenience of set up without leads is important to you, and you want to copy your vinyl to your DAP, then this turntable is well worth checking out and comes highly recommended for its target audience

particularly students – who are incidentally getting more and more interested in vinyl. The modern look of this turntable – like their speakers – will certainly attract the younger audio fan. This turntable, like their speakers and the music centre, is rounded off at the edges, and its good looks appealed to me; you won't want to hide it on a shelf. The one piece arm might be cheap, and doesn't even come supplied with a cueing system but rather relying on your steady hands to raise and lower the cartridge onto the record, but its design was certainly not an afterthought, and has very low friction. The turntable motor has a DDS digital frequency generator (Direct Digital Synthesis) to keep constant speed and the motor is suspended using rubber mounts so that vibrations don't reach the arm and cartridge. The unit comes complete with a separate power source, so that it can work at any voltage, converting as it does to 12V DC. Although that part was missing for my review (previous reviewer please note) I was able to use one of my many regulated supplies, which gave a very steady direct current enabling this unit to play music with very low wow and flutter. The turntable uses a bronze bearing to ensure perfect centring of the turntable plate and low noise. The built in MC and MM phono-stages similarly give good readings of 78dB and 82dB respectively. The Omega is slightly heavier than the Alpha at 5.8kg, but still is a very light unit. The steel forged platter is just under 11" diameter, reminding me of my first record deck. As a child with a Philips turntable with just a 10" platter I always longed for a 12" one, just as I wished my FM radio aerial extended higher than my school friends FM radio; size mattered in those days. Interestingly the platter is fixed to the spindle and is supplied with it in place, rather than separately stored in the carton for you to assemble. Whilst this platter will 'ring' if tapped the felt matt does stop this affecting the sound, and the PMMA plinth itself is very absorbent of noises and vibrations, unlike many turntables costing significantly more than that. The unit comes with a semi spherical weight (they call it a 'centralizer') to place on the spindle to keep those records flat on the

platter, though it just sits on the top, rather than screwing in, probably to keep the costs down. Anti-skating is altered by turning a track-wheel on the arm pivot/bearing assembly, which makes a nice change from the conventional suspended weight on a nylon thread, though accurate setting-up relies on observing arm movement or using a test record. The turntable cover matches the plinth's curvature nicely, though its hinge is not tensioned, so the cover needs to be fully lifted so that it doesn't fall down. A pity. A tensioned hinge wouldn't have added much to the price, though I shouldn't ever recommend playing turntables with lids on. However, what is good is that the lid is provided in the box rather than an expensive accessory. Speed control is via a 33/45 toggle switch on the top of the unit, which is really a good looking feature, as is the fact that the turntable does not start revolving for a few seconds until the motor is able to go at full speed, to prevent belt slippage and eventual stretching; the motor feeding the flat belt around the edge of the plate. The DDS digital frequency generator maintains a very accurate speed. With speeds for 33 and 45 via the toggle switch, you can even persuade it to play 78rpm, should you have any shellac, by playing the unit at 45 and quickly moving the toggle back to zero and back to 45 again. You then need to repeat this procedure again once you wish to play a 45rpm disc again. The tonearm has a carbon fibre tube for stiffness and a low friction polymer plain bearing with an adjustable counterweight to get the cartridge to the correct tracking force. It should arrive ready to play the OM10, but do check that weight. The arm does not have a measurement engraved on it nor a means of setting to zero force, rather the turntable comes with a paper template for you to measure the distance from the gimbal to the adjustable weight, which is assumed to then be exactly to match the required tracking force for the supplied Ortofon OM10. No, this isn't a good idea, nor very reliable as the template puts it nearer 1.75g. The OM10 is best set at just above 1.5 grams. My trusty cartridge scale to the rescue, then. Once optimum setup was



ELIPSON OMEGA 100 RIAA BT TURNTABLE



attained I could then start to enjoy this threesome of turntable, arm and cartridge. A brand new Elipson 100 will have the cartridge already set up on the arm.

The Music

My listening started with the Schubert 'The Trout Quintet' (Sviatoslav Richter, Borodin Quartet), playing via my Snee/Graham Audio LS5/9 system. The music was so open and relaxed and very much in control, it was surprisingly good, and although bass and top end could have been better, and minute detail was somewhat lacking it was a good performance from everything, especially the musicians. It just lacked dynamics and detail that I would expect in a more expensive turntable and cartridge. Moving to the ELO 'Out of The Blue' re-pressing of this iconic album from my youth, it brought back memories of my attempting homework whilst pumping music loudly through my VMS20E/Trio KD1033/Sansui AU-D33/Audiomaster Image 2 set up. Just as then the deepest bass wasn't as clear as I had hoped, and this new turntable lacked real detail that I needed to extrapolate from the music; I must be fair though, the OM10 is not the best cartridge out there for musicality, though its stereo detail and positioning of instruments was very clear and unwavering, showing that the arm is indeed better than its simplistic set-up and materials might otherwise suggest. This turntable was perhaps really crying out for a cartridge such as the Ortofon 2M Red, and with its selectable MC phono-stage, perhaps something even more exotic. The phono-stage had a flat response and excellent noise level. The lack of bass detail meant the deep spoken vocal ident in 'Believe Me Now' didn't have the depth that I have got accustomed to hearing, though the lowest notes from the piano in Rachmaninov Piano Concerto No 2 (Julius Katchen, LSO Sir Georg Solti) was very able and full. For the wallet-shy audiophile this was however still a reasonable performer. What really makes this turntable really worth the money, though, are the additional features offered.

Turning therefore to the Bluetooth facility, this is limited as one would expect to a 10m line of sight distance to your enabled speaker(s). Pairing is easy with a button at the back of the turntable, and will, by virtue of the format, limit audio quality, though I did find it adequate particularly with the aptX transmitter which is an improvement over the basic wi-fi standard. Of course audio interruptions will happen if other wi-fi signals are in the vicinity or if the Bluetooth device performs other activities (eg internet). When the record is switched off at the end of a "side" the wi-fi connection will continue for another 2 minutes of inaction before disconnecting. Not only did I try it with my miniature Bluetooth speakers but also with my Optoma BE6i aptX IEMs, which I have to say was extremely fun; wearing earphones and moving around the room whilst listening to music from a turntable. Quality was surprisingly musical and full frequency, making performances of Mozart, Pink Floyd and London Grammar highly enjoyable. This turntable would therefore be ideal for those fed up with wires trailing across the room to their speakers or who just like listening on IEMs/headphones, particularly students or those with limited space, or those simply wanting to enjoy the latest technologies. The range will suit every need and pocket; where the basic Omega 100 comes in at a penny short of £350, you can add £80 to the price for the 100 RIAA with its internal MC/MM phono-stage and a further £70 to also including the BT function making a grand total of £499.99. Not only can I play to my Bluetooth enabled devices but I also have the USB function, meaning I can copy my vinyl onto my computer. I was able to use Cubase to record 24/192 copies of my albums, though there are a number of free audio recording programs out there. I was disappointed that there aren't any suggestions on either the instruction booklet or their website to offer help on finding a suitable program, nor do they have their own basic audio program to download (Sony supply one with their PS-HX500) and nor do they even supply a USB lead. But, this is a

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perhaps
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exotic

ELIPSON OMEGA 100 RIAA BT TURNTABLE

The detail extracted from your record won't be as good as is possible from the best 'basic' £500 turntables, but then this is deck has so much more

good looking and able machine with rather a lot of facilities for the price.

Conclusion

As a basic turntable at £349 this is certainly a reasonable product, offering good sound quality, and to some perhaps looking more fun and modern than Rega/Pro-Ject equivalents. The Carbon arm is certainly a good feature, but whilst the lid is rather cute it lacks a damped hinge. Once you add the RIAA stage and the BT/USB features then this turntable begins to shine. For an 'all singing all dancing' affair complete with a reasonable starter cartridge this is a good product. I just wished it came complete with audio software and USB lead. Being able to play 24/192 digital files is very attractive, and the sound quality and reasonable noise floor from the motor makes this a very well-priced package. OK, the detail extracted from your record won't be as good as is possible from the best 'basic' £500 turntables, but then this is deck has so much more. If convenience of set up without leads is important to you, and you want to copy your vinyl to your DAP, then this turntable is well worth checking out and comes highly recommended for its target audience.

AT A GLANCE

Build Quality: Modern looks and ease of setting up. Solid PMMA plinth with electronics underneath. Carbon arm tube is a good feature

Sound Quality: Very pleasurable and surprisingly musical for the price

Value For Money: At £499.99 for so many features this is an excellent buy for those at the cheaper end of the audio market

Pros:

MC/MM RIAA stage, 24/192 USB, and Bluetooth with aptX
Modern looks and choice of colours
Already set up with basic cartridge

Cons:

No cueing lever
No damped lid hinge
No system for levelling

Price: £499.99

Janine Elliot



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Stemfoort SF-200 Passive Line Amplifier

By Lionel Payne

Stemfoort may not be a name that immediately trips off the tongue when speaking about amplifiers, but the companies heritage goes back to the mid eighties and they are owned by J.E.Sugden, who many will know for their Class A amplifiers. Lionel Payne takes a listen to their SF-200 Passive Line Amplifier costing £2135 for Hifi Pig.

STEMFOORT SF-200 PASSIVE LINE AMPLIFIER



I have to admit that I hadn't heard of Stemfoort Audio before being asked to review this integrated amplifier. Stemfoort began life way back in 1985 in Holland and was a partnership between a recording engineer and a group of enthusiasts and audio designers. J.E.Sugden & Co. acquired the company in 1988 and, interestingly, the original founder still remains an active and valued technical director with Sugden and was the designer of the SF-200's unique circuits.

The SF-200 is a passive line amplifier, often referred to as a straight line amplifier. This means that the basic configuration is a volume pot directly coupled to the power amplifier section, i.e. the preamplifier is passive ensuring the most direct signal path from your source to your loudspeakers. Handmade by a team of dedicated audio enthusiasts, the SF-200 is a wide bandwidth design reaching frequency extremes of 6Hz to 120kHz making it an ideal partner for hi-resolution formats such as 24/192, DSD and SACD amongst others. Power output is listed as a very capable 100 watts per channel and there is plenty of current available providing impressive tone bursts and resulting in greater control of loudspeakers and powerful deep bass when required. My own reference loudspeakers (Impulse H2's) are known to require a good, strong current supply and the SF-200 did a fabulous job in driving them. The robust power supply has quite a unique selling point as the manufacturers claim that the amplifier can remain operational even when faced with a 30% drop in mains voltage. That seems quite a feat to me ! Visually, the SF-200 gives a little hint to its heritage. It has a 10mm thick aluminium faceplate with rounded corners that are identical to the Sugden's portfolio of products. However there is a central line cut

through with a CNC machine to allow the placement of a central dial for input selection, a similar sized dial to the right for volume control and on the far left a smaller push-in on/off button. In between and to the left of the central dial is a small red bulb which lights to indicate power is on. To the right of the central dial is a small sensor for remote control of volume only. This central cut out with curved edges to mirror the two dials and the smaller power button reflect back to earlier Stemfoort designs and , in particular, their LPA-10 which was a popular high powered integrated, dating back to early Sugden ownership. There are substantial heat sinks to both sides of the amplifier but during operation I found the amplifier to be absolutely stable without even a hint of getting warm. To the rear are 3 way gold-plated loudspeaker binding posts, five pairs of single ended line inputs and a tape out which are also all gold-plated. Other than that there is the proprietary IEC socket. It should be noted that there is good distance between all the sockets so even the broadest of interconnects and speaker cables can be utilised.

The SF-200 is visually as impressive on the inside as it is on the outside with military specification wiring to eliminate interference from power supplies, while the custom designed transformer sits within a steel sub assembly to reduce noise and vibration. Quality components have been used in all areas, chosen for performance and reliability; low inductance resistors replace standard components in critical areas of the signal path. Each circuit board is always completely hand-soldered and there is no sign whatsoever of surface mount components that can degrade sound quality.

Sound

Quality components have been used in all areas, chosen for performance and reliability; low inductance resistors replace standard components in critical areas of the signal path

The SF-200 is capable of producing this kind of detail and is the type of amplifier that will have you rediscovering your music collection all over again

I knew the SF-200 had been run-in when it arrived so it was quickly put into action within my reference set up. The first CD placed into my venerable disc spinner, the Acoustic Precision Eikos, was Tracy Chapman's self-titled debut album. I wasn't immediately planning to get into review mode but simply wanting to listen to some good tunes. However, within two or three tracks I had identified what turned out to be this amplifier's strongest attribute. It has a captivating way of portraying the rhythm and timing of a tune that only the very best possess. A slight caveat on that statement would be that the partnering equipment, and in particular, the loudspeakers must be reading from the same hymn sheet. Synergy is definitely the premium element when looking to build a system around this amplifier but if you get the chemistry right you will be rewarded ten-fold. I listened to the amplifier through several pairs of loudspeakers and the results were mixed but never below par with it. Without a doubt, my favourite combinations were with my reference Impulse H2's and the recently reviewed Monitor Audio PL300ii's and further references within this review will be discussing the SF-200 driving these loudspeakers.

Listening to that first Tracy Chapman CD really highlighted a wonderfully taut, transparent midrange with Chapman's intonation really to the fore. One of my favourite bands are New Model Army who date right back to my Indie DJ'ing days of the eighties. They are a band that somehow have missed the bigtime but surely deserved more success than they have attained. They are a difficult band to put into a genre as they could be categorised in punk, post-punk, indie, rock, political, folk and probably a few others besides. I think I have virtually every album they have ever made but I do tend to listen to their live albums more frequently and because I listen to them so often I can more easily identify slight changes in presentation with the hardware being used. Listening to one such album (Between Wine And Blood – CD2 which is a live recording) I was astonished at how tangible their lead singer – Justin Sullivan's voice appeared, I swear I could hear the fact that he has a front tooth missing (he has !) as he got stuck into his performance. The SF-200 is capable of producing this kind of detail and is the type of amplifier that will have you rediscovering your music collection all over again.

I do find a lot of amplifiers that are capable of highlighting these small details like this are often balanced a little bit towards the bright side but I found this SF-200 to be right on the

money in terms of tonal balance. I listen to a lot of rock and acoustic music, particularly live recordings, and the Stemfoort played both extremely well and always gave a view to the size of a venue with an informative soundstage. Perhaps, if I were forced to choose, I would favour its execution of an acoustic set over a rock performance and, although I rarely listen to jazz, I would wager that a jazz aficionado would adore what the SF-200 has to offer.

I also found that the SF-200 was an extremely entertaining listen at low volume but I did find when I pushed the volume up to concert level output the combination with my Impulse H2's did become a little strident. However, this was not the case when I pushed the amplifier to similar sound levels with the Monitor Audio PL300iis.

Conclusion

The Stemfoort SF-200 is a lovely amplifier and one that has a lot of good selling points. It has great tonality and timing and is really well put together. The design is obviously all about creating the best sound quality possible and to this end it does eschew facilities that a lot of modern amplifiers are now including; there is no phono stage, on-board DAC, headphone socket or LED display. It does have a remote control but this is only for volume control and nothing else, making this a fairly utilitarian offering. However, for all its shortcomings in facilities it does what we really buy an amplifier for – it plays music... and it does so with great aplomb.

I really like it !

AT A GLANCE

Build Quality : Impeccable throughout and should last for years

Sound Quality : A mellifluous tonal portrayal with fabulous timing

Value For Money : In a tough price sector but don't dismiss without audition

Pros :
Well built, good soundstage, great tone and fantastic timing

Cons :
Lack of facilities

Price : £ 2135.00

Lionel Payne

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Onix DNA-50 Amplifier

By Dominic Marsh

British brand Onix will be a familiar name to many and has a strong heritage. Here Dominic Marsh puts their DNA-50 amplifier costing £1979 through its paces.

ONIX DNA-50 AMPLIFIER



Right from the
off I was
impressed with
how clean and
crisp this
amplifier
sounded and
that was fresh
out of the box

The brand Onix is a wholly owned British concern that has been around for a good few years now (approximately 35 years no less) and for reasons I still cannot fathom out, they have not really reached into mainstream hifi territory and become well known amongst audiophiles as other brands have become during the same period. Except of course they do have a small loyal band of followers and I shall touch upon this group of people in this review and the influence they have on the current product. Maybe ONIX don't bang their drum loud enough, or they want to maintain the key core values they are not prepared to sacrifice for the sake of vanity, fashion, or following the herd. This review then is about their latest model the DNA-50 integrated amplifier offering, so kindly read on.

Construction

If ever there was a minimalist front panel layout then this is it. A mere 45mm in height, it is claimed to be the thinnest integrated amplifier on the market, so without scouring the entire world's supply of integrated amplifiers to check that assertion, it remains unchallenged by me. Two sizeable rotary controls dealing with volume control and source selection only, so beyond that there is nothing else to excite the knob twiddlers or button pressers, then there a series of six multi coloured miniature LEDs arranged horizontally to denote which source has been selected, then zilch, nothing, nada, to play with or look at. Well not strictly true, because the ONIX logo has been milled into the bottom right hand corner of the faceplate. You can watch a video of the faceplate being manufactured on the ONIX DNA website. Around the back it's equally as complex, with six pairs of RCA line level sockets, 2 output RCA sockets, a set of four BFA type speaker terminals, an earth tag, an IEC power inlet and an on/off power switch. The input sockets are labelled "O, G, W, R, Y, B" and I thought at first glance I thought I had a drop too much home brew the night before, until I realised that sequence corresponds with the different miniature coloured LEDs on the front panel and it doesn't need a genius to realise the letters are the first letters of the coloured LEDs of course (Blue, Green,

Yellow, etc.), but to save confusion and befuddling nitwits like me, ONIX have labelled them inputs 1 to 6 below the sockets. The left hand OUTPUT socket can be used to feed a separate power amplifier and the right hand OUTPUT socket pair has another function which is to allow use of the amplifier with the last chosen input to remain active while in standby, enabling a selected source input fed into the amp having an output while it is in standby, to something like a multi-room installation while the main sound/entertainment system is not active. If your speaker cables are fitted with spade connectors or they are bare wire ended, then you need a different set of speaker cables (or connectors) to fit the DNA-50 as these BFA terminals accept neither one of those. As a handy tip, "Z" banana plugs fit if you don't have BFA plugs available.

The amplifier's chassis is a good strong rigid affair made from aluminium and a nice touch is the recessed stainless steel screws which won't rust or distort the first time you need to take the lid off (not that you would). Talking of chassis and lids, note there are no ventilation holes or slots in same, as the chassis itself also performs the role of heat sink for the electronics within. It works very well too, as after 3 hours of solid listening the lid isn't even warm to the touch.



ONIX DNA-50 AMPLIFIER



From the lowest bass to the highest treble everything is evenly balanced, so while you are listening no part of the sound spectrum dominates and that is a GOOD THING in my book

Finally, you get a very well made metal remote control unit, again fashioned in minimalist style with only three buttons to play with. One is underlined with three dots for source selection which also doubles up as the standby button. A quick press on this button advances the source sequentially from left to right, or pressing and holding for four seconds sets the amplifier into standby mode, with a quick press to bring it out of standby with the last selected source stored. Below that button are two others for up/down volume selection setting.

Well, for a minimalist amplifier design that took some explaining I must say. I am informed there will be a phono stage and a DAC in the pipeline as extra cost options.

Sound Quality

BANG! Right from the off I was impressed with how clean and crisp this amplifier sounded and that was fresh out of the box. ONIX informed me it had been soak tested but not fully run in yet, so I carried on listening regardless to that and if there was any improvement in sound quality, it was not noticeably manifested during the evaluation. This is a good old fashioned Class AB amplifier with a lot of experience behind the design and for good measure, someone with a very good listening ear has honed it into a

pure music making machine without any gimmicks. From the lowest bass to the highest treble everything is evenly balanced, so while you are listening no part of the sound spectrum dominates and that is a GOOD THING in my book. At the same time its presentation is effortless so you can forget the specifications as almost irrelevant and it takes complex music into it's stride with absolute ease.

However, (he's softening us up for something I sense you thinking) there is one thing I ought to draw your attention to before I go any further. The motorised volume control has a very narrow usable range starting from 7 o'clock (fully off) to only 10 o'clock after which it is rather loud, so by the 11 o'clock position it is getting a bit raucous. ONIX explained this to me by saying a good number of their existing customers have legacy and vintage products which produce around 750mV outputs rather than the standardised 2 volt outputs we have become accustomed to these days, so that lower input voltage is reflected in the volume control having a wider operating window range when used with these units. Now that makes sense to me, but setting the volume I was happy with using the remote control was a series of up/down jerky steps until I found the exact level I wanted. I found it easier to walk across and manually set it with the volume knob but even that required a

ONIX DNA-50 AMPLIFIER

deftness of touch at times. If that is my one and only gripe with the ONIX DNA-50, then put this comment into context with the remainder of the review.

The DNA-50 performed faultlessly with my resident speakers and also a number of other speakers that were submitted for review purposes and it handled them all equally well. Bass in particular was very deep and very well controlled with not the slightest hint of bloom or overhang. Dynamics as fast, lithe and crisp as you could wish for and when the going got tough with some really complex music the DNA-50 was almost saying to you "Is that the best you can do to wrong foot me? Ha!" The DNA-50 amplifier has a real solidity and assuredness that you don't even bother to seek out its purported strengths or weaknesses, you simply sit back, relax, spin your favourite tunes and be comprehensively drawn right in by the clarity, power and emotion of the music. In other words, you really are not listening to the ONIX DNA-50 at all per se.

At this point in the review I would generally try and relate those statements to some music I put through this amplifier during the evaluation, but on this occasion I am going to refrain from doing that, so instead I will summarise this amplifier's traits for you. Treble is crisp and sweet, free from sting, splashiness, or tizz. It picks up ambience and reverberation cues with complete unflinching accuracy. I was impressed by the way it made drum cymbals very real and tangible, so you were left in no doubt it was wood striking metal. And there was a moment or two of "not heard that before" from many very familiar recordings. Midrange was also free from any colouration, haze or chestiness. Female vocals were a delight especially.

Bass was strong, articulate and powerful, as well as communicative. Kick drum had the gut thumping power I adore. Bass guitar in particular had a real growl to it rather than just low bass notes and each pluck stood out

as a separate entity. I'm sure some of you out there know exactly what I mean by that.

Conclusion

As you have probably gathered by now from reading this review is that the ONIX DNA-50 is all about the music, nothing more and nothing less. It has no embellishments, no bling, no gimmicks, no tricks up it's sleeves, it does not masquerade as something it isn't, it is simply well designed, well built and it's true forte is beguiling you entirely with the way it plays music. I'm going to add a rider to that, because I see so many components described as being "musical" which I interpret as a euphemism for something else; as a poor and entirely subjective way of not being able to categorise a component's characteristics and that is the last thing I could accuse the DNA-50 of and my use of the word "music" is what I say it is.

So I am asking, no pleading, that you to give this amplifier a serious audition. It might captivate you like it did me and I highly recommend it accordingly.

Bass was
strong,
articulate and
powerful, as
well as
communicative

AT A GLANCE

Build Quality: Simple design well executed

Sound Quality: I couldn't quibble at all about the musical abilities of this amplifier

Value For Money: You could pay more than the asking price and this amp still be good value in sound terms

Pros:

Stunning sound quality sufficient enough to silence the one gripe I found

Cons:

Volume control is rather sensitive, more so with the remote control

Price: £1979

Dominic Marsh





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Lab 12 Pre 1 Valve Preamplifier

By Stuart Smith

Lab 12 are based in Greece and that is where they handcraft all their products. Here Stuart Smith takes a listen to their pre 1 valve preamplifier costing €1440 and their knack power cable costing a further €210.

LAB 12 PRE 1 VALVE PREAMPLIFIER



We've been using the Lab 12 gordian power conditioner for a little over a year now and it has been the one bit of kit that has simply been fit and forget; it's set to auto and just gets on with its thing 24/7. So, when Vichos Stratos asked us if we'd like to review the Greek company's unassuming looking valve preamp costing a modest €1440 I jumped at the opportunity.

Internally Lab 12 uses a matched pair of E88CC valves along with a solid state power supply with four separate regulation stages for each channel. pre 1 is fully dual mono and uses the company's trademarked "Fine Symmetry" in every part of the circuit. MKP audio grade capacitors and resistors are used and are selected to be accurate to 0.1%. You can order the pre 1 in matt black or in pearl white, but special orders can be accommodated.

The pre 1 has the same clean and simple lines of the rest of the company's products and I like the way it sits on the rack. The front panel has an input selector, a motorised volume knob (ALPS Blue Velvet), five red LEDs down the left hand side to show which source is selected and in the centre of the panel is an LED showing power is on and a further pair of LEDs to tell you that the left and right channels are working. On start up left and right channel indicators blink slowly until the unit is ready to go and this takes around a minute from start up.

Round the back you have two sets of outputs (both RCA on this version, but the latest version comes with one RCA and one XLR) and five RCA inputs. Then there is the IEC input and the power switch. Included in the box is a simple Lab 12 branded remote control which can adjust volume, change input and mute the preamp. You can also turn the unit on and off from the remote. The remote is a bit plasticky but is functional and better in build quality than some remotes I've had on kit costing a lot more than this moderately priced pre. The pre 1 comes with a five year warranty which is very reassuring.

Listening

I'm a big believer in putting gear we get for review into a system that is relevant from a

cost perspective and so with this in mind the pre 1 was partnered with a Nord power amp, Leema Xen speakers and a Nova Fidelity player. Cables were from Tellurium Q, Chord and Atlas made up the power cables, other than the power for the pre 1 which was Lab 12s own knack 2. Interestingly I found that the preamplifier performed at its best with their own cable, though I've no idea why this should be ...I have had the same experience with powering the Gordian unit and I would suggest that when considering buying the pre 1 you factor in a further €210 to the buying price.

Lab 12 suggest a burn in period of 200 hours but straight out of the box it is pretty clear that this is a good sounding unit but critical listening was left until the suggested period had lapsed.

Being a valve pre I had expected at least some background noise but this is very quiet indeed (pretty much silent) and proved to be a great match for the Hypex moduled Nord power amp...you can turn the volume up pretty much full whack and there be nothing in the background.

Bowie's Five Years is a good track to start things off with and the opening drums are crisp, dry and correctly placed around the soundstage and there is very good detail throughout the rest of the song. There is the misplaced assumption amongst many that valve amplifiers inherently add warmth to the mix, but with the Lab 12 this is just not the case and words that spring to mind are neutral and dry, though Lab 12 do mention warmth on their website...I'm just not getting that at all with this combo. If you are looking for a pre that does add warmth and bloom then perhaps you should look elsewhere as the pre 1 just doesn't add much of its own character...Lab 12 do use the word analytical in describing the pre 1 and I would go along with this wholeheartedly without suggesting it is hard or cold sounding. Jon Martyn's Solid Air has good weight and speed to the bass and there is plenty of detail coming through the mix. I switch out the pre 1 for our reference pre and whilst there is more space around instruments and a better feeling of texture in the performance we are not comparing like for like price-wise,

You can turn
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background

The pre 1 is fast, with bass stopping and starting where it should and just the right side of analytical without being tiring on the ears

with our preamplifier costing four or five times what the Pre 1 costs.

So, the Pre 1 can do relatively simple acoustic tunes, you know, the kind of thing that gets played at shows to show off a system to its best, but regular readers will know we are techno junkies at Hifi Pig Towers and so I reach for the remix of Juno Reactor's The Golden Sun. This is pretty complex music with lots going on in the mix but the Lab 12 certainly doesn't disappoint. The mix is portrayed very well with sounds coming from the right places in the mix and with mids and particularly tops being very well presented and with lots of space and an etched like quality to the stereo image. Again, switching to the reference you are rewarded with a bigger and more detailed sound but to be honest there is not a great deal in it.

The pre 1 is fast, with bass stopping and starting where it should and, as previously stated is a great match for the Class D amp we partnered it with; just the right side of analytical without being tiring on the ears. We're lucky enough to have a Trafomatic 2A3 amp at our disposal and I'm well aware that there are going to be folk out there who will want a full valve set up for whatever reason and so we team the pre 1 with this and our Avantgarde Duo XD loudspeakers that use active bass. The pre 1 should feel well out of its league sonically but it just doesn't and were I not used to the extra detail and better staging of our reference I could quite happily live with this in the main system. There isn't the absolute level of detail that I'm used to but you are certainly treated to a beautiful performance and getting to the point of splitting hairs to quibble. Neil Young's Old Man has the vocal projected well into the room and with enough feel for the recording for it to be very believable indeed.

Conclusion

The Pre 1 from Lab 12 offers a seriously strong performance that belies its relatively modest price-point. It is not absolutely neutral but offers up a dry, clean and detailed performance that many, including myself, will really enjoy. Micro-details aren't as evident as with our reference but at this

asking price it is hard to quibble with what you are offered sonically.

The unit is very, very quiet and has enough gain to drive the three watts of the Trafomatic 2A3 amp we played with to realistic levels when turned only half way up. The quietness of the Lab 12 pre 1 is a major selling point for me as silences in music are often as important as the music and quieter passages are allowed to flow nicely against this background.

Build quality is good throughout and whilst the looks aren't going to wow those long for glitz and glamour it is a handsome enough beast... in a minimalist kind of way. Bear in mind the all important five year warranty! I have absolutely no hesitation in recommending this product and whilst it is not bargain basement in price, it does punch above its weight sonically.

AT A GLANCE

Sound Quality: Dry and clean performer with low background noise allowing more of the music to come to the fore

Build Quality: Solid build and understated looks

Value For Money: Very good performance for the money and should be on your audition list if looking for a preamplifier in this price range, though you should also factor in the knack power cable which I think is essential. Even then this offers seriously good value

Pros:
Solid sonic performance
Good build
Ample inputs
Included remote

Cons:
Lacks the absolute detail of our reference
Need to factor in the knack cable to the price

Price:

pre 1 – €1440
knack 2 – €210

Stuart Smith



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CHOICE



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Rupert Neve RNHP Headphone Amp

By Janine Elliot

Rupert Neve is a name that will trip of the tongue of anyone who has been interested in or worked in recording studios; put simply he is a giant/demi-god in the industry. Neve has now put his name to a £469 headphone amplifier and who better to put it through its paces than Janine Elliot.

Rupert Neve is a legend, and this modest looking, professional headphone amp was something I just had to listen to



Having spent a quarter of a century listening to various form of Neve mixing desks at the BBC, whether the GP desk produced under licence by them and two other companies (Calrec and Audix), or my favourite the Neve 66, I have got accustomed to the sound produced by this great man. Air Studios in London have three specially made Neve consoles. Legendary Beatles producer and founder of Air Studios, George Martin (1926-2016) was heavily involved with Rupert Neve in the design process of what was a radical new desk at the time. With toroidal wound transformers it was clear that sound quality was the key aim here, as it always should be. As a new BBC sound engineer in the 1980's aiming for the best in sound quality, with Neve desk plus Quad 405 bi-amped into LS5/8 speakers I was near to heaven. Those GP desks, first thought of in 1975, were so well made they lasted well into the 21st Century, maintained and loved by sound and electrical engineers alike. Some parts were taken out and adapted in standalone boxes well after the GP desk saw its (other) celestial maker in the skies; the compressors, limiters, and EQ were just what was needed. Then when Rupert's new Neve 66 desk arrived I was even closer in heaven; an analogue desk with digital routing of channels that had clout and passion and that worked so well and was so easy to use.

To see a Rupert Neve headphone amp at Whittlebury in 2016 for £469 pricked my ears into wanting to relive all that I had wanted to be involved in since my teens; broadcasting, mixing, performing and working with legends. Rupert Neve is a legend, and this modest looking, professional headphone amp was something I just had to listen to. Rupert was born 31 July 1926 in Newton Abbot, England. Growing up mostly in Argentina before WWII, his experience with broadcast equipment design spans almost 80 years. Starting it all from his home and then moving to a purpose built factory near Cambridge, Neve Electronics created professional audio consoles and systems with class-A designs

and using high quality components. The Neve history is complex. Setting up the company in 1961 and then leaving it in the 70's Neve was sold to German company Siemens in 1985 and then linked with AMS (Advanced Music Systems) becoming AMS Neve. Siemens moved the Neve factory to the AMS Burnley site. Setting up ARN Consultants, Rupert's links to Focusrite, Amek, sE Electronics and others show his interest in getting involved in all areas of analogue broadcasting consoles and ancillary equipment. The massive Amek 9098 was probably his best work to my mind. sE Electronics is a recent venture helping designing microphones for the Shanghai company. More importantly for this review, Rupert Neve Designs was set up in United States, where he has resided since he and his wife became U.S. citizens in 2002. This great British master craftsman now has his masterpieces designed in Wimberley, Texas, not Wembley, London. This company continues the work of one of the most respected names in the business, with many famous musicians and broadcasters having their utterances played about through his creations.

My favourite mixing desks were analogue, and Neve continues to produce analogue products. Their 5088 console combines the best of analogue including audio transformers on every single input and output with a true floating ground and high quality capacitors and inductors. His present portfolio goes back to the days of modular design; the days when you could get your fingers to any controls on the desk without needing to press a touch screen with drop-down menu. By which time it is too late. Even synthesisers are now going back to buttons and knobs. The new 24V 6W RNHP headphone amp is based on the headphone output circuit in the 5060 'Centerpiece Desktop Mixer'. Headphone monitoring in the studio is sometimes a necessity and Rupert Neve can see the importance of a reliable and accurate monitoring source. Originally

RUPERT NEVE RNHP HEADPHONE AMP

designed for studio use this little beauty is now available for anyone to enjoy.

The RNHP

The surprisingly small unit (just 165 x 117 x 48mm) is machined from solid-steel to reduce RFI, a clam-shell construction, and built to a high standard with an overhang to protect the connectors at the back and main level control at the front from glancing blows, as well as having shock-absorbing rubberized feet. This is a very robust and industrial looking machine which can also be VESA-mountable. Indeed, the name 'RNHP' is equally industrial, reminding me of the days of BBC equipment codes such as DK4/19, DK4/26 (original GP desk working name), AM8/12 (power amps for use with BBC speakers), oh and of course names like LS3/5, LS5/8 etc. "DK" was the short cut for "DesK" and "AM" for AMplifier, "LS" was short for, well, you know that one. The new Neve headphone amp has three inputs, selected by three green illuminating buttons on the front, and allows stereo RCA phono sockets, stereo 3.5mm input

(calibrated to work with mobile devices such as phones, tablets and laptops). Thirdly is a calibrated +4dBu line input with two combo jack accepting either XLR or TRS inputs for balanced professional devices. Both impedance and gain have therefore been carefully optimised to best suit whatever source is to be used. The RNHP allows high-impedance up to 600Ω headphones. Importantly the RNHP has been designed with a near zero Ohm output impedance (.01Ω at 1kHz) to minimize changes in the sound due to reactive load impedance; something which is noticeably greater on headphones than loudspeakers. Indeed, headphones can sound so different on different amplifiers and at different levels that I often have to touch base with original sources I know well. It was good to be able to use any headphone and know that I was getting an honest account of the music with only the headphone driver and design being the limiting factor.

For the review I used the Fiio X5 DAP analogue line output into the RCA inputs, .wav files from an iPod, and XLR line output

from my Revox 15ips PR99 reel to reel. There is a single highly damped dark red aluminium potentiometer on the front and a cute looking small rocker on/off switch on the rear. Power supply is, surprisingly, from an external wallwart switch-mode power supply, this from a man famed for class-A designs and toroidal power supplies. But, switch mode supplies can be very efficient and quiet and he intentionally chose them for this design, which is no doubt also reflected in the extremely good price point. They also operate with whatever input voltage and frequency you have in your country meaning that one unit fits all. It would be nice to see a toroidal option to quell my inquisitive quandary, though the supplied unit is selected for best output power and noise performance. My only criticism is when affixing the UK's 3-pin 13A plug (or indeed any of the others) the rectangle unit fits sideways meaning you cannot connect it on a multiway mains adaptor without hiding other sockets. However, that is my only criticism of a product designed for the professional and audiophile alike, and at a price that is hard to believe. No clever spin,



RUPERT NEVE RNHP HEADPHONE AMP



frills or selling hype. Just pure, honest audio in a design you can feel secure is going to give you sound satisfaction. Whilst normal headphones can be used, balanced cannot. That didn't give me any problems as I used my broadcast Sennheiser HD650 and latest generation Audio Technica W1000X, two entirely different sounding headphones and different impedance matching. The former is still widely used in recording studios and the latter offering an exceptional 3D sound with a spacious and clear presentation giving me a chance to explore these headphones accurately.

The Listening Tests

"One More Time" (Ray Davies 'Working Men's Club') offered a smooth and lifelike presentation of Ray's distinctive voice on the 300 Ω HD650's, showing how musical and well-designed these aged cans now are. It was only after putting on the much more comfortable 43 Ω AT's that the soundstage totally opened up and the individual elements of the music excelled, and the love affair with the RNHP began. We might all be having relationships with Planar based headphones these days, but AT headphones are very capable and underestimated, like their cartridges. The openness from the AT's and the clarity and depth from the RNHP gave a fullness of sound in Ray La Montagne's "Till Son Turns Black" that I hadn't heard so well on a headphone amplifier anywhere near this price. The atmospheric reverb and the genteel piano and strings, plus pin-sharp acoustic guitar on the right ear were individual pieces of a jigsaw pieced together to form a well-framed painting of beauty. The bass tom rumble at the start of "Empty" was clear and very precise, just as the recording engineer would have heard it. This

headphone amplifier was not wanting, coping precisely with any extremes I threw at it. The Sennheiser HD650 just wasn't so good at the tops and with such speed, however it was able to present the violin long notes that anchored me back to my days at the BBC mixing violins on a Neve 66 through LS5/8s. Turning appropriately to the strong string entrance on Sibelius Pelleas et Mielisande "At the Castle Gate" (Linn Records 24/192, Scottish Chamber Orchestra, Joseph Swensen) the AT W1000X opened up the sound with a clarity and musicality that only someone with the studio experience of Rupert Neve could have produced. Johannes Fischer's percussion album "Gravity" is an exceptionally well recorded compilation to indicate initial transients and decays of percussion sounds. This is particularly shown by the non-pitched hand drums in Xenakis's 'Rebonds A' and 'Rebonds B' that open and close the album respectively. 'Calculo secreto' by José Manuel López López shows immense detail and encapsulation of the transients and harmonics of the vibraphone. This was getting addictive, and the more I wanted to unplug and get on with other house work, the less I could.

Turning to the 'Jazz Masters Vol. 1', a ½ track 15ips recording courtesy of STS recordings, the extent of the musicality from this pint-size unit came into its own. This excellent album includes Buddy Tate on tenor sax, Milt Buckner on electric organ and Wallace Bishop on drums; all effortlessly performing with a tight close mic'd saxophone and live organ sound (complete with noises from Milt), plus a carefully performed drum kit. Sometimes simplicity is best and this pairing excelled with ease and space. Being accurate didn't make this RNHP boring. Quite the opposite. It was lifelike, and that was far more important,

The openness from the AT's and the clarity and depth from the RNHP gave a fullness of sound in Ray La Montagne's "Till Son Turns Black" that I hadn't heard so well on a headphone amplifier anywhere near this price

Everything
was honest
and sincere.
The top
wasn't
sacrificed
for the
bottom or
vice versa

getting me very close to the musicians; more so than most headphone amps I have tried. A sound engineers dream.

Listening To Britten's "Dawn" from Peter Grimes (Michael Stern, Kansas City Symphony Orchestra) gave further evidence of the speed and clarity of sound that make this a truly professional sounding purveyor of honest music. The detail in strings in the third movement between the viola and cello, with wind rustling noises from violins and birds flying about from the flutes with patterns of rain and thunder splattered about the landscape, capture an almost pictorial image of nature.

Pink Floyd's "Cluster One" from 'The Division Bell' gave tight ride cymbal minim beats effortlessly floating high above the long chords and guitar lines, in a way I could impelled to listen on and on. Everything was honest and sincere. The top wasn't sacrificed for the bottom or vice versa. Swapping the unit with other headphone amplifiers at this price point I could see just why this one was so special. A secure and detailed bass, extension in the highs and low noise made this a very enjoyable listen. I guess my background with mixing desks for some 40 years and recording speech and music made me realise that sometimes simplicity and good old fashioned ideas are the best. This might be a 21st Century product but it has a lifetime of sound soul searching.

Conclusion

For around £469 the RNHP was far more than just the headphone stage of a mixing desk. This was a far more musical and authentic product than its price point might suggest. With sockets for all your likely analogue line sources, plus honest performance and excellent headroom this is a little better well worth considering, if you are happy with the rather industrial looks. Another Neve work of art.

AT A GLANCE

Build Quality: Solid construction with good electrical design, though might look too industrial for some.

Sound Quality: Detailed, quick, and very good headroom, with a classy bass end and treble finesse. A totally neutral performance with nothing added or taken away.

Value For Money: One of the best headphone amps I have heard, whatever the price. Worth a listen to and if bought from Russ Andrews you get a 14 Day 'Home Equipment Trial' just to be sure.

Pros:

Excellent audio quality for £469
Transparency of sound; nothing added or taken away
Analogue musicality that you just won't want to switch off

Cons:

That power supply hides other sockets.
Price: £469
Janine Elliot

Technical

Maximum Input Levels

"A" XLR I/P: +22.8 dBu @1kHz "B" RCA I/P: +14.7dBu @1kHz, "C" 3.5mm I/P: +3.3dBu @1kHz

Output Power:

As measured with typical headphones, Z=44 Ω: 3.617 VAC RMS @1kHz = 300mW RMS
16 Ω typical Load: 1.933 VAC RMS @1kHz = 230mW RMS
150 Ω typical Load: 5.108 VAC RMS @1kHz = 175mW RMS

Output Impedance

.08 Ω @ 1KHz, 16-150 Ω load, 0dBu input

Frequency Response

+/- .2dB from 10Hz to 120KHz

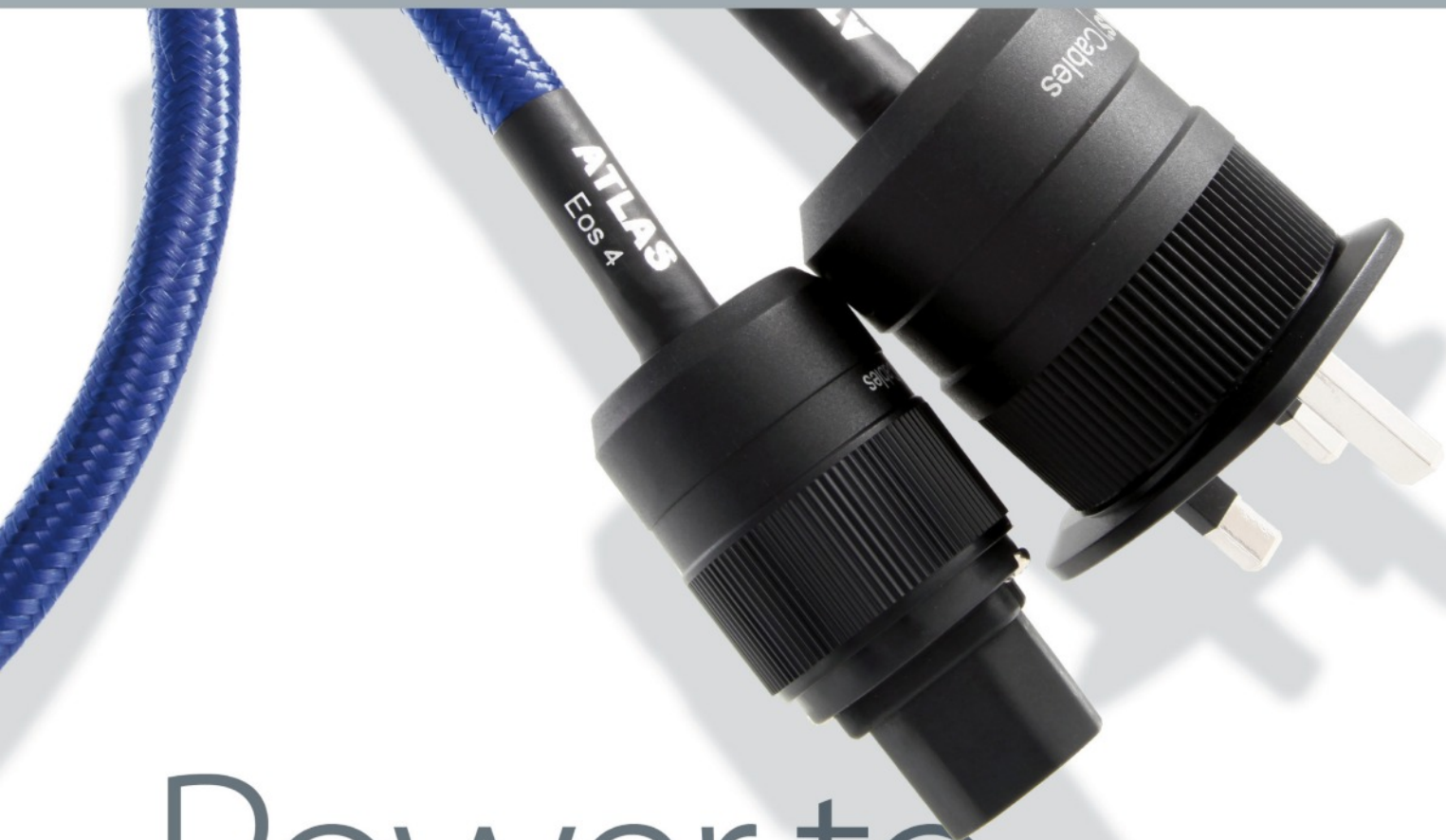
Noise

Measured with typical headphones, Z=44 Ω, BW 22Hz – 22kHz "A" XLR Input: -101.9dBV, "B" RCA Input: -100.9dBV "C" 3.5mm Input: -88.8dBV

Dimensions

6.5" wide x 4.6" deep and 1.9" tall





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Trafomatic Audio Head 2 Headphone Amplifier

By Janine Elliot

Based in Serbia, Trafomatic are well known in audio circles, not least for their £100 000 Elysium amplifiers, but they also produce more moderately priced products. However, £2350 is a serious commitment for a headphone amplifier, Janine Elliot takes a listen to the Audio Head 2 and tells us if it is worth the outlay.

TRAFOMATIC AUDIO HEAD 2 HEADPHONE AMPLIFIER



Some of you will remember my glowing report on the Belus preamplifier from this relatively new Serbian company run by Saša Čokić. When looking at the company's portfolio one product (apart from their £100,000 Elysium monoblocks) got me very excited, and that was their (almost) Ferrari-red Audio Head 2. This model is also available in white and black, and in fact can be in any colour on the extensive RAL card if you request nicely. I had to make do with the black unit for the review, which actually looked very good against the classy silver knobs on the front. Whatever colour you choose, this model replaces their more traditionally looking Experience Head 1 which appeared when headphones were efficient little beasts; conventional driver-based cans from the likes of Sennheiser, Grado and Audio Technica. Now that today's must-haves are inefficient planar designs from HiFiMan, Audeze, Mr Speakers and Oppo to name but a few, that 300mW powertrain was not really sufficient enough to drive them well.

Hence Audio Head 2, a curvy number with its Class-A Push Pull circuit design based around a pair of hand-picked 6N30P and ECC88 double triode tubes per channel give a whopping 2 Watts into 50 ohms, designed with 3% feedback, and of course all amplification through those valves. The Woo Audio WA5 300B can give out the same 2 Watts at 50ohms (8W at 8 ohms), this amp offering more, though that model can also suffice as a speaker amplifier. The 6N30P is a gorgeous but expensive tube very similar to the ECC99 and is very long lasting (10,000+ hours), and the ECC88 was designed as a VHF television amplifier valve, and is often used as a replacement for the 6922, and based around the famous ECC83. Saša loves these tubes:

"The 6N30P, also called 'super tube', is a very, very linear tube and is very important for headphone amplifiers. Very low THD is important considering you have speakers at your ears and no air gap between as is in the case of speakers. The ECC 88 is recognized as a very musical tube and simply I love that tube".

The culminating sound quality from this beautiful looking machine shows Saša's love for creating the best sound as well as his great knowledge of valve design, and this model goes much further than the Experience 1. This latest model also has an input for 4-pin balanced headphones as well as traditional ¼"-jack variants (the original release of the Head 2 had a combo XLR/¼" jack). Just as the Belus I reviewed had some original architecture in its design, so does this; firstly the model features the ability to make it highly attractive to both the shy and not so shy listener alike; yes, as well as offering excellent private listening on cans, by turning the left of the two knobs fully clock-ways transforms the unit into a fully-fledged (well, single input) pre-amplifier with XLR and RCA outputs for your balanced or non-balanced power-amp. The 'overbuilt' power supply features a robust multi-stage high-voltage filtering, for superior low-frequency performance, and a proprietary output stage with two double C-core output transformers and Quadfilars Windings allows use of a wide range of headphone impedances stepped at 25, 50, 100, 300 and 600 ohms.

The Head 2 is very distinctive in looks; a highly lacquered curvy unit made of plywood with aluminium grille on the top to show off the horizontally positioned valves and also with air vents underneath, that combine to

The
culminating
sound quality
from this
beautiful
looking
machine
shows Saša's
love for
creating the
best sound as
well as his
great
knowledge of
valve design

The
amount
of detail,
speed
and
depth of
sound
was
quite
startling

allow good circulation of air to allow heat to escape out the top. So many valve products just have vents at the top, which is not so effective. With on/off toggle switch carefully indented on the left side and a red indicator at 7 o'clock on the output selector knob this was visually quite a beautiful piece of audio-architecture, especially with the two large almost industrial looking knobs on the front. This plus the fact that it is available in any colour, so you can even get it to match your toaster, and that you can choose between gold or silver control knobs and feet, shows Trafomatic's desire for absolute customer satisfaction and confirms its price point of £2350. How it sounds, though, should always be the reason for purchasing any high-end audio, and as expected I was not to be disappointed.

Listening

As a sound engineer by trade I chose to stick to the conventional driver headphones I was used to using in most of my reviewing, namely Sennheiser HD650 and Audio Technica W1000, but also the less efficient planar Oppo PM2's that I was able to borrow for the review and at the cheaper end the brilliant Meze 99 Classic. My first listening was actually my own new 24bit/96kHz album that I am working on; giving me a chance to compare with sounds I had been creating in the studio.

The amount of detail, speed and depth of sound was quite startling. My voice is not the best, but the Trafomatic was sensitive to my vocal limitations and the Audio Technica gave a forward sound that kept my voice clear and precise, with violins and backing vocals clearly positioned about the soundstage. One of the tracks sounded very, very slightly compressed, which surprised me, as compressors are never used in my

studio work, only the occasional limiters, perhaps showing just how good the unit was at extrapolating every detail out of the music and showing me my own studio failings, though that bass end was certainly generous. Playing the very open and excellent top-frequency Oppo PM2 showed no compression, perhaps due to its slightly light bass-end. Whilst top end was excellent, especially from my glockenspiel and ride cymbals, the lower frequencies were still there and certainly not for wanting. Back to the AT's, the extension of frequencies from bass guitar to glockenspiel was excellent, and the amount of 'three dimensionality' in the sound-stage was quite noticeable, with every instrument positioned exactly as I had expected, largely due to the slightly forward facing drivers, my main reason for buying these cans. This really does help with natural audio dispersion, something I first got excited about with the original Stax SR-Sigma ear speakers. Turning to another album that I was party to the recording session gave me a chance to see how that 3D soundstage excels. Mike Valentine's binaural recording of the latest album "A Tribute to Spain" with The National Symphony Orchestra conducted by Debbie Wiseman and featuring mezzo-soprano Rosie Middleton, was recorded at the Air Studios in London to celebrate Valentine's Day, and featuring music all about love. Using the Neumann KU100 binaural system resembling a human head with the microphones positioned in the ears, and which was carefully placed above and slightly forward of the conductor, gave a perfectly presented account of the positioning of the instruments. I loved dummy head stereo when it first presented itself to me in the 1970's, and this 'out of the head experience' excelled through the Head 2 in a way that I found highly compulsive. This new album from Chasing the Dragon is available on direct-cut vinyl and digital DSD



TRAFOMATIC AUDIO HEAD 2 HEADPHONE AMPLIFIER



and FLAC versions in either the mix down from the massive 96 channel Neve 88R mixing desk or direct from the binaural microphones, including Rimsky Korsakov's Capriccio Espagnol and Chabrier's Espana, and with mezzo-soprano, Rosie Middleton singing two pieces from Bizet's Carmen, "Habanera" and "Gypsy Song". The pizzicato and cello undergirding the start of Rosie's entrance in Bizet's 'Habanera' from Carmen was poignant, with the instruments at my left and right as they would be had I been standing at the rostrum. The distant percussion might be arriving at the (head) microseconds late but this just added to the reality of this recording. I was there again. The lower string pizzicatos at the start of 'The Gypsy Song' from Bizet's Carmen were as clear and real as binaural can get. Rosie's fortissimos were clear and undistorted as only the best sound engineering or real life can get. Only trying my AT W1000 at 50Ω gave a slightly edgy sound on the peaks. Chabrier's Espana is a track that takes me back to my first recordings I did on reel to reel as a child, copied as I did from vinyl as I thought the record wouldn't last more than a few playings. Funny that my reel-to-reels oxidised and fell apart, and the record from my youth still plays fine. This recording has a very energetic start, only slightly losing excitement midway, though the harp and brass forays in the middle section brought back some of that fun, if with a slight mistiming from a few of the musicians. This is a once-only performance – no editing as it is recorded direct to vinyl – and this makes this album so enjoyable. Turning to the open back HD650 gave a more open performance that made the binaural even more fun. Those cans might be old news, but they are still a favourite of sound engineers. The pizzicatos from the violins at the start of Chabrier's Espana allowed me to pinpoint nearly all the

individual violins, and the energy from the kettle drum and cymbal blasts and trombone calls throughout this exciting work reached my ears as if I was standing where Debbie Wiseman was waving her baton. This was fun.

After all that excitement Sibelius's 2nd Symphony (Simon Rattle, Berliner Philharmoniker) was a welcome relaxation. This set of discs and 24/192 FLAC downloads of all 7 symphonies was put together to celebrate the composer's 150th anniversary, and is one of my favourite recordings of these fine works. Whilst the musicians were now inside my head I did not find this at all claustrophobic; the Head 2 seems to get you so engrossed in the music that you don't feel you are actually wearing headphones apart from that slight pressure on the head. Whilst the Audio Technicas are my choice of cans for comfort, the Senn's gave a much more spellbound performance. Finally turning to "Hey Now" from London Grammar album 'If you Wait' played from vinyl via my Manley phono-stage gave me a chance to experience an extremely powerful keyboard bass, and also bass vibrations from the record grooves that I hadn't heard before on other headphone amps from the Sennheisers; this amplifier has a very able bass end. Only moving from the recommended 300Ω setting to 100Ω did I get a more natural frequency response in the lower region, however I quickly turned back to 300Ω when next playing "Walking on the Moon", Yuri Honing Trio. The bass, drums and saxophone trio were positioned inside my head as best as I had heard them. Reading between the lines you may guess that with certain music I found the bass a little more pronounced than I wanted, and although it wasn't OTT it just felt a wee bit slow. Turning the unit into a preamplifier

The extension of frequencies from bass guitar to glockenspiel was excellent, and the amount of 'three dimensionality' in the sound-stage was quite noticeable, with every instrument positioned exactly as I had expected



MC Step-Up Transformers
Phono Amplifiers
Pre Amplifiers



Paint It Black

"I felt I was listening to a more lifelike rendition of the music...good vocal projection combined with tight timing and a natural tonality make this cable extra special"

Tony Bolton

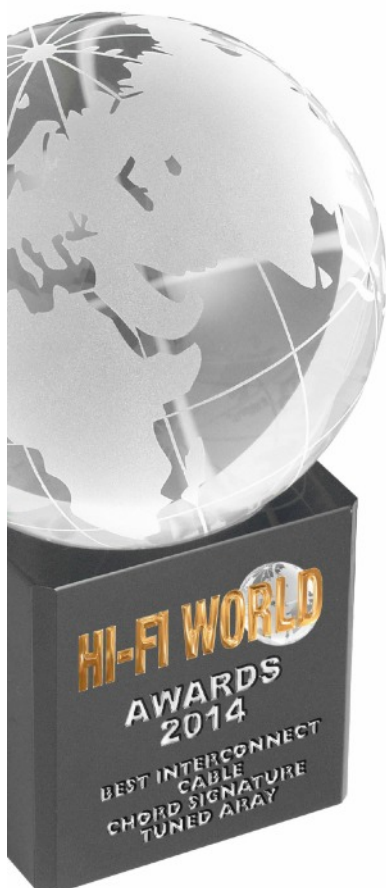


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Where it really excels, though, is as a headphone preamp, and what is very important is that I did sense a good degree of spaciousness and authenticity of music through the headphones that I didn't expect I would get

playing balanced at 25 ohms (or through the RCA sockets at 6 ohm) to my Krell/Wilson Benesch system brought me back into true 3D soundstage that non-binaural recordings cannot do. The bass end was particularly noticeable as a preamplifier, especially compared to my choice MFA Baby Reference pre, but the music had plenty of grunt and reserve if I needed it, and though whilst perhaps a little less controlled than a top end preamplifier it was none the less musical and fluid. Where it really excels, though, is as a headphone preamp, and what is very important is that I did sense a good degree of spaciousness and authenticity of music through the headphones that I didn't expect I would get. The Oppo PM2's were the real surprise here; plenty of volume at my control and speed and detail that shows why this planar technology, like electrostatics, is so important in today's breed of FLAC and DSD files. If only I could have plugged in my Stax 407's. Similarly the HD650 gave one of their best ever performances; these cans are not easy to drive.

Conclusion

On looks alone this headphone amp should be one that you take for a drive. £2350 might seem a lot of money but if, for example, you are spending around £2600 on a balanced HE1000 then you really do need to have a good amplifier. Saša used a HE1000 himself when designing the Head 2, and whilst I tried a number of different headphones in this review (including others not mentioned above) this amplifier never left me wanting more power. Nor did I find any type of

headphone, whatever load, that wasn't able to harmonise with this beauty. The Head 2 was quick, full frequency and with an excellent noise floor, offering a very dynamic performance with excellent 3-dimensional sound.

AT A GLANCE

Build Quality: Excellent looks and materials. Valves screened in their own section of the body. Beautiful finish to the paint work

Sound Quality: Dynamic and wide response. Low distortion and very quiet amplifier. Plenty of power in reserve for those inefficient planar headphones

Value for Money: At £2350 this is a headphone amplifier for those who want the very best, and the fact that it can be a preamplifier as well makes it even better value for money

Pros:

Dynamic and detailed

A gorgeous curvy number you won't want to hide on the shelf

Works well on all types of music and headphones

Good facilities and can be used as a preamplifier

Cons:

Bass might be a tad too rich for some.

Price: £2350

Janine Elliot



exaSound e32 DAC

By David Blumenstein

exaSound are a Canadian brand that make just a handful of products. Here David Blumenstein takes delivery of their \$3499.00 e33 Digital to Analogue Converter.



The e32 has
taken my
listening
experience
and
enjoyment to a
whole new
level

Five years ago I embarked upon a decision to pick up sticks and emigrate to London from New York City. This was made somewhat more concrete for me as a result of my father's passing and my desire to get away and make a fresh start. I knew that wherever I would call home music, more specifically my library would come with, but not all my gear and definitely not my records and CDs. The decision was to streamline as much as possible and limit gear to whatever could fit in good sized Airline approved carry-on roller bag. This meant that I had to digitise all my music and that apart from my speakers I would be taking my Mac Mini, hard drives and trusty universal, 110/220v, Bel Canto Design s300 integrated amplifier with built-in 24/96 DAC. Everything else would be purchased upon my arrival. I went through a slew of speakers before I finally felt comfortable with the Audio Physic Tempos, and it was during that time that not only did I find myself downloading and acquiring more HD, high definition files, but also discovering something new to me called DSD, Direct Stream Digital.

As I was slowly settling into my new life abroad, I felt that I was just settling for sonic quality, so I plunged myself into the UK hifi community; joining online forums and reading all the local magazines. I had purchased a very capable and portable FOSTEX HP-A4 headphone amp/DAC to tide me over. It is powered over USB and supports DSD 128, so I thought I had it made, and then DSD 256 raised its head, but more importantly the sound was good, but not the level that I would drop everything and rush home for. Armed with all the research and queries of forum members, I listened to and demo'd the following DACs which were available to me in the UK, without extraordinary import taxes and duties: Chord Hugo, Mytek 192, M2Tech Young, Auralic Vega, Wyred4Sound and miraculously the exaSound e22. Miraculous, because apart from reading about the DAC, it was only because of advert in one of local hifi magazines that I learned there was a sole

distributor up in Cambridge, outside of London.

It is now just about three years since acquiring the exaSound e22. The decision not so obvious, as it met my particular criteria:

Portability, it would comfortably fit in my roller bag.

Universality, auto switching power supply, so I could plug it in anywhere.

Integration, using the Apple remote meant one less gadget to keep track of.

Sonics, in a word "Glorious", and a reason for me to run not walk from the underground station to my flat.

The exaSound e22 remains the mainstay of my digital system. Over the past few years I have auditioned other DACs, listened intently to others in the possession of friends and kind strangers, but nothing I heard so far in terms of my aforementioned criteria, price and sonic quality has turned my head, until of course George Klissarov, founder and designer of exaSound announced the new e32 DAC, not a slipstream update, but a bona fide upgrade moving on from the ESS 9108S Sabre32 chip to the new ESS 9208 Sabre32 Pro chip, which after email exchanges with ESS and a close look at the block diagram, I learned that the 9208 affords designers a slew of new technical/design possibilities and improvements, however as it relates to prospective exaSound customers here are the highlights:

Enhanced firmware and drivers for both Mac Core and Windows.

Seamless format switching and handling of higher resolution formats when compared to the e22, the e32's predecessor.

Inclusion of a 12 volt 1.5 amp power supply input which allows for a number of linear

I listened to the first batch and second batch with my e22 and then again with my 32 this month. The comparisons were startling

power supply units to be used and after listening to a few which I either had on hand or borrowed, was not convinced that the additional outlay returned an exponential increase in sonic quality.

There is renewed debate in the benefit of a Linear Power Supply over a switched one, and this will no doubt rage on.

My digital library is now just over 10TB, and while that has indeed grown and storage solutions changed over the years, I have remained consistent in my use of an Apple Mac Mini Late 2012 as my source running various software playback programs: Audirvana Plus, Signalyst HQPlayer primarily for ASIO playback, upsampling and files manipulation. ROON has just recently been added to my arsenal.

HQPlayer's ability to manipulate files with its myriad of filters and settings can be a minefield. I had to remember to go back and listen to unaltered files when assessing the e32, and remind myself what I was listening to and the role the DAC was playing in all of this.

For reasons of transparency, I have been and continue to be a long time proponent of Damien Plisson's Audirvana software from versions 1.x, 2.x and now 3.x. As for ROON, this was most recent, and somewhat ironic as I count the principals behind ROON and SOOLOOS as friends of mine for just about 20 years now.

ASIO Windows – Steinberg vs CORE Apple. It should not be a competition and more of a matter what one's hardware supports. With exaSound's proprietary drivers Apple Macintosh users can take advantage of both Core Audio and ASIO and make up their own minds which sounds better.

There are numerous papers and posts arguing their benefits and deficiencies. I made a point of including HQ Signalyst software and ROON in my arsenal because they both support ASIO playback and I want to not just notice but hear the difference. There's also been quite the debate over Native DSD and DOP, DSD over PCM playback and that that latter is by definition inferior in some way. After extensive listening, switching back and forth between the two it remains subjective – a matter of personal preference. Unfortunately, in the course of the review, am finding that the number who find themselves steadfast and strident in one camp or the other, stating their allegiance to me directly, not surprisingly, were found to have a horse in

the race looking to sell me on a better bit of gear/piece of kit.

Bottom line: My ears are my instruments of choice and not an oscilloscope. Having devoted an entire day to ASIO/Native DSD and CORE/DOP listening comparisons, tantamount to aural ping pong, all I can do is wish you the best of luck in your own double-blind test.

The associated equipment for this reviews is as follows:

Source: Apple Mac Mini – Late 2012 – running Apple OS X Sierra as its operating system. Playback software: Audirvana Plus 1.x, 2.x, 3.x, HQ Signalyst and ROON. Files are stored on hard drives connected directly via USB and over the local area network, wired and wireless – WIFI.

DACs: exaSound e32, exaSound e22, Fostex HP-A4, Audio Note DAC 1.0
Amplification: Parasound Halo 2.1, Bel Canto s300

Speakers: Audio Physic Tempo, Platinum Audio Solo
Interconnects and Speaker Cables: Audioquest

After almost three years now, I know the exaSound e22 from stem to stern. I know how it operates, how it handles, how it sounds. It has travelled with me across continents and until the e32 I would NOT part with the unit. The e32 has taken my listening experience and enjoyment to a whole new level. The clarity, the depth and the soundstage. From my days in the darkroom, the blacks are indeed blacker. The e32 handled them all with such aplomb. Not satisfied, I never am, it was time throw everything at the e32 in a feeble attempt to flummox. I put together a massive playlist of files of all manner of format, file type, bit depth to trigger a reaction and wanted to see it fail. Damn you exaSound, the e32 did not miss a beat.

If one is going is going to acquire a top level DSD 256 capable DAC, might as well as get a hold of proper DSD albums and tracks. I made it a point to contact friends and soon to be friends from the Blue Coast, Yarlung and Native DSD/Channel Classics DSD labels so I can put the e32 to the DSD 256 test. I listened extensively to vocals, instrumentals and symphonic pieces and was blown away by the sheer depth of it all. DSD, Direct Stream Digital, is an acquired taste and much like everything else in this wonderful HiFi world of ours is up for debate.

EXASOUND E32 DAC

Two years ago I contacted Cookie Marengo of Blue Coast to supply me with 2 sets of files PCM 24/96 and DSD 128. These files were to come from the same masters and be as identical as technologically possible. Earlier this year I received a new batch of PCM 24/96 and DSD 256. I listened to the first batch and second batch with my e22 and then again with my 32 this month. The comparisons were startling. The PCM files, upon the second hearing sounded richer and fuller from both batches and whereas in the first listening there were stark differences between them, not so much with the e32. Having downloaded Jenna Mammina's Closer To You from Blue Coast, not small task when you take a look at the file sizes. I was transfixed by her rendition of Elvis Costello's Watching The Detectives and Steely Dan's Dirty Work. Listening to the e22 it sounded alive, natural to the point that I could trace her breaths between lyrics, but then with the e32 I blinked once at it was if I was in the studio with her. Talk is made of breaking barriers, but not like this, it's as if the fourth wall crumbled ever so gracefully. It doesn't stop there. In doing this review I set out to better understand the Native DSD process and learned a great deal about what goes into recordings before it gets to the studio. I received sample classical DSD256 files of Beethoven's 1st Symphony's Third movement and was asked to play them on my DAC and report back not only what I heard but which I preferred.

Fischer and his Budapest Festival Orchestra never cease to amaze on the Channel Classics label.

Gary Koh, of Genesis Advanced Technology, turned me onto the Yarlung label and the Smoke and Mirrors Percussion Ensemble's Volumes 1 and 2.

The sound is transformative. Close your eyes and it's not your cares that disappear but your system. If this is what Native DSD 256 is all about then bring it on. I'm open to seconds and thirds of the stuff. Am not going to shun DSD, as some might like, if it is out there and my DSD supports the format. Whether or not it survives, everyone should at least listen to DSD for themselves. Closed ears are the hallmarks of closed minds. As for PCM files, regardless of depth and bit range, the e32 revealed more detail. Marcus Miller never sounded real to me. And for those who are of the mind that Rebook, like Latin is dead, I suggest acquiring anything and everything on the Stockfish label. It is through such recordings that we come to understand and appreciate the power and versatility of the exaSound e32.

I could have gone into endless detail about technical advancements and features which would mean precious little to a lot of people. If nothing else such information could be used to compare a device's cutting edge quotient, but at the end of the day that's what

Close your
eyes and it's
not your cares
that disappear
but your
system



As luck/skill/fate would have it I chose the file that not only sounded better to me but to the producer/recording engineer of the music in question. I preferred the track where there appeared to be greater depth and contrast between the sections of the orchestra. I was expecting to hear tales of daring-do in the studio but learned to my surprise that everything was exactly the same, save for the manufacture of the microphones. There was no mistaking the difference listening through the e32. I sat down time after time marvelling at how I was hearing each instrument as if each member of the orchestra was being afforded a solo. Ivan

the official websites and promotional literature for. In touching upon the new ESS 9208 PRO chip and exaSound's drivers I hit on what I deem to be the most noteworthy. I am here to write for those who appreciate gear but listen to their music.

Three years is a long time to own a DAC. What with all the improvements and advancements being made, so the exaSound e22 is a marvel in that regard. The exaSound e32 took my digital library an order of magnitude further. I was listening to the familiar and it made it unfamiliar as new details in the music emerged.

EXASOUND E32 DAC

I was listening to the familiar and it made it unfamiliar as new details in the music emerged

The e32 may very well unseat my DAC. I was prepared for it to be different and given my experience with exaSound I should have realized that this would be far more than an update but a wholesale upgrade. exaSound owners owe it to themselves to hear the e32 and experience the progression. The rest of you in the market for a DAC and in this price range should definitely include the e32 in your shortlist to audition.

AT A GLANCE

Build Quality: Built to last. Ergonomically designed: economy of controls

Sound Quality: Detailed, wide open soundstage, a clarity which not only lets you hear the music, but the layers you didn't know were there

Value for Money: You reach a point in your life where if you want it, here it is, come and get it. Value is subjective. If you want the aforementioned sonic quality ask no questions

Pros:

Proprietary CORE Audio and ASIO drivers developed to extract the best from the respective systems. Built on top of ESS 9208 S Pro chip. Intuitive interface and detailed online support for playback software configuration

Cons:

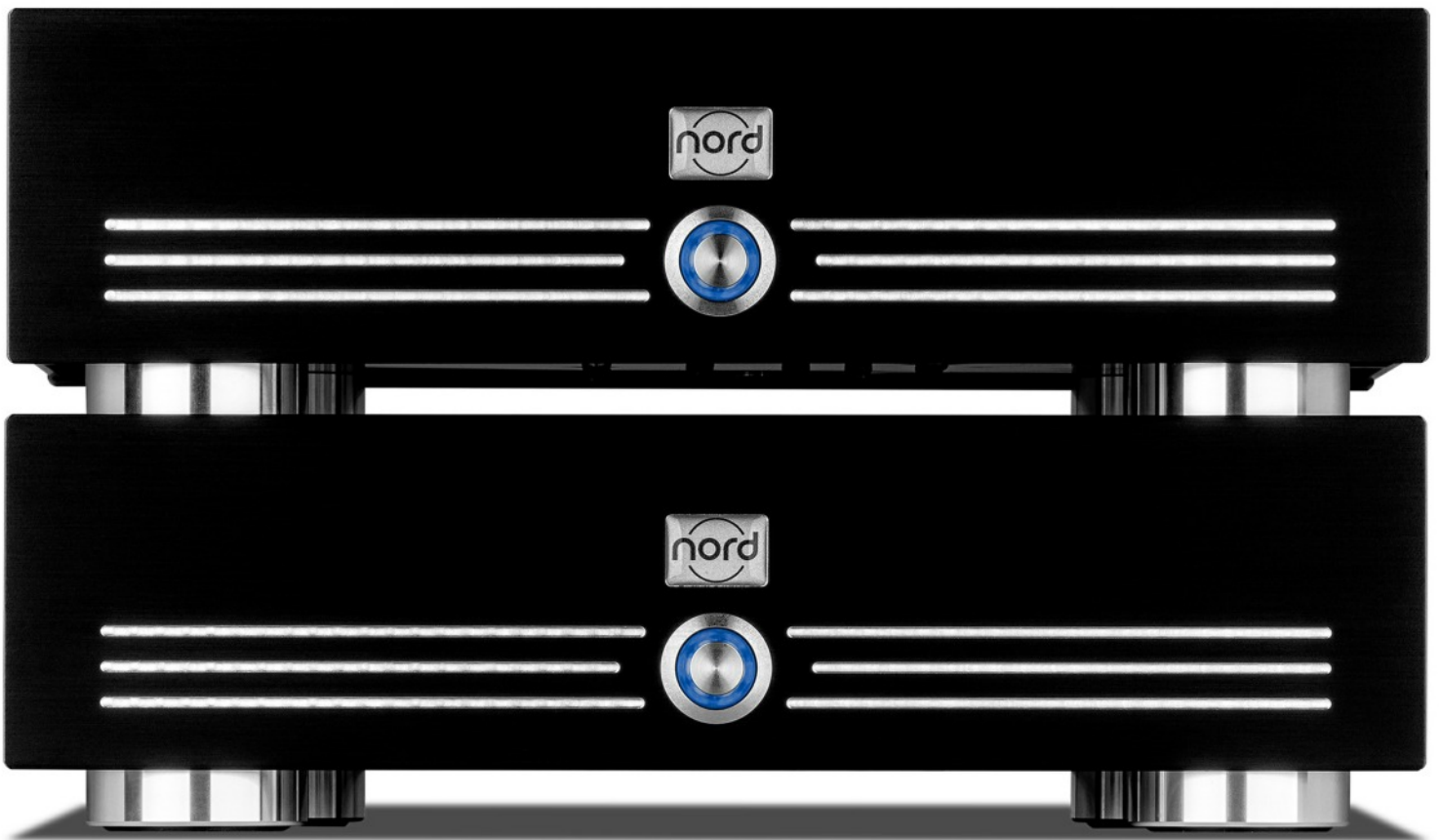
Apart from the price. Human condition is to want everything for less, am at a loss to list any

Price: \$3499.00

David Blumenstein



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Many of our sales are coming from customers "downgrading?" from large traditional Class A and A/B powerhouses from McIntosh, Copland, Accuphase not to mention modern players like Devialet and the NAD Masters M22 etc. with very positive feedback, slightly embarrassing! In other words seasoned wealthy Audiophiles who have been playing the game for 30 odd years!

And I can assure you they are know nobody's fool!

We also have customers wanting a cooler running amp for the summer only to find an unexpected level of performance and naturalness compared to their Class A amps.

We Now have a Chassis to Match the World Class Sound in the SE Version.



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Wyred 4 Sound DAC 2V2

By Janine Elliot

Wyred 4 Sound are based in California and produce a wide range of products from amps to music servers. Here Janine Elliot wires up their DAC 2V2 costing £2299.



I was excited to review the Wyred DAC 2v2 for two reasons. Firstly, this was yet another company whose choice of name is an interesting conversation starter. "Wyred 4 Sound" reminds me of a 1981 Cliff Richard album and title song that I am embarrassed to admit I actually really liked when I was young. As the company informed me the name was really just a play on words, and a shame that there never ever was a 'Mr Wyred', just as there was never a 'Mr Schiit' at Schiit Audio. But it certainly gets your attention. This company was set up by an E.J. Sarmiento in 2007 after he left Cullen Circuits (a company producing electronic circuits and modifying others) and produces distinctive looking products that have two slanted 'end caps' at each end of the front panel, the whole in two-tone matt finish that fit well alongside my similarly dressed Krells. The second reason for my excitement was the use of the ESS Sabre 9028 Pro chips in the design. I recently reviewed the Lehmann Linear D Headphone amplifier/DAC and the Copland DAC215, both using ESS Technology Sabre products, and loved the clarity and speed of sound that I heard. Similarly this unit is configured in quad differential mode meaning that with four D-A converters per channel they could achieve improved S/N ratio and output drive. For those with earlier DAC 2's they can be updated to the v2 by sending their DAC and some dosh to Wyred 4 Sound. There is also the higher specification DAC 2v2 SE which uses the reference 9038PRO DAC chip, plus a selection of other improved components. That doesn't mean the machine up for review here is not qualified enough to take your digital files to a new level. This is a very able machine, and it must be stressed the DAC is only a small ingredient in the whole product; the use of toroidal transformer, ESS Time Domain Jitter Eliminator® and W4S proprietary discrete output stages help to add up to a very exciting 'end product'.

I first got interested in W4S when I saw their Class-D amplifiers, and as a staunch Class-A-Addict found them surprisingly good. Now their DACs are receiving equal acclaim, and their portfolio also includes preamps, music servers and cables. The new DSD 2V2 and DSD 2V2SE are based on their award-winning DAC-2 series comprising the DAC-2, DAC-2 DSD and DAC-2 DSDse.

With a mighty 129db dynamic range and -120db THD+N it uses ESS Labs' ES9028PRO Sabre 32 bit DAC chip, a successor to their ES9018S chip as used in the previous incarnation. The SE version improves on this using ESS's flagship chip, the ES9038PRO Sabre; where it promises 140db dynamic range and -122db THD+N, though with this and other improvements adds another £1500 to the base model's price point of £2,299. Whichever version you chose you get some impressive specification. Playing all sample rates in between the common 44.1/48/96 and 192, such as 88.2 and 176.4kHz the 2v2 will play Toslink up to 24bit/192kHz (though the instruction book states "a maximum of 174.6 has proven to be more reliable") and S/PDIF up to 200kHz, with USB and I²S supporting PCM files up to 32bit/384kHz and up to DSD256 files, double what was possible on the DAC-2 DSD. Each of the coax inputs are transformer coupled to isolate the source while maintaining proper loading. To ensure that the lowest input signal level will satisfy the digital conversion engine, the signals also pass through TTL buffers to maintain consistent signal integrity. The DAC 2v2 is well supplied in the socketry front too; 2 Coax, 2 Toslink, XLR AES/EBU, USB and I²S. The USB input uses what they call "galvanic isolation" to eliminate computer noise from interfering with the audio signal. Also, the ESS chip is used as the receiver chip and performs all the signal selection and

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Basically nothing is added or taken away from the sound, this is as honest a DAC I have ever heard

routing. Automatic signal up-sampling is done internally to keep output filtering to a minimum, all helping to reduce jitter to zero. The I2S input utilises a HDMI socket (it tells you not to connect your DVD player, game console or TV to this HDMI socket!) This format is different from normal digital inputs, as information such as bit clock, word clock, master clock and audio data are all on their own dedicated pins rather than being combined on a single digital connection. By not having to get all clock information from the single data stream jitter is thereby reduced to zero. Outputs include RCA and balanced XLR, plus Home Theatre (HT) bypass and 12v trigger sockets. Just wish there was a headphone socket on the front (and associated amplifier of course), since this combo of DAC/headphone amplifier seems so common now, and also perhaps a 3.5mm jack at the front to connect direct to portable DAP player S/PDIF outputs that are becoming popular as well. But I digress. With the HT bypass feature you can connect the pre-outs from your surround sound processor. If HT input or the trigger is initiated the HT bypass inputs will activate. I'm not a fan of surround sound, so I gave this test a miss. On the power supply side this is a well-designed unit combining an oversized toroidal transformer, more than 115,000uF of capacitance, 3 stages of filtering and 13 regulation points. The analogue output stages are powered by a separate supply to ensure isolation from the digital front-end.

In basic factory set up when switching on the unit it always resorted towards mute, so you need to increase the level using the remote to get a respectable number (61 for me). 70 is the maximum and the levels are stepped; so 1-9 are in 3dB steps and 10-24 in 2dB steps and anything above is 1dB. You can make changes to the minimum level by configuring it as you wish in Set Up by holding all three buttons in standby mode and then using the up and down buttons to get to the pages you want to modify. You can set minimum level of each input, so if you set minimum as 10, then you will have 60 steps at your disposal. You can also choose Fixed or Variable for the input level; fixed mode bypasses the internal DAC volume control, while variable mode engages it, giving you a choice of using the unit as a preamplifier or as a straight input into your preamplifier's volume control missing out the digital volume control. You can also make changes to the filtering, bandwidth and I2S type. That remote is rather a cheap oversight and for a £2000+ product I would have expected far better, preferably metal matching the two tone metal DAC console itself. The rubbery remote is very cheap, and looks it. Sorry. Since the

main unit only has these power and down/up buttons you are rather dependent on the remote for speedy operations. Interestingly this remote does have a "phase" button which is disabled and non-functional, though you can substitute a universal remote, should you wish, as W4S have added it to the Logitech Universal Remote database. The display has two levels of blue lettering which is clearly readable from your listening position, and the unit itself is ½ the width of standard 17" width hi-fi, so you could put this and a matching server on the same shelf, for example. But bear in mind that the unit's cooling is via holes at each side.

Listening

Turning to USB input I installed the supplied 32bit/DSD driver, with a view to playing audio via Foobar2000. The instruction manual is very good at showing how to do this if you need. It is also good that they supply their own driver, though I would expect this at the price. Playing a 32bit recording of Alan Parsons "Eye in the Sky" with its distinctive and aged electronic drum kit created a very clinical portrayal of the music; basically nothing is added or taken away from the sound, this is as honest a DAC I have ever heard. Turning to the detailed jazz and rhythmic minimalism from the duo of composer Steve Reich and Jazz guitarist Pat Metheny in their joint 'Electronic Counterpoint' the music was as coordinated and clear as I have heard this music. Both pride themselves on precision of timing and the W4S DAC made that even more exciting. The Pat Metheny produce excellently recorded albums with clear instrumentation, particularly from the drums, and this was a great listen, though I did miss some of that bass energy or mid warmth that some lesser conversions might present; This DAC is all about accuracy and honesty.

Turning to digital output from my X5 the latest 24/192 binaural album from Chasing the Dragon "Espana – A tribute to Spain" gave me a good chance to hear the clarity and space of sound offered by the W4S. Whilst binaural really works best on headphones, the depth of sound and positioning through loudspeakers is quite astounding. Rosie Middleton's vocals of Bizet's 'Habanera' and 'The Gypsy Song' from the opera 'Carmen' were picked up clearly by the KU-100 binaural mannequin from Neumann and presented confidently by the W4S. The close violins and cello's appeared as if I were sitting on the front row, and the reverb from the Air Studio's hall was allowed to work its charm with a clarity and finesse that made the music come to life. The slightly late tambourine and triangle

entries a few times in Chabrier's Espana just assisted in making this recording as live a performance as I could get in my living room. The national Symphony Orchestra under conductor Debbie Wiseman performed with passion and this DAC allowed that all to be clear and precise. Bass was deep and top end pin sharp. Listening to my favourite Sibelius symphony No2 (Berliner Philharmoniker, Sir Simon Rattle), the sound gave slightly more grainy violins and more controlled dynamics than I had heard before which slightly disappointed it for me; it was getting all the detail it could out of the recording but this was like lean-beef rather than a full-fat quarter pounder with fries; the former might be better for me, but not quite so enjoyable. The Lake Poets' 'Live from The Minster' gig in Sunderland on 26th September 2015 (24/96 download from Bowers and Wilkins) was a very atmospheric performance with pin sharp accurate reproduction of man and his guitar and audience. Nothing gets past this DAC; it was like watching a film on a 4K television rather than a 1080p plasma.

Turning to jazz the Modern Jazz Quartet "Blues on Bach", originally recorded in 1973 but available on 24/192 the close harpsichord mic'ing of John Lewis's playing gave for a very detailed and polished performance in 'Regret', especially with the vibraphone playing of Milt Jackson. The slight over peaking in the recording of 'Blues in B Flat' did give me a surprise as I hadn't noticed that one before. "Rise Up in the Morning" is a tune Kenny Everett used in his

mime-artist comedy routines, and this gave a chance again for these artists to give a polished performance of harpsichord, vibraphone, double bass and drums including sleigh bells and triangles. To be honest the ESS DAC plus all other components in this box gave as polished a performance as the musicians. A good test when reviewing is to play bad quality recordings to see if they sound any better. If the product is good it shouldn't actually make the music sound better, if anything it should show up even more of the faults. Ray Davies's distinctive voice in title track from his album Working Men's Club gave me a chance to hear the close drum mic'ing, distant backing vocals (including occasional lower octave interjection) and piano and organ and guitars that really aren't as well recorded and clear as I would wish if I was engineering the album myself. The DAC gave me a chance to see how ordered all the bits could be "assembled" to make my listening experience more enjoyable. If anything, the clarity from the 2v2 made it more painful than the last time I played it. Luckily the next track "Morphine Song" gave me less pain and made me happier, as I would expect the drug itself to do. The guitar was clearer though the thick textures and compression made it less musical. The W4S DAC wasn't the problem; it gave an excellent top end clarity and a weight through all the frequencies that made the music exciting and clear plus musical all at the same time. I think you get the picture that it is hard to fault the DAC.

This DAC is all about accuracy and honesty



This is quite
some unit
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actually
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to criticise

Turning to ELO's 'Alone in the Universe', comparing my Krell CD player against the W4S, whilst the latter gave a clearer representation of the vast soundstage I felt the sound was more exciting and real for me through the KPS20i. That player's aged DAC might not be as clever as today's wonders but it excited me every time I played. Sometimes perfection misses out some of the magic. The bandwidth/IIR settings can be changed to allow roll-off at above 50, 60 or 70kHz for fine tuning to your personal taste, though, and using the balanced output direct to my power-amplifier gave improved soundstage and musicality, showing the unit can be successfully used in a digital-only system as a very capable preamplifier, if only that remote could excite me more.

Conclusion

This is quite some unit which I actually found hard to criticise apart from the remote. If you want pin-sharp accuracy and speed of reproduction then you cannot go wrong. This machine worked well whatever I plugged into it whether wav, FLAC or DSD. It has an honesty that might surprise you about some of your own digital collection of music. If you can put up with hearing more of the detail and speed, and perhaps hear some of the imperfections in the recordings, then you cannot go wrong. This is one of the best DACs I have listened to, and that ESS Sabre DAC is only part of the story. Wyred 4 Sound really do know how to put all the ingredients together to make a good DAC.

AT A GLANCE

Build Quality: Excellent construction with distinctive 'two-tone' design and excellent components and connections. Just let down by a basic remote

Sound Quality: Giving a detailed and honest conversion of the digits fed into it, with a punchy bass and clear top end.

Value For Moeny: At £2299 this might be in upper DAC territory but it is such a good performer, catering for all main digital formats and input terminations. I really enjoyed playing with it. If you use it as a preamplifier then it is even better value.

Pros

Well controlled and precise delivery
Bass was tight, with a clear and detailed top end.

Cons

That remote.
Its aim for perfection of sound could make some music sound a little clinical

Price: £2299

Janine Elliot



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Ruark R7 Radiogram

By John Scott

Many of us of a certain age will remember the radiogram, now Ruark bring it bang up to date with their R7 Radiogram costing £2000. John Scott gets a bit nostalgic in what is a bit of a departure for Hifi Pig.

RUARK R7 RADIOGRAM



I have been fascinated by music and the things that make music for literally as long as I can remember. My earliest musical memories centre around a 1950s HMV radiogram that took pride of place in the corner of our living room. At this point, readers born after 1970 may require some explanation as to what a radiogram actually is. The radiogram combined a record player – we didn't call them turntables back then – with a radio (we didn't call those tuners yet either). The record player and radio were housed in a solid wooden cabinet containing a speaker, or if you were lucky a pair of speakers, and usually a little built in cupboard to store your record collection. The radiogram was as much a piece of furniture as a functional item and was built for the ages – ours still lives in my mother's house.

That radiogram entertained and educated me. I moved from Pinky and Perky records (if you don't know, look them up) and a series of orange vinyl 7 inch records that played at 78 rpm and contained nursery rhymes and children's stories, to cherry picking from my elder sister's record collection. She was principally a Cliff Richard fan and I didn't share that enthusiasm but The Last Time by The Rolling Stones, Yeah, Yeah by Georgie Fame, Here Comes The Night by Lulu and Cathy's Clown by The Everley Brothers were given regular plays. The radio was something to be played with rather than played; the 4 bandwidths of VHF, Long Wave, Medium Wave and Short Wave could individually be coaxed into making a variety of interesting noises by twiddling the tuning knob but musically speaking there was little there to interest me. That would all change in 1967 through, when BBC Radio 1 took to the airwaves.

The radiogram fell out of fashion by the end of the 1960s; replaced by the music centre, which typically added a cassette deck to the turntable/radio combo, and the increasing popularity of separate systems for those who really took their hifi seriously. Tons of teak, mahogany, valves and Garrard turntables were consigned to the scrap heap – just not in our house. Fashions often come full circle and if you have visited the furniture department of your local department store recently you will have noticed that 1950s furniture is bang on trend; all sexily-curved sofas and spindly-legged tables. And if your local department store is the same as mine, a Ruark R7 radiogram sitting prettily in amongst them and looking perfectly at home. Unboxing and Appearance

Like the radiograms of yore, the R7 is very much a piece of furniture and is also solidly built; the unit's 30 kg weight is testament to the quality of its walnut, aluminium and glass construction. The unit arrived well packet inside a sturdy cardboard container. A cardboard box is a cardboard box but the external design featuring the Ruark logo and a breakdown of the R7's features give a sense of the quality of the quality of the product within. Opening the box, the R7 and its component parts were so well packed that I was already dreading the repacking that I would have to do when the time came to return the product. Luckily when the time came, that actually turned out to be pretty straightforward.

The R7 itself is cozily snuggled in a large cotton drawstring bag – very useful for protecting the walnut cabinet work if you need to put the unit into temporary storage. A second box contains the power supply and a third the legs, remote control, FM aerial and various other accoutrements. Slipping

You would expect an all-in-one unit like a radiogram to be simplicity itself to set up and the R7 does not disappoint on that account

The Ruark R7 is a versatile, stylish and very well-built unit bringing together a CD player, network player, FM/DAB and Internet radio and Bluetooth connectivity

the R7 out of its little sleeping bag, I was immediately struck by the quality of its cabinet work – it really is superb, not just on the obvious visible surfaces but also on the base of the unit where the subwoofer lives. The R7 can be used as a freestanding unit on its elegant spindle legs. Alternatively, it can sit on top of a sideboard or AV cabinet supported on 4 screw-in “pucks”. Aesthetically, my preference was for the freestanding spindly-legged option but the presence of a Christmas tree in the room meant that space was at a premium so, after a short test period using the legs, the sideboard option was the one I went for.

Setup, Operation and Sound

You would expect an all-in-one unit like a radiogram to be simplicity itself to set up and the R7 does not disappoint on that account. The circular, almost hemispherical, remote control is intuitive to use and in combination with the bright and clear front panel display, I very quickly entered my wifi password and connected the R7 to the audio files on my NAS and to Internet radio via my router. It is possible to scroll through your network audio library using the remote and the display but if you gave a large library this quickly becomes tedious. This is not a particular criticism of the R7 however – this process on the R7 is no more or less tedious than on any other product that offers on-screen library navigation. Fortunately, as the R7 is UPnP compliant, I was able to use my NAS's library management app on my iPad to more easily navigate my collection.

Safe in the knowledge that my digital library was under control, I decided to start my R7 listening experience with the FM/DAB radio options. I have never owned a radio that relied on a ribbon aerial and found the results to be anywhere near satisfactory.

Unsurprisingly, the R7 was no different. I went through the usual farce ballet of positioning the ribbon in unlikely and impractical configurations in order to get a signal that was as stable and static-free as possible. Why anyone would want to do this when there is a perfectly acceptable substitute available in the form of Internet radio is beyond me. I can say that because radio is not a particularly important source for me. If it is for you, however, then connecting the R7 to an external FM/DAB aerial ought to see you right in that department.

Moving on to the CD player, I mirrored the R7's retro-but-modern feel with Don't Be Afraid, the recent album from country singer Tami Neilson, which also has a Fifties style with an up to date twist. The R7 suited the album's production perfectly; twangy baritone guitars were detailed and resonant; Tami's vocals were rendered with clarity but with a degree of warmth. The overall sound just made me want to settle down with a glass of red wine and wallow in the album from start to finish.

The R7 retained these qualities when I moved on to some choices from my digital library. The R7 can be warm and comfortable like an old pair of slippers but it is also adaptable. When asked to summon up the crisp, cold air and glacially-sculpted landscapes of Sibelius' second symphony, it was still capable of painting an appropriate sonic picture. Once again I found myself simply settling back and letting the music take me away. It would be unrealistic to expect the R7 to have a massive soundstage and it doesn't, but it does do okay for its size. I threw a lot of different styles of music at the R7; given the time of year, a lot of different styles of Christmas music in particular, and time and again the word I kept coming back to was comfortable. The R7 isn't the last



RUARK R7 RADIOGRAM

word in tonal accuracy, it won't knock you off your feet in the way that it conveys pace, detail and rhythm but it does offer an easy and seductive listen. Playing Haitian Divorce from Steely Dan's album The Royal Scam, I still got caught up in the intricacies of the instrumentation but I wasn't able to pull the music apart and follow Dean Parks' guitar lines or Bernard Purdie's hi hat throughout the song in quite the same way as I normally can with my usual hifi set up.

I have not previously had any use for Bluetooth in an audio system but I discovered that the R7's USB port was capable of powering my Amazon Dot and once I had paired that to the R7 via Bluetooth, there was great fun to be had by asking Alexa to play Radio 2 or a 1960's Christmas playlist. She even came up with the goods when I asked her to: "play the song that goes 'Poor old Johnny Ray'". Okay, so this was straying away from hifi quality but for a bit of casual listening and a bit of fun it was perfectly acceptable.

Conclusion

The Ruark R7 is a versatile, stylish and very well-built unit bringing together a CD player, network player, FM/DAB and Internet radio and Bluetooth connectivity. It is never going to outperform a well-matched set of separate components but that's not really the point and so if you feel this is the kind of thing for

you it comes highly recommended. The R7 brings something unique to your home. If you decide that you need one in your life then nothing else will do.

AT A GLANCE

Build Quality: First-class craftsmanship, oozing quality

Sound Quality: Not the last word in Hifi at the price but a highly engaging and enjoyable listen

Value For Money: Purely in sound terms you can make £2000 go a lot further, but the R7 is much more than just a piece of audio equipment

Pros:

Versatile and easy to use

Killer looks (if Fifties-inspired design is your thing)

Exceptional build quality

Cons:

Fifties-inspired design is not for everyone

If sound quality is your top priority, you can do better for the money

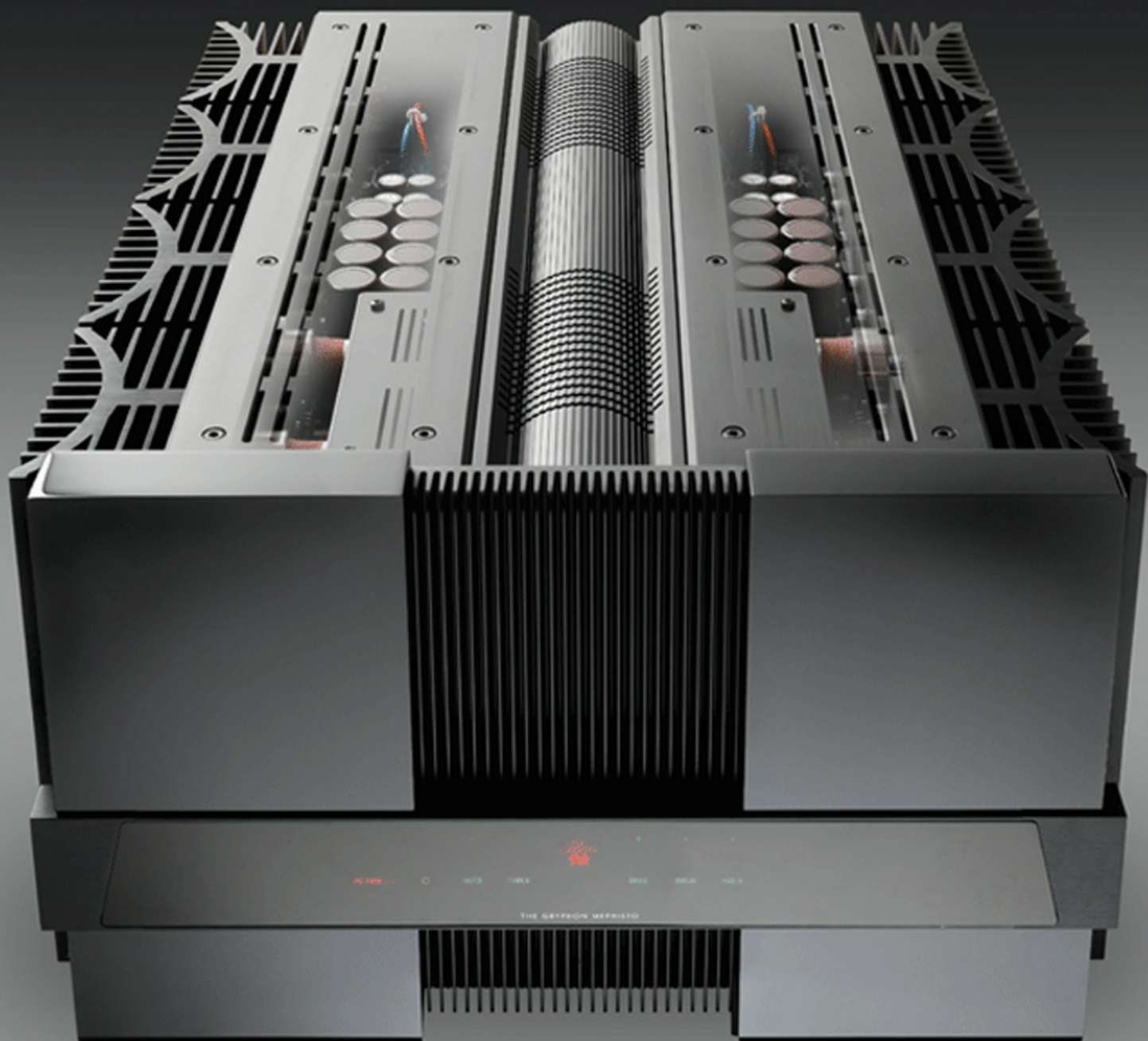
Price: £2000

John Scott

The R7 can be
warm and
comfortable
like an old pair
of slippers but
it is also
adaptable



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Fiio X1ii DAP

By Janine Elliot

The Fiio X1ii is a personal music player that costs just £99 but has great specs. Janine Elliot has a play.

It gave me a
chance to
give a
general
judgement
that detail
was fast
and with an
excellent
top end



I love reviewing personal stereo, and it shows how times have changed in the last 30 years. As someone working their way into the older generation I can see we have become more insular, as the days of sharing our music and talking face to face seems to disappear seamlessly into a world of private listening, private viewing, and 'talking' to others via texts or Facebook. Even the latest fad of 3D VR boxes can only be used by one person at a time. Sad days. Or is it? Whilst I loved my Sony and Akai cassette Walkmans, they still had that limited frequency response, hiss, and wow and flutter. It did, however, mean that playing unsociably loud music became more limited to car stereos. Whilst personal stereo took a step back with MP3, the rise of higher definition uncompressed digital files is beginning to mean we can start to have higher expectations of audio, as we retrain our ears into accepting better sound quality. With increasing competition of FLAC and DSD audio DAPs, and most importantly prices beginning to come down at the same time as growing performance and bigger storage capacity, high end personal audio is becoming even more popular. One name that has been foremost in making it all accessible to the general public is Chinese company Fiio. I regularly use my X5, and now their original and popular range of X1, X3 and X5 have been improved into easier to use and better looking second generations, plus they now have a top-end X7 and at the

other end of the market a very cheap M3 capable of 96/24 FLACs.

The original X1, almost 3 years ago brought cheap hi-def audio to the masses, and this new X1ii is equally important at £99, having a similar front layout to the original model, but being smaller and much better looking and almost Apple Nano'esque with its curved sides and flat top and bottom. At under £100 the original X1 was extremely good value at a time of very little competition anywhere near the price. So to do a similarly priced and improved unit now it needs to be that much better and with more facilities, which I am glad to say it certainly does on both accounts. Of course you still have to pay for the microSD cards to assemble your music but as prices of storage is reducing each year that outlay is getting less. The original 106 gram 96.6 x 57 x 14mm X1 used the PCM5142 DAC from Texas Instruments. This new aluminium alloy shell model has the excellent TI PCM5242 which achieves a higher S/N ratio (the X1ii can achieve around 115dB SN and 107dB dynamic range) and supports full differential line output to achieve balanced line output function, and is in a slightly thinner and 4 gram lighter box at 97 x 55.5 x 12mm, available in black, rose gold or black. Whilst much of the architecture has changed, the Intersil ISL28291 buffer chip and an OPA2322 op-amp remains the same. It is fully featured, too, with iPod-esque touch

The unit does allow full screen and normal screen selection, so you can choose what you see. It even can display supporting lyrics if you like singing along to the music

wheel, and four buttons one at each corner, two-way Wireless Bluetooth 4.0 allowing you to receive Bluetooth signal at the same time as sending, so it can be used in your car or with wireless IEMs. It even turns on or off when you start or stop your car engine, if it is equipped with Bluetooth. The unit has a good support for lossless audio including up to 192kHz/32bit WAV and 192kHz/24bit FLAC, though not DSD. The previous first generation model only did 24/192 for both WAV and FLAC). The single microSD socket now allows a 256Gb card (the X1 was 128Gb) and has a switchable headphone/line output socket. It allows in-line remotes on IEMs as well, though not allowing volume control support of Apple earPods, nor my Flare R2s. The 1800mAH 3.7v battery gives a further hours' use at more than 12 hours, and with a fast charging time of around 3 hours. Not only this but the deep-sleep standby mode means it can give you up to 15 days of 'instant' wakeup, a feature also introduced in the second generation X3 and X5.

Accessories are vast in this package. Not only can you purchase one in a selection of three colours but then you can "dress" the X1ii with a choice of two bodywork carbon-fibre stickers in black and white if you are still not satisfied; I kept mine nude in black for this review. The unit also comes with a plastic almost-transparent clear cover to protect the back and sides from scratches and bad treatment in your pocket (it also has a standard clear plastic protector already over the screen, and with a spare should you need it). Whilst the cover was a great idea for the back it did mean that you had no protection on the important front panel except for that 320×240 screen, or if you used the carbon-fibre stickers. Of course inline remotes on the IEMs give you some of the controls you need, but I still prefer the

rubber cover of the X5 which allows access to the wheel and with full safety around them, though does increase the size of the unit, which might concern some. Also supplied is a USB-to-micro USB cord.

For this review I mostly used the Flare Audio R2Pro IEMs, an excellent quality product which would show up exactly the audio quality without adding any of its own personality. Consequently it gave me a chance to give a general judgement that detail was fast and with an excellent top end, though sounding more clinical and less musical than some DAP Walkmans I have played with over the last year, though they are considerably more expensive. For the price, though, this was a surprisingly good player, if a bit low output at around 100mW at 16Ω. Dadawa's "Home without Shadow" ('Sister drum' album) is well known for the bass extremes and excessive dynamic range. Where the top-end on the recording is excellent, indeed better than the original X1, the bass end just isn't there as much as would like. Playing most Planar and Dynamic headphones would be limiting in sound level; where my X5 at 150mW has slightly more dB, the new X5ii has 250mW! Having the facility for Bluetooth connection to wireless IEMs, now the 'in-thing' following the news of the iPhone7 having no headphone sockets, allowed me to connect up the Optoma BE6i wireless IEM, though the absence of aptX meant the quality was not quite so good as it could have been, especially in terms of dynamic range.

The 320×240 screen is better than the original model, which seemed a bit anaemic in detail and colour, and it shows track details including file details at all times the screen is lit if you haven't downloaded the cover photo. I really like to see this detail at all time, but few have sufficient screen size



to permit full details and an unspoilt front cover picture simultaneously. The unit does, however, allow full screen and normal screen selection, so you can choose what you see. It even can display supporting lyrics if you like singing along to the music.

Where the mechanical wheel on the X5 was rather over-sensitive and fidgety, the X1ii is a very precise and virtual touch wheel as in the iPods, so is much easier to use, though not quite as good as the Apple. Also, as in the new X5ii, there are no covers for the microSD socket, something I liked in the X5. Whilst this shouldn't be a problem it does mean that dust might get trapped inside. Another shortcut in the design is that there is only one 3.5mm jack that serves headphone or line output which needs to be selected in the setup, and both headphone socket and microSD card slot are now at the bottom of the unit, rather than on top and side, respectively. I prefer them at the top, especially if the unit is sitting in a top pocket. Initial updating media loading of songs onto the unit took longer than I hoped, but once all registered in the UI, allowed faultless playback of all file types, if just a little slow between track selecting, though the latest firmware FW1.4.1 did speed it up a tad. Only wish it had the facility of using as a USB DAC, but that would be too much to expect for the price.

Bach's Goldberg Variations BWV988 Aria (24/192 FLAC), had a very precise and fast harpsichord showing me an improvement in timing and detail in the top end, though I found the sound not as musical as players costing north of the X1ii, though still acceptable. "Music for a While" ('Classically Minded' David Rees-Williams Trio) gave me a chance to test space and detail from lows to highs, and the X1ii did this very acceptably, with the BE6i showing a greater warmth in the bass end, though not quite as good as some players over £100. Katie Melua's new album 'In Winter' (WAV download) is beautifully recorded, though there are a number of very low frequency and low amplitude mic pops which the X1ii couldn't show when carefully listening, suggesting a slight attenuation at lower frequencies, though when you consider this unit is priced the same as "good" cassette Walkmans back in the 80's, which had none of the technical finesse of 21st Century DAPs, I have no complaints. Katie's close-

mic'd voice in 'Perfect World' (track 3) comes across with a very human quality, showing an almost perfect world. "Can't we be Friends?" ('Ella and Louis', Ella Fitzgerald and Louis Armstrong) might have turned everything now to mono inside my head, but the clarity in this old recording was carefully assembled in the X1ii. Finally to Ray Davies 'No one Listen', this grainy recording just slightly missed out in its performance, being slightly less clear in the mids than the tops, though by no means a problem, and the grainy recording slightly encouraged by the lower end DAC. If only this was an ESS Sabre DAC.

Conclusion

I actually really enjoyed using this machine, and whilst tonal quality was not as good as the more expensive X5ii, or indeed a number of much higher priced DAPs, easily took its place as the best value out there now and still highly acceptable for the price. When you look at its good looks and features you wonder how it can be so cheap. Being so small, and allowing 250G of FLACs makes this obvious choice for the price-conscious personal audiophile. Well done Fiio!

AT A GLANCE

Build Quality: Excellent aluminium shell and good looks

Sound Quality: Very detailed and tidy sound, with improved top end compared with the original X1

Value For Money: At £99 everyone should have one in their top pocket. Don't forget that microSD cards and earphones are extra cost, though

Pros:
Excellent value
Good looks and build quality
Having a non-mechanical scroll wheel
Bluetooth functionality

Cons:
Bass not quite as extended or flat
Slower user interface than some DAPs
Price: £99
Janine Elliot

When you consider this unit is priced the same as "good" cassette Walkmans back in the 80's, which had none of the technical finesse of 21st Century DAPs, I have no complaints

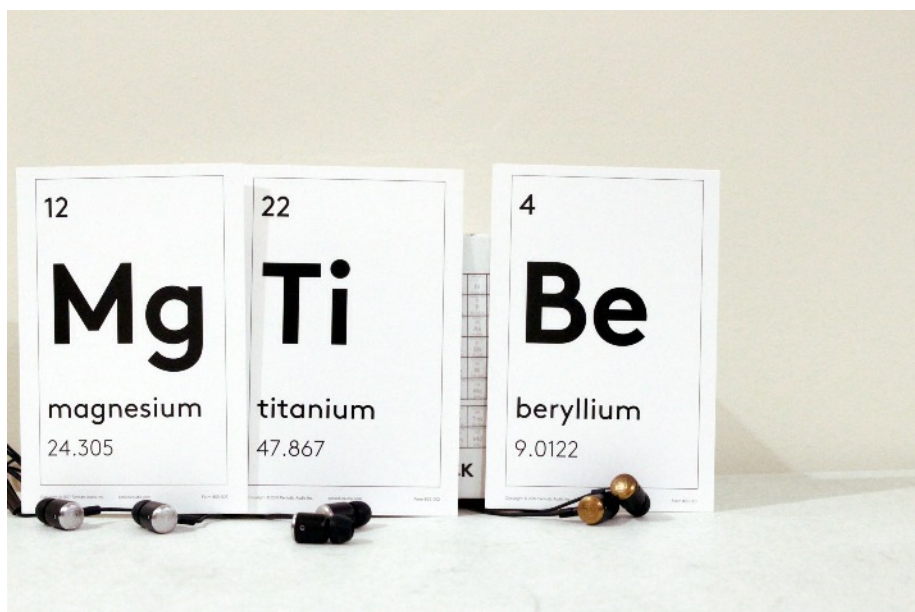


Periodic Audio IEMs: Magnesium, Titanium and Beryllium

By Matthew Sampson

Periodic Audio have done away with convention and named their in ear monitors after elements of the periodic table. Matthew Sampson takes a listen to their three offerings costing \$100, \$200 and \$300.

PERIODIC AUDIO IEMS: MAGNESIUM, TITANIUM AND BERYLLIUM



Usually, when a Hifi company comes out with a new anything, they follow the same naming convention: letter-letter-numbers-and-maybe-another-letter. So when Periodic Audio came out with their initial run of IEMs, and named them after metal elements, two earth and one transitional, I was pleasantly surprised. When I listened to them, I was downright impressed. These IEMs, or, if we're being colloquial, earbuds, are workhorses for a certain section of the population, and though they're not the cheapest when it comes to IEMs that aren't custom-moulded, they're by no means unreachable.

But let's talk about those elements for a second. If you asked me why my Fostex TH500RP headphones are TH, 500, or RP, I'd probably have to double-check the manufacturer's spec sheets to find out exactly why they're designated as such. With the Periodic IEMs, the Magnesium, Titanium, and Beryllium, they're called that because, frankly, that's what they are. Each IEM features voice diaphragms (yes, not balanced armatures) made either primarily or entirely of whichever element they're named after, and the minimalistic boxes that the IEMs are sold in feature the Atomic number, weight, symbol, and name of the element; a bit of fanservice for anyone who fancies themselves an audiophile and a science nerd.

In fact, "minimalistic" is probably the best way to describe how Periodic handled many of the design elements. Once you get the IEMs out of the boxes and their foam rubber padding, the gold-colored carrying tin has no designation on it, and the IEMs themselves have no marking on them, save for the company logo on the appropriately-colored backing cap. This was the first shortcoming

that I encountered, as I had no way to differentiate between left and right without plugging them in and listening. However, the manufacturer notified me that the production models have black grilles on the left-ear unit, which solves the differentiation issue without compromising the minimalistic styling of the IEMs.

What's not minimalistic, however, is the amount of choice given to the end user in terms of ear tips and adaptors. A lot of IEM nuts are going to go out and snag the appropriate pair of Comply eartips (TX500, in case you were wondering) but frankly, most people won't need to. Periodic includes the three major types of eartips (Foam, single flange silicone, and double-flange silicone) in three different sizes apiece, and so whatever your preferences, there's probably an included eartip for you. Also included is a $\frac{1}{8}$ "/3.5mm to $\frac{1}{4}$ "/6.35mm adaptor, and an airplane adaptor, both of a fairly decent build quality, and gold-plated.

Listening

So the sound. The reason why we have IEMs in the first place. Full disclosure, these aren't for everyone. If all you listen to is Steely Dan and Vivaldi, you're probably going to be disappointed, and your considerably-lighter wallet may cry a bit. However, if you're like me, and you occasionally indulge in EDM, Pop music, anything with -beat, -dance or -wave suffixed on the end, or Hip-Hop, you're in for an absolute treat. This is probably the most fun I've ever had listening to Electronic music, bar none, and I actually found myself seeking out new electronic music to listen to with these on. The sound is lively and punchy, with danceable driving bass that is neither boomy nor dull, and searing high lead

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to with these
on

Synth-heavy,
or even just
generally
danceable
pieces all
sound
magnificent,
akin to
bringing a club
or discotheque
with you
wherever you
go

synths, with present mids that allow you to hear the reverb and vocals clearly, which is a pleasant surprise with IEMs. The manufacturer points out the Titaniums as the best for EDM, and they really are, especially for the modern stuff, but the Beryllium just has...something. Well, something besides an additional USD 100 in cost. The detail in the sound is quite nuanced, and any serious electronic music fan who has the cash to splurge should probably consider these for on-the-go listening. And the Magnesium, the entry-level offering, is no slouch either, with probably the most present high frequency response of the trio, and the clarity to allow for some versatility, which can justify the cost for those new to IEMs. The downside to this is that the sound isn't really anything I've not heard elsewhere, so I was less wowed.

Especially given the strong suit of the Magnesiums, you could bet money that nobody could find a better IEM offering for USD 100 from EDM and Hip-Hop standards such as Beats, Marley or SOL, and probably win that bet. If you've got music that features electronic or sequenced instruments, you'll want to hear them through the Periodic IEMs, and hey, if you want to listen to Aja for the 200th time, you can do that too.

"Electronic music" has a bit of a bad reputation in the audiophile community, evoking images of MDMA-addled millennials listening to brickwalled offerings from Skrillex in between drags of their oversized vape pens. But when I say Electronic music sounds great, I mean almost anything featuring mostly-synthesized instruments sounds fantastic. So while I did test the best Carpenter Brut, Savant, Scavenger Hunt, Disclosure, Blackmill, and Goldroom tracks in FLAC, I also tested out Herbie Hancock's "Future Shock," almost all of Jean Michel Jarre's "Oxygene" and "Chronologie," some

lesser-known works like Propellerheads' remix of "On Her Majesty's Secret Service" and the quintessential 80s dance number "Pump Up the Volume." Synth-heavy, or even just generally danceable pieces from groups such as The Birthday Massacre, VNV Nation, A-ha, Donna Summer and a lot of Michael Jackson's early releases all sound magnificent, akin to bringing a club or discotheque with you wherever you go.

The biggest question that many people have with IEMs is of course, about the mobility. The answer is simple: They're IEMs. Most mobile phones, DAPs, portable computers, and tablets can provide ample power to drive these 32 Ohm IEMs. You put them in, and they stay in, providing the isolation you need when on public transit, out for a walk or jog, at the gym, or even just around the house. The cord isn't excessively long, so it's not going to get tangled up around you whenever you move around, or require you to carry a bundle of cable in your off hand, but it's not so short that you can't carry a connected DAP in your pocket. (And a mobile with an SD card full of FLAC works just fine as well) The carrying tin makes portability easy, even if bystanders may think it's a fancy can of mints or dipping tobacco for a split second. Bottom line, they do everything one would expect of IEMs, and a little more.

So now for the elephant in the room. These things aren't cheap, but that's for a good reason. The Magnesium is roughly USD 100, MSRP, and the price ascends 100 dollars every time you go up an iteration, with the Beryllium costing USD 300. As mentioned before, this isn't insane, especially when you consider the cost of some of the insanely luxurious custom-molded IEMs that some companies offer, but most people wouldn't



PERIODIC AUDIO IEMS: MAGNESIUM, TITANIUM AND BERYLLIUM

consider the Beryllium a throwaway purchase.

So let me break it down this way:

If you're light on cash, but really like hip-hop, EDM, electronica, disco, or synthpop, and you want to get started in the world of IEMs, the Magnesium is a pretty safe bet. Also, these are probably the most versatile of the set, so they're pretty great for other genres.

If you like EDM a lot, and you want to take that appreciation with you wherever you go, the Titanium is your best bet. Lowest versatility, highest return on investment for those who like modern Electronica.

If electronic music is your passion, and you want the absolute pinnacle of luxury (and have the requisite USD 300) then the Beryllium will be worth every penny. Lower versatility, but a Jack of All Trades is a master of none...and these are masters.

Conclusion

Should you buy the Periodic IEMs? That's up to you. But I can safely say that for anyone I know who enjoys electronic music, and who asks me for a good pair of earbuds, I'll recommend the Periodic IEMs without a second thought. Oh, and they offer a 5 year warranty, if you're rough on your kit, or just want that added security.

AT A GLANCE

Build Quality: Good. Polymer IEM housing feels sturdy, and none of the eartips feel flimsy or cheap

Sound Quality: Good to excellent for the price, depending on the user's preference.

Even the lowest-cost offering in this set sounds robust and fun, and the Beryllium is truly spectacular with electronic music. Caveat Emptor with the Titanium if electronic music isn't your speed.

Value For Money: Variable. The Magnesiums are a great buy for any listener, though not a unique experience. The Titanium is highly specialized, but sounds great for its intended use (electronic music) and the Beryllium is like the Titanium, but with an impressive amount of nuance, making it a better buy, but still not as neutrally versatile as the Magnesiums

Comfort: No issues wearing them for long periods of time, even when undergoing strenuous activity and with different eartips

Pros:

One of the most enjoyable listening solutions for EDM, Electronica, Pop, and Hip-hop music

Cool, sleek design sensibilities. The elements nomenclature is a nice touch as well

A glut of included choices when it comes to eartips and adaptors

Punchy, clear bass, searing highs, present mids

Cons:

Not as versatile as some IEMs

Beginners may balk at the cost

Upper-level IEMs in the series are increasingly specialized

Price:

\$100, \$200 and \$300

Matthew Sampson

The sound is
lively and
punchy, with
danceable
driving bass
that is neither
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Aequo Audio Ensis Loudspeakers

By Stuart Smith and Linette Smith

The €24000 Aequo Audio Ensis hails from The Netherlands and has an innovative and interesting design. Stuart and Linette Smith take delivery of a pair and naturally throw some Dutch techno at them.

We first got in touch with the Aeque Audio guys before last year's High End show in Munich and when we arrived at the MOC were drawn to their booth because they were playing electronic music rather than audiophile music that is de rigeur at such events...and we were really impressed with what we heard. Of course, a booth at a mega busy Hifi show isn't an ideal environment for any kind of critical listening and so we were keen to get a pair in our main system. And so it was that Paul and Ivo made the journey from the Netherlands to our humble abode.

The Ensis speakers are an elegant looking proposition and should find favour with those looking for something that is modern looking yet stylish. They are narrow and stand 116cm high so any room should be able to accommodate them. The speakers are sloped backwards to time align the drivers. At the bottom of the speakers is an enclosure that houses the ten inch aluminium subwoofer that is actively driven and is adjustable: This is a very useful and sensible feature that allows the Ensis loudspeakers to integrate brilliantly into any environment and room situation. The mid/bass driver uses a Hexacon voicecoil with a Kapton-Aluminium former. The soft fabric tweeter's dome is centre fixed using a carbon rod and billet aluminium dispersion cone and utilises an acoustic lens. Ensis is a closed design that is heavily braced and uses four types of wood. The crossover for the mid and tweeter uses matched polypropylene capacitors and air core baked wire coils throughout, though there are no capacitors in line for the midbass, whilst the aforementioned sub uses "ARPEC" sound processing and a 500W per side N-Core amplifier.

Terminals are WBT and accommodate bananas, spades or bare wire. The front of the speaker is made of a mineral filled polymer and available in white, black or custom finish. The overall feel of the speaker is one of understated luxury with fit and finish being exemplary.

We used our Nord amp and Music First Audio preamplifier along with a Chord DAVE DAC, but also drove these 90db speakers with a little Clones Audio i25 (25W) and a Audio Hungary valve amp with no feeling that we needed to pump

more power through them. This is a good thing given that Ensis is likely to be used in homes that are modern and clean, in keeping with their design and people that buy these are unlikely to want clutter and boxes all over the place – I could see them being used with something like the Roksan Oxygene amp and CD player for a compact and neat solution.

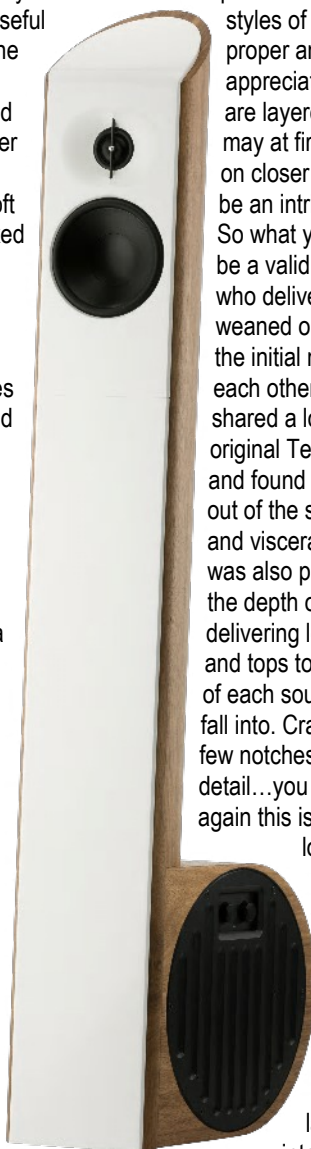
Set up of the speakers was a doddle as being a closed design they just aren't that fussy, though a small degree of toe-in was preferred and a bit of fiddling with the beautifully crafted bass controls was needed to match perfectly with the room.

Listening

Now, techno is a much maligned and often derided genre of music, particularly the head down, furious gabba variety that comes out of Holland, but for those in the know this kind of music has a beauty and complexity that to some, and I include myself in this, is

preferred to more audiophile-centric styles of music, though you need a proper and detailed system to appreciate this. Electronic sounds are layered in such a way that what may at first appear just to be a racket, on closer inspection reveals itself to be an intricate and gorgeous sound. So what you may ask and that would be a valid question, but Paul and Ivo who delivered the speakers were weaned on this kind of music and after the initial niceties and getting to know each other we soon realised we shared a love of this style. I played the original Technohead (React) album and found that whilst the sound coming out of the speakers had that rawness and visceral feel that is essential, it was also possible to lose yourself in the depth of each sound, with the Ensis delivering loads of detail in the mids and tops to the extent that the make-up of each sound was easy to unravel and fall into. Crank the volume button up a few notches and you lose nothing of the detail...you just have more volume, and again this is a very good thing. Lesser

loudspeakers can get all flappy and distressed with this kind of material at high volume, but not so the Ensis; they remained composed and unruffled at all times. Bass tones and that very recognisable bass kick had a depth and layering that again drew you into the individual sounds but without losing and overall cohesiveness.



The Ensis speakers are an elegant looking proposition and should find favour with those looking for something that is modern looking yet stylish

Presentation is clean, uncoloured and powerful when it needs to be – and likewise subtle when there is the call for it



Bass is low, controlled and tight which is another must for me with a loudspeaker. Speed is a key factor with any good loudspeaker and the Ensis are as nimble on their feet as I've heard. In some ways they have that immediacy and speed that great horns have and whilst one some systems this speed in the mid and tops can lead to a lack of cohesiveness with the bass, the Ensis' solution of having a separate but fully integrated sub works an absolute treat. Timing is fabulous and you never feel that anything is remotely out of phase leading to a transparent and open sound with real coherence across the frequency spectrum. OK, I'm well aware that very few people are going to be listening to gabba on a set of speakers that costs this much money and it's rather likely that I'm in a small minority of people who "get" this genre and so, as we always do when reviewing any piece of kit, a wide and varied selection of music was listened to. On acoustic music there is a real feel for the instruments and their timbre with Baden Powell's nylon strung guitar sounding as lifelike as I've heard. There is just so much detail evident in the music when listening with the Ensis loudspeaker, but this doesn't come with an over analytical or fatiguing character; you could listen to these all day and not feel you were overloaded. Late night listening at low volumes is often a good test of a speaker's capabilities, with lesser speakers not having the ability to convey the full range of the music, but with the Ensis, as when you turn them to high volume, you do get everything that is going on in the performance.

I'm a sucker for speakers that create an all encompassing soundstage and was a fan of Audio Physic loudspeakers in the past (though I've not been as impressed with their

more recent offerings when I've heard them at shows) because they did that three dimensional presentation; the Ensis do this trick brilliantly too and you feel that the musicians are laid out in front of you both left to right, front to back and up and down. Despite having to concentrate and listen critically to what is going on I often found myself just listening to tunes for long spells without taking notes and just enjoying the experience, which is a great sign the speakers were doing something right. Moving out of the sweet spot there is still a good sense of this image and the Ensis are a speaker that can be enjoyed with friends as well as for when you are feeling a little more isolationist.

Turning to Jeff Buckley's version of Hallelujah and it's as good as I've heard in our room. There is a purity to his voice that conveys the emotion of this tune and this comes across beautifully with these speakers. Real goosebumps time! And this is another key characteristic of a loudspeaker for me; it should connect you with the music and the performance on an emotional level and given their low colouration and amounts of micro-detail the Ensis give you a direct connection.

I'm really struggling to find anything negative about these loudspeakers. They are detailed in the extreme but not fatiguing. They have a hugely three dimensional presentation that is highly addictive. They convey the emotional content of music brilliantly. They are controlled, uncoloured and transparent. They are elegant and clean in their appearance. There is the old adage that all loudspeakers compromise in some aspect of their presentation and of course this is true to an extent but I'm struggling to find a

compromise in these speakers...perhaps the price is a little out of the reach for many.

Conclusion

These are as good a pair of loudspeakers that I have had the pleasure to have in our listening room (and I include our current reference Avantgarde Duo XD in this, though their presentation is obviously different). Presentation is clean, uncoloured and powerful when it needs to be – and likewise subtle when there is the call for it. Dynamically they are brilliant. They present every nuance of a performance or piece of music with dazzling detail and yet remain an easy listen.

Good source components are a must for these speakers given the level of detail they provide, but that needn't mean spending a fortune and we got great results using a gainclone based amplifier costing less than £1000.

They look good and will appeal to those looking to have a modern looking, stylish loudspeaker in their home that really delivers on the sound front. For me their big selling point is that no matter what style of music you throw at them, be that Industrial Strength techno or something like Fleetwood Mac's Songbird, they allow you an open view into the recording and the music. Yes you can get lost in analysing what you are listening to if you want to but for the most part you will find yourself just feeling connected directly to the music on a truly emotional level and to me that is what music is all about!

Stuart Smith

And now Linette's thoughts...

We get asked to visit a lot of people at High End Munich; companies launching new products are keen to get the press to cast their eyes and ears over their wares. When Paul from Aequo got in touch about their Ensis loudspeaker I was surprised that we hadn't heard of them before, they came across as a well established company, confidently launching their new loudspeaker at the High End show. The Ensis is in fact their first production model but Ivo and Paul have taken a lot of care over how they present themselves and the company. From the first contact Aequo are a very professional outfit, from choosing the world's greatest hifi show to launch their speaker to the slick graphics of their promotional material you get a feeling that these guys know what they are doing...it inspired confidence that we were in for a treat when we visited them in Munich.

The Munich visit did not disappoint and we were immediately impressed with both the looks and sound of Ensis, we also knew that we would get on with Paul and Ivo...their love of electronic music matched our own. Their embracing of non-audiophile music continued when we saw them again at the Warsaw show. Their room was belting out Michael Jackson while most of the others played jazz or classical, we liked their style.

The guys personally brought Ensis to Hifi Pig Towers for us to review. It was a pleasure to get to know them on a more informal basis and also to have some time alone with the speakers. The professionalism of the business is carried on in the product. Ensis is an elegant looking speaker, made of high quality materials and with great attention to detail. Its actually a very compact speaker and the slender, gently tilted back design makes it the perfect fit for the home environment. The sound that comes from Ensis is also very refined, clear, precise, detailed and a surprisingly big soundstage makes for a very enjoyable listening experience. The precise nature of the speakers is never clinical and they are very easy to listen to, whether playing at low volume in the background or belting out techno they are the kind of speakers that you could just live with day in, day out. Their clever design also means you can put them more or less anywhere, another plus point for modern living.

Ensis is very much like her creators, a smart, slick and businesslike exterior wrapped around a love of music and a fun personality. I like a diverse range of speakers but they do have to tick certain boxes in order for them to make it onto my 'Would like to own' list. Ensis really does tick them all. Great looks, sound great with all types of music (not just 'audiophile music') a lively detailed sound which is never fatiguing and a very reasonable price. Definitely on the list, outstanding!

Linette Smith

We spoke to Ivo Sparidaens who designed the Ensis speakers to get the background to his Octagon philosophy of design and how it affected the end product we see here. Size And Form (one of the eight aspects in the Octagon philosophy)

The size and shape of a loudspeaker is an aspect which we are confronted with all the time when we are in the same room with them. Even if they are not playing music. Several aspects of a loudspeaker's appearance obviously derivate from its

The sound that comes from Ensis is also very refined, clear, precise, detailed and a surprisingly big soundstage makes for a very enjoyable listening experience

Ensis is very much like her creators, a smart, slick and businesslike exterior wrapped around a love of music and a fun personality

function. Form follows function is indeed a great credo to design a beautiful product. As if our touching and seeing it can analyze its features to be processed in our mind. After this evaluation, the design “feels” right, when it actually is capable of sounding right. But yet, one functional demand can account for design choices that will be contradicting to other functional demands. And in practice we see a lot of speakers that sound well but are not shaped in a way to please the eye and even worse: vice versa. If we would trust our instincts instead of just letting go the relationship between looks and performance, we need a better explanation for the divorce instead of the happy marriage. This problem could very well be a symptom of, or better: a clear sign of the existence of contradictions mentioned earlier in functional loudspeaker design. The understanding of this concept is in fact the foundation of Aequo Audio’s conceptual design. It is making the right choices for a good relationship between the two. For better explanation let us start with a sum of such demands, then continue to zoom in on the possible contradictions between them, and finally shift to what design choices accompanied with the right technology do deliver the goods on all fronts and ensure staying happily married forever. Functional demands of loudspeakers with consequences for size and form
Listening height: something we must consider to give a realistic and comfortable presentation of sound (and stage) at the right height.

Functional mounting space: room for fitting capable transducers/drivers in the cabinet to deliver the full sound spectrum properly.
Sensitivity/amp matching: often many, or large drivers are needed to get high enough sensitivity and 8 ohms nominal loads to work with all amplifiers.

Directivity: Mounting drivers in the right direction (with respect to the directivity of each driver)

Volume size: having the right enclosure volume matching with each driver.

Diffraction: effects of sound resonance from edge to edge on the outside surfaces of the speaker.

Indirect sound from cabinet: sound bouncing from the source driver to the surface of the speaker and then to the ear, arriving a fraction late in time (out of phase with the original sound).

Interaction as an object with the room: resonances between the point of sound output and a wall or corner, or just that of sound resonating between walls and a speaker surface.

Point Source or homogeneity of multiway speakers: music and multichannel material are recorded with loudspeakers to operate as a single point source each, not matter how many drivers (ways) they need to do the job.

Mechanical capabilities: a solid construction of the speaker cabinet and mounted parts, without unwanted cabinet resonance.
Construction complexity: what is the simplest way to get the right size and form or shape, to meet all demands as well as possible.

Contradictions

If some of us had their way, the only high-end speakers of the future would maybe end up as something like two small spheres hanging in the room with unlimited full range capabilities. Or they disappeared at all, but



RUPERT NEVE RNHP HEADPHONE AMP



The Ensis speakers are a perfect example of how form follows function can indeed result in perfect harmony between performance and beauty.

without the suffering that accompanies today's in-wall and on-wall speakers: poor soundstage and imaging because of all the indirect sound coming from so many surfaces in close proximity of the driver/source, plus a serious construction project to have it installed in case of in-wall speakers.

Speaking for all of us that still love to see a real speaker in the room: even a hardcore high end enthusiast that enjoys the view of his loudspeaker must accept it has to fit in the room without his spouse filing for divorce. It must be proportional to the room itself and to other furniture. Hence: if the room is not dedicated to listening only, it should not be in the way both practically and visually speaking. Instead, it should be considered a piece of art to look at, adding value to the room for all its users. A design is needed that isn't compromising size for full range dynamics or vice versa. A design that doesn't compromise soundstage if not placed unrealistically far from rear walls. For most domestic environments this means it must be compact and still it doesn't compromise technology for usability. Or performance for looks and feel. It has room for the right drivers and parts, and at the right direction and at the right height. As if that is too much to ask and you need big bulky speakers if you want enough inside room and a sturdy cabinet that doesn't add any unwanted sound. And they will be in your way to get them right. That is the gestalt of the first main contradiction to start with. Design choices that work on both fronts Unlike sports cars, where looks, feel and performance of certain models have gone hand in hand for decades, in Hifi we have just only left the era of plain rectangular boxes. One can say this is only because of

the very different type of performance in speakers versus automobiles and thus no need for aerodynamics in loudspeakers, but one would be wrong. Every 90-degree corner and sharp edge at the wrong place can lead to sound resonance due to diffraction. Wavelengths with the size from edge to edge will be pronounced. More indirect sound will be added. Ideally sound should slide over the loudspeaker evenly and untouched. Just like an aerodynamic car sliding through the air and using its shape to overcome problems. And only there were diffraction effects can be used as a correction for certain shortcomings, such should be implemented just like spoilers and diffusers on cars are used to overcome lack of grip and unwanted lift. Actually, what one should say or point out on this topic is the fact that not only outside aerodynamics count in speakers, but also those inside the cabinet. Parallel walls mean inside resonances of specific wavelengths/frequencies. Even more reasons for a better looking curve instead of the dull plain boxy lines! And as in a usable sports car, the designer should try to get it right without too much ugly add-ons while also providing enough space for performance parts, a view through the windshield and space for the big gripping wheels to fit. And at the same time a curved loudspeaker cabinet panel is much stiffer automatically, and less prone to panel resonances. See where this is going and how it matches your instincts about form following function as for it being something that actually results in beautiful instead of boxy, bulky and ugly?

Fixing the remaining contradictions
Let's stay with the car/speaker metaphor for just a bit more and take a look at the back of a Porsche 911. For decades, it is unchanged

RUPERT NEVE RNHP HEADPHONE AMP

in being elegant and curvy, while providing enough room for big rear wheels at a wide enough span for proper handling and also loading a powerful engine in its low rear not rising the center of gravity. The engine can provide enough power being fitted in that limited space, because of refined technology that made the famous rear shape possible: a low profile and compact 6 cylinder boxer engine, made with special materials enabling high rev power from small displacement or even more so when fitted with a turbocharger. This technology enabled Porsche to bring a beautiful design with high performance without throwing just more cubic inches under a longer and higher lid or hood. Aequo Audio has put enormous in-house R&D efforts in getting the right technology, materials and production facilities to do something very similar. Technology to get the full range bandwidth from a smaller speaker. Materials for a compact, non-resonant cabinet without the need of extremely thick walls. A special 20 ton press to form different layers of wood into super precise and ultra-stiff curved panels. Further technology was developed to allow speakers to throw a holographic soundstage even when setup in problematic room positions and/or acoustically poor rooms. And also allowing bass adjustments for different sized rooms and positioning near walls or corners, without the need of digital sound processing.

Size and form of the Ensis loudspeaker and its enabling technology.

The unique design of the Ensis cabinet, best described as a three-dimensional music note, is a compact slim shape that holds three powerful transducers at the right place. Two high sensitivity passively driven, high sensitivity drivers for mid and high frequencies are placed very close together and at the right listening height and direction. A long excursion, active 10 inch subwoofer is placed very low and coupled to the floor, facing enough to the front for its directivity and to keep from turning to walls with optimized toe-in positioning of the speakers. The music note tilts back to time-align all drivers to the listening position. In house developed ARPEC™ technology is added to the subwoofer to ensure a full and dynamic reproduction of the lowest octave, without the need of a larger enclosure or an ugly separate subwoofer cluttering the room. It also allows analog adjustment for room size and placement. The addition of a 500watt Ncore amp added to the mix further helps with less than easy or highly powerful amplifiers without the need of many or large and highly sensitive bass drivers. The ellipse shape of the vertical upper part of the music note is carefully chosen for the optimized

travel of both internal as external sound waves. It is built with new state of the art materials, like the artificial stone front and finally evaluated with advanced resonance measurements to be optimized with Grey Matter Compound™ (in house developed non-toxic dampening compound three times heavier than granite stone). Diffraction is lowered further by rounded edges on the front and a rounded off and sloped top near the tweeter. The narrow baffle of less than 14cm wide prohibits indirect sound from the baffle and allow the speakers to shine in the “disappearing act”. The lower part of the enclosure is also round at the back for maximum strength and together with its angled sides, it completes the speaker’s avoidance of internal parallel walls and resonances associated with these, while giving more room than expected at first glance of the slim appearance. Without rear bass ports and with the positioning adjustments the speakers are easily placed. Addition of the EHDL™ tweeter system makes sure you have problem-free holographic soundstage and imaging performance in real domestic environments.

The Ensis speakers are a perfect example of how form follows function can indeed result in perfect harmony between performance and beauty.

AT A GLANCE

Build Quality: Impeccable build and styling where form follows function beautifully

Sound Quality: Detailed and uncoloured, with a three dimensional presentation

Value For Money: Twenty four grand is a lot of money but in the grand scheme of things these offer a great sound in a stunning package at a price that is commensurate.

Pros:

Fabulously well built and stylish looking
Brilliantly dynamic sound quality from a relatively small package
Very room friendly in regards to placement

Cons:

Can reveal inadequacies in partnering equipment and of poor recordings

Price: €24 000

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RDacoustic Evolution Loudspeakers

By Stuart Smith

RDacoustic are based in the Czech Republic and we first came across them at High End Munich where their Evolution loudspeakers were being powered by KR Audio amplifiers being fed by a 440 Audio turntable...all Czech brands. The Evolution loudspeakers are a single driver design using a backloaded horn and cost from €9990.



The Evolutions are an imposing back loaded horn loudspeaker standing 180 cm high, weigh 75Kg a piece and come in a variety of real wood finishes, embellished on the front baffle with artificial leather; again the customer can choose the colour. Evolution is a single driver loudspeaker with no crossover and you can choose between Voxativ, Lowther, Enviee and a few other 8" drivers. Our review pair came with what I think is the pick of the crop, the Voxativ and the Oris 500 front horn, which is designed to boost frequencies above 500Hz by 3dB. Oddly the speaker terminals were on the side of the cabinet near the driver and when I questioned this I was told this was to keep the internal cable lengths as short as possible but again customers could choose to have them placed on the back. Prices start from €9990 with the driver type being the deciding factor. Fit and finish is lovely and despite these being imposing we loved them in the room.

Listening

The first thing to be played was the wonderful Souvenance album by Anouar Brahem...go out and buy it! The first thing that grabs your attention with these speakers is the amount of detail that is being conveyed. With little details in the background of the recording becoming that little bit more evident. Piano is fast and believable in an organic sense, which is something that not all loudspeakers are able to manage. Plucked strings have weight and again there is a 'realness' to the sound. As the music rises and new instruments come to the fore there is a sense of scale added to proceedings, but the RD Acoustic Evolution speakers don't get ruffled or unnerved and simply get on with it. This album appears to be very simple and with little going on but it is actually quite complex in its structure and

where the Volya Bouquet loudspeakers we reviewed recently were massively analytical, what we have here is, and I hate to use the word again, is an organic feel to the music and with this kind of music quite effortless. Gil Scott Heron and Brian Jackson's classic album "Winter In America" has the tune that many will be familiar with, The Bottle, on it and it is a tune that gets hammered (excuse the pun) in this house. It starts off with the musicians giggling and the sense of the room it is recorded in comes across really well with the reverb of Heron's "Uno, Dos..." having the required presence and believability. Again not all loudspeakers manage to do this. Tambourine cuts through the mix really nicely and the frantic bassline is easy to follow and fast – in the stop start sense of the word. Little flourishes on the flute again cut through the mix really nicely and words that come to mind are natural and organic. Detail in the mids and tops is mightily impressive and I put this down to the effect of the Oris 500 front horn, something I would consider a vital purchase. Whilst there is colouration of course (something folk who love the speed and immediacy of single driver designs just, I believe, learn to live with) you are left feeling like you are listening to the music as a whole and not dissecting it into its component parts.

Up to now I've played pretty straight forward and undemanding music through the Evolutions, Heron's voice through them is pretty addictive it has to be said, but it's time to get the test tracks out. These are tracks I know inside out and back to front but are also tunes that can be somewhat challenging for loudspeakers...torture tracks if you like. First up is Deep Purple's live version of Smoke On The Water from Made In Japan and this is used primarily for the bassline. With the RDacoustic's Evolution speakers the guitar and hi-hats at the start of the tune

The first thing that grabs your attention with these speakers is the amount of detail that is being conveyed

Soundstaging has scale and depth and whilst these speakers certainly don't disappear, you are presented with a wholly believable and realistic portrayal of the performance



are absolutely stunning in their believability but the growling bassline is missing the impact that we are used to using our Avantgarde Duo XDs. Don't get me wrong, bass is there but it is not going as deep as I am used to. The guitar solo on the other hand is presented as realistically as I've heard on any speaker at any price. Compromises are inevitable with any speaker design and here, whilst you have stunning mid and top detail, the bass department is compromised a little – this is something you will either be able to live with or not.

Hardfloor's Once Again Back is another tune used primarily to check out how a loudspeaker copes with extreme bass and again the RDacoustics don't go down deep but there is just so much detail, speed and insight into the mix everywhere else that you could forgive them.

Neil Young's Heart Of Gold is sublime when played on these and again it is the amount of detail these speakers give you that impresses most. Snare hits are tight, guitar stops and starts superbly and Young's voice is projected into the room with reality and micro-detail that makes for a very believable performance indeed.

Induologue's Day By Day is a record I often reach for to get a sense of how a speaker presents a space a recording is made in and the Evolutions do not disappoint at all. What is really impressive with these speakers and on this recording is the whispered nursery rhyme over the main mix at the start and the detail that it is presented with. This is as good as I've heard at any price...again. Contrabass doesn't go deep but it is pretty believable and natural

sounding and the more I listen to this recording the more enamoured I become of this speaker's ability to make you feel you are listening to real musicians playing in real space before you...the vocal is truly stunning!

Conclusion

Single driver loudspeakers live or die by the quality of their drivers and to my mind the Voxativ units used in these speakers are perhaps the best available, though you could save yourself a bob or two and, as mentioned add Lowthers or another brand. I've heard these very speakers with the Lowthers and my advice is to save a little harder and get the Voxativs from the get go. I also see the Oris 500 front horn as being an essential element of the speaker and much preferred the presentation with is on. If you listen to mainly jazz or small scale classical music then you should seriously consider these speakers. They are stunning in the amount of detail and insight they afford the listener with this kind of music. Vocals are delivered in such an organic, natural, believable and realistic way that it is very easy to forgive the speakers shortcomings in the very lower registers.

Soundstaging has scale and depth and whilst these speakers certainly don't disappear, you are presented with a wholly believable and realistic portrayal of the performance. Just play the DSD version of Jazz at the Pawn Shop on the Evolutions and you will understand immediately what I am batting on about...you really do feel like you are part of the audience.

Techno and hard rock fans may want to look elsewhere, but once you accept that you

RDACOUSTIC EVOLUTION LOUDSPEAKERS

aren't going to get trouser flapping basslines you get in a nigh club, you just fall into the music in a way that is hard to describe but very easy to fall in love with. If I wasn't a bass junky, I put this down to years of Djing and playing in Dub reggae bands, I'd have these speakers in a heartbeat for the sheer wonderfulness of their mid band and the effortless way they bring the music to you.

AT A GLANCE

Build Quality: Very solid and well built

Sound Quality: Impeccable in the mid and top frequencies but don't expect trouser flapping bass

Value For Money: You are getting a lot of speaker for your money here but save harder for the Voxativ drivers

Pros:

Stunning Mid and top frequencies
Well built and impressive looking
Detailed, fast and organic presentation

Cons:

Don't do very low bass.

Price:

From €9990

Stuart Smith

I'd have these speakers in a heartbeat for the sheer wonderfulness of their mid band and the effortless way they bring the music to you



Rdacoustics Euphoria Loudspeakers

By Stuart Smith

A month or so ago we published a review of the RDacoustic Evolution speaker, a back loaded, single driver horn loudspeaker. Here we have the latest model from the Czech company in the form of the €8790 Euphoria.

RDACOUSTICS EUPHORIA LOUDSPEAKERS



The Euphoria is an interesting looking speaker as it combines an eight inch full range driver with a fifteen inch ported woofer. The woofer has a knob for both sensitivity and bass so you can tailor it to your room and your preferences and whilst this Beymer unit is crossed over (obviously), the full range driver is run fully open. Essentially this is a two box design with the cabinets for each driver being separate.

Physically the speakers stand 93cm in height with a width of 51 cm and a depth of 48cm with each weighing a substantial 45Kg. You can get the Euphoria in a choice of four woods (Oak, Ash, cherry and American Nut) and a choice of colours of artificial leather that goes round the top and sides of the speakers. The front and back of the speakers is made from a rounded off 40mm piece of wood, whilst the body of the speaker is made of Ultra-HDF. Instead of using spikes the Euphorias use wooden spheres which I thought was pretty cool. Round back there's a very well finished round brass plate with two pairs of binding posts and knobs for controlling sensitivity (pure, balance and defined) and bass (+1, +2 and +3 dB) which after much messing about I found I preferred Pure and Plus 3dB – folk who know me and read my reviews know I like to feel bass). Overall the look of the speakers isn't going to suit everyone, but personally I really loved the unusual design, though Edvard Munch's The Scream did get mentioned by a couple of visitors, but no one is going to question how well put together these speakers are.

The technical design is of course unusual too and in my notes I have written "has the world gone mad" but thinking about it this design is actually pretty sensible and potentially gives you the benefit of a single driver loudspeaker and all the speed and openness that the best implementations afford, along with the bass oomph you just don't get with even large single driver loudspeakers like the aforementioned Evolution speaker from Rdacoustics.

Sound

As soon as I plumbed these speakers into the system and started playing music I knew that I was going to enjoy them a great deal; I just sat back and listened to Hawkwind's Hall Of The Mountain Grill (great record by the way) without really taking much notice, but the immediate thing that hits home when compared to the Evolution speakers is that they don't have the sheer sense of scale of their bigger brother, but what they lack in scale they more than make up for by having more of that all important, for me, bottom end. The speakers pass our Smoke On The Water (Made In Japan) test with aplomb in the bass department but they just don't have the same level of detail and micro-detail in the mids and tops as the bigger RD Acoustic speakers. Bass guitar is growly and tangible which is how this should sound.

Playing Doug MacLeod's My In Laws Are Outlaws at low volume there is a really nice intimate feeling with the bass bouncing along nicely and guitar having a good sense of the recording space and microphone position. Soundstaging at these low volumes is "small scale realistic" by which I mean they've not got the scale that the best (and usually bigger) speakers can produce, but everything is there in the right places – sort of as if you are looking down on the performance a little. Guitar tone is properly metallic and vocals project nicely forward in the mix/stage.

On the opening lines (it's an arpeggiated synth line) on Fat Freddy's Drop's Big BW there is a sense that the synth is coming from FAR beyond the speakers boundaries before it then pans left...eerie and a real sit up and take notice moment. Really, that one sound appeared to be three feet to the right and three feet forward of the three dimensional sound space, which is, I know, contrary to what I said earlier about these being small scale realistic. On first listen I got

This design is actually pretty sensible and potentially gives you the benefit of a single driver loudspeaker and all the speed and openness that the best implementations afford, along with the bass oomph you just don't get with even large single driver loudspeakers

Was it not that
I own the
Avantgarde
Duos these
would certainly
be on my short
list

the feeling that these speakers lacked scale, but the more I listen to them the more I'm of the mind that they do scale really well, despite their relatively squat nature...it's just a different kind of presentation. Jerry that used to review for Hifi Pig used to talk a lot about where in the concert hall he felt he was sat when listening to speakers and with these you get the sense you are sat right at the front centre of the dress circle.

As with the Volya Bouquet speakers we had in previously there is a feeling of the music being presented in a sphere before you...it's not as dramatic as with the Volyas and you are looking down on it a tad, but it is there and that's a good thing.

Sound effects on the very dubby Fat Freddy's Drop album just fly about with these speakers as they should. It's not a monitor type sound in any way and there isn't the analytical quality you get with monitors, but it is very enjoyable, musical and whilst not having the organic, natural feel of the bigger horns, or our Avantgarde Duo XDs, they feel more rounded overall than the Evolutions...or perhaps just more to my taste in that they do bass, but then I do like a lot of front ported designs.

John Martyn's Solid Air shows these speakers are a versatile performer in that the mids and tops have good detail and

resolution, but bass is also nice tight and tuneful. The mix is laid out before me and there is that three dimensional feel too, though I'm not suggesting that these speakers disappear by any stretch. Guitar sounds very much like a guitar with good amounts of information coming through and the contrabass likewise with the twang of the strings and movement on the fret-board coming through well.

These are a nicely balanced speaker that I think will appeal to many with a wide taste in music. They do rock, they do jazz, they do techno and in many ways they do remind me of the hORNS Mummy loudspeakers that we lived with for a couple of years before getting the Duo XDs, though being taller the Mummys' cast a "more in the stalls" image. For those of you looking for a good allrounder these certainly deserve your attention, though there are of course compromises. Time and time again I forgot I was supposed to be writing a review of them and just enjoyed listening to the music...again a good sign. One of the criticisms of single driver speakers in the main is that they are fabulous with simple, uncomplicated music but tend to lose the plot when things get more complicated and hectic. Yes, these speakers are at their best with pretty "simple" tunes like Solid Air, but they don't get hugely flustered when you pop on a bit of Motorhead either.



Natalie Merchant's Lady Bird sounds absolutely wonderful and has me in tears. And this is important! Music and the equipment we play it on is there to connect us emotionally with the music, be that making us want to dance, cry, sing or laugh and these speakers do just that. Sometimes it is not the most resolving or expensive bit of kit that connects us though and that is the case here. Nick Drake's Northern Sky has me utterly connected with the music. Yes there is some colouration and yes there is not the resolving power of some speakers we've recently had the pleasure of using, but there is something I love about these. I am a fan of good single driver loudspeakers, I love their speed and their point source nature, but often find that I am disappointed in their bass performance and the volumes I can get them to and this is a deal killer. What RD Acoustics have managed to pull off is a speaker that has many of the qualities of a good widebander, combined with the oomph of a big bass driver, and the bass is nicely integrated too. Purists may think this is heresy, but here it works pretty well.

Conclusion

The Euphoria speakers take up where the bigger and more expensive Evolution speakers left off and, in my opinion do a better all round job of getting you closer to the music in a more complete sense, ie they go lower. They don't have the resolving power or scale of their bigger brothers and in that sense they are actually more compromised, but they are great fun.

Fit and finish is impeccable and my only criticism in this regard is that they are not a little taller, which would bring the wide-band driver to ear height, which in turn would, again in my opinion, improve the sense of scale these speakers have.

Was it not that I own the Avantgarde Duos these would certainly be on my short list. I thoroughly enjoyed them and despite not being as resolving as their bigger brothers they still represent a good loudspeaker if only for the fact that they are more versatile and cope well with everything you throw at them.

AT A GLANCE

Build Quality: Very good indeed, though some will find the aesthetics of the speakers challenging

Sound Quality: Not as accurate in the mids and tops as some single driver speakers I've enjoyed, but the lower octaves being present make these a good compromise. Having the full range driver below ear level creates a stereo image that is from the dress circle rather than the stalls. At their best with relatively simple music but cope well with other stuff where other wideband designs struggle

Value For Money: These aren't an impulse buy and you need to hear them before buying as they are not cheap

Pros: Many of the attributes of a good full range driver system but with more bass and can cope with more complex material. Very engaging!

Cons: Can get a little flustered at really high volume with difficult material. Not as tonally correct in the mids and tops as some other full range loudspeakers

Price: €8790

Stuart Smith

As soon as I plumbed these speakers into the system and started playing music I knew that I was going to enjoy them a great deal



Russell K Red 50 Loudspeakers

By Dan Worth

Dan Worth takes a listen to the Russell K Red 50 standmount loudspeakers costing from £975.

RUSSELL K RED 50 LOUDSPEAKERS



Monday's are usually considered as the most hated day of the week by mass consensus but when you receive a call from Russell Kauffman asking if it's possible to meet up to discuss a review of the bottom of the beanstalk standmounts he produces you know this Monday isn't going to be as torrid as the last!

Russell and I discussed some extremely important parameters for the review process, namely a range of good ciders and a place to eat. Russell stated 'take me somewhere where I can try some good local ciders Dan and I'd love a good Chinese, the rest is up to you'.

It always fills me with joy when I'm given so many options to work with and with this criteria in mind my options were not exactly rich but who's complaining, I'm a cider drinker and love a good Chinese – now all we needed was a designated driver...in comes Dominic, as he doesn't drink, it would be rude of us not to include him in our somewhat adventurous Monday.

Our day got off to a not so ideal start when Dom arrived in the work van, kind of resembling a lunchbox on wheels and as neither he or I gave enough thought to the logistics of three in a two seater van and once Russ had dropped his car off at the hotel it quickly became evident that either Russ or I were to be seated on the floor in the back. I jokingly asked 'so which of us I'll be in the back then Russ?' And to my amazement Russell rose his hand. Of course I explained I was only kidding but was ever so grateful as I've been suffering with some lower back issues, I commended the man for this as he slid back the side door and parked himself on the Royal throne of cushions

Dominic had placed in the rear of the short wheel bass buggy.

I decided we would go to a nice little pub on the outskirts of Dartmoor where the landlord Simon regularly attends the local cider festivals and has a great choice of brews. Getting there from mine isn't an awkward affair until you're the only one who knows the way, it's almost dark by 4:30pm this time of year, you suffer from an eye condition that means you can't see at all in the dark and you have an iPhone and Google maps! Typically in sat nav fashion and always when in the country, the swine takes you somewhat off piste and the blinkers of two headlamps is the only small amount of light down the narrowest of country roads – no, let me rephrase that, a dirt track that even Colin McCray would have been weary of.

Poor Dom's little trooper of a van was bouncy over turrets, sliding across verges and jerking through rocks, puddles and the occasional badgers den.

With Russell in the rear doing a great impression of pong and my back splintering at the seams, all of this on one of the most hideous days of weather this year, torrential rain a wind that cuts right through you and plummeting temperatures that would make a brass monkey drop its balls!

Fortunately though we were safe in the shell of the vehicle, well all apart from dear Russell who was rattling around somewhere behind me.

Good old Google maps was still confident that we were on a 'fastest route' to get to our first port of call, so we persevered a little longer, praying the phone and satellite signal would not deplete in case of the need to phone the AA because we really were

Finished in a
range of real
wood veneers
and and real
auto grade
deep
lacquered
finishes the
Red 50's look
stunning, a
real sense of
pride of
ownership is
evident when
removing them
from their
packaging

My standout impressions with these initial listening tests were that the little Red 50s had great bounce and enthusiasm with a terrifically stable soundstage

getting deeper and deeper into bandit country.

All of a sudden we stop, I ask 'what's wrong?' Dom says 'I just need to open a gate in the lane', he jumps out and quickly returns, 'it's locked!' oh, that's unfortunate we say, you'll have turn around sir (or words to that effect). So Dom backs up a little and attempts a three point turn, we go 90 degrees to the left and oh no, we're stuck and I mean stuck, wheels spinning, wet mud flying everywhere and no brew in sight! I say 'come on Russ we are going to have to push' and out we get. So now imagine the scene, it's pouring with rain, freezing cold, slippery and muddy, there's a black and blue manufacturer and a blind man trying to push a van out of its muddy ditch – Monday bloody Monday's! Could we get free, could we hell, so Russ and Dom swap roles and finally we break free of nature's grasp. Russ will argue that it was due to his driving skills but personally I think it was down to Dominic's brute strength!

10 minutes later we are in a warm pub with a pint and a couple hours after in a wonderful restaurant on the sea front eating what was – and I think we would all agree the most fantastic Chinese meal we had all ever had. Finishing off the evening sat in front of a log fire back at Russell's hotel with a Jack Daniel's in high spirits and laughing about our evening's escapades.

The Speakers

Did I mention earlier in this supposed review that Russell was bringing the Red 50s along with him? Well yes, indeed he did. The Red 50's are the smallest of the Standmount speakers from the ever growing Russell K range measuring in at H- 310mm W-205mm D-200mm. Constructed from

16mm MDF all round apart from the front baffle which is 19mm MDF and rear port tuned to 55Hz, the completely undamped cabinet does have an internal acoustically tuned shelf with several ports or holes above the woofer.

Driver compliment for the Red 50 is a 5" mid/bass injected paper cone and a 1" soft domed tweeter. Crossovers connect drivers in positive phase with a crossover frequency of 2200Hz nominal 12 db/Oct. Both drivers have only one component in the signal path! this all culminates for a reported in room frequency response of 45Hz-22KHz. Finished in a range of real wood veneers and and real auto grade deep lacquered finishes the Red 50's look stunning, a real sense of pride of ownership is evident when removing them from their packaging, they are simplistic, stylish and somewhat elegant in style.

The Sound

After positioning the speakers into a position where I would usually seat a speaker of this size I played various pop music. Russell and I had previously talked about how suitable the genre is in initially testing speakers and drivers alike. We both agreed that the wide range of instruments, vocals and frequencies gives a great impression of how a speaker may behave with further listening. My standout impressions with these initial listening tests were that the little Red 50s had great bounce and enthusiasm with a terrifically stable soundstage.

I moved on to some music of very opposite appeal in order to try and distract the 50s from their seemingly comfortable characterisation. I played some Loreena McKennit as I wanted to explore how intimate they could sound. From Loreena's



first phrase I simply sank into the sofa and any anxiety I had on behalf of the 50s dissipated when the velvety smooth and passionate rendition of her vocal compared admirably against my own Ayons and some more expensive speakers from larger manufacturers. Russell always says 'we are a big company stating in a smaller way' and I can give him respect for this as these babies have performed excellently so far.

Without any forwardness at all, no peaky upper midrange and the availability of emotion from a speaker so small and under £1000 I pushed on with optimism and confidence that listening to a male vocal counterpart could also lead to some further positivities from the Red 50s. In light of the connection Loreena McKennit gave me I played some Damien Rice. His lyrics and overall style is not to everyone's taste and usually takes centre stage in my room only at certain times during late night listening. His passion for music is very explanatory within the phrasing and tempo of his voice, conveying a belief of emotion within his lyrics.

This honesty was appreciated greatly through the 50s and although the bigger brother, the 100s have more intensity of vocal inflections, detail and realism the 50s within their own right have a real coherence attitude which really gives the impression that you are not losing out on the fullness of a male vocal either and the richness that would be expected from a larger cabinet shocks when heard from the Red 50. Very recently I had the pleasure of reviewing speakers from the new ATC range of Standmount speakers, which got great reviews from Dominic and I. The smaller of the speakers, the 7 and 11s ticked so many boxes, including detail retrieval, speed, accuracy and transparency but they were very specifically voiced to the cleaner presentation. What I find just so embracing about the Russell K's is that they can compete with ATCs toe to toe and with their internal acoustic shelf and porting add another layer of enjoyment through conveying that little bit of warmth which makes them so much more engrossing and rich sounding, allowing for more intimacy, especially in the midrange, fleshing out vocals and giving the impression of greater soundstage depth with a smoother upper midrange which controls female vocalists especially well.

This richness is also evident when listening to Jazz music and Acoustic pieces. You cannot listen to Trad' Jazz without richness. Overall bass weight can be questionable or user specific but the richness has to be there

and when equally balanced with strong detail and transparency a standmounted speaker in a smaller room such as the Red 50 will be so effective.

On the acoustical side of things my main concern with a small speaker is that when a guitar note is played, so often do you only hear the top half of the note, the decay can be missed, the note sounds too sharp and the instruments cabinet resonance is non-existent. Russell K's Red 50 do not suffer from this issue, yes it can be done more effectively with a speaker of a larger scale but from a cabinet of this size and again I reflect on the price tag, the Red 50 holds it head up high without a smug grin, just a look of confidence in their abilities to outperform some of the serious competition in today's extremely competitive market.

During the process of reviewing the Red 50s I've used a few amps on them. A Jeff Rowland integrated some Muse Monos with Rowland pre and my DiDiT DAC/PRE with some Cairn Monos. Each pairing of amplification has driven the speakers with no issues and although not very sensitive they are an easy load to drive. Each pairing has also proven to me how transparent the 50s are and the character of each amplifier has really shone through without damaging the Russell K flavour of house sound.

Capabilities of a small speaker can be somewhat limited especially in the bass region, although the Red 50s have had to have a tweak around 80Hz in order to bring more realism to the spectrum I categorically state that they do not sound as if they have a 'hump', something that personally drives me crazy with smaller speakers as it inevitably loses the truthfulness of the material.

On the same subject, tweeter integration can be tricky when managing the coherence of a diminutively sized cabinet. When balancing the articulation of a tweeter with its mid/bass counterpart I've experienced speakers which can be violently aggressive in the higher frequency field and the lack of bass weight and richness makes the tweeter sterile in sonic signature, a lack of underpinning of the high notes and a more forward presentation. For a smaller speaker I've generally favoured a ribbon style tweeter with a lower crossover point.

The Red 50s didn't suffer at all in my many listening sessions with any fatigue associated with the soft dome tweeter implemented here. Russell has a neat little process which he vigorously goes through with all of his designs. He will acquire a range of high frequency drivers and play

The Red 50
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smug grin, just
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confidence in
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some of the
serious
competition in
today's
extremely
competitive
market

Integration of
the entire Red
50 design with
the faster
paced music
was flawless
and the Red
50 can
certainly be
enjoyed very
much indeed
with many
genres

predominantly pop music through them on a bench in full range from an amplifier to assess their capabilities. This process has worked excellently, he will then select the most suitable tweeter for cabinet design and have it tweaked further with copper faraday rings (for instance) and careful crossover component selection. Anybody hearing his designs will have undoubted appreciation for his approach and implementation.

I ran the tweeter through its paces with a wide variety of music. At the time of review I also had the Martin Logan Motion 15's in with their undoubtedly exceptional Motion Ribbon, which for me is the standout driver of the design. The Russell K tweeter excelled with the very peaks and air with Nils Lofgren's guitar on the Acoustic Live version of Keith Don't Go and the pace was ahead of the Motion Ribbon. However the ribbon tweeter had a slightly more fleshed out tonality allowing for more body in the lower treble regions, both still exciting and engrossingly musical.

Electronica and dance music favours the soft dome tweeter and transparency in the upper limits was dynamically more mature and thrilling. Integration of the entire Red 50 design with the faster paced music was flawless and the Red 50 can certainly be enjoyed very much indeed with many genres and the overall compliment of drivers, crossovers and cabinets makes for a level of dynamics and realism that can be natural or within the realms of electronic music, the designs bass limitations and room size is just great!

Conclusion

It's been a long time since I've heard a small standmount sized speaker which can offer lucid mids, natural tones and sheer enthusiasm in a realistic sense for under a grand.

The Russell K Red 50 is such a compliment to Russell Kauffman's years of work in the

Hifi industry and his extensive knowledge of driver selection and integration through working at with other driver design companies is reflected in the speakers' instinctive performance.

I listened intently to flaws in the design after first impressions were just so good and I don't believe that anything that resided in their frequency response ever sounded out of place or unsympathetic to the material I played.

With true transparency a whip like responsiveness and the ability to hold the emotion of a strong vocal, the Red 50 is one of the very best small standmount speakers around £1000 that I have heard to date.

AT A GLANCE

Build Quality: Very high quality lacquer or real wood veneer, with great overall styling

Sound Quality: Unexpectedly impressive from such a small cabinet. Very well voiced and even-handed

Value For Money: Great amount of sound per pound, what should be expected from a speaker of this price

Pros:

Astonishing bass for the size

Detailed, transparent with a touch of warmth

Realistic appreciation for many genres

Price

Cons:

Binding posts have an opposite orientation than the norm and spade connectors need placing from the sides. No dedicated stands (yet)

Price: £975 (real wood veneer), £1099 (gloss black), optional grills £85

Dan Worth



Townshend Audio Engineering Maximus Supertweeters

By Daniel Worth

Supertweeters get a mixed reaction whenever they are brought up in polite audiophile conversation. Daniel Worth tries out a pair of the Townshend Audio Engineering Maximus Supertweeters costing £899.



A supertweeter is often considered as an unnecessary addition to any loudspeaker design, but these comments are often put forward by the same people who have very strong feelings on the benefits of expensive cabling. However, there is a logical argument to be made – the human ear can only hear up to a maximum of 20khz and even this is at a push and infrequently measured, with most testing of healthy adults actually coming out at 18khz max.

In my opinion both supertweeters and cables can be very beneficial to a high-end rig and it's down to their implementation and construction as to how their benefits can really be appreciated. Unfortunately like many other products in the world of high fidelity, one needs to trawl through the crap and snake-oil and rely on well regarded and established companies for a truly well produced product, that is actually worth its weight in currency and Townshend Audio have long since established themselves as a brand one can trust.

I've personally used many supertweeters in my years of audio and have really only ever heard results which have made me appreciate their worth in integrated designs – where the designer has took them into consideration with the entire build in mind. Adding a supertweeter thereafter often accentuates the lower treble frequencies too much giving an overpowering doubling of the db levels of the existing tweeter, rather than extending its abilities due to mismatching in crossover points.

The extension of the 20khz potential maximum audible by the human ear is what is often debated by many as unnecessary. Why would we even require a tweeter to reach beyond this threshold of measurable human hearing limits? And if it isn't measurable by the human ear then what's the point?

What we actually hear varies significantly, the younger we are the more we can hear in and around 20khz, the older we get the more these higher frequencies are rolled off (many of us also suffer significantly from peaks and drops right across the frequency range. A good friend of mine has a terrible peak at

8khz and he has to tune this into his system for complete pleasure). However our brain can still recognise these higher frequencies, often referred to as 'spatial awareness'. Spatial awareness is a quality that any audiophile strives to achieve from his or her system.

Being able to ascertain events, acoustic cues, reverbs, along with instrument and vocal placement is so important in creating a more realistic performance from our home setups. Granted, a substantial amount of the information presented to us isn't contained in the upper regions of frequency reproduction but the atmospheric noise, decays and interactions within the acoustic arena is. These frequencies are just as important to the overall complexion of the music as they add that last layer of realism and that 'being there' feeling, just like sub sonic bass from a subwoofer recreating the feel of an organ as opposed to what can be heard from an organ.

Correct implementation comes down to many key factors. The topology of the tweeter itself, whether a soft dome, ribbon, planar, diamond etc etc, but most often a well regarded supertweeter will be of the ribbon type. They can lack a little less dispersion than a dome but their sonic signature being a little sweeter and incredibly articulate tends to integrate very well with more integrated tweeters. Quality of internal components just like any crossover is crucial for transparency. Chassis cooling and db level controls to integrate to the main speaker are also essential for an after market design.

The Maximum from Townshend has six db levels simply numbered from 1-6 which I appreciate, it takes out any preconceived ideas of what sensitivity and level the tweeter should be set at in conjunction with the associated loudspeakers. I myself didn't expect a 1-6 level and was already considering options on leveling them to my Ayons, taking this away simply allowed me to trust my ears and integrate the Maximum Supertweeters in the most sensible way – by playing music!

Presentation, Fit and Finish

Beck's guitar
really made
use of what
the
supertweeters
were able to
add down into
the midrange
by supporting
better
separation
between the
instruments,
vocals and
venue

The supertweeters themselves came in a matte black finish which was ideal to match my speakers and quality of the finish couldn't be better



Packed very well in a suitably snug box and in outer sleeved styled box with nice graphics, the Maximum Supertweeters are presented nicely to the customer. Inside each tweeter has its own pocket of foam to sit in during transit, with a nice thick plastic wrap over each. Included also is a 1.5m copper cable for each supertweeter. The cable has bananas on both ends, personally spades at one end would probably make more sense for connecting to existing binding posts as I'd assume the majority of people would be using bananas on a single set of binding posts already fitted to the main speaker. If bi-wired, spades would still work. On the other hand, the fact that a starter cable is included is a thoughtful touch.

The supertweeters themselves came in a Matt black finish which was ideal to match my speakers and quality of the finish couldn't be better. To the rear there are two flush mounted 4mm binding posts, the type that Naim, Exposure and Cyrus use, although I hate this style as it limits the type of connectivity so much, on the Maximums it makes absolute sense and keeps a nice clean overall look to the supertweeters. To the front is a sturdy and stylish metal grill to protect the ribbon and just to the sides are cooling vents. The underside has four small and shallow rubber feet, which I was again pleased with as they are massively grippy, allowing for some weightier cables to be installed.

Installation

Simply put – a breeze.
There are two main options in connecting these to the speakers. The most obvious is

to piggyback them off the main speaker's binding posts, the other, which I chose was to run another set of speaker cables back to the amplifier. I opted for this configuration as I use Studio Connections Black Star speaker cables and having a same length pair of their Reference Plus model, which essentially is a lesser amount of conductor version of the latter, plus, there are less connections in the chain driving amplifier direct.

The Sound

Firstly I only connected the left Maximum Supertweeter and set the level to '3', recommended by Max Townshend as a suitable starting point before dialling in. I went over and sat down...for about three seconds, noticed a real lean to the left hand side of the soundstage and instantly connected the right supertweeter and sat down this time for a proper listen. I played Bliss' 'Quiet Letters' album first through the Melco and an instant further layer of detail filled the soundstage, allowing for extra perception of air and space. I even felt that I had more midrange depth as the three dimensionality of the top end carved more structure to the presentation leading down into the upper mids. Triangles had a longer lasting and more discernible decay with plenty less smearing as the music got busier.

The lower cross-in point of the Maximums is around 6khz, something I was a little wary about before installation as I didn't want to double up on what my tweeters already give, but I couldn't say that I was hearing any overblown lower treble frequencies at level '3'.

TOWNSHEND AUDIO ENGINEERING MAXIMUS SUPERTWEETERS

I played some Joss Stone and Jeff Beck next, which can sound a little tragic through lossless Tidal with the direct rip sounding far better. I didn't notice any peaks or nasties in Joss' tones and Beck's guitar really made use of what the supertweeters were able to add down into the midrange by supporting better separation between the instruments, vocals and venue – until I had the audacity to turn the supertweeters up to level '4'. Then I could hear exactly what the Maximums were adding to the entire picture and that the level was too great for overall balance.

The Townshend Maximum Supertweeters being so well constructed and doing what they are supposed to do so well, will feed back to the listener when he/she adjusts to an unsuitable level.

They need to be treated like adding a subwoofer to a 2-channel system, they need to be dialled in so that the listener cannot hear them singularly, you don't need to hear the individuality of the addition, just how the additional abilities integrate gently with the whole. I went backwards and forwards many times throughout many different genres of music and although every now and then level '4' would be better if I was absolutely critical, level '3' was on the money at least 95% of the time with my 90db speakers.

I especially love how the Maximums invite the listener into the recording arena or venue more. For instance when listening to Fink's live albums a real sense of being there is located by the inclusion of the supertweeters, everything sounds larger and more lifelike and at night time with the lights down or off, it's very easy to be transported into the audience when their applause can be

ascertained as bouncing off the walls and the airiness of the venue becoming more lifelike. Micro details and micro dynamics also receive a helping hand. Intricate tempo driven micro details flow wonderfully well and there is that cliché of being able to re-explore your music collection in more detail.

Pleasantly so, with the correct level dialed in, there is no adverse brightness to be reported by correctly installing the Maximums, rather, an extension of what the main speaker is capable of is clearly delivered and not just only within the top end, the frequency extension also aids lower frequencies within the midrange especially to enhance image separation and layering whilst remaining completely musical and palpable.

There's no doubt in my mind that frequencies past the 20khz human threshold of hearing make a perceived difference to the overall presentation of the music and what can't be heard can be understood and appreciated.

Conclusion

If you have any doubts in whether a supertweeter can make a difference to the sound of your hifi system and all the reading you undertake leaves you with mixed opinions as to whether it's even humanly possible to be able to cognitively notice differences, i'll just say one thing – stop reading people's opinions and make your own mind up by demoing a pair.

Every dealer of Townshends Maximus Supertweeters, should have a demo set in constant use for customers to hear and also a loan set on a sale or return basis to allow

There is no
adverse
brightness to
be reported by
correctly
installing the
Maximums,
rather, an
extension of
what the main
speaker is
capable of is
clearly
delivered



I especially love how the Maximus invite the listener into the recording arena or venue more

customers to be able to try on a risk free basis.

My biggest concern was the overlap of frequencies between my tweeter and the supertweeter.

I would have liked the ability to dial in my own crossover point as well as db levels or sensitivity as the Townshend Maximus' are so worthwhile that I feel I could in fact obtain even more performance by being able to fettle them even further. As a consumer unit they work as they are but for any hardcore audiophile the shred of doubt in their mind as to how much better could these even be will show its ugly head.

All in all I consider these an asset which would be dearly missed if it wasn't for the fact that they now have a permanent home with me and Townshend are a little richer! Adding a Townshend Maximum Supertweeter, along with some of their Seismic Isolation to the speakers will transform any listening experience considerably by adding more resolution, better control, added layers of musical bliss and a natural tonality that many of us strive for but without the correct guidance leaves pursuers of audio satisfaction spending pockets full of cash in the completely wrong

areas as opposed to a single calculated purchase which promises great things and proves to be worth every penny.

AT A GLANCE

Build Quality – very nice construction and finish, great looking

Sound Quality – exceptional, a real extension to any quality loudspeaker

Value For Money – again, to compliment a high-end loudspeaker worth every penny

Pros

Fantastic ability to integrate with main speakers

Lovely build quality

Well packaged and presented

Great anti-slip feet

Adds a new dimension to the sound

Cons

No shiny finishes available

No dial for crossover frequency

Price: £899

Daniel Worth



TAGA TAV-616F SE Floorstanding Loudspeakers

By Ian Ringstead

TAGA Harmony are based in Poland and offer a wide range of loudspeakers and other products to suit all pockets. Here Ian Ringstead tries out their TAV 616F SE floorstanders costing €735.

TAGA TAV-616F SE FLOORSTANDING LOUDSPEAKERS

Given the high specification of build and finish you'd expect a commensurately high asking price. Well you'd be wrong!



This is the first time I've had the opportunity to listen to a pair of TAGA loudspeakers at home and are a relatively new name to me. They are a Polish company offering high quality products for the hifi and audio-video market. The main types of products are: high-end, hifi and home theatre speakers, in-wall/in-ceiling and outdoor speakers, multimedia speakers, hifi electronics and accessories for speakers. Started in the early nineties the company is run by enthusiasts who felt that a lot of high end equipment was expensive and didn't always offer the sound quality it should have for the money. They wanted to do something about this and so formed TAGA Harmony – "To Achieve Glorious Acoustics".

The model I was sent is an improved version of their popular TAV-616F and 606 models in

SE form finished in a superb piano white gloss paint of which seven layers are applied. Not cheap to do and normally only offered by competitors at a much higher price point. The cabinets are very heavy being made of thick 15mm walls and a 21mm front baffle composed of high density MDF. I can vouch for the solidity as they came boxed in one carton that was a dead weight to carry through my front door. I'm used to large floorstanders coming and going, but these certainly felt substantial at nearly 35 Kg a pair.

The tweeters used are 2nd generation TPTTD-1 Taga Pure Titanium Tweeter Dome which has a differently shaped and lighter titanium dome to previous models. A double magnet assembly is used which allows higher SPL's and far better detailing and

The TAV -616 F-SE proved the least fussy speakers I have ever tried out from brand new and sounded great from the off



speed. Below the tweeter is a glass fibre midrange unit at 6.5" and then two 6.5" polypropylene bass units that are very light in weight to allow for fast response and dynamic definition. The tweeter has a faceplate made of aluminium to enhance the sound dispersion and the mid and bass have aluminium rings as well to aid sound dispersion and look very smart.

Around the back are a set of bi-wire, high quality binding posts and the internal wiring is OFC as used in the dearer Coral series. The front firing bass reflex port below the bass units and the terminal box are rubber coated and the speakers come with a set of high quality polished spikes to isolate them from the floor. The reflex port is also contoured and the surface of the rubber is dimpled to assist air flow and cut down on turbulence. It proved effective in listening. The speaker binding posts come with the usual gold plated metal linking plates, but I replaced them with my own wire links. A smart black grille fits on the front baffle with the usual peg and socket arrangement. The grille sockets are thoughtfully finished in white as well so that when you use them without the grilles, as I did, the usual black fittings don't stand out.

Given the high specification of build and finish you'd expect a commensurately high asking price. Well you'd be wrong! 735 Euros or £660 approximately at time of writing. Wow I was shocked! I haven't seen such quality at this price and TAGA live up to their ethos of providing superb quality at real world prices. Well done.

The Sound

Straight out of the box I was expecting the usual break in time allowance as I

experienced just before the TAV-616 F -SE 's, arrival where the other speakers I had for review sounded truly dreadful. So much so that they went to another reviewer to try out and he said he had to thrash them for quite some time before they suddenly sounded sublime. This all goes to prove that breaking in time varies wildly with different products and here at Hifi Pig we try our best to give the products we review every possibility to shine. The old saying never judge a book by its cover or initial sound in this case applies. The TAV -616 F-SE proved the least fussy speakers I have ever tried out from brand new and sounded great from the off. I always worry that any largish speaker in my listening room, particularly with four drive units will dominate and be too bass heavy. Well I was pleasantly surprised. I was greeted with a clear even handed sound from top to bottom with no bass over hang or boom. A credit then to the designers and quality of the speaker. The front firing bass port certainly was a help and the rubber coating and dimpled surface did their job well. My room is generally very good sound wise and although I have no fancy room treatments, (more about that another time), it is well damped and has solid walls and floor. After all it is our living room as well, so I must take my dear wife into consideration. She loves music, (although not a lot of what I like to listen to!!) and the look of the equipment is a bonus if she comments on it positively. Most husbands/partners know what I'm saying here.

Back to the speakers in question. They provided a tight and clean sound and could handle power with aplomb. I tried my Meridian 556 with them, a Densen B-150 and a set of Temple Audio mono blocks. They all drove the TAV -616 F-SE easily as at 91dB sensitivity and /6-ohm impedance,

TAGA TAV-616F SE FLOORSTANDING LOUDSPEAKERS

they aren't a difficult load. Led Zeppelin's classic album was a treat through them and being newly remastered and produced by Jimmy Paige on 180gm vinyl it brought back memories of when it was first released back in the seventies. With a good source and amp these speakers shone producing good stage depth and width and it was easy to hear what was going on in the mix. Tiny details and subtle effects could plainly be heard thanks to the drive units' design and the attention to detail of the whole cabinet. As well as good deep controlled bass, the mid-range was open and uncoloured and the treble was never harsh. Overall a great sound balance which for the price is superb. I have heard a lot of speakers over the years and few achieve this quality even at high prices. I'm not saying the TAV -616 F-SE is perfect, but for the money they are very good.

All types of music worked well as they should and bass aficionados should like these as long as they appreciate tight controlled bass, not loose boomy unfocused low end. I used to try and educate customers all the time in retail about clarity in the sound of a system, and especially when choosing loudspeakers. It's natural instinct for most people to like a lot of bass, but only if their room can handle it and it is accurate. At hifi shows it's a pet hate of mine if a room sounds too bass heavy or one note as it totally destroys any enjoyment for me then. The TAV's certainly

couldn't be accused of that if used with good equipment and a decent listening room. So, in conclusion an excellent speaker to suit all tastes of music which are versatile and will work well in hifi or AV systems.

AT A GLANCE

Sound Quality: Excellent, easy on the ear covering top to bottom without any issues.

Build Quality: Excellent.

Value For Money: Superb, as you not only get excellent build, but also a great sound.

Pros:
Great sonic performance
Good build and finish

Cons:
The weight when packaged in one box makes them too heavy to handle unless there are two of you. TAGA are going to address this issue and box them individually in the future.
The modern piano white finish will not suit everyone's taste. (Alternative options would appeal more, although I am nit picking here)

Price: €735 / £660

Ian Ringstead

With a good
source and
amp these
speakers
shone
producing good
stage depth
and width and
it was easy to
hear what was
going on in the
mix



Audiovector QR1 Standmount Loudspeakers

By Dominic Marsh

Audiovector are based in Denmark and produce a wide range of loudspeakers? Here Dominic Marsh takes a listen to their £750 QR1 standmount with ribbon tweeter.

AUDIOVECTOR QR1 STANDMOUNT LOUDSPEAKERS



I will use the words “uncoloured”, “lithe” and “precise” to describe their overall sound characteristics, which might lead you to think they are lean or thin sounding, but not so

When the stand mount speaker market has plenty of competition and rivals to fight amongst themselves, it takes something a little bit special to stand out from the herd. All of them however have limitations due to their physical cabinet and driver sizes, so invariably have to perform with a whole host of compromises and we as consumers have to decide which of those are acceptable to us and which are not. Every once in a while I find a product that defies the odds and if there are any compromises being made, then I really am not really aware of them, because the package as a whole exceeds the sum of it's parts.

For those of you that are not familiar with the Audiovector brand, they are in fact one of Denmark's leading speaker manufacturers, up there with the likes of Dali, Dynaudio and B&O, headquartered in Copenhagen. Audiovector also provide what I think is a rare and rather unique service for it's customer base and that is to offer a full upgrade service for your existing base level

speakers to the higher specified version of the same model.

Under test here then is Audiovector's compact QR1 loudspeaker.

Construction

The very first thing I noticed about these speakers when unpacking them is just how handsome they are. With a high gloss black cabinet they were impressive at first sight, but when I removed the grilles they looked even smarter still, with a light gunmetal coloured chassis ring to the bass driver and what appeared to be gold coloured screen mesh sitting in front of the Air Motion Tweeter's delicate ribbon membrane, which Audiovector have termed an “S Stop Filter” which in plain English is purposely designed to minimise sibilance. The mid/bass driver is a 150mm concave dish shape with no central dust cap. Material is said to be an aluminium sandwich with a fibre and foam filling.

AUDIOVECTOR QR1 STANDMOUNT LOUDSPEAKERS

They are
extraordinarily
unfussy about
placement.

Both the bass driver and ribbon tweeter frames are laser etched with the word "Audiovector", so if aesthetics are important to you then the QR1's will do very nicely on that front as they have a quality air to them. Beneath the drivers sits an elongated slot type of reflex port, extending almost the full width of the front baffle.

Cabinet dimensions are 32,5H x 19W x 23,2D (CM), weigh in at 6.2Kg and much to my surprise are fitted with four small rubber feet so shelf mounting or indeed stand mounting is as simple as placing the speakers where you want them and there is no sliding about or damage to the underside of the speakers – especially so when sited on metal framed stands.

To the rear we find a single pair of well made high quality binding posts that accepts bare wire, 4mm banana plugs or spade connectors.

Price at time of review is £750.00 retail.

Sound Quality

As befitting their good looks, so too are the Audiovector QR1's are up to the mark regarding sound quality.

They are extraordinarily unfussy about placement. While installing them into my system they ended up perched on top of their boxes while I re-arranged my entire rack. This being a lengthy process I had a break half way through the task with a cup of tea and a biscuit and casually connected the QR1's exactly as they were sat on their boxes. Conventional wisdom says that being too low, on top of hollow wobbly cardboard boxes, one speaker near the rear wall the other two feet out, one facing dead ahead into the room and the other around 45 degrees facing the other way, should by rights not sound pleasant at all but pleasant indeed they sounded and they actually imaged rather well! Once correctly installed on to 60cm steel stands and sited around 30cm from the back wall with a slight toe in, they sounded superb, especially imaging and sound-staging which was both wide and deep. Running in period was surprisingly short too, at around 20 hours or so as I recall.

I will use the words "uncoloured", "lithe" and "precise" to describe their overall sound characteristics, which might lead you to think they are lean or thin sounding, but not so. They also have a fair measure of deep bass for their size and for once isn't hidden behind an artificial uplift in upper bass to give you that perception there is more bass than there actually is in reality. Indeed, I would say the bass extends down below 45Hz that Audiovector claim for the QR1, albeit well rolled off but still easily discernable and this I prefer much more than the upper bass "hump" put there on purpose to fool you into believing the lowest registers are being rendered when they are not.

Midband is free from any congestion or bloom and having the crossover point between bass driver and tweeter at 3kHz is no doubt largely responsible for this accuracy and cleanliness.

The AMT tweeter is a real peach in my view, because while it maintains accuracy to a high level, it never spills over into harshness or brittleness, unless of course it is there in



AUDIOVECTOR QR1 STANDMOUNT LOUDSPEAKERS

the recording to begin with. I do have some recordings with some sibilance and the “S Stop Filter” did a grand job of reducing the effect considerably, but not eliminating it entirely.

Time to play some music to get a handle on the QR1's performance envelope. Into the CD drawer (none of this new fangled streaming malarkey for Dominic during a review) went Fink's 'Wheels Beneath My Feet' live album which has a clearly defined set of benchmarks that any component must either match or exceed.

Track two called 'Perfect Darkness' has some intro bars with bass provided by the bass guitarist and drummer on his kick drum, plus some very crisp rim shots on the snare drum. I pay close attention to the reflex port to make sure it isn't chuffing away in time with the bass and the QR1's were not so afflicted. A definitive and cleanly portrayed “tock” sound as the drummer was hitting the snare drum with rim shots, not only that but I could also clearly hear the shell of the drum and the ambience of those rim shots ringing out into the venue too. You could also tell that the drummer has a hard faced beater on the kick drum with some good heft behind it. Beautiful. So free flowing and natural, a real joy to listen to and I could have easily bathed in that sound for many hours without fatigue. Moving on to track 12 called “Sort of Revolution” the initial intro bars are a bass guitar solo with the audience clapping and

cheering in time, which carries on throughout the whole track. It has to be propulsive and engaging, in perfect time and rhythm to be fully appreciated, dare I say it, toe tapping too. This was no test at all for the Audiovector QR1's, it was their playground and they just drew you further and further into the music itself without you even realising it.

I played some jazz, orchestral, acoustic and a film score too with equally engaging results, so they are suitable for most genres of music.

Conclusion

Here is a small challenge for you; if you know of a good looking, good sounding and highly specified stand mount speaker with an AMT ribbon tweeter for £750.00 or less, then kindly let me know. As I cannot think of one that meets all of those criteria.

If therefore you have a hankering for a really great stand mount speaker and around £750.00 burning a hole in your pocket, then it would be unwise to make any decision on which speaker to buy without giving the Audiovector QR1 a hearing at the very least, so do make sure it is on your audition shortlist.

I found them to be engaging, enthralling and entertaining all at the same time and not many speakers have that level of capability,

especially in this fiercely contested sub-£1,000 price bracket.

On that basis then I have no hesitation in giving them my recommendation.

AT A GLANCE

Build Quality: Superbly built and finished, with a top notch ribbon tweeter fitted as standard no less. They have become my new benchmark in this price range

Sound Quality: Detailed, clean and transparent, with no colouration. Bass won't shake your ornaments off the sideboard with sheer power, but the bass is deep and well controlled

Value For Money: For me they are at the top of the tree for their £750.00 asking price

Pros:
Peerless build quality, stunning looks and fantastic sound to boot. You will love the tweeter for sure

Cons:
None at this price

Price: £750

Dominic Marsh



Tannoy Revolution XT6 Loudspeaker

By Dominic Marsh

Tannoy is a household name, and not just amongst audiophiles. Here Dominic Marsh takes a listen to their £599 Revolution XT6 loudspeakers.

TANNOY REVOLUTION XT6 LOUDSPEAKER



It is truly refreshing to see that the name Tannoy 90 years later still at the forefront of loudspeaker design

TANNOY. Now there is a name many people will recognise and it's one of the few names that are deeply embedded into the way people around the world would describe a loudspeaker system. The name actually occupies the same lofty and unique territory in our everyday language as the name "Hoover" is used to describe vacuuming your home, as in "I'm going to Hoover the carpets". How many times have you read in a newspaper, book or magazine, or perhaps watched a TV programme or film containing these words: "An announcement was/will be made over the TANNOY system for all passengers to " and is still in regular use even today? No surprise then that Tannoy are still manufacturing Public Address systems as well as a huge range of professional studio equipment.

I was curious about where the name was derived from and I found the answer on the Tannoy website under the history heading. The name was formed from the metals they were using in the production of their rectifiers as in Tantalum / Lead Alloy and adopted as the formal company name in 1928. It is truly refreshing to see that the name Tannoy 90 years later still at the forefront of loudspeaker design and that I have the honoured task of reviewing the Revolution XT6 loudspeaker.

Construction

The first thing that strikes you is the trapezoidal shape of the 10.8 litre cabinet which you either warm to or you don't.

Looking at them squarely face on means you don't see the side walls at all anyway. Unusually too, there is a factory fitted plinth that the speaker sits on which does two jobs no less. Through the aperture between cabinet and plinth is the bass reflex port firing downwards and the plinth having a larger footprint than the cabinet, means it adds additional stability to the speaker as well as some additional mass. Three jobs then, for the keener eyed readers amongst you. Nice to see real veneer on the cabinets, in this instance a pale honey Oak colour, with a choice of Dark Walnut as an alternate option.

The speakers are supplied with a dark colour fabric covered grille, attached to the cabinets by secreted magnets.

Driver complement consists of Tannoy's "Dual Concentric" array, with a 150mm multi fibre bass cone and a centrally integrated 25mm PEI dome tweeter that Tannoy refer to as being mounted in a "Torus-Ogive waveguide". In other words the tweeter is set back into the driver array throat for phase and timing alignment.

To the rear of the cabinet we find a set of four biwire terminals with gold plated brass jumper strips.

All in all then it is a compact well built package built upon a long line of Revolution models that have gone before, yet enhanced even further in this latest incarnation.

TANNOY REVOLUTION XT6 LOUDSPEAKER

It is a compact
well built
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upon a long
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incarnation

Sound Quality

Fresh out of the box they are not a pleasant listen at all. Strident treble and a woolly bass will not endear the Revolution XT6 to you at first hearing, so please be patient and if you intend to audition a pair then ensure they have some running hours on them before making any judgements. Thankfully they mellow very quickly and are listenable within an hour or so, so I recommend you connect them up, feed them some music to work with and put the kettle on, then raid the biscuit tin to amuse yourself while the XT6's take a chill pill. As with most speaker running in periods the XT6 speaker will follow an exponential curve whereby they quickly lose the raw edges and then gently and slowly mature to full potential, which in this instance was roughly 50 hours or so.

I placed them on 60cm stands and they looked rather ungainly to be truthful, as the plinths extend out beyond the cabinet boundaries and spoiling the otherwise sleek looks. I don't have a sturdy shelf to mount them on, or spare room on my desktop either, so however ungainly they looked on stands that's where they had to stay throughout the review. I will say that I did get used to the sight of them perched atop my speaker stands, despite the initial oddness about them. So then, on to some real music to put the XT6 speakers through their paces. First into the CD drawer was Hugh Masekela's "Hope" album and those of you who also own this album will know that it has a good spoonful of dynamics and subtleties to play with.

My first impression of the sound they produced was how perky and ebullient they



TANNOY REVOLUTION XT6 LOUDSPEAKER



My first impression of the sound they produced was how perky and ebullient they were, full of verve and sprightliness

were, full of verve and sprightliness. With a six inch bass driver and a ten point eight litre cabinet I wasn't expecting gut punching bass, but much to my surprise they weren't that lacking of weight in the lower registers, but that final octave did elude them as was expected. No criticism from me here because similar sized rivals fare no better and if heft and power in the bass is high on your listening priorities then I would suggest you find a bigger speaker that can move more air because the laws of physics apply here, full stop. The kick drum in the opening track of "Hope" was conveyed that it was an actual kick drum being played, while the hi hat strikes sounded very clean and metallic sounding. It is the trumpet that defines this track and I have heard some raspy nastiness in some speakers, but glad to say the XT6 speakers were not one of them. All of the music strands stood apart from each other with no clashing. The immense benefit of housing the tweeter within the base cone centre in this Dual Concentric configuration is that you get a huge amount of pin sharp imaging focus from that point source. Sit bang in the middle of that sweet spot and you can positively BATHE in the imaging and sound staging these little speakers produce. Move a foot either way though and that magic becomes a bit ordinary in the way imaging is structured and that very trait means you are going to be firmly glued in that sweet spot for as long as you possibly can. I know I was.

Next into the CD drawer was my old favourite in the shape of Fink's "Wheels Beneath My Feet" album which has a whole raft of benchmarks that review components have to surmount.

The verve of these speakers was amply manifested in the way they could capture the very essence of cymbal strikes. No fizz or tizz, just good clean rendition of wood striking metal with associated harmonics and ringing decay. Pleasure. Once again that sweet spot revealed the venue ambience accuracy perfectly and musician placement supremely defined, plus you did get the feeling you were actually sat in the audience around two or three rows back from the stage, which was impressive. Bass guitar and kick drum were below my benchmark ratings but not by a big margin, yet the Floor Tom strikes that the drummer really does drive down into in the track "Sort Of Revolution" still managed to shake my listening room. Go figure.

A change of pace and genre too, in the shape of Loreena McKennitt and her "An Ancient Muse" album to see how the XT6 speakers portrayed female vocals. I cannot begin to describe any of the instruments being played in the track "The Gates of Istanbul" but my attention was focused purely on Loreena and her voice, which was beautifully airy and crisp, soaring sweetly and melodically as only her voice can, dead centre stage with the instruments wrapped around her in a shallow arc. The drums in the track didn't have the deep thump and impact that my resident speakers demonstrate, but again no criticism given from me here.

Now this should please the classical music fans out there, because that glorious sweet spot really does unpick complex pieces with ease and orchestra placement is about as good as it gets, at least that is for my limited exposure to the genre.

TANNOY REVOLUTION XT6 LOUDSPEAKER

Once again
that sweet
spot revealed
the venue
ambience
accuracy
perfectly and
musician
placement
supremely
defined

Conclusion

I can sum up these loudspeakers pretty much in my first impression of them where I stated they were a perky and ebullient speaker, full of verve and sprightliness, because that was their character throughout the evaluation. Their top end and midrange were as good as any in this class, bass output round about average for their configuration, but those powerful floor tom whacks in Fink's album shaking my listening room somewhat tramples all over that generalisation and I could have pursued that further perhaps with playing some heavy rock music, which I don't have in my collection. You can keep your four chord wonder noise bands as I don't class that as 'music'.

OK, they looked a tad strange to me sat on speaker stands, but they would admirably suit being sited on a shelf or desktop and not look at all out of place.

In all honesty I wouldn't pair them into a budget system, because to get the best out of them you need the best put into them and you will be amply rewarded.

That Tannoy badge on the fronts is a measurement of the quality you can expect and come resale time...that same name means you have a ready audience with less depreciation during your ownership.

AT A GLANCE

Build Quality: A cut above with real wood veneer finish, good quality terminations and above all, the superb Dual Concentric drivers.

Sound Quality: Locate yourself into that central sweet spot and it really does open windows into the music. If I were to be picky, then bass doesn't have slam and power but that's a small trade-off and look on the positives instead here.

Value For Money: The sound and build more than balances the asking price.

Pros: Sound and build quality. The Tannoy badge.

Cons: Looks ungainly on stands, bass depth isn't in the top class league but this review hopefully pinpoints where exactly it stands.

Price: £599.00

Dominic Marsh





Ziro Audio Disclosure Power Cord

By Dominic Marsh & Dan Worth

Ziro is headed up by Adam Fairless but he's not letting on what's inside the little black box on his Disclosure power cable. Dominic Marsh and Dan Worth attempt unravel the mystery of this £900 power chord.

ZIRO AUDIO DISCLOSURE POWER CORD



Ziro Audio is a new company who say they have spent a lot of time and money on research before launching their products onto the market. So when Adam Fairless at Ziro Audio sent me one of the best one-liners I've had so far in an email by saying "I will let the cables do the talking" it was a sure sign he had confidence in his products.

There is no such thing as the "perfect" cable and my approach to the subject is to work from the bottom upwards by observing that an upgrade cable that sounds "better" is in actual fact "less imperfect" than the cable it replaces. If your starting point is the ubiquitous given away for free three ampere rated IEC computer lead, then substituting a "better" sounding lead as a replacement, only means it is "less imperfect" than the lead it has just replaced and that applies to all aftermarket mains leads in that broad scale, whether they cost £10.00 or £10,000 the principle is exactly the same when applied logically in the way I suggest.

There are many hundreds of cable manufacturers in the marketplace all claiming to be the best ever and my job as a reviewer is to put that assertion to the test, so herewith below is my perceptions of the Ziro Audio Disclosure mains power cord.

Construction

Standard length of their Disclosure power cord is 1.25 metres and the sample supplied for review was that same length. The actual length of the cable itself was sufficient to easily reach from the wall socket to my MS Audio distribution block, but there is a rather large and heavy oblong aluminium cased module situated half way along its length. My mains sockets in the listening room are around a metre off the floor so either the

module was suspended by the cable, or I had to support it in some way. I found a sturdy cardboard box which supported the module and relieved the strain on the cable. I am advised that the module can be sited anywhere along the length of the cable which should be clearly specified when ordering. I have reviewed cables with modules built in (Audiomica Ness Excellence as I recall) before and if the manufacturer deems it wise to reveal what's inside their modules then all well and good, but if the manufacturer decides not to reveal the internal workings, then I don't ask and I don't tamper with anything either, it remains a mystery then and so the Ziro Audio Disclosure power cord remains in that latter band. As long as it works as claimed, then it could contain cold porridge for all it matters to me.

I suppose though the closest competitor to the Disclosure power cable is the Vertex AQ Roramia which has an outwardly similar design. Neither manufacturer though is giving anything away regarding their construction details, so it's a moot point whether they compare directly or indirectly in price or performance terms so I will not dwell on this.

The cable itself is around 14mm in diameter and surprisingly flexible for its size. Conductors within the Disclosure models are said to be 3 x 2.08mm of high purity silver in a twisted configuration. The cable has an outer sheath covering of a multi-coloured fabric weave pattern. At either end of the module the cable enters and exits via metal gland fasteners. With regards to terminations, the review sample had Furutech connectors at each end, with a bottom entry FI-UK-N1G 1363-L 3 pin UK plug fitted, with a FI-11 IEC socket at the component end.

Adam Fairless
at Ziro Audio
sent me one of
the best one-
liners I've had
so far in an
email by
saying "I will
let the cables
do the talking"
it was a sure
sign he had
confidence in
his products.

ZIRO AUDIO DISCLOSURE POWER CORD

What was to me a vague, loose and indistinct bass from these particular speakers suddenly became perfectly controlled and I mean PERFECTLY controlled in every sense

Price at time of review: £900.00 for the standard 1.25 metre length. Ziro Audio also produce the "Tranzient" range which has a similar outward appearance to the Disclosure range, but use copper and silver plated copper for their conductors and substitute Wattgate connectors instead of the Furutech connectors. Naturally, the Tranzient power cord costs significantly less than the Disclosure power cord equivalent and is priced at £370.00 for the standard 1.25 metre length.

Sound Quality

When I received the Disclosure power cord I was stuck in a quandary while evaluating a pair of loudspeakers, which I couldn't quite summarise accurately and was rather perturbed by that. I don't normally add new components to my system during an evaluation in case it confuses matters and what drove me to it is still beyond comprehension, but in this instance I did so and I am very pleased that I made that decision.

What was to me a vague, loose and indistinct bass from these particular speakers suddenly became perfectly controlled and I mean PERFECTLY controlled in every sense. Treble acquired a stunning realism,

with copious amounts of inner fine details and macrodynamics not heard before and as for midrange, that was free from any congestion or bloom whatsoever, bass both powerful and highly communicative, a total joy to listen to. I simply had to pinch myself to make sure I wasn't imagining what I was hearing and to be sure I swapped back to my resident power cable several times to check – I might add and there was no comparison. I could actually hear shapes, timbres and textures from every single note from the Disclosure cable and trust me, I have never heard ANY mains cable do that to this degree before now. Yes, I have had a touch of firmer and tighter bass before with a lessening of boom, perhaps wider and/or deeper imaging too, yes I have had a cleaning up of midrange bloom, a quieter background and perhaps a touch more definition in the treble regions from other (read expensive here) mains cable confections, but never all of these factors added together as a whole and never to such a degree as the Disclosure cable was giving me. I fell in love instantly. With a mere power cable?

The sound became so natural, effortless and accurate but not in a sterile or monotone way. Dynamics and transients maintained superb contrasts and acquired razor sharp acceleration. I might have expected some sibilance artefacts or some intolerance of



poor recordings, but even that wasn't manifested, at least not exacerbated because a bad recording remained so, just it seemed to irritate me less than at any time before. Now that was impressive to say the least.

To illustrate this point I played Porcupine Tree's "Deadwing" album which has plenty of raw edges to it and can often induce some real wince moments at high volumes. It was no different with the Disclosure power cord installed, it sounded even more wince inducing, but strangely enough found some content I had not heard before that took me completely by surprise in the form of hearing each guitar string during the rough chords and the drummer stayed clearly focused throughout the title track which my experience says is very hard to achieve. At 6 minutes 42 seconds there is a long low bass note that goes way down the registers and seems to roll out of the speaker and advance across the carpet towards you in a rolling motion, but in this listening session it was even more accentuated than I have heard before. None of this album was rolled off, masked, or muted by the Disclosure power cord.

Of course I also played my reference CD in the form of Fink's "Wheels Beneath My Feet" live album. That was a real feast for the ears with a constant stream of newly revealed details and a powerful, deep and articulate bass that left me utterly bewitched. I could have listened to the same CD all night long, it was that enjoyable, overflowing with vitality yet still non-fatiguing.

At that point though some questions were beginning to run through my mind; was this some sort of chance event only happening with my system in the current configuration? I had to find out more.

Out went the evaluation speakers and in went my resident speakers which of course I know their performance intimately. Same result, they took on another dimension of neutrality, refinement and exquisite detail, the bass became much more powerful and communicative. I had toyed with the idea of replacing them soon, but they are staying now I have experienced what their true capabilities are. On I pressed, connecting up a pair of Roksan TR-5 stand mount speakers which I have the kind use of courtesy of Roksan and they too moved up a gear or two in sound quality and a pair of Audiovector QR-1 stand mounts also gave more performance than I ever heard from them before. As I write this review I have a pair of Melodika BL40 floorstanding loudspeakers submitted for review, currently playing Peter

Gabriel's Real World album and they are sounding utterly sublime, way beyond expectations and almost rediscovering the whole album from scratch.

This was of course just one Disclosure mains cable alone fitted to my mains block feeding the entire system and another question that will haunt me now is how would another 3 more Disclosures fitted to my CD player, pre-amp and power amplifier bring to the party? Past experience suggests more gains and I would relish the opportunity to put that to a test.

The Ziro Audio Disclosure mains cable had an even bigger challenge than any of this to face which is, can it impress my fellow reviewer Dan Worth? Dan has a more sophisticated system than I have, plus he has mains enhancements that I don't have in the form of dedicated mains spurs and balanced power supplies. We meet regularly so I took the Disclosure cable over with me during one visit and I will let Dan give you his verdict in his own words.

Conclusion

If you are not convinced that an upgrade mains cable can have a truly profound effect on a hifi system's performance then I have no wish to debate the issue because I have heard first hand what this cable's real capabilities are. If you are open minded and a true music aficionado, then I do urge you to audition one and then decide for yourself. I reckon you will be equally as impressed as I am.

I have over the years both heard and owned a vast range of power cords into the many hundreds in number, ranging from just a few pounds well up into the five figures league. The overwhelming majority have given pretty small improvements in sound quality ranging from the barely perceptible to easily heard improvements in different areas of the audible spectrum. Some have given a firmer bass and sweeter treble, a lower noise floor too, better sound-staging and combinations thereof. What I can say for sure is the Ziro Audio Disclosure cable is a top notch music making component which leaves others way behind and you should set aside your own scepticism at least long enough to give it a hearing. If my editor ever asks me to nominate my personal Product Of The Year, this could well be it for me, as it had a major and highly profound effect on the way my system sounded and I am still reeling from knowing that a mere power cable had achieved that.

The sound became so natural, effortless and accurate but not in a sterile or monotone way

If you are not convinced that an upgrade mains cable can have a truly profound effect on a hifi system's performance then I have no wish to debate the issue because I have heard first hand what this cable's real capabilities are

The big question though is would Dominic put his hand in his pocket to buy it? Without any hesitation is my truthful answer. I will be haunted for eternity by that magical sound when it is returned to Ziro Audio, so if I don't buy one I will surely rue the day of not doing so. Building a special shelf behind my rack for the module to sit on is but a small price to pay when this much performance is on tap. It isn't cheap, but anything that has this much quality never is and I'm sure I will live well without one of my kidneys to raise the necessary cash, as my street busking skills are truly appalling. I jest not.

AT A GLANCE

Build Quality: Good rather than exceptional, but the connectors make up on lost ground here.

Sound Quality: In one word; Peerless.

Value For Money: Given the performance level available, it is very good value.

Pros:

Phenomenal sound quality and there wouldn't be much incentive to upgrade either.

Cons:

The module is a pain to house sensibly because of it's size and weight. My own solution would be to put up a special shelf to accommodate it behind the rack. Minor inconvenience.

Price £900

Dominic Marsh

While Dominic appears to be impressed by the performance of the Ziro Audio Disclosure power cable, to be even considered as nominee for an Outstanding Product Award by Hifi Pig, any product must pass the scrutiny of a second reviewer, in this instance Dan Worth puts the Ziro Audio Disclosure to the test and here is his verdict:

Dom has been wonderfully accurate with the vague description given to him of the Disclosure power cable from Ziro Audio, however I was able to dig a little deeper, well in a continued manner of vagueness. The cable is constructed using a few carefully selected diameter strands of ultra pure silver which is softly annealed to allow for a very finely tuned frequency response and tonal balance. Which in turn allows for better flexibility of the cable to its single overall gauge counterpart. Conductors are wrapped in natural materials rather than man made plastics and the connectors are by Furutech,

Adam Fairless will allow customers to specify specific Furutech plugs of their preference as he does the position of the magic box.

Personally I prefer the non-plated versions of the Furutech plugs and after Dominic brought the Disclosure power cable over for my attention I promptly ordered three more with all Cu plugs fitted – I find them to be a more cohesive listen with less of a 'wispy'ness' in the upper frequency extremes over my years of tweaking.

The magic box itself (or whatever you wish to call it) has a three pronged topology applied to it, what these topologies are will not be revealed and rightly so, if I had spent a few years developing a product that has a lot of money invested into it, and of course time, I wouldn't be eager to divulge its implementation to the masses, so no hard feelings there.

Overall build Quality is very nice indeed and the soft cottony feel to the cable is a little more luxurious to the standard nylon braids regularly used, overall presentation of the product and its packaging is really nice looking.

The Sound

As for the sound of the Ziro Audio Disclosure power cable, I was extremely impressed and after Dom and I had our first joint listening tests, we both whole heartedly agreed that we would be inclined to pursue the cable further on the basis that an Outstanding Product Award was very likely to be awarded by us.

Performance in my system and his was exemplary and in this world of Hifi very reasonable price wise. I have been very intimately drawn to the characteristics of the cables performance and attributes. A refined, effortless, smooth and detailed presentation ticked all the boxes for both myself and Dom. I have never in all my time heard a pure silver cable which sounds so natural, smooth and detailed; there's generally some gripes with any silver cable which becomes a trade off to other positive aspects, but I don't hear this in the Disclosure cable. Needless to say after Dominic left on the Friday afternoon's listening tests I spoke with Mr Fairless to arrange a few more samples for my system. I initially placed one from my balanced power supply to the wall socket and changed it out to the amp, then after further listening added another to the BMU again. The effects of one, especially on the amplifier was more profound in my system than the additional, yet further power cables only seemed to enhance system qualities and firm up my registered feelings on performance, giving

ZIRO AUDIO DISCLOSURE POWER CORD

real solidity to bass and allowing the soundstage to increase in size and texture. Bass notes are firm, expressive and wonderfully extended. During initial burn in of say 48 hours if I was to be critical there was a slight smearing between the lower mids and upper bass but this soon cleaned up to reveal the skin of the drum being hit on London Grammar's "Hey Now".

Generally when auditioning cables an initial focal point is the top end, too bright, too rolled off, thick or thin, how spacious etc., etc. The Ziro requires no focus as it simply lays out incredible amounts of definition and air to the listener with a beautifully sweet treble which is satisfying from the outset, I was truly impressed straight out of the box with the treble response, allowing the listener an ease of appreciation and for the sound to blossom over the burning in period, which surprisingly isn't as long as most cables, or maybe it's just that they sound so good out of the box that satisfaction begins immediately and the distraction of analysing becomes replaced by the enjoyment of the music.

Midrange transparency is also very natural, the cable allows the performance to remain somewhat truer to the recording and can really determine a clean, warm or gritty tracks soul very well, especially with vocals, I don't hear any colouration in the midrange at all and it's neutral yet full nature is very accurate and has great substance, cohesively integrating surrounding frequencies without masking inner details or focus.

As a whole and I think Dom would agree, sound-staging really is a strong point with the

Ziro, large and complex, even front to back and the rhythmic nature of a system is never lost in an over manufactured overly clean display, everything sounds just so effortless and engrossingly musical, which has to be the deciding factor surely when buying any piece of Hifi equipment or accessories. The attachment to the music is paramount and the Ziro Audio Disclosure power cable doesn't just tread the line between Hifi and musicality (which is often lost in translation) it does an awful lot to help define it, so well done guys, it was a pleasure. Sound Quality: One of my most favourite power cables to date resulting in me ordering a couple.

AT A GLANCE

Build Quality: very good indeed, substantial, sturdy and flexible.

Value for Money: this is Hifi, so in that respect I say really very good indeed, the quality of materials is right up there, I see cables costing many times more that probably don't cost even half to make.

Pros:

Unmistakably natural coherent musical sound
Beautifully sweet treble
Great build quality

Cons:

Inline box can be a little unwieldy so measure and order the cable with placement of the unit in mind

Dan Worth

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Ghostwire "Silverheart" Loudspeaker Cables

By Dominic Marsh

Chris Sommovigo is an American based relocated to Japan where he makes finished audio cables and the wires inside them by hand. Here Dominic Marsh takes a listen to his Ghostwire Silverheart speaker cables costing \$239.95 for 1.5m pair and \$349.95 for 2.5m pair.

GHOSTWIRE “SILVERHEART” LOUDSPEAKER CABLES



When I was assigned to carry out this particular evaluation, I took it upon myself to read fellow Hifi Pig reviewer Dave Robson's review of other Chris Sommovigo cables to get a handle of what performance I am likely to find with this Silverheart speaker cable. Dave's verdict is that they are fine cables and awarded them a recommended result, which may or may not translate here to the Silverheart cables under review.

These cables are hand built by Chris Sommovigo who upped sticks from the USA and moved to Yugawara in Japan and because all his cables are hand built in his own workshop, you won't be able to buy reels of finished cable by the kilometer, or indeed beyond lengths that his expertise, available time and winding machines can muster. He is also fairly prolific with his new ideas and just when you think you have mastered his product range he creates even more! From what I have read about this person he is very passionate in what he does and takes immense pride in the product he builds and ships worldwide.

The Silverheart loudspeaker cable is sold under the “Ghostwire” brand name and has it's own dedicated website.

Construction

It is constructed in the following manner:
3.0mm Japanese cotton-based cord
Silver-Plated Copper woven tube (sums to ca: 15awg)

Nylon Multifilament woven insulator (32 x 1680 denier) BLUE AND BLACK
Bare Copper woven tube (sums to ca: 14awg)

Nylon Multifilament woven insulator (32 x 1680 denier) WHITE AND BLACK

The “positive” line is the internal blue-black line (silver-plated copper), which is carefully extracted from inside the center of the cable. The “negative” line is the white-black line, which is formed by the outer (bare copper) conductor.

This concentric, or “coaxial” construction lends itself particularly well to the requirements of a speaker cable, being quite naturally low-inductance (due to the proximity of the conductors to one another inside the cable). It is also less susceptible to issues related to skin-effect (the AC resistance and DC resistance of the thin-walled woven tubes are essentially equivalent to roughly 700KHz), and also less susceptible to issues related to proximity effect (the coaxial construction means that the conductors are always an equal proximity to one another for their full circumferences, unlike twisted pairs).

Chris will be making, on a limited basis (as time permits, monthly), Ghostwire Silverheart loudspeaker cables. Each month he will be making between 10 and 20 pieces, mostly 2.5m lengths, as this is the most popular length. He will also be making fewer pairs of 1.5m sets for those with monoblocks or more closely-spaced speakers.

The review pair arrived ready terminated with gold plated 4mm banana plugs. They are surprisingly flexible, easily routed and the banana plugs have ample grip too, which is surprising to me given that they have a simple splined construction which I am no

The Silverheart speaker cables sailed through all of these benchmarks with ease and if you had said to me the cable would do so when I first connected them up, I would have stared at you in disbelief

GHOSTWIRE "SILVERHEART" LOUDSPEAKER CABLES

great fan of, given that the cheap ones seem to lose springiness in the splines over time. The MSRP for the cable are \$55 per running (linear) meter unterminated, while the completed speaker cables, terminated with XOX direct-gold-plated copper bananas, are \$239.95 and \$349.95 for 1.5m pair and 2.5m pair respectively, exclusive of shipping costs (\$25 flat shipping fee).

I am unable to confirm if other lengths or terminations are available.

Sound Quality

When I first connected the Silverheart speaker cable to my resident system, they sounded, well how can I phrase this yet remain diplomatic? Horrible, yes that word will do very nicely. Bass was decidedly foggy and muffled, midband wet and limp, treble had receded into the midband and was waving a white flag and going down for the third time. I cannot recall a cable that was in this much distress fresh out of the packaging. Oh dear. Well, start the bedding in process while Dominic goes away and does other things to amuse himself. Suitably refreshed after a cup or three of coffee and a slice or two of cake and the cables had livened up enough after just one hour for me to discern some treble, a cleaner midband, but still a very sluggish bass. It was close on 10 hours before the "horrible" disappeared and was starting to sound half decent. These things usually resolve themselves exponentially, so at around 30 hours they had improved sufficiently for me to start putting them through their paces, even though I knew there were still some hours to go yet before they would give of their best. After that I lost track of how many running hours had elapsed, as it's a case of multiple plate spinning tricks as you have to fit in other evaluations into your busy reviewer's schedule and it's all too easy to lose track of what components have had what running times when everything you receive to review is all factory fresh.

I have recently expanded my music collection in the search for finding another reference recording, as by now those of you who regularly read my reviews must surely be a bit jaded by now with my constant references to Fink's "Wheels Beneath My Feet" album. Haven't found one yet folks, so here we go again.

Yes of course I listened to other music genres during the evaluation, but this album is an essential tool to use during my extensive listening sessions to see if it could meet all my benchmark sound quality expectations. The drummer's cymbal strikes

in the intro to "Biscuits" were very satisfying and without complaint, which in reality is commendable. Bass kick drum was propulsive and solid, the timing being spot on. The acid test for me is listening out for the drummer's rim shots on the snare drum. Very difficult to put into words that you dear readers can relate to easily, so the closest I can get is to say that they have to sound "real" as if you are sat next to the actual instrument being played. The strikes must not sound at all thin, you can note the different energy put into each strike and you should be able to hear the shell of the drum for sure and if you cannot, then something is amiss. Given these are live recordings the venue's ambience should also capture these snare drum rim shots. Most hifi components struggle with recreating the sounds an audience makes during a performance and it usually gets conveyed sounding like frying pan cooking bacon, with sizzling and sloshing sounds that really annoys me. The Ghostwire Silverheart allowed me to hear the clapping, whistling and cat-calling very clearly as if I was sat in amongst the audience.

The album's true forte though is the instruments, with some stunning well recorded drum playing and bass guitar. When the drummer hits the Floor Tom in the track "Sort Of Revolution" it should penetrate to the centre of your being with it's power and slam, the bass guitar just has to have a throaty growl to it and the audience claps along too, giving the entire track a propulsive, dare I say infectious element to the performance. Listen carefully to Fink's voice and it has to have an edgy throaty rasp to it, even though his diction is sometimes unintelligible, but that is all part of the charm this album holds for me.

The Silverheart speaker cables sailed through all of these benchmarks with ease and if you had said to me the cable would do so when I first connected them up, I would have stared at you in disbelief.

The biggest shock of all was when I reconnected my resident speaker cables after the evaluation which cost three times more than the Silverheart cables and suddenly I realised which cables I preferred listening to. Not a huge amount of difference granted, but it is those tiny minute subtleties that we all hunger for, were there to be heard.

Conclusion

From an inauspicious start to a big surprise at the ending, the story of the Ugly Duckling came to mind as I write this. At first hearing I

described the sound as "horrible", then as the cables were run in their true colours finally shone through, pretty much like a Swan with the beautiful pristine white plumage the adult bird carries.

For your money then, you get a unique hand built, good sounding cable that you would probably have to spend a good deal more to better, plus you get the satisfaction of knowing this cable was never chopped off a huge reel of standard wire with some cheap plugs soldered on and covered in camouflage to hide its true origins. On that basis I simply must give it a highly recommended award and to do otherwise would be a travesty.

AT A GLANCE

Build Quality: Very flexible and easy to route. It isn't just a fancy jacket on the outside either, it is part of the construction

Sound Quality: Great bang for the buck, but be patient from the start, it will get there

Value For Money: Cannot think of anything that would class it otherwise than good value for money

Pros:
Nicely built, hand crafted, good sounding.

Cons:
Give it plenty of running hours before passing any judgment.

Price: \$239.95 for 1.5m pair and \$349.95 for 2.5m pair

Dominic Marsh

Townshend Audio Engineering Seismic Speaker Bars

By Daniel Worth

Max Townshend is unmissable at pretty much any Hifi show you care to attend. He's a larger than life character and his team are likewise always knowledgeable but down to earth and fun. His demonstration of the seismic bars and platforms is one not to miss. Daniel Worth pops a pair of the company's Seismic Isolation Bars costing between £999 – £1299 under his speakers to feel their effects.



Townshend Audio Engineering have been established for almost five decades now. They are renowned for applying strict engineering policies to audio applications. Common sense and creative know how has allowed Max Townshend – the leader of the pack – to apply his experience and expertise to reducing some of the most detrimental anomalies affecting our audio setups. Within the range of products inspired by Townshend's topology are the Seismic Isolation Bars. Geared toward mechanical isolation between speaker and floor but in theory can be used under equipment, although Townshend produces some very nice looking isolation Platforms specifically for that role, the Speaker Bars can be designated in various sizes and supportive weights dependant on the speaker. Townshend also offer a bespoke service for customers who would like a more specific, size and/or weight compliment on each of their Seismic products.

I had initially wanted to try a pair of Podiums but unfortunately when placing underneath my speaker the shallow elliptical design didn't suit the styling of the Podiums (which I have heard work wonders in other systems), so without the need to go back to the drawing board a very helpful Mrs Sue Townshend sent out the bars swiftly. (I chose the smallest of the sizes for my speakers, as I wanted the Pods to be as close to the underside of my speaker as possible, rather than being far away on each corner due to the odd shape of my loudspeakers and the Podiums design having them fixed to the outer corners) which unlike the first incarceration of the product is extendable and can accommodate speakers with a footprint up to 200% larger than my Ayons. The Load Cells on each end of the bars were the type C, this means that they will comfortably support speakers from 32kgs up to 64kgs.

Installing these was a very straight forward process, I simply removed the current spiked outriggers on my speakers, placed the Speaker Bars on the floor where the

speakers usually lived in a parallel front to back formation and dropped the speakers into place on the felt pads fitted to the Bars. Some fettling and a few minutes later after very brief listening tests I found that using these with the Load Cells at the front and the back of my speakers, with the two rear Cells pushed almost together at the centre rear and the two front angled outwards on the front diagonals gave me maximum stability for my speaker's shape and weight distribution which led to the most enjoyable sonic results.

The Sound

So how do these Speaker Bars from the Seismic Isolation range by Townshend affect the sound? Well in a nutshell extremely positively.

The first notable aspect was a change in the way that bass notes were presented to me. I initially thought that I was hearing a slight boxy-ness from the Ayons during the first few notes of Nils Logren's 'Keith Don't Go' but it was almost simultaneously evident that what I was hearing was a more natural rendition of the body of his guitar. This led on to my attention being drawn toward the acoustic temperament conveyed into my listening space which was large and full of normally more muted details of reverbs and crowd interactions. During the guitar solo I appreciated the pace of the music very much and decays seemed to last for a considerable time longer than usual, obviously due to the cleaning up of detrimental vibrations caused by coupling the speakers previously to a floor that was giving vibrational feedback as well as drawing it down from the speakers, almost oscillating. I urge everyone to watch the video on YouTube produced by Max Townshend which clearly demonstrates how the Seismic Cells work and how the reduction in impact ringing can be proven measured.

I delved into listening to bass notes much further, finding that a continuous lack of bloat, a cleaner and more defined upper

The acoustic temperament conveyed into my listening space was large and full of normally more muted details of reverbs and crowd interactions

The bass notes were now textured and in fact seemed louder and larger than ever before

bass with far greater weighted extension was apparent. 'Blanket' by Urban Species is victim of bass bloat in virtually every system I've ever heard it in and over the years, various equipment and tweaks either enhance it or reduce the decibel level of it but never anything I've tried under my speakers has ever been able to remove the bloat and just leave the deep bass note itself. The Speaker Bars did, the bass notes were now textured and in fact seemed louder and larger than before, louder I thought, surely not, not after removing the added bloom. So again and again I went backwards and forwards over the coming week, spikes, Bars, spikes, Bars and every time with each and every piece of music I listened too I felt that I was actually receiving more bass, more extension as well a more natural and enjoyable presentation, along with less shake, rattle and roll in the living room. I moved around the house, listening for the nasty nodes that everybody has – collected in certain areas of their homes and can honestly report that they had subsided all but completely and that actual mechanical vibration in walls, floors, shelves and other fixtures was non-existent. So I retiring the two young maidens of good strong stock that usually hold my speakers in the air during my critical listening tests, allowing them to snuggle up on the sofa with me instead and enjoy the music.

Looking more into the midrange, initially and as before with the bass notes, the sound presented to me was 'different'. I needed to play some good vocals to get a grasp on exactly what was happening here. Never even from the first concentration on vocals was the sound ever 'wrong'. From listening to a few of my normal vocalists that I like such as Norah Jones, Loreena Mckennit, Vanessa Fernandez I found their vocal to be projected still in a wonderfully clean manner with plenty of power but from a slightly deeper position, which in fact was very welcomed. I never had any issues to my mind from what and where vocals stood previously in my system but hearing the same music with Townshend Seismic Isolation in, I felt that the entire picture was more correct and palpable.

A wonderful amount of tone came from human voices and instead of each vocal whether male or female, had a system enhanced quality to them I felt that they were just that much more individual and bespoke to my system, as if I had walked from one studio to the next. I've spent a lot of time reworking my crossovers in the Ayons to get the all ceramic compliment of drivers to excel on transparency and speed which was the easy part but to get fantastic tone and

midrange to upper midrange balance was more difficult and it ultimately became a system wide task. The Speaker Bars just added a calmness, an air of ease and stability that again I didn't realise I needed until it was there, I had been meaning to go 'Seismic' with these for some time and as the opportunity arose recently and came at a time where I had just finished the latest mods within the speakers I felt that fate had a little hand in the timing of this whole scenario.

Fleshing out a top end unless your speaker is of particular pedigree can be a nightmare! I have had huge problems over the years making treble sound more dense, thick and tonally plush. Most of us get so used to an overview of what treble is and as long as we can obtain air and detail our attention wonders off elsewhere. Treble has so much more in undertones and body than what we are used to hearing that it's only when we're presented with something new we can understand what we have been missing. This has been another task of mine to achieve over recent years and especially more so since I decided to walk away from from all valve systems and concentrate on integrating good valve preamps with strong transistor amps. My current pre is a hybrid, basically a valve linestage feeding into a TVC made by Audio Music (the Reference 1). I find the combination with this and my Gamut D200mk3 power amp a great combination but it does lack the body in the upper regions of a good all valve setup, even if in reality being a second harmonic distortion, valve amps have an undeniable flavour which adds a certain beauty to the music.

Crossover components, cabling and isolation are all ingredients in the right recipe and all require particular attention and without this particular attention my main speakers would not be where they are soundwise today. The Seismic Speaker Bars, gave a relaxed and controlled top end that flows with more ease and more confidence, whilst retaining the air and transparency I've worked so hard to achieve. As well as the Speaker Bars I've also just added the Townshend Maximus Supertweeters the combination of these two products has given me a certain personality to my speakers that I would never have been able to achieve with just crossover and cable modifications alone. It's like going from a great digital system to an awesome analogue system.

As mentioned earlier the lack of injection into the structure of the room and the surrounding building was most noticeable here and less interaction with the framework of the structure equals less interaction back

TOWNSHEND AUDIO ENGINEERING SEISMIC SPEAKER BARS

into the speakers and the oh so delicate equipment in our racks, doing nothing but damage to the delicate audio signal. In turn a complete lack of smear reveals how much more information can be obtained from the electronics and released through the transducers.

This culminates in a soundstage that is more holographic and three dimensional, bringing out more muted details in the soundtrack that we often would believe were recorded at the levels we were used to hearing them, if we can even hear them at all in some cases, here in fact they were meant to be more prominent from the outset. The old sayings 'you don't miss what you never had' and 'you don't know what you've got until it's gone' are both very true in this case. Removing the Seismic Speaker Bars from the system, has a shrinking effect, a smearing effect and a connection to the music that diminishes the will to even listen to music anymore. A lot of us have had this sensation and it's always wise when demoing anything to leave it in a system for a while and then see how you feel once it's removed, if it's missed then you know it's a keeper. Well these Bars are definitely keepers and I'm very glad I had the foresight to pursue these after the Podiums didn't work for me, but then in all honesty it really was just due to my speakers size and shape and not the technology employed here as all – Seismic products from Townshend are based on the same principles.

Conclusion

For somebody who works intently on all areas of his system and who has spent a lot of time and effort on crossovers and other modification within the electronics etc to gain a presentation which is more tonally mature and emotionally connective, at the same time as preserving pace, transparency and rhythm I was bowled over by the Townshend

Seismic Speaker Bars. They became the piece of the puzzle that I never knew I was missing.

With an all ceramic driver compliment in my Ayons, I never felt that cleanliness and smear was ever an issue in my setup. My how wrong I was! The benefits of a Townshend a Seismic product works to stop all negative mechanical effects of a room charged with vibrations and micro vibrations, leaving the listener with a natural, clean, more tonally accurate sound. An absolute must for any music lovers wishing to obtain a more intimate relationship with their music, plus they keep the neighbours happy also!

AT A GLANCE

Build a Quality – Very solid, very smart good looking design

Sound Quality – Natural Analogue presentation, tighter, cleaner and more textured

Value For Money – Very reflective of performance gains – great value

Pros:

An unexpected Analogue type conversion
Micro detailed more prevalent
Bass is more natural
Enhanced rhythm with less bloat and smear
Soundstage increases in all directions
Less interaction with the building which I great for neighbours
Many sizes available for weight and length

Cons:

None what so ever

Price: £999 – £1299

Daniel Worth

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IsoAcoustics GAIA III Isolation Footers

By Dan Worth

Dan Worth takes a look at an interesting tweak from IsoAcoustics in the form of their GAIA III isolation footers costing £199.



This years Bristol Sound and Vision Show has been covered extensively here on Hifi Pig, so take a look at the articles. There were a great number of exhibitors with some really interesting new equipment for 2017.

Among the manufacturers and distributors present I found one of the better sounds and demos to be in the SCV Distribution room, comprising of a range of brands and platforms. For me my interest was directed towards their main show system, which comprised of a Benchmark DAC3 HGC (reviewed here), paired with a Benchmark AHB2 stereo power amplifier and Aria 936 loudspeakers. The characteristics of the sound in this room suited my own personal tastes very well, with a greatly open, full bodied and detailed sound that excels on transparency and insight.

The system demo was very much orientated around what IsoAcoustics GAIA feet, particularly the GAIA III due to its support in weight relation of the Arias, with a 32kg max load capacity. IsoAcoustics also produce two other sizes and weight bearing load versions of the Gaia – the GAIA I which can handle speaker or rack loads up to 100kgs, GAIA II 54kgs and then the Gaia III 32kgs, each rating is per set of four not the individual footer.

Design wise, aesthetically they are very nice with a high grade stainless steel body which is dark chrome plated and looks fantastic and in combination with the rubberised internal structure which is formed to stabilise internal reflections and also forms as the stable base to the footer in one moulded piece; a tactile suction type force for a hard surface, minimising vibrations and ringing from cabinet to floor and vice versa, allowing the supported speaker to be in a more

“floaty” position. Carpet spike adapters are also available for under this system and are not a replacement to the rubberised bottoms which are intrinsically part of the overall vibration control system.

Note: The IsoAcoustic logo on the GAIA needs to be facing forward when the footers are installed due to the lateral movement of the system, alternatively they can be rotated to 180 degrees for a logo-less look. A standard spike fitted to the bottom of a loudspeaker will transfer energy into any floor, but whether concrete or floating there is still a bounce and a ringing effect. These vibrations will also travel up through the equipment rack and harm the performance of those delicate electronics. Bass energy in a room is also detrimental to speaker performance and the transfer of this energy to the floor and room will reflect back into the speaker causing a smearing effect, especially of the bass leading to overblown and bloaty bass notes. The construction of the GAIA feet disperses and minimises this reaction through the combination of their materials and the movement of the devices to compensate for driver movements during playback, in relation to Newton's third law.

Installation is a breeze and IsoAcoustics, instead of selling the customer a designated size for their requirements, include 8mm, 6mm and 1/4" threaded inserts as standard which all fit the GAIA without adapters. Also included is a small wrench for a groove on the threaded inserts for fine adjustments, along with different sized knurled ring fasteners/washers for the underside of the speaker and top of the foot (covering the adjustment groove for complete anal aesthetics) for secure and stable fixing. When installed the speaker becomes flexible to the floor and I spent quite a few childish

After hearing the GAIA's at Bristol on a system that suited my tastes very well and the A/Bing between two sets of the same speakers I thought, now these seem worth investigating further and I'm very glad I did

Midrange sounds gained a little fluidity and the vocalists had better air and space around them allowing for finer venue acoustics to come through from the recorded material

moments flexing the speaker backwards and forwards like a skyscraper during an earthquake.

The Sound

Personally I've been working my way through a bunch of speaker isolators over the past year or so, finding many to either suck out the bass, muddy the midrange or make the sound hard, I was considering trying some Townsend Podiums next but they are really quite expensive. After hearing the GAIA's at Bristol on a system that suited my tastes very well and the A/Bing between two sets of the same speakers, one with the GAIA III and the other pair with standard spikes I thought, now these seem worth investigating further and I'm very glad I did. The first most noticeable difference for me when I finished installing the GAIA III was how much more "freer" the sound was from the speakers, the bass especially instantly stood out, far more insight and detailed. Bass extension was far better controlled and tighter with the upper regions being more defined and natural in presentation. My system is hardly lumpy or bloated, but a more explorative and musical nature came with seemingly more weight as the bass was almost able to breathe more and felt so much less restrictive in how it interacted with me and my room. Even the nasty node I get in

one corner by an alcove disappeared considerably.

Midrange sounds gained a little fluidity and the vocalists had better air and space around them allowing for finer venue acoustics to come through from the recorded material. The overall transparency of the midrange was wonderful with more perceived structure to depth and overall three dimensionality front to back. A particularly welcomed aspect of the speaker being isolated so well was how much grunt and body a male vocalist delivered, with a real throaty and or chesty nature to some artists which is conveyed well here already, but just not quite as good as with the GAIA III in place.

Top end frequencies were also very pleased to receive some GAIA treatment; again the overall air and perceivable bandwidth was extended further to convey more realism and welcomed spatial awareness. Micro details were dynamically stronger and there was a more holographic presentation to boot. Leading edges were also more precise and the cleaner edges were coupled with great tonality and timbre – there is NO loss of body to the upper frequencies although the characteristics were of a cleaner nature. Everything was just more natural, precise and ultimately timed far better.



ISOACOUSTICS GAIA III ISOLATION FOOTERS

Overall soundstage presence was more accurate, transparent and spatial, very cohesive and exploratory. One very important factor I will note that has been a bug bearer for me in my listening room is slightly behind me in the upper right part of my room I have always noticed a small null. I can hear harmonics all around my room (and it's not perfect by any means but what it is is realistic to many domestic setups), apart from this one small area where sound seems to fall into a black hole, after listening to my speakers on the GAIA's I actually was amazed that there was actually sounds in this area and whatever room/speaker/frequency interactions had disturbed things was cured!

Conclusion

If I had to describe the IsoAcoustics GAIA III in one sentence it would be that they allow the speakers to sound more tactile, resolute, spacious and natural, adding tone and timbre and increasing timing performance.

The aesthetically pleasing design, full fixture kit for any speaker (including B&W 800 and Nautilus adapters – optional) and the fact that they stabilise the speakers to the floor so much better than anything else I've tried, gives complete peace of mind, especially for the domestic family room, where other anomalies cannot be treated and the speakers are also protected from little fellas who bump into them with their fire engines, they simply flex rather than fall on the micro Firefighters.

I will be buying these two sets for my Ayons and consider these one of the better tweaks I've made to the system, I can see the IsoAcoustics GAIA isolation feet doing incredibly well over this side of the pond and I'd like to give credit to SCV Distribution for focusing so intently on their implementation in the demo room at the Bristol Show this year, as they are one of the cheaper products they support and usually it's the most expensive pieces that are given the limelight at such events.

AT A GLANCE

Build Quality: Superb!

Sound Quality: superb!

Value For Money: Superb!

Pros:

Beautifully constructed, super supportive and allow for the speaker to present itself with far more tactile freedom in bandwidth and allowing the frequencies to really breath, giving more insight, timbre and timing.

Cons:

Absolutely nothing!

Price:

GAIA III (Tested here) – £199

GAIA II – £299

GAIA I – £599

Dan Worth

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GoldNote Vasari Gold and Red Moving Magnet Cartridges

By Janine Elliot

Gold Note are a well known for their very high end products but here Janine Elliot takes a listen to their €195 and €350 moving magnet cartridges.



Gold Note is well known for their distinctive turntables, particularly the €65,000 Bellagio Conquest Black King featuring a massive 270mm spindle. However, the company are also making phono stages, speakers, amplifiers, a CD player, a DSD streamer, cables and stands. They also make a variety of moving coil and moving magnet cartridges. I loved moving magnets in the 1970's and my favourite Stanton 681 EE, Decca London Gold, Ortofon VMS20E and Shure V15iv cartridges still play well on my various old turntables. When everything turned Moving Coil we saw Moving Magnets consigned to the lower-end of the market as the sound from the new MC's generally got faster and more detailed. In recent years new design MM's and MI's are back, showing that the format still has a place at the end of your arm. I recently reviewed the entry point Valore (meaning 'value') turntable and used their entry point Vasari Red cartridge, finding it sounding refreshingly musical and detailed.

Gold and Red seem to be common names in the GoldNote portfolio. Their Donatello, Machiavelli and Tuscany series of MC cartridges are epic products offering Gold and Red versions with equally epic specifications; the Tuscany offers 5-55,000Hz, 35db channel separation, silver wire and Samarium Cobalt magnet, boron cantilever and micro-ridge diamond. Those cartridges retail at 4,800 – 7,300 Euros for the Red and Gold respectively. So to be offered moving magnet Vasari Red and Gold cartridges that retail at a mere €195 and €350 I was rather apprehensive. However, the Red performed admirably in my Valore turntable review, so I wanted to put it together with the Gold to see how they both performed. I asked Tommaso Dolfi, Marketing Manager of Gold Note why he

chose "Gold" and "Red" as model variants, as opposed to "Gold" and "Silver", and he told me the colours are related to the high-end and luxury world, something broader than hifi. He told me "...many brands usually define with gold the elegance/premium line and with red the "sportier" line". He is currently considering the possibility of a silver range.

The Vasari replaces the earlier Babele moving magnet cartridge that retailed around €95, and comes in two levels of performance and design. Whilst both have similar looks it is clear that the Gold is a higher quality product being two grams heavier and formed from a solid block what Gold Note call "Duraluminium". The Red is made of Delrin, otherwise known as Polyoxymethylene, a thermoplastic that has very high strength, hardness and rigidity. Both are very well made, as one would expect from Gold Note. Both have a rigid aluminium cantilever with copper wire and Alnico magnet, and both track at 2 grams. The Gold has a 7.5 x 15.5µm elliptical diamond whereas the Red is a 15.5µm conical shape. Unlike MM cartridges of old the cantilever is securely and directly installed into the metal body in order to ensure good rigidity and trackability, and ultimately so that all the information from the record groove makes its way to the magnet. And, if it does go blunt, as diamonds will eventually do, Tommaso Dolfi will re-tip a new diamond just as we have got accustomed to on our favourite MC cartridges. The variance between the two cartridges isn't just simply the diamond tip and housing material, as Tommaso I told me; "The difference in the material used for the body also means that the Gold requires more precise and strictly matching internal coils" The Vasari RED gave for me a full-bodied and detailed sound, surprising me with its

The Gold gave
a more
detailed and
warmer sound
with good
attack and
excellent
spread of
detail across
the sound
stage,
particularly in
the lower
frequencies

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RED gave for
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at such low
cost



ability at such low cost. Stravinsky's Symphony in C, written between 1938 and 1940, is one of my favourite works from the Russian-born composer, pianist, and conductor; a work commissioned by an American philanthropist Mrs. Robert Woods Bliss. The 30 minute four movement work was written during his neoclassical period allowing it to be favoured by many traditionalists who might be less enamoured by his earlier more-distinctive rhythmical and less tonal style of writing, and the Vasari cartridges allow a very musical and clear picture of what is going on in the composer's head, even if perhaps he denied it at the time; The Second World War was already under way and Stravinsky was still mourning the death of his wife and daughters from tuberculosis, something the composer himself had just been diagnosed with in 1937. Stravinsky denied that his own personal woes had anything to do with the

work's rather laid back style and its retreat into more traditional writing, though it is easy to see some connections in the music. An extremely vivid placement of instruments, especially the depth of clarity in the cellos, was immediately apparent, though with the Gold this was slightly improved; enabling a finer degree of involvement in the orchestration and instrument positioning, particularly the brass "bursts" to interrupt the quaver repeating patterns of the strings. The cello is the closest instrument to the human voice, ranging from a bass singer bottom "C" to above top "A" in the soprano's high end. The Red had previously shown me an almost human character to the instrument, as of course with violins and violas. The Gold communicated even better allowing me to get even closer to the music. That elliptical stylus would help get more detail from the groove. The two models do have identical specifications, both with an impedance of 1k Ω , an output level of 4.0mV and a claimed frequency range of 15Hz to 25kHz, but that stylus and solid aluminium frame do set this model as the clearer and more detailed, and ultimately better of the two, though at almost doubling of the price. That might seem a lot, but at €350 is a small price to pay for such improvement.



Turning to a 160g Rush live Kiel Auditorium album recorded in Missouri in 1980, the Gold gave a more detailed and warmer sound with good attack and excellent spread of detail across the sound stage, particularly in the lower frequencies. The cartridge is a warm sounding product, but not in a bad way. It made me think of the warm sunshine in Montespertoli near Florence, Italy, where it is made or perhaps St Louis, Missouri, where the album was recorded. It also still sounded transparent, which worked well with the rock album just as much as I expected it would, of

GOLDNOTE VASARI GOLD AND RED MOVING MAGNET

course, with classical music. Detail and ambience were excellent for such a modestly priced product. Turning to the Schubert Trout Quintet (EMI ASD 4032) showed yet again how good this cartridge is allowing clear positioning of instruments, particularly the piano, with a good detail of the individual musical lines. Rick Wakeman's "The Myths and Legends of King Arthur and the Knights of the Round Table" has a degree of orchestration that is as long as the album title, and often can sound congested and confused when not played on the very best cartridges. The Vasari Gold cartridge gave a very forward sound that was slightly more open than on the Red, and whilst not quite as good as my usual array of much more expensive cartridges, was still very acceptable. Indeed, my time with the Vasari Gold and Red showed me just why moving magnets shouldn't be put cast to the annals of history just yet. Bearing in mind unless it is a high output Moving Coil it can be 1/100 of the sensitivity of a moving magnet so you need a really good MC phono-stage to compete. Another reason why you shouldn't give up on moving magnets just yet. For those with a good 47K Ω load phono-stage or those with limited availability of cash, you should make the most of moving magnets, and both the Red and Gold are excellent contenders.

Conclusion

Whether coming in Red or Gold, this new cartridge from Gold Note was a surprisingly good sounding product at €195 and €350

respectively. The Vasari takes the best parts of the best MM's of old and put them all together in a single package.

There was an excellent musicality, especially in the low and mid frequencies, and an almost human sensitivity to the music making it very enjoyable. There is a definite improvement in detail and clarity from the Gold; an elliptical diamond is also a very important move in reducing any harmonic or intermodulation distortion, and the stricter matching of internal coils really does make a difference.

So, if cash allows that extra price is worth considering for the extra performance, and so would be the preferable choice, but don't be fooled at either's cheap price; these are both high achieving products that wouldn't feel out of place in a £3000+ turntable.

AT A GLANCE

Pros:

Good value

Excellent bass and midrange, especially on voices and strings

Can choose between two versions to fit your wallet

Cons:

Just slight lack of detail and speed when compared to much more expensive Moving Coil cartridges

Janine Elliot

Whilst not quite as good as my usual array of much more expensive cartridges, the Gold was still very acceptable

