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MUSIC INTERVIEWS &
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SUMMER 2021

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Gabi Rynveld is a professional concert pianist, born in Budapest, Hungary, she has performed in famous concert halls worldwide since she was nine years old. Later in life, while raising five children, she led sales and marketing for International Audio Holding, the company behind Siltech and Crystal Cable.

DAVID ROBSON

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Dave Clark, along with wife Carol are the publishers over at Positive Feedback, the US audiophile magazine. Here we talk to Dave about his art and what motivates it.

MARTIN DUNHOFF

Martin Dunhoff is the Sales Director of Danish loudspeaker manufacturer Audiovector, a bit of a favourite with HiFi Pig as we use their R6 Arreté in one of our reference systems.

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CAMPAIGN



YOU NEED YOUR HiFi DEALER & YOUR HiFi DEALER NEEDS YOU!

In this issue of HiFi Pig Magazine we launch our campaign to help support HiFi retailers and independent record shops. We'll be putting our money where our mouths are and offering all independent HiFi retailers and record shops the opportunity to take advantage of a FREE advertising package worth £250 with us.

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ALAN CLARK

INTERVIEW

Well known on the UK audio scene, Yorkshire-based Alan Clark is about to launch his latest venture, Alchris Audio. HiFi Pig catches up with him before the official launch of the new brand at the UK Audio Show.

HP: Tell us a little about the new brand and how it came about.

AC: Hello and thank you for this interview. Alchris Audio is a whole different direction for us from what I was doing before in the HiFi speaker market. My partner Christine was in ill health for a while during 2019 and the stress of working and looking after elderly parents finally brought things to a head in early 2020 when Christine had a heart attack and had to be fitted with stents, I took a step back from speaker building to concentrate on getting her well again and made her all sorts of lush healthy meals to get her well again and soon she was recovering and getting back a new lease of life and I took up my other passions of sculpting and model making again so that I could be with her 24/7. The brand name came about as a result of all of this and we decided

that Alchris would be a fitting rebirth - if you like, to rise from the ashes of what we had been through together.

HP: This is a whole new range of loudspeakers, where do they fit in the current market and who do you see as being the customers for each product in the range?

AC: I have included something for everyone in the new range and have even designed a centre speaker for AV use. I've also spent a lot more time designing and tweaking my existing knowledge to make the designs better than the products I have designed before and there are quite a few innovative new ideas in there. The OPLS system is a case in point, this is an Optimal Panel Loading System that tunes the cabinet to the drivers using weighted blocks in just the right location for each cabinet.

Then there is the new bass loading on the AR-10 called the ACTS system (Acoustic Chamber Tuning System) which features a resonance chamber inside the speaker to extend the bass, it makes the speaker look like a transmission line but it's actually just a really clever ported design. All the crossovers in every model are also free floating and they sit on a rubber compound that isolates them from the main cab to reduce vibration. Then there is the magnetic cover storage on the sides, all models have this, where you can remove the covers and place them on the side of the cabinet, it also helps with edge diffraction and strengthens the stereo image and all models except the AR-66 have this. I've also outsourced most of the wood cutting and CNC work so that it makes for a better environment here and speeds production up to keep up with demand for the new products. We are aiming for the higher-end of the budget market to the mid-range Audiophile market but I did consider going really high-end spec's but I'm quite happy in this price range and it means I can still offer great value for money and meet loads of nice customers. The cabinet veneers are all real wood with Oak and Walnut being standard finishes. The veneers I am using on the new speakers from Alchris are all from sustainable woods and are engineered to help save the planet - so every little helps

HP: At least one of your designs draws on a well-loved product from the past but with your own take. I'm thinking about the wonderful looking Celestion 66 homage, of course. What do you think were the strengths of the original and how have you improved on it?

AC: Ahh the Ditton 66, I've had 4 pairs of these over my lifetime with my first pair being in 1978. Sadly they all got damaged at parties with the tweeter being their big weak spot. Don't get me wrong, it's a good tweeter but can't take the same power as the other drivers, and unless the amp they are used with is delivering clean un-clipped power they usually burn out pretty quickly. The original design is great and you can't take that away from the guys at Celestion, they were top of the tree at the time and the midrange unit in them is a stonking piece of engineering...as is the bass driver. In my opinion, the main thing that let them down was the cabinet build and the crossover layout which

had way too much coil crosstalk through badly positioned coils. How have I improved on it, well I'm lucky enough to have all the original drivers to hand and I also know a few people that built the original 66, so what I've done is try to match as close as I can with new modern drivers with greater power handling capabilities to the originals, I've improved the crossover design and made the cabinet stronger, I've also addressed the reflection point at the front top lip of the cabinet and I've mounted everything on a fully floating sealed front baffle. But more than anything I had to look like an original 66 with the cover on and the results are quite astonishing as you will see at Cranage (North West Audio Show) show next year when they make their public debut. The Celestion sound is one I grew up with and I loved the deep extended bass the Ditton range had and the lovely midrange that was nice and easy on the ear. I've tried to keep as much of the sound signature of the original design as I could in this modern update. It's tempting to make it way overblown, but I've decided to go for the middle ground so the design keeps faithful, though in an up to date way, and that way it will satisfy the demands of a larger audience.

HP: How do you go about the design process and who has the final say in the voicing of your loudspeakers?

AC: I still use the tried and tested methods I've used for the last 45 years, although I do now use more modern methods with regards to measurements to get to the ball park quicker. It's what you do while you're in the ballpark that makes all the difference to the finished speaker design and the final voicing is done through hours of listening. Christine does most of it to be fair as she has been far more sensible with her hearing over the years than I have (unless you count the stranglers concert in Sheffield when we were both deaf for 2 days afterwards) I call her Bat Lugs because she literally can hear a pin drop, don't ever mutter anything under your breath as Christine will hear it! The two of us work very well together. I'm very sensitive to phase shift and it's something that actually makes it easier to design stuff, the modern computer programs just confirm what I already knew. This new AR range has been refined over 12 months to get it just right and I'm certain we have.



INTERVIEW





HP: Are you planning on keeping Alchris a UK-centric product or are you looking to take on overseas markets too?

AC: The plan is to keep the brand UK and Ireland, shipping fees for the bigger speakers will be very expensive so I've no real plans at this time to break into the export market.

HP: Can you share the prices of your range with HiFi Pig readers?

AC: I can, yes. The smallest AR-2 comes in at £549 and the Flagship AR-66 is £4,499. The floorstanding models are all personally delivered and set up by me and Christine free of charge, whilst smaller speakers will go with a trusted courier.

HP: Do you plan to focus purely on loudspeakers and if so why?

AC: Alchris Audio will focus on just Loudspeakers, there are other plans to launch other products but not under the Alchris Audio brand.

HP: As well as loudspeakers you make some very impressive models, where does this interest come from and will you be looking to take this to the buying public too?

AC: I do yes. It's something I've always had a passion for - I just like making things. I've made Daleks, models, masks, sculptures, car body kits, I love making moulds and casting stuff. I get many requests for sculptures, sadly im only any good at sci-fi stuff and I couldn't sculpt a human face it would look like something Mr Bean made in a pottery class, but monsters, and mascots etc don't seem to be a problem. It was only a matter of time before the two finally met and I created a speaker with a sci-fi theme and I've included a few examples I've built for customers in the images. The Predator had 2 x 130mm bass drivers and 2 x 25mm tweeters in the eyes, they had bass loading in the stand and were very good performance wise. The Cylon speakers had a working Larson scanner eye and these were also 2 way speakers featuring a 100mm bass driver and a 19mm tweeter. Other sculptures include Snaggletooth (Snaggles

INTERVIEW





#1 sits proudly in the main HiFi Pig listening room and guards us all – Ed') and Eddie, the Iron Maiden mascot. All these are private commissions and I hope to set a website up in the future where I can bring customers ideas to life and where they commission a special one off of something they have always wanted.

HP: Anything else you'd like to add?

AC: There are some wonderfully supportive people in the HiFi industry, and it's always been a pleasure to be involved with likeminded peo-

ple. I think getting younger people involved in HiFi is crucial to its continued success and general wellbeing. In a throwaway society I think it's getting more and more important that we as manufacturers can produce a product that customers can treasure for a long time, just as our parents did. Thanks for the interview Stuart, it's been great chatting to you.

The Alchris Audio website is under construction at the time of going to press but you can [visit it here](#).



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AUDIOVECTOR R1 ARRETÉ LOUDSPEAKERS

Audiovector R1 loudspeakers are made in Denmark. In this review, Stuart Smith checks out the £4700 R1 Arreté stand mounters, dedicated stands, and Freedom Grounding Concept cables.



Stuart Smith

Let's not beat about the bush, I have loved Audiovector loudspeakers for a number of years. I'll qualify that – I've previously always enjoyed Audiovector loudspeakers when we've been at shows, and so when it came to auditioning new speakers as our 'conventional' speakers in the main system it was Audiovector that Linette insisted we audition first. Long story short is that during that audition process we didn't bother having any other speakers sent to Hifi Pig Towers to listen to and pulled the trigger on the Danish company's R3 Arreté floorstanding loudspeakers with their Freedom Grounding Concept grounding cable – yes it works and yes it's voodoo as far as I'm concerned. I bang on about the FGC in the R3 review.

R1 Arreté arrived with some matching stands (£775), Freedom Grounding cables (£595) and were very well packed, though nothing ostentatious. The speakers are finished in Italian Walnut veneer and the stands in Gunmetal grey, though the stands. Other veneers for the speakers are available as standard (White Silk, African Rosewood, Black Ash, and the Italian Walnut we have here) and custom piano gloss finishes are available on request. The stands are a good match and visually the Audiovectors look smart and elegant on them. The speakers come with a cloth grille that connects magnetically to the cabs to protect the drivers from prying fingers, but as always I left these off.

There are three levels of speakers in the R1 range - R1 Signature, R1 Avantgarde, and R1 Arreté. The Signatures

FIT, FINISH & SPECS





have an R Evotech soft dome tweeter and the Avantgardes have an R AMT tweeter – essentially that's the only difference between those two. The Arretés have an improved AMT Arreté tweeter plus NCS (Natural Crystal Structure) and FGC (Freedom Grounding Concept) – more of these in a bit - otherwise, they are the same speakers as the others in the range.

Around the back of the speakers is a very well finished backplate with a single pair of very good binding posts, and a post for the grounding cable. There is also a couple of ports on the back.

The R1s are a pretty compact (37 x 19.6 x 29 cm) two-way, bass-reflex design (that's one of the ports) that employs a non-parallel teardrop construction that is designed to minimise internal standing waves. In addition to the teardrop design, the R1s have a narrow front baffle to lower undesirable diffraction distortion.

DRIVERS

Woofers in the Audiovector R1s are 6.5" and have a carbon construction and are the same as used in our R3s, as is the AMT (Air Motion Transformer) tweeter.

I'll copy the information with regards to the AMT tweeter from the last review as I think it will be of interest, but it's also a pointless exercise to rewrite it just for the sake of it.

The AMT was invented by Dr Oskar Heil and works in a very different transduction principle than your common or garden driver. It also works somewhat differently to ribbon loudspeakers in that the diaphragm is pleated and it uses a metal-etched sheet of metal-etched folded sheet of polyethylene terephthalate film with the etching acting as a voicecoil. The whole is then housed between four stacks of steel pole-plate pieces positioned at forty-five degrees within a high-intensity, quadratic, opposing magnetic field. The folded diaphragm works like the body of an accordion with it being pushed in and out. Thanks, Wiki! AMTs have a reputation for being fast and detailed and with a focused sound characteristic with the air leaving the diaphragm being around five times faster than the speed of the driver itself and this is

where the name originates.

Behind the tweeter you have that port/grill I mentioned earlier as the AMT essentially acts as a dipole firing both front and back – the port allows the tweeter to fill the room from front and back. The Arreté AMT tweeter also uses what they call an Integrator Acoustic Lens to the front of its mount which Audiovector says improves dispersion, impulse response, and integration with the mid-driver.

Audiovector says that the frequency of the R3 Arretés goes down as low as 38Hz and up to 53kHz with a sensitivity of 87dB. This sensitivity isn't massively high in the great scheme of things but you aren't going to need a huge muscle amp to drive these you'll be pleased to know. They are a nominal 8 Ohm load, will handle 200 W, and crossover at 2900Hz.

FEATURES

There's a lot of anacronyms listed on the specification sheet of the R1s (and other Audiovector loudspeakers, for that matter) and I'll go through them here as I think some of them really do add value to the speakers.

IUC stands for Individual Upgrade Concept which basically gives owners of Audiovector speakers to upgrade to a higher level when you can afford or when a new model becomes available. I like this concept a lot as it basically means you can buy into the Audiovector brand and move up the food chain as and when.

LCC is Audiovector's Low Compression Concept which is incorporated into the drivers to allow the membranes of the drivers to move freely even when pushed hard or when they are under "difficult conditions."

Soundstage Enhancement Concept is designed to allow the soundstage to remain solid wherever you choose to sit – I'll put this to the test later but I'm assuming that this should mean that speaker positioning isn't as critical as it can be with other more demanding units.

NES is a concept that Audiovector suggests tackles the problem of drive units sounding best when they "don't carry the weight of the speaker

cabinet to which they are fixed.” This is tech carried down from the R11 Arreté.

All versions of the R1 have the above technology included, but the Arretés add both the Freedom Grounding Concept (FGC) and NCS (Natural Crystal Structure).

FGC is basically a cable that attaches to the grounding post at the of the speakers and then to your mains earth via a plug and is designed to address “movement induced distortion of and between the drive units.” Here is what Audiovector say about it - “The currencies running between the chassis are being processed and dealt with through a new separate crossover, which routes the signal to the ground terminal of your wall socket or your grounded mains distributor. These currencies cause coloration and distortion between the drive units. By balancing and filtering these through a dedicated separate filter and by offering the possibility of connecting them to earth/ground, we achieve a clean, very accurate, much more realistic sound with low noise floor.” Now I’m sceptical about this kind of thing but it really worked incredibly well on the R3s and so hopefully it will have the same effect here on the R1s.

NCS freezes components used in the speakers down to -238 degrees C which is supposed to realign copper molecules to their natural positions to reduce resistance. My natural response is to be sceptical of this kind of thing but I’ve not got the Avantgardes here to compare to and so really can’t comment on the efficacy.

THE SOUND

Set up of the speakers is as pain-free as it could be and I had them both near the back wall and out into the room, with me preferring the slightly more open sound of them well out into the room. The stands complement the speakers really well, are a perfect fit, and bring the AMT tweeters to ear height when I’m sat.

I was sort of expecting much of the same kind of sound overall as the R1s bigger brothers that we listen to daily but with perhaps a little less in the bottom end. And pretty much that’s what you get with the R1s. It struck me here, and

after listening to the R1s for a fair while, that it may have been easier to put a link to the R3 review and just write “much of the same only with a smidgen less scale” but that’s not really giving these speakers the credit or attention they deserve, and they do deserve your attention in my opinion.

Like the R3s, the soundstage is wonderfully three-dimensional front to back, up and down, and left to right, and despite only being a metre or so from the side wall the stereo image seems to extend beyond the speakers quite nicely. This three-dimensional effect is more prominent when the speakers are further out into the room from the back wall, but very good in either position. When compared to the Xavian Perlas we regularly use in this system there is definitely more of a reach out and touch feel to the image, though it may be slightly less so than the Daptique dp77s which are isodynamic. For relatively small speakers there is a huge sense of scale to the image with the R1s. And it’s not just the image that has scale. Daft Punk’s Tron Legacy sounded nothing short of majestic, with me having a feeling of being enveloped in the soundscapes, sounds, textures, and rhythms. Orchestral themes that abound on the Tron record feel magnificent, and, dynamically speaking, the R1s are wonderful with them never feeling anything short of in control.

Audiovector employs the Sound Enhancement Concept that got mentioned earlier. This addresses there being a very specific hot seat for most speakers where the stereo image is brought into sharp focus and essentially widens the places you can sit and still enjoy a good stereo image. There is definitely a spot where you get the best stereo effect, and sitting bang in the middle of the speakers is quite spectacular, but sitting to the left or right of this, you still get a good representation of the image.

Bass response in this well-damped and treated room was very good with me having no issues even when playing bass-heavy electronic music such as Infected Mushrooms’ Army of Mushroom”. I also liked that the bass was tight and fast – something I think standmounts can often either do very well or, indeed, very poorly. Bass reflex designs can also sometimes suffer from a somewhat monotonal bass note but I don’t get

REVIEW



that here with bass being tuneful and bouncy. The speakers do drop off a little bit below 45Hz but I was still seeing a fairly significant peak (admittedly on an Android app) at 38Hz (ish) when playing the Tron record, which was pretty impressive for a speaker this size and I found it absolutely stunningly entertaining in this room. Honestly, in this room anything much lower would be too much and I never once thought to get the subs plumbed in.

Tonally I'd say the R1s, like the R3s, err on the side of being ever so slightly brighter than flat, but that actually may be a good thing in that they offer up a really breathtaking listen that has you on the edge of your seat and you become really drawn into the music you listen to in a very engaged kind of way. Whilst purists may perhaps want a more monitor style of listening experience (I do enjoy monitors too), but what you have here is a speaker for someone who really loves their music and wants to engage and be engaged with it.

All what I've just written sounds like these are a fur coat and no knickers kind of listening experience, but that's not the case, and whilst they are exciting, dynamic and engaging (I'm well aware I've repeated that several times) they also do subtle and intimate with suitable material. Human voice (I often use the odd spoken word piece or speech radio in the review process) sounds natural and without colouration.

GETTING GROUNDED

In the R3 review I added the cryogenically treated grounding cable betwixt speakers and the earth of the electric socket via the supplied cable (it an extra £595) and was gobsmacked, and, despite being ready to dismiss such nonsense as silly marketing spin, I was really taken by it.

I've copied and published verbatim, above, what Audiovector claim this cable does but, frankly, I haven't a clue what they are banging on about, I'm afraid. It all sounds like scienceified marketing to me, but the reality of the situation is that something goes on with this 'concept' and I have experienced it with the R3s and with now with the R1s. There is a perceived increase in volume and there is a sense of there

just being more of everything going on. I don't know what the cable does but I like it. The Tron Album that previously sounded "majestic" now sounds "****ing majestic". This effect is repeatable and real and I A/B'd tune after tune, just as I did when I first experienced it with the R3s – we leave it constantly "in" with the R3s, but to not have it there and then to add it makes you really notice it! I defy anyone to listen to these speakers without the Freedom Grounding Concept and then add it and then want to go back to the set up without it in place, and, as such, I feel, just as I did with the R3s, that it is a must-have addition to the speakers - so factor it in when budgeting. What was an edge of your seat listen suddenly becomes like you've shifted down a gear, hit the accelerator, and been pinned back to your seat – in a very good way!

CONCLUSION

I loved them! There's no other way to say it - the R1s do so much so very right. Whatever kind of tunes you play on them, they just get on with it and deliver an exciting and engaging sound that just demands you whack on another tune...and then another. The Tron record I mentioned got played several times on the trot, both with and without the Freedom Grounding cables.

The Freedom Grounding, despite coming across in the marketing bump as spin (I'm being polite), really does add to the speakers' appeal and is a must-buy (not) option!

A big floorstander would be too much in this room and I'd struggle to push them to their limits where I feel most speakers really come on song, but with the R1s you really can push them hard and get the very best from them. In a larger space, they will still work, but I'd prefer to have the extras that the R3s bring to the table in that situation. In a small to medium-sized room, they are stunningly good and work pretty well at low levels too.

The truth of the matter is that I feel this particular system we use as a reference is a world-class system that has been carefully put together to really deliver an exceptional listening experience at a price that is relatively achievable for many, but it's also a reference by which to measure other products that come and go. I





REVIEW

hate to say it, but with the R1s in the system, it is elevated a notch if not a notch and a half – and I do not say that lightly!

The stands are very well made, heavy and with spikes in their underside. They match the speakers brilliantly, but I feel at €800 they are a tad on the pricey side.

AT A GLANCE

Build Quality:

The speakers feel pretty light but they are well put together and have quality components and accoutrements

Sound Quality:

Enveloping, engaging, and dynamic. Not the flattest of speakers but that is forgiven for the level of sheer enjoyment they bring to the feast.

Value For Money:

Not cheap and the added extras do bump the price up considerably.

We Loved:

The engaging, dynamic sound

Tight and tuneful bass

Easy positioning

The Freedom Grounding experience is still a novel thing to hear

Airiness around instruments

Encapsulating sound stage

We Didn't Love So Much:

Price of extras, particularly the speaker stands

I genuinely cannot think of anything else

Price:

Speakers: £4700, €5250, \$6250

Stands: £775, €850, \$979

Freedom Grounding Cables: £595, €650, \$850

Elevator Pitch Review: Well-made and great-sounding speakers that major on delivering an exciting and three-dimensional performance, but have the ability to be subtle when needed. Stands are too expensive. Freedom Grounding Concept really works and is a must-have!



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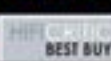
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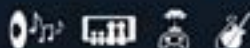


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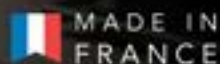
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FINK TEAM KIM

FinkTeam KIM is the German company's smallest loudspeaker. It is a two-way standmount loudspeaker with its own stand and sports an AMT tweeter. Stuart take a listen and Linette Smith gives her verdict too.



Stuart Smith

I reviewed the FinkTeam BORG loudspeakers (£22 000) around this time last year and I absolutely loved them and awarded them our highest accolade. When the opportunity to have the little KIMs around to play I really couldn't resist.

KIM is the third loudspeaker in the German company's output and is, according to their website, a response to dealers and distributors looking for a less expensive model for their clientele.

Whilst BORG is undoubtedly a statement product that says "this is what we can achieve!", KIM is a little different but still feels like something of a statement of what can be achieved at a price. Like BORG, KIM is still a two-way design, still uses a paper coned woofer with an oversized magnet, and still uses an AMT tweeter based

on a Mundorf-designed model. Like the BORG, KIM's body and cabinet have been designed to avoid colouration.

A CUT DOWN BORG?

To me, KIM looks like a BORG that has been cut down to size so as to be easily accommodated in modern living spaces. And whilst KIM is pretty chunky, it is very unobtrusive and looks rather elegant on its built-on and open-framed stand. In fact, I'd possibly go as far as to say I think that KIM is one of the best-looking loudspeakers ever to have graced our listening space. The design shouldn't look good – it's short, wide and squat – but I think it's a loudspeaker of real charm from a looks perspective.

For those interested in the numbers, KIM stands 854mm tall (actually a smidge more when the included spikes





are taken into the equation), is 300mm wide (around the same as a record), and 310mm deep, though adding the stand takes this depth to 412mm as it's angled ever so slightly upwards.

Construction-wise the cabinet is made up of double-layer sandwich panels with bracing and is pretty heavily damped. Tapping the cabinet results in nothing but a dull thud. The weight of each KIM is a chonky 25.1Kg. A number of real wood finishes are available and fit and finish are impeccable. Really without fault as far as I can see. All fittings round the back are really nicely done and the speaker posts are very good indeed, though it's a bit cramped round there with thicker cables. Our finish was Amara/Black but they are available in a good few finishes.

ADJUSTABILITY AT THE TURN OF A KNOB

Also around the back and next to the speaker posts are two knobs labeled Damping and High. The damping knob is to change the damping of the 8" woofer (with a 38mm voice coil) whilst the HIGH knob changes the way the 110mm AMT

tweeter behaves – effectively it makes it more or less prominent. The high setting has three positions labeled +, 0 and -. Karl-Heinz Fink explains "This time, we only added two controls. The left one can adapt the speaker to different amplifiers. Modern amps have very high damping factors and that is the 1st position. The second one is for amplifiers with a lower damping factor (like a typical NAIM for example.) The last one is for tube amplifiers.....not for the 7W class A single end, but for a typical PP EI34 or KT88 construction. It compensates 0.5 Ohm transformer resistance. The other switch does change the level of the tweeter....but only a little to compensate the setup if necessary."

I actually found this a really innovative and useful feature of the KIMs and it allows you to tweak the sound of the speakers to your ancillary kit (amp/s) and your personal taste. I particularly enjoyed the effect of turning the 'High' knob on the back of the speakers to the +ve position. I felt this added even more air to the presentation, though that's not really something you could accuse these loudspeakers of lacking in any way anyway. This effect was, I thought, most beneficial when listening at relatively low

volumes with the sounds having an ethereal feel to them – in a good way.

SOUND

That HIGH knob I mentioned is particularly useful for low-level listening, I found. I often have speakers and other kit running-in in the background whilst I'm writing or setting kit up etc, and I tend to listen at low volume in these situations – I'm taking around 60dB (normal conversation level apparently). Most often the music is simply there but without me taking notice of it and it just becomes background noise. However, these speakers are a little different (particularly with that High knob in the +ve position) and I found that I simply had to listen to what was playing and got really drawn into the music – and whatever was playing! Often you will find that a speaker loses a great deal of detail at low volumes but that's just not the case here. Obviously, you don't have the bass clout you would get when the speakers are being pushed a bit more towards realistic listening levels but it's perfectly listenable and very enjoyable.

Positioning was simple and I ended up with them about 2.5m apart with the sitting position equidistant. I found that there was a definite sweet spot to the speakers but the stereo image was still very reasonable both left and right of absolute centre.

SLAM AND AUTHORITY

Bass heft is another great feature of the KIMs – they go low and they have real slam and authority. Yep, it's tight and whatnot, but also very tuneful. As I mentioned, it's a year since I had the BORGs here to listen to but there is a clear family sound going on here. No, that's perhaps not fair as it suggests the speakers are colouring the sound in some way, but I found colouration to be really low. Perhaps I'm better off saying that you get a lot of the BORG's positive characteristics with KIM, with the possible exception of them not going quite so low. I loved the BORGs but I actually think I prefer these, which I know makes no sense at all given my proclivity for big floorstanding loudspeakers.

So what were FinkTeam thinking of when they designed KIM? Again, I'll let Karl-Heinz answer

that one for us - "BORG is a sort of design statement and always visible in a room. KIM was planned to be more of a stealth design, blending into the room without being too prominent. In the past, many speakers have been in that height and as long as they are around the height of a table or sideboard or window sill, they are hidden in a way. Of course, the image should still be as high as the Borg, so we worked a lot with the tilting angle and the AMT length to get it right. And we also wanted to make a more affordable speaker from FinkTeam, using as many features as possible we did for BORG."

Indeed, you are getting a lot of what the BORGs bring to the party with KIM and so why would you spend a considerable chunk more on the BORG over and above what these cost? I find that question very difficult to answer and in this space I'd personally probably opt for the KIMs, particularly as Karl-Heinz tells me that FinkTeam has no intention of making a smaller speaker than this, but then, and reading between the lines, they have the EPOS brand to fulfil that role. Karl-Heinz did mention that they do have plans to upgrade their flagship WM-5 to the next generation with new midrange and bass drivers...watch this space.

I had thought that the KIMs would sound a lot smaller scale-wise than they do, but then the speakers tilt backward a little on their stands which makes them feel a lot taller from an aural perspective than they actually are. Does this bring about phase issues? Nope, not at all, and the KIMs sound as integrated from top to bottom as the BORGs did.

IMPRESSIVE SOUNDSTAGE

Soundstage is impressively expansive with the effect being a little like being in a bubble of sound that expands slightly beyond the speakers left and right, behind the speakers a little, and then out into the room. It's a wonderfully enveloping experience that has me reaching for the next album over and over again. Certainly no fatiguing or harsh sound here! Ambient electronica just washes over and around you whilst the image presented in front of you remains stable and pinpoint accurate in a monitor style! Yotam Avni's Was Here record sounds

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absolutely sublime on these speakers! The resonance of the vocal on the Beyond the Dance track is wonderful.

Lee Perry's Party Time taken from the From The Secret Laboratory album is a tour de force of effects and sounds flying around and on these speakers, you get that full effect...and whilst the next track plays (Seven Devils Dead) there's a sound that sounds like chirruping birds that I've not really taken much notice of before. I like that the speakers allow me to listen to a tune I must have played hundreds of times with wholly fresh ears and hear things I've not experienced before. The spatial quality of these speakers really is very impressive - holographic is a term bandied around a fair old bit in Hifi reviews, but these really are reach-out-and-touch holographic to my ears.

have an album called 313 Detroit that has a tune on it by K.E.L.S.E.Y called Baby Can (M.K. Dub), and whilst the tune is fantastic there is a rawness and dirtiness to the recording. KIM hides nothing of this and this tune sounds not unlike it's been recorded in a tin can – no doubt this is all down to the very basic samplers available at the time. Anyway, don't expect KIM to make poor recordings sound any better than they are...personally I love the rawness of this tune and its flaws which KIM doesn't gloss over!

These speakers REALLY suit electronic music which is probably 75% of what I play for my own enjoyment - they are fast, accurate, and tight. However, I'm well aware that in the respect of my personal music choices I'm in a bit of a minority – but I am finding it difficult to tear myself away from this kind of music to give a more balanced review of KIM's charms.

Bad Brains' Sacred Love turned up loud is majestic. That live but tight drum sound on the track is really well presented. The guitar riffs have power and speed and the vocal, heavily processed to sound as if it's over an intercom, projects into the room and sounds as it should. Guitar lines are easy to follow and so is the bass guitar. In a similar vein Body Count's self-titled album is an assault on the senses as it should be. With that said there is a load of detail in the record that is easily missed, and these speakers let you hear that. Crank the volume up

and it's as hard-hitting as I've heard, but without losing any of the definition and detail – just MUCH louder. And you can really push these speakers very hard without them getting anything like over-wrought or flustered. Stunningly dynamic!

Moving on to more subtle tunes and José James' version of Strange Fruit from the album Yesterday I Had The Blues sounds really beautiful at low volume, with the slightly nasal quality of his voice at the start of the tune coming through really well. His voice is clearly projected into the room whilst the very simple backing and clap adds eeriness to the song. Again, the soundstage feels really expansive and there is a feeling of 'liveness' to the song presented. The line "...for the sun to rot" has an inflection on the final consonant and this comes through brilliantly with KIM. Really, what's not to like here?

CONCLUSION

I like these speakers a lot! They are perhaps one of the best loudspeakers we have had in the house in the sub ten grand price-point and had I not just bought another turntable I'd have been having a pair of these in a heartbeat. Yes, they are that good!

Key takeaways are speed, clarity, and an open airiness.

At low volumes, they are a delight but put some power up them and they just come alive in a wonderfully dynamic and engaging way.

The soundstage is vast with KIM - and I mean in every dimension.

There is a certain quality to these speakers that just drags you in, tells you to shut up, and to take notice of the music that is playing. I listened and listened to album after album. They feel unforced and they are natural-sounding uncoloured and true to the recording.

I need to sleep on the gong these get as I've not given the award I'm considering previously. I'll make the decision tomorrow....

So, I have slept on it and I don't think I can



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do anything but give these speakers the new Editor's Award, but that will only be confirmed after Linette has given her verdict - which will be done without having read my comments. We plan on giving these awards out very infrequently, but to give these anything less just wouldn't be fair to them or to FinkTeam. Yes, they are the best part of nine grand in the UK but I wholly believe that they are worth every penny, particularly when you compare them to the BORGs at £23K, give or take.

It's impossible to put a percentage of what KIM gives with regards (and compared) to the BORGs, but I'd suggest it's in the 90s...

OVER TO LINETTE

As Fink's KIM rated so highly with Stuart, I get to give my opinion too. Although we have been listening to them together, I have written my thoughts independently and without us discussing our findings, except to say to each other 'wow, these are great!'.

I have been listening to these speakers whilst going about my business, not just sat in front of them, and the first thing I noticed was that the sound from them is excellent, even not in the designated sweet spot, you really can walk around our large listening and living room, even sit out of the listening room part, and still enjoy what is playing. However, moving to the sweet spot the experience becomes more intense, so I sat right there for some critical listening.

It's like KIM is giving you a big, warm pre-covid hug (remember those?). She draws you in and wraps her music right around you. The soundstage is literally 'wrap-around' giving that wonderful total music immersion that I really enjoy.

Even at low volume music sounds expansive and detailed but not clinical, you can hear the breathiness or the rasp in the singer's voice, very noticeable on Elton John's 'Tiny Dancer'. Piano and guitar 'feel' as they should, the country twang of guitar in the Stones 'Dead Flowers' sounded incredibly real.

Giving it a bit more welly, Todd Terry's Time To Blackout had the threatening feel it should, the creeping menace of dark Drum & Bass, with

that bass being fast, taut, and dry...thumping you into the middle of the chest. This was carried on with the bass-driven Da Funk from Daft Punk, the building crescendo of electronica brilliantly defined and all-encompassing. Sister Sledge's 'Greatest dancer' showed that KIM likes to D.I.S.C.O. too, showing off the funky Nile Rogers sound.

People often say that speakers disappear, a term that can be overused but should rightly be used for FinkTeam's KIM. The sound stage expands well beyond the speaker and, walking into the room, you would expect a much bigger speaker to be playing.

Looks-wise I think they are lovely loudspeakers. Fink was never going to design a boring box standmount. These have similar quirks as their big brother Borg. I love the way the design plays with the standard speaker form, the angle of the cabinet planes and the elegant tilt are pleasing as well as functional. Finished in the 'velvet' black and luxurious dark wood of the review pair we had, they would suit modern or classic interiors.

Overall, I would class the FinkTeam KIM as 'goosebump' speakers, they connect you with music in a way that you really FEEL, totally tactile sound. They are speakers for living with, not just critical listening. They are in a busy market for this price point but stand out from the crowd for their looks and their enjoyable and immersive way of delivering music.

Definitely, one of the best pairs of speakers to grace our listening room and certainly worthy of our first ever Editor's Award!

AT A GLANCE

Build Quality:

Really beautifully finished and whilst they are a squat and wide loudspeaker they look great. Their open frames allow them to appear to be less than they actually are. The wooden boxes they arrive in is very well finished too. Speaker terminals are very high quality and the tap test has them pretty much dead.

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Sound Quality:

Space and air in the tops and mids is underpinned by a solid, tight and accurate bass performance. There is a clarity to their sound and whilst they can do subtlety with aplomb they can also rock out brilliantly. The soundstage is big and enveloping but feels natural and not overblown.

Value For Money:

They are not a cheap loudspeaker! Compare them to the BORGs from FinkTeam and they suddenly seem to become a bit of a bargain.

We Loved:

The open presentation

Deep and tuneful bass performance

Fit and finish are great, as are the binding posts (*with a but on the latter point)

Tuneable tweeter is a very useful feature, as is the damping of the woofer

Allow a really good insight into small details and inflections in music and vocals

Work with all kinds of music from rock to vocal jazz and through techno

Easy to position and unfussy

Easy to listen to for very long periods

Worked with both the solid-state and valve amps we played them with

We Didn't Love So Much:

They aren't cheap

*The back panel was a bit tight space-wise with thicker cables

Won't make poor records sound any better – that's a good and a bad point depending on your viewpoint/record collection

Relative inefficient at 86dB

Price: £8 900 (UK) €9 450 (EU)

Elevator Pitch Review: A relatively compact, well-made and good looking loudspeaker that manages to be able to pull off the trick of being subtle and refined with an ability to really rock out too. That AMT tweeter is a treat and adds so much to the character of the speakers but never feels like it is the dominant force, and leaves you with a beautifully balanced loudspeaker from top to bottom. If you have ten grand to spend on a pair of speakers, get these on your short short-list!



THE ITALIAN TURNTABLE



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"all my music sounded simply wonderful. Clean and ever so there with a lively presence that was fast on its feet... pace and rhythm. [...] I could find nothing to criticize"

Dave Clark - Positive Feedback

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AUDIO PHYSIC AVANTI 35 LOUDSPEAKERS

Audio Physic Avanti 35 Loudspeakers are the latest iteration of the German brand's well known and well-loved Avanti speakers. Stuart takes a listen to an old friend reborn.



Stuart Smith

I've been a long time fan of German brand Audio Physic and have owned a couple of pairs in the past – the smaller Tempos and, crucially for the purposes of being able to talk about the speakers we have here, the Avanti 3s. Both were exceptional loudspeakers for the money and it is likely that we would still have the Avanti in our system somewhere were it not for a series of unfortunate circumstances best not gone into here.

The original Avanti 3s that I had were really nicely finished, were valve amp friendly, and, to coin a phrase, imaged like bastards ((that means they were very, very good at imaging!)) Really, the stereo image that the original Avanti 3s threw out into the room was, and yes I bang on about this term being overused, holographic. I remember hearing Audio Physic's for the first time

when they were relatively unknown in the UK and thinking that I really ought to own a pair sometime. I forget what the first ones I heard were but remember them being powered by tubes and me being asked if I had any requests. I had a recently cleaned (scratches repaired) Mastercuts CD of Hip Hop on me at the time and the chap in the room very kindly played a track from that whilst commenting "Not the usual kind of thing that gets played through these, I'd guess."

I was smitten and returned home and bought a used pair of Tempos which I powered using a 300BPSE amplifier. I loved them but in reality they only gave me a taste of what I'd previously experienced and so when the Avantis came up I jumped at the opportunity, even though it was a three-day round trip to pick them up...and this is what they looked like in the flesh.



So, when the guys at Elite Audio called me and asked if I'd be interested in listening to a pair of the new Avantis it really was a no-brainer for me and I immediately said yes. What is interesting is that the very same amps I had powering the original Avantis are the ones I am using for the review here, though previously I had them with a Coffman Labs pre and now a Leema Libra DAC/PRE.

Now I'm sure that all reviewers do the same, but here at Pig Towers we have a pretty strict regime for the review process and we try to make it as consistent as possible so as to avoid anything getting in the way of us focusing on the product, in this case, speakers, that we are actually reviewing. That means that we don't use amps that are in for review and always use our own reference amps, we use the same front end, and, where possible, the same cables. Crucially we also don't do any critical listening until, particularly loudspeakers, have had time to run-in/loosen-up/call it what you will. For the Avanti 35s we had them hooked up to a big old Krell that had just come back from the States after a bit of a refresh. Tunes were blasted through at decent volumes for a good few days and whilst we obviously listened to music through them we made no notes or judgements – though they did actually sound pretty decent out of the box. All this adds time to the review process, of course, but we'd rather think we were using a product as it would be likely used in the home than a product straight out the box.

FEATURES, FIT AND FINISH

The speakers arrived nicely boxed and were simple to extract and get set up. The finish on these paino black ones is absolutely stunning with a mirror-like reflection from them – see my little piggy picture. Actually the speakers are finished in glass (yes) that really enhances their finish, though it's an obvious trap for fingerprints, though no more than any other high gloss finish and being glass they polish off easy, though a pair of white gloves in the packaging would have been a nice little touch for initial positioning. That's an unusual material to use and I only know of one other company, Waterfall, that employ glass to this extent – actually Waterfall speakers are wholly constructed from glass and so very different from the Avantis that

use glass as an outer layer only.

Aesthetically the Avanti 35s are a very attractive speaker in this finish. They are fairly tall (1087mm) but also fairly slim (170mm) and slope slightly backwards. You get a set of feet to fit to the outriggers that use opposed magnets to provide a degree of isolation from the floor – I believe these are an extra and are called VCF Magnetic, though the speakers do come as standard with the non-magnetic version simply called VCF (Vibration Control Feet).

Round the back are a single pair of good quality binding posts though you can order the speakers with an extra set should bi-wiring/bi-amping be your particular thing.

A HEALTHY OBSESSION WITH VIBRATIONS

The cabinet is a sandwich affair designed to keep the speaker as quiet as possible vibration-wise. In essence, the cabinets panels have an internal core to which the outer panels are glued. In this version, the glass panels are then placed on the outside of this sandwich and Audio Physic claim that the heavy glass panels act as further dampening. The tap test does seem to have the cabinets being pretty dead apart from one area that I'll come onto later on. I spoke to Audio Physic about the idea behind this sandwich, and particularly its use with glass and got this response:

"The sandwich construction of the AVANTI 35 is made of an inner cabinet (MDF), an elastic acrylic tape (2mm thick) and glass panels (4mm on the side /6mm front and top).

"The resonance characters of glass and MDF are completely different. In combination with the elastic tape, the overall construction has no typical sound. The 2mm gap between the inner box and the glass reduces the transmission of sound from the inside to the outside of the cabinet.

"Overall, this reduces colourations associated with the cabinet."

Bracing in the cabinets uses an interesting material in the form of Ceramic Foam which is basically what it sounds like. This ceramic foam



is lighter and more rigid than the often used MDF and being porous doesn't impede the drivers' performance, claim Audio Physic. I think this is a very interesting use of innovative products and so asked how they came about it:

"Several years ago we ran several tests with all kinds of open-cell foams (metal, carbon, polymers, ceramic). Due to the huge surface, open-cell foams act more like a diffusor than an absorber – a characteristic, that I prefer. The ceramic foam is very rigid and "consumes" very little volume, which makes it ideal for internal bracings. Using it as a diffusor, allows us to use less absorbing material.

The copper foam experiments lead to a new generation of capacitors (manufactured by CLARITY CAP)."

Audio Physic seem to have paid a whole lot of attention to damping in these loudspeakers and employ active damping on both the mid-range driver and the tweeter. The technology is called Hyper Holographic Cone Technology and I'm guessing that the Audio Physic marketing department chose this given their loudspeakers past history of being described as "Holographic". Audio Physic use a dual basket design for the HHCM-III drivers whereas conventional drivers usually only use one. Conventionally, this basket is used to mount the driver to the cabinet to allow free travel of undesirable vibrations from the driver to the cab and from the cab to the driver, whereas the HHCM IIIs mid-driver has an inner basket with good damping properties to cancel micro-vibrations. The second basket around the inner basket is used to mount the driver to the chassis with the contact between the two baskets being very small and then damped - again to reduce vibrations. New 3D printing methods have allowed for a more complex open structure to the dual basket design that optimises vibration control and rigidity better than were previously possible using normal production methods. See, told you it was a bit of an obsession.

This obsession with damping also extends to the speaker terminals which are mounted on an aluminium construction that is decoupled from the cabinet using a neoprene seal. Audio Physic say that they search for vibration and attempt to

eliminate it at every opportunity.

Something Is Missing But Not Really...

So all in all the Avanti 35s certainly look the part but I couldn't help looking at the speakers (and whilst having them playing in the warm-up period) and thinking "where is that bass coming from?" The little mid-range unit is far too small to be producing such prodigious bass, but where the original Avantis that I had had a pair of side-firing woofers these don't have anything - no bass ports, no downward-firing bass, nothing! Or so it would appear on the first inspection. Whilst tapping my way around the speaker (yes I know) it was clear that the lower part of the speakers sounded more "hollow". After reading the technical spec' of the speakers the bass I heard and the hollow sound on the tap test was made apparent. Basically, there is a woofer that is placed within the cabinet that uses the sandwich construction and a cavity in the base of the cabinet to allow it to move air, though there is still the glass panel there. I'll be honest here and say that this worried me more than a little. It's a bit of a departure from anything I have personally seen used before, and whilst it allows for a more home-friendly design, I just didn't get how it would work in the real world - though it clearly does work. Audio Physic say that the first approach was more cosmetically driven and that the side-firing woofer of the first generation CLASSIC 20 spoiled the look of the sandwich construction and so after some experiments with the "invisible woofer", they found that they could improve the performance in the bass and get a speaker that is easier to set up in a room.

Let's see!

The Avanti 35s have a claimed frequency response of 31Hz to 40KHz which is, on paper, very impressive and lower than I would have thought for these cabinets. They are nominally a 4Ohm load and are 88dB sensitive.

SOUND QUALITY

So, after a suitable running in time I reckoned the Avanti 35s were about ready for a bit of a listen with a more critical ear.



As I mentioned (in part) the kit for this review was a pair of Merrill Thor amps with Merrill (Cardas) XLR interconnects and speaker cables, Leema Libra Pre/DAC and an Auralic Airies G1 running Roon from a NUC.

Positioning is not difficult but you will be rewarded by spending a few minutes back and forth from your listening position to get them just so and by way of getting that image pin sharp. I had these a metre or so from the back wall and a couple of metres from sidewalls in a fairly well acoustically treated room. I found that to get the best image I had to have the right-hand speaker (slightly further away from sidewall) a little more toed in than the left-hand speaker, but we are talking a matter of a few degrees here.

John Tejada's Year Of The Living (Kompakt) is a downtempo techno album for the most part. It's a record I've been getting into a fair bit and it's a pretty good record for using in reviews I think as it's pretty simple and rich in lots of different frequencies, tones and effects. This record suits the Avanti 35s really well. At low volumes, you get a very good sense of what is going on with regards to the record. Skippy beats on the electronic hats are crisp and taut and effects come and go in the soundfield really well. It's difficult to say if the soundstage that the original Avantis I had is matched by the 35s (it's a good few years ago since I heard them) but it is pretty impressive without being overblown or artificial sounding. There is a bit on the track Panacea that is clearly a clever mixing effect, but the sound does appear to be coming from way beyond the speakers' boundaries and into the room – it's a cool effect and a tad more pronounced here than is usual for us. There is a definite sweet spot with these speakers where everything just clicks into place in the stereo image and whilst they spatially perform well away from this hotspot it is here where you get the best effect. The positioning of instruments in the mix is really impressive with a real three-dimensional feel. I like this effect a lot and it's something I normally associate more with top-notch standmounters – I suppose the small driver and the narrow cabinet are helping in this regard. When compared to our Audiovector R3s I'd suggest that the air I always talk about with the top end is there to an extent but different in its presentation – where the R3s do the imaging

this really well they also seem to float instruments in their own space, whereas the Avanti 35s seem to be more pin-sharp in their spatial presentation.

Turning the volume up on this track was pretty impressive and, like the recently reviewed FinkTeam KIMs, they kept their cool as the wick went up – everything still in its proper place spatially and just more of everything. As always, I pushed these pretty hard on this track and didn't feel they lost control until really being pushed beyond their limits. Actually, they really came alive when pushed a bit, but I'd suggest that these are a fairly refined loudspeaker in that they don't seem to want to over-exaggerate anything that's going on.

No review of mine would be complete without mentioning the Daft Punk track Contact and this isn't going to be the exception. The Avantis play the tune well, though I think they are a little too polite for my personal taste and this particular track. Yes there is the detail and texture to the sounds of the tune, and yes I can hear everything that is going on in the tune but it's not got me on the edge of my seat and really getting madly excited about the tune as it does on our own speakers. With that said it is not that the tune sounds bad or unlistenable in any way, rather it's a bit polite for my own personal taste – I am certain others will love this easy-going approach and delivery. I actually let Roon do its thing and played a whole load more tunes over and over and I actually found the speakers a real delight to have on in the background. Servicio al Cliente by Servicio al Cliente is new out on Kompakt and laidback morning music and again I think the Avantis really suited this kind of tune.

The obvious next step is to throw some raucous rock and roll and Pink Fairies' City Kids comes out of the virtual rack. It sounds great; there's clarity and definition and the phased effect comes across really well, but it leaves me feeling a little like I wanted more oomph and, well, raucousness. Likewise The Sex Pistols God Save The Queen – it's all very nice but a bit lacking in welly that this track needs. But then you whack on a track like Hardfloor's Acperience 1 and all is good with the world again. That bubbling 303 sounds like it should,

REVIEW

the kick is right, the hats sound crispy, and the cowbell sounds as it should (all these are sounds I know pretty well). That relentless 303 in the background manages to hold its own with the other sounds in the mix without becoming muddled in everything that is going on and when they let fly with the cutoff and resonance knobs you can really hear (and visualise) what they are doing to the silver acid box.

Switching over to Miles Davis' Sketches of Spain makes me sit up and take notice. Detail and tone are the main things I bring from this. The castanets moving about the stage sound absolutely brilliant as does the tambourine (or whatever it is). Davis' Flugelhorn sounds really very good and the speakers capture both the tone and subtlety of the playing here. Dynamically they do this track justice brilliantly and just as you are getting drawn into the tracks quieter moments you jump at the crescendos. Hard to fault really. The Stockholm Guitar Quartet on Opus 3s DSD Showcase sounds live (it is) and you get an incredible sense of the recording space as well as the recording. Superb stuff!

Do let's talk about bass and what better way to put a pair of speakers through their bass paces than a bit of dub in the form of Dub Syndicate's Strike the Balance record. Bass underpins the dub sound (you know that, yeh?) and I've no complaints here at all. That unrelenting bass goes deep enough, though I'd say that 31Hz is a little on the ambitious side if I'm honest, and given the size of the drivers and cab this is hardly surprising. This may sound like a bad thing but the reality of the situation is that there's not going to be that much music other than the odd organ track that digs that low in real terms. What I love about this presentation is that the speakers allow the tune to do all the stoned out tricky stuff that dub is supposed to your head - it's a spatial thing in a lot of ways, of course. I could listen to dub on these all day and every day!! The strings in Je T'Aime are lush and the little percussion effects are delightfully presented and really jump out from the mix.

CONCLUSION

This is a bit of a difficult review to write really. In many ways, I really love the Avanti 35s and what they bring to the party and they do bring

back memories of the Avantis I owned. On a whole lot of music they are brilliant and wholly satisfying, and then a track comes along that really throws them, and without much notice that they are going to not like it. My suspicion here is that the small mid is being asked to do a little more than it should be and I'd really love to try the MIDEX or AVENTERA IIIs from the same Reference Line as the Avantis.

The Avantis are really very good indeed on relatively simple music – and by simple music I mean music that doesn't have too much going on, or is really well mixed with regards to the placement of instruments. Simple vocal music, though I don't mention it much above, really is very good. Likewise, Jazz and, particularly, dub sound glorious through the Avantis.

The 35s imaging and stereo soundscape is great without you feeling it is being over-exaggerated. Likewise, the detail you can pick out of tunes is very impressive, and on some tunes I was hearing things that I'd not taken much notice of before.

Bass is good and tight but I think 31Hz would be pushing it a bit. I never thought that the bass was anything other than correct and I actually think this is one of the strong points.

Look here is the thing, these are a very good loudspeaker at a pretty reasonable price in the grand scheme of things. They don't, in my experience, do everything well and with equal measure but when they are playing something they get along with they really do sing.

AT A GLANCE

Build Quality:

The Avantis look great and are undoubtedly very well finished and put together. That glass finish is really something to behold, but watch for fingerprints on them!

Sound Quality:

The level of detail you get with the Avantis is very impressive. Soundstaging and imaging is fantastic. They are uncoloured and the bass

REVIEW



is tight and taut. They can get confused in the mid-band on complex tunes.

EU: €6590 / €6890

Value For Money:

US: \$5538 + vat / \$5790

I actually think these are pretty good value for money. They certainly look the part and with most music the sound very good indeed.

We Loved:

Fantastic Detail

Wonderful imaging

Tight and taut bass

Uncoloured and clear sound on the right music

We Didn't Love So Much:

Can sound a bit lack-lustre and unengaging on some tracks

Mid-band can become muddled on busier music

Price:

UK: £5499 standard finishes (+£300 enhanced finishes) + Free UK shipping

Elevator Pitch Review: On the right kind of music these speakers really are fantastic with incredible detail, imaging, and clarity allied to a deep enough and tuneful bass. They are unfatiguing and are clearly a class act, but can be a bit polite on some music and muddled on other. Personally I found myself digging out a lot of dub reggae to play on them as they really do this well! Pass the chillum, would you?





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BACHE AUDIO SONATA EX LOUDSPEAKERS

Bache Audio is a small manufacturer of loudspeakers based in New York that makes a handful of products using wideband drivers that are enhanced by more conventional drivers. Stuart Smith takes a listen to the \$2780 Sonata EX standmount loudspeaker.



Stuart Smith

Bache Audio may well be a new name on the audio scene and I for one had never encountered them before until, by chance, I stumbled across them on social media. Bache is based in Brooklyn, New York and originally started creating loudspeakers for their own use but liked what they heard so much they made them available as a commercial product. All their speakers are based around wide-band drivers, which was cause enough to pique my initial interest, and these cover the frequency range from about 100Hz to 10kHz to which Bache say our hearing is most sensitive. These are the only stand-mounters in the Bache range where you will find four floor-standing models that start at just over \$3000.

The speaker we have here is the \$2780 Sonata EX which is

an upgraded version of their previous Sonata-001 loudspeaker.

DESIGN AND CONSTRUCTION

I said that it was the wide-band concept that initially caught my eye and the speakers we have here are based around a 3" bamboo driver that is run full range, that is there is no crossover used on this driver. However, it is not this driver that dominates the front panel and there is also a 5.25" composite cone driver that has a very simple crossover. Bache call this driver an "Assistant Bass Driver". In addition to these two drivers there is a 1" AMT (Air Motion Transformer) tweeter which again is called an "assistant".

This whole layout is pretty unusual to say the least and I'm not sure I've come across



SOUND QUALITY

anything quite the same, although I have put together DIY wideband speakers that have been aided by horn tweeters in the past, and with very good results. The given thinking here is, as mentioned, that the mid-band is where we are most sensitive to sound, but it is also the frequency range that many audiophiles like to talk about being the most important to them. However, what I think will be interesting with the Bache speakers is how that tweeter and bass (assistant) units integrate with the 3" wideband driver. So, despite what this speaker may look like at first glance, it is neither a 3-way nor a 2-way design. Rather, it's better to think of these as a sort of a single driver loudspeaker that is getting a bit of help from a bass driver (only one coil in the path), and the AMT that operates only above 10 000Hz and with just one Mundorf Capacitor in the path. The latter does away with the whizzer cone often found on wideband loudspeakers.

The speakers are a rear-ported (tuned to 32Hz), bass-reflex affair with a claimed frequency response of 37Hz to 27kHz (+3dB) and have a nominal impedance of 4Ohms. They are pretty sensitive at 91dB and so should pose no problems to amplifiers with relatively modest outputs – Bache suggest an amp with at least 20Watts output, though we used our normal Merrill Thor as the reference.

They are a pretty big standmounter depth-wise (14"), but height and width are pretty normal (15" and 8.5"). The speakers weigh a healthy 27lbs and so given this weight and depth, a pair of sturdy loudspeaker stands are the order of the day. They come with a pair of magnetically attached grilles.

The speakers are made in MDF but you can also get 200mm plywood or bamboo versions for an additional \$200. The finish on the pair was a sort of dark brown stain which I actually quite liked, and the speakers are certainly put together very well. Around the back is a single pair of good quality speaker binding posts on a solid metal plate. Looks-wise they are going to divide opinion and they are pretty idiosyncratic in their appearance, though I quite like that difference from the run-of-the-mill. Being hyper-critical I think the badge on the front top looks a bit DIY and detracts from the speakers' look.

I have enjoyed and owned a few pairs of single driver loudspeakers and they certainly have their benefits, the main one for me being the lack of crossover colouration, plus speed and purity of sound. Where they have lost favour is that the driver can feel like it is doing too much, trying to cover far too many frequencies and as a result becoming a bit confused. I like the Bache approach as it maintains the purity of the lack of crossover (or as near as damn it), and, on paper at least, I have high hopes for it.

Set up was our usual reference kit in this room of the Merrill Thor amps and the Leema/Auralic Pre/DAC/streamer combo. I suppose I should really get into the spirit of the single driver concept (though this isn't strictly) and get a valve amp out, but the truth is I haven't used it for a while and so don't really have a relevant reference point for it.

Needless to say, the speakers were played for a good while before critical listening by way of running them in and loosening them up a bit.

I'm going to say now that I have my worries about these speakers, though I try to go into any review with an open mind and a willingness to embrace the different. Greg, the owner of Bache, mentioned in conversation the speakers and their reproduction of voice and piano, and that led me to think that perhaps they would be all audiophile-midband and little else. Let's see!

So, taking what was said about piano and vocal I thought the best thing to do was to throw a bit of dub reggae at these speakers in the form of Mad Professor's Science and The Witchdoctor, a record I really did used to hammer on The Big Pig Soundsystem and on the radio show. I sat back, pressed play and waited to be wholly underwhelmed. I wasn't at all underwhelmed and really a touch on the gobsmacked side.

The bass on the opening track Anansi Skank was both deep, tight and tuneful – certainly not a one-note bass fart that I was sort of expecting. The bass on this track is relentless and repetitive, but when the player moves up the fretboard you hear it and the speakers report this back in the music that fills the room – and

we are listening in the bigger of the listening spaces. The bass response is fast, strong and sits centre stage (literally throughout), though it does drop off. One point here is that the speaker stands I had to hand were either too small for the large footprint of the speakers, or too low to get the tweeter at ear height and so I used a pair of IsoAcoustic stands I usually use on my desk between stand and speaker. This had the effect of really opening the sound out, particularly the effects and upper frequencies and so if you do get the opportunity to audition these speakers then do make sure your stands are at the right height! Without the extra couple of inches, I thought the speakers sounded a bit closed in. One thing that did really shine out with this particular track was the purity of the percussion, particularly bongos/congas - they were as lifelike as I have ever heard them sound in this track and in this room - that is very high praise for any loudspeaker, but particularly so for a speaker of this size and price.

Dub is a dynamic kind of music and a speaker needs to respond quickly if it is to succeed in playing it well - these, and there is no one more surprised than me in saying this, do, and do it very well. A few days after initially setting the speakers up and beginning to listen to them properly I had them playing whilst beginning the working day and at pretty low volumes whilst playing Dub Syndicate's *Strike the Balance*. At low volumes, they are really a very pleasing loudspeaker indeed, with me really not feeling like I was missing the extra volume or bass oomph. There is still very good detail throughout the frequency range and the bass you do get (far from trouser flapping) is still very tuneful. And that's one of these speakers really nice attributes with regards to basslines - they neither dominate nor fall off into the background and are very easy to follow.

On hectic and wholly inappropriate music like X-313's *Cybernator* (Gabber), I'd expected the Bache to bugger it all right up, but again I was pleasantly surprised and they play this kind of techno very well. That hollow bass kick's tone comes through really well and they really don't seem to be sweating it at all. There's not that final bit of bass that I'd be getting from the Audiovector R3s, and even less so than from the Avantgarde Duo XDs with their active

1000W double 12" subs, but there's very little to whine about - and I genuinely thought I'd be tearing into these speakers at this point.

OK, I'll be kind and play some of what these speakers are supposed to like and get on with. Here's Vladyslav Sendek's *Solo Piano* at Schloss Elmau and it is a very lifelike experience indeed. The changes in the playing are portrayed wonderfully, as is the way the keys are hit and Sendek's expression on the pedals. There is also a really nice sense of the room's acoustic being played out in front of me, particularly when the sustain pedal is hit. If I can pull one critical thing from this experience it is that at louder volumes this particular record did seem a little much at the very higher frequencies. Not enough for me to get up and turn it off, but it is worth pointing out. Now, I gave this a good deal of thought and this slight hardness of sound may be because our chosen reference DAC is particularly revealing in the top-end (it was chosen to be like that) and were I looking for a more synergistic partnering I could have opted for the more forgiving Lampizator Big 7 DAC we have to hand - however, that is not the purpose of a review situation. The tone of the piano really is very well portrayed on these speakers to my ears and I actually ended up listening to the whole record, which given my musical preferences is pretty good going.

Look, you guys know I don't write about listening to classical music that often and that's because I don't listen to it a great deal, and when I do it is the more simple music that I tend to enjoy. Jean-Guihen Queyras and Alexander Melnikov's *Beethoven Complete Works for Violoncello and Piano* is one that I do listen to and I do get on with OK. At low volumes, I'm getting everything, but it all seems a little bit subdued and in the background - sort of as if the speakers aren't getting enough juice up them. A handful of clicks on the remote volume button and all is well, with the tone of the violoncello being represented beautifully, and the expression and sound of the piano are really nicely portrayed. Dynamics are expressed now with vim and vigour. Music fills the room very pleasingly and whilst the speakers certainly don't disappear (what speaker really does that impossible task?) you can close your eyes and visualise the player in the room. You also get a





pretty good impression of the acoustic of the space the piece is recorded in and with good space and air - I suppose when I talk about space and air I'm actually talking about the effect of the recording room when referring to live recorded music. On this record, the Bache speakers are really very nice indeed. Again, I find myself listening to much more of this than I perhaps would have done – it's even managing to chill Ali the cat out, which is no mean feat. Greg that makes these speakers, I strongly suspect listens to a lot of this kind of music as the speakers certainly play it very well.

Mick Softley's version of Strange Fruit on the Eve label is guitar and voice...and tape noise. This again is very well presented and when the vocal is over-saturating the tape the speakers don't hide it. I actually really like the honesty of the speakers. On this album, they really date the recording but I sort of quite like that too. Softley's voice and his passion for the subject matter he is singing really shine through. The recording is very live and like the classical music I spoke about earlier you can hear the recording space – this 'looks' like a small and low studio that Softley has been recorded in, and this is particularly evident on The War Drags On.

Bowie's Fall and Rise is a record I came to relatively late in life, maybe only 15 years ago,

but I listen to it a lot. It's a good record to use in reviews I think as it's really well produced and there is a lot going on, despite its apparent simplicity in parts. The strings on the opening track (Five Years) are absolutely wonderful on these speakers. Not with the same scale as the R3s or Duos but still very good and enjoyable. When the track fades and the drumbeat solos and fades it does with tightness and accuracy that is admirable. Saxophone has rasp and the vocal on track two reaches out into the room. There are parts on this record that some speakers can get very wrong and get very confused in trying to cope but that's genuinely not the case here and I'm actually a bit surprised.

CONCLUSION

The speakers are speedy and tight which is something I like in better standmounters. They are also very nicely balanced from top to bottom.

They don't go uber-low but the bass that you get is quite special in how taut and tight it is. I didn't try a sub on these but suspect that a well-integrated one would flesh out that very bottom end a good deal – I didn't feel the need, even with dub and gabber.

There is a simple and enticing purity to the presentation of the Bache's that really draw you

REVIEW



REVIEW

into a recording, and whilst that pretty much open AMT tweeter can at times be a little much, and can get harsh when pushed, it presents a level of detail that allows you to see into a recording and the recording space.

The level of detail and emotion they manage to project into the room with vocals is wonderful and I particularly enjoyed listening to a good deal of simply recorded folk music, where the recordings were uncomplicated and honest to the tunes being played and sung. I found myself really getting lost in these tunes – tape hiss and all.

They are not the prettiest of loudspeakers and whilst actually being well put together they look a bit like they have been assembled from off the shelf components – they have, to be fair. Some may think that because of this that the speakers are pretty pricey!

They also benefit from careful placement, with particular attention needing paying to the height of the tweeter.

AT A GLANCE

Build Quality:

Very nicely put together and very solid but they do have the air of small production about them in the way they look.

Sound Quality:

Pretty even throughout the frequencies with a nice emphasis on the mid-band. This emphasis, in my opinion, lends the speakers a propensity to being better with simple music. I'd expected them to be bass-light but they are not overly so, and what bass is there is very tuneful. The AMT tweeter can be a little much on some music. Detailed and even overall.

Value For Money:

There is no doubting these are nice speakers but they are certainly not cheap and that will reflect in the award these get.

We Loved:

Open and detailed mid-band

Tight and tuneful bass

Really rather special at low volumes

Open and with a good sense of space and the room

Pretty truthful to the recording and with no place to hide for poorly recorded or mastered tracks

Much more dynamic a speaker than their size would suggest

Sensitive enough to get on well with most amplifiers

We Didn't Love So Much:

Quite expensive

Look a bit "handmade"

Can be a tad harsh on some material at the very top end

Some will want more bass oomph

Price: \$2780

Elevator Pitch Review: Quite a big stand-mount loudspeaker that may be difficult to accommodate stand-wise. A lovely open and well-projected mid-band with tight and very tuneful bass. They can sound a bit harsh at the very top end on some recordings. If you play a lot of fairly simple music these are a very worthwhile audition.





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KUDOS C20s LOUDSPEAKERS

Kudos C20s are a relatively compact floorstanding loudspeaker made in the United Kingdom and costing £4000 a pair. Ian Ringstead takes a listen.



Ian Ringstead

A good looking and elegant loudspeaker with a downward-firing bass port

I have known about Kudos since they formed and I've seen and heard them at many shows, but this is the first time I have had a chance to hear them in my home. The word Kudos means (according to the Oxford English Dictionary) "Praise and honour received for an achievement". Derek Gilligan who owns Kudos and designs the loudspeakers achieves his goals in a slightly different way to the normal approach of speaker design. Derek uses music as his main tool in his designs - a bold approach that requires confidence and not a little experience. All designers have to have a real belief in their ideas and confidence to see them come to fruition, but most will rely on measurements and

then tuning by ear.

Kudos are based in County Durham and work closely with some of Europe's top suppliers in order to obtain the best possible components, connections, and excellent craftsmanship.

The C20 I was sent for audition is an upgrade from the original design with the improvements being to the crossover. Derek is a big advocate of the KISS principle (Keep It Simple Stupid) which means he uses top-quality drive units, a good choice of materials, and a crossover that is kept as simple as possible for the drive units to work together to the very best of their ability.

DESIGN AND CONSTRUCTION

The cabinets of both the C10 and C20 are precision manu-



factured from balanced veneered High-Density Fibreboard (HDF). Unlike the standard and almost ubiquitous 'kitchen cupboard' Medium Density Fibreboard (MDF), HDF is of a more consistent consistency both throughout the product itself and from batch to batch.

Kudos have always worked very closely with Norwegian specialist drive unit supplier SEAS. The C20 uses a custom 180mm mid-bass unit with a die-cast chassis that has large open areas. It has a coated paper cone with a 26mm voice coil and a phase plug to aid directivity. The drive unit are bang up to date having low distortion, high linearity, and low crossover modulation. The tweeter is a custom version of the famous SEAS Crescendo K2 29mm fabric dome. The K2 is normally reserved for much more expensive designs as it is a very natural sounding and musical performer – and costs more.

To marry the drive units together Derek has designed a very simple crossover that he believes conveys as much as possible of the music. The crossover is a first-order electrical circuit for the bass using a zero-distortion, low resistance Mundorf air-core inductor whilst the tweeter is filtered by a second-order electrical circuit using an ICW capacitor, another Mundorf air-core inductor, and a Mundorf MOX resistor. The components are mounted, hard-wired and well-spaced onto an HDF panel that is then torqued to the cabinets rear to maintain rigidity rather than using a plastic terminal plate that could potentially weaken the structure of the cabinets.

Internal wiring is all Kudos KS-1 cable. The KS-1's conductors are 19 strands of silver-plated Oxygen-Free Copper (OFC) insulated with Fluorinated Ethylene Propylene (FEP) run with a slow twist and all surrounded by a hard PVC outer for protection, physical damping and simplicity of use. FEP shares PTFE's low dielectric constant but is a little softer for claimed improved mechanical damping. The choice of 19 strands is not random and Kudos claim there were multiple listening tests carried out to identify sonic differences between the number of strands changing whilst keeping the overall conductor diameter the same. Nineteen proved to be the ideal number of strands.

The C20 has a fixed boundary bass-reflex loading design which is meant to aid low-end reproduction and it vents from the bottom of the cabinet making positioning far easier than with rear-ported speakers. Four spikes and locking nuts finished off the pedestal.

The external appearance of the C20 was clean and simple, and very well finished.

SOUND

My audition pair were finished in black and had already had some use and running in and so that helped save some time. From the get-go, they impressed me with their open top end, clear mid-range, and powerful bass.

My listening room isn't huge so I am always wary when I try floor standing speakers out - many have worked, but a few failed to impress. The C20's definitely worked well. My room is well damped but not overly so with furnishings and a rug on the solid oak floor. I have experimented with sound panels etc. but generally speaking, the room furnished as it is works very well to my ears. The bass of the C20's packed a punch, but it was tight and controlled whilst not dominating the overall sound or booming at all. I loathe boomy bass and prefer to have less rather than more. I put Donald Fagen's album "Morph the Cat" in my Luxman D-05 SACD player and reveled in the clarity the C20's emitted. The tracks all have complex arrangements but the C20's unraveled them with aplomb as each musician played their part. The tweeter on the C20's was excellent showing dexterity and clarity to highlight the treble (much as a good ribbon tweeter does) and spatially place the percussion perfectly. SEAS has done a great job on this design and it is no doubt aided by the quality and simplicity of the crossover design. There was no artificial sheen or taint to the treble on any of the albums I played.

Vocals flowed beautifully and I particularly enjoyed the new (to me) artist Amy Wadge, a prolific songwriter, whose had collaborations with many world-famous artists and she sings and wrote all the music on the BBC series "Keeping Faith". The C20's caressed my ears



with her music, my only criticism being that the album is only 30 minutes long. All the vocals I tried were equally spot-on, proving that the simple crossover design had really paid off. Derek Gilligan has certainly shown his prowess here because what appears to be a simple design to a layman is far from it when it comes to the final result. Many hours of experimenting have been spent perfecting this design and it shows with the final sonic results.

Porcupine Tree can shake a system up and so I tried the album "Dead Wing" which certainly blew the cobwebs off and tested the bass units and their power handling capabilities. I didn't go to 11 on my Luxman and my ears would have given up by then anyway but played this album at a decent level as it deserves to be. Prog Rock is not to everyone's taste, but I grew up with it and still listen to many of the classic bands from the 70's, and 80's. The grungy guitar sound and the pounding bass of Dead Wing was portrayed in all its glory and the C20's were tight and controlled on the bass allowing me to hear the complexity of Steve Wilson's musicianship and the other band members. Sometimes you come away from listening to an album like this and you wonder what it was all about or lose interest in the music, but the C20's kept me hooked as they communicated so well, especially when the volume was turned up.

Blue Nile is a blast from the past and I listened to their second album "Hats" and loved how

Paul Buchanan's vocals hauntingly drew me in. A warmer and smoother sound to their first album the C20's lapped "Hats" up. The synths and strings were clearly spread out in the sound stage and the emotions the writer wanted to convey about love and relationships worked for me, meaning the C20's could keep me interested for a long time. There is a balanced approach and sound to these loudspeakers that really satisfied.

If a system works well in synergy as the C20's did with my Luxman amp, SACD player, and turntable then listening is a pleasure not a chore – as it should be. Every time I switched the system on I got the same buzz as I do with my Jern loudspeakers – not something that can be said of every speaker I get sent for review. The C20's (30Hz) certainly have more bass extension than my Jerns (45Hz) so the tracks that reached down to that sort of level had more wallop, but the fixed boundary system really controlled the lower frequencies as intended in my listening room meaning nothing was overpowering or overblown.

CONCLUSION

As you can tell I really loved these speakers and if I didn't already have my Jerns I would happily have a pair in natural oak or walnut. They are easy to drive and as such they will be compatible with many amplifiers. They have an excellent build and as such represent a stylish compact floor stander that many homes would



REVIEW



welcome.

AT A GLANCE

Build Quality:

Excellent as they should be for the asking price. Solid, very well finished and look smart in the natural wood finishes. The plinth makes for a stable placement but the supplied spikes could have been more substantial.

Sound Quality:

Really communicative and addictive with top to bottom consistency being tight and fluid. Lovely treble that was very classy.

Value for Money:

Not cheap and with a lot of competition. However, I feel they hold up very well because fit and finish are very good, as is their sonic performance.

We Loved:

Excellent build

Good looks

Solid and tight bass and very smooth and open mid-band

Upper frequencies never became over-bearing

having excellent clarity and spatiality

We Didn't Love So Much:

The speaker connections are fine but my spades didn't fit as well as I would have liked. Chunkier binding posts preferred

The Black Ash finish was very good but I prefer natural wood finishes, purely personal of course

Price: £4000 a pair.

The C20 is available in White, Walnut, Natural Oak and Black Oak.

Elevator Pitch Review: Kudos aim high with their designs and have succeeded admirably with the C20 which many enthusiasts would be very happy. They are consistent throughout the frequency range and as such they are well worth hunting out for an audition.



Cardas Audio

Bandon, Oregon



Since 1987, Cardas Audio has manufactured premium audio cables and component parts. My father, George Cardas, founded the company to perfect audio cables using ultra-pure materials, innovative Golden Ratio resonance control techniques and uniquely insightful solutions to transmission line problems. The legendary craftsmanship at Cardas reflect his pursuit of perfection.

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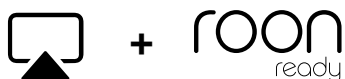
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FALCON BBC LS3/5a GOLD LABEL LOUDSPEAKERS

The BBC LS3/5a must surely be one of the most famous loudspeakers in the world, in this review Stuart Smith checks out the Falcon Acoustics BBC LS3/5a Gold Label model costing from £2475.



Stuart Smith

There can't be any other speaker quite so iconic as the LS3/5a and few that divide opinion quite so much as this diminutive wee beastly. I remember reading about them when I was first getting into HiFi in the early to mid-eighties and they have been on my "must scratch that itch" list ever since. On the second-hand market, the originals fetch daft money and that doesn't really seem like changing any time soon. When the opportunity to buy a pair of the Falcon Gold Label LS3/5as at the Bristol show a year and a half ago popped up I couldn't help myself. I'd heard these specific speakers a few times before and I really "got" them when partnered, if I remember correctly, with Primare electronics. Even in the confines of hotel rooms, I was smitten by the way they image (very important for me) and how really well they seemed to play

music so naturally and so unforced. However, the box with the speakers in simply wouldn't fit in the car on the way back to France and so they languished safely in Barnsley up until a few months ago, but then the Krell amp I wanted to pair them with was back with Krell in the US having a full refurb' and so hence a bit of a delay in getting this review written.

Praise for these diminutive speakers is loud and, as I mentioned, so is the disdain. I distinctly remember reading a comment on a forum (we must be going back a good while as I've not visited a forum in years) saying that the worst system one member had ever heard was round at a reviewer's who had a pair of LS3/5a's - I forget the rest of the system. This person described the sound as being (as I remember) lifeless and insipid.



The LS3/5a's have a reputation of only being able to play some genres of music well (think what I would call "audiophile music") and don't do rock or anything with any bass - so, the perfect speakers for folk like us that listen to a lot of techno...not. When the speakers arrived I put a photo up on a dedicated LS3/5a group on Facebook and in the background of the photograph was a sculpture of the Motorhead Snaggletooth character we had made (thanks Alan) and someone made the comment that Motorhead was a very odd choice to pair with these speakers. Regular readers will be aware that a good proportion of the music that makes up our daily fodder is pretty bass-heavy. "Great buying decision then, Stu" I hear you say. Well, an itch is an itch and you do just have to scratch it! We have a couple of dedicated listening spaces at Pig Towers - one is a big room and one is what I'd say is about the size of a normal UK sitting room - though the latter at ours has a HiFi, two chairs, room treatment and no more in it. Needless to say, it is the second and smaller room where I am choosing to write this review from. Realistically, the wee threes just aren't going to move the air in the big room - it's no use trying to think that they were.

HISTORY

Way back in the late sixties the BBC was looking to produce a loudspeaker to use as a near-field monitor for their programs, specifically a loudspeaker that was natural, dynamic, and would work in small spaces like studios and outside broadcast vans. This was birth of the LS3/5 with the A being added after KEF, the supplier of the drive units altered them and mods had to be made to the speaker itself. Licenses were issued to a few manufacturers to make the LS3/5a and in '87 further changes were made (to the crossover) after changes to the mid-bass drivers (KEF's B110) and the speaker's impedance went down from 15 to 11 ohms. The speakers have sold in huge numbers and have cult-like status. There's loads of information out there on the internet about these speakers and here's not the place to go into detail about them.

CONSTRUCTION

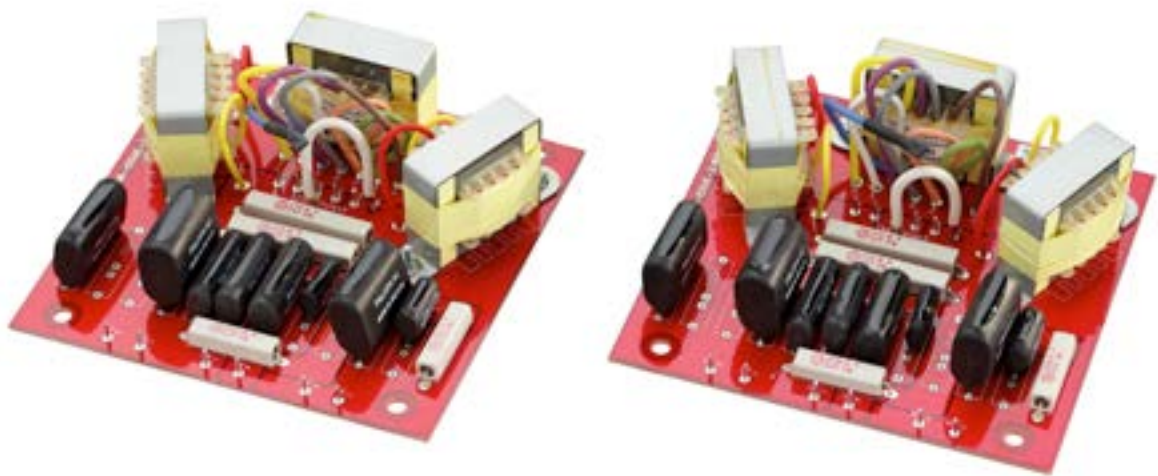
Most folk who have had an interest in the LS3/5a will be well aware of what the speaker looks like. Size-wise you have a 30.5 x 19 x 16.5cm (12 x 7.5 x 6.5 inch) box that sports a 110mm mid-bass driver and a 19mm dome tweeter (both obviously being made by Falcon) - essentially the KEF B110 and KEF T27. These drive units were designed by Malcolm Jones of Falcon, who also designed the original KEF drive units, are handmade in the UK, and are said to be identical to the originals. They are also unique to Falcon.

Externally the speakers are a little unassuming box with a heavy grille - the speakers are designed to work with the grilles on. Round the back of these Falcons we have a single pair of very nice binding posts and a plaque giving the speaker's individual number and other information. The Falcons are built to the specifications of the BBC (with improvements with the Gold Label) and have an impedance of 15ohms. Really, there's not much to add - they look like a little, unassuming sealed-box loudspeaker.

The Falcons are all handmade in the UK (Oxford) and the aim is to get as close to the BBC design that was published in 1976. That means the crossover is of a transformer-style and based on the original BBC FL6/23. Cabinets re Baltic ply with Beech battens and again are made in accordance with the BBC specs.

Essentially, what you are getting here is as near as you can possibly get to the original design. However, the Gold Badge design, which these are, has a modified crossover that has "enhanced size BBC specification Transformer-style inductors with improved saturation and distortion characteristics." Bass is also said to be "enhanced". Capacitors are from Falcon and are said to have very similar characteristics to the polycarbonate film caps used in the Kingswood Warren Limited edition of the /5as. Again, these crossovers are handmade and to order in the UK.

The finish is, as you would expect, impeccable and I cannot find a fault with them at all. They look beautiful, it has to be said. I'm not over-egging this and it's not that they have just arrived - they have been here a couple or so months and I've put off reviewing them as I've



just enjoyed listening to them whilst they loosen up and run in.

Set up was pretty easy. I used a pair of reinforced five-column stands that are very heavy and with IsoAcoustic stands between the top plate of the stand and the speaker. I found it pretty important to get the speakers' tweeters bang on ear height to get the best for them and the addition of the IsoAcoustics did this perfectly. A little fine-tuning to get them in laser-sharp focus and you are good to go.

SOUND

Physics can't be ignored and these speakers are obviously not going to reach down massively low and so it would be completely unfair of me to start any kind of formal listening to them by playing Gesaffelstein's Aleph. With this in mind, I open up Roon and find my copy of Gesaffelstein's Aleph, a fabulous slice of murky and menacing techno that is made for dark and vast clubs. The Falcons work surprisingly well! Of course, they don't plumb the depths with regards to bass, but I didn't find myself really missing it, despite me being on strong medication for a serious case of bassheaditis. The tightness of what bass is there really does make up for what is missing and I really loved what I was hearing. They're not the kind of speaker you could pull off the shelf, plug in and pump up the volume for a party, but for the kind of listening I'm doing here they are very nice. Actually, and no doubt I'll get lambasted for this comment, they do suit this kind of program very well with imaging and small details through the mids and tops really coming to the fore. Effects on sounds shine through and there is a level of detail (that I would call accuracy) that makes these sound really attractive – definitely a monitor sound (not surprisingly). The brooding bassline on Destination is suitably menacing, the imaging of the other sounds in the mix is excellent, and the spoken word vocal track is wonderfully delivered. I'm struggling to use the word natural because this music is far from natural in that it's all electronic (bar the voice) but there is a feeling of organic rightness to it. At this point, I thought I'd dial in the pair of REL subs we have in the room and see if they are needed. OK, after a bit of fannying about to get the subs dialed in accurately there is obviously

more oomph and lower-end heft, and if you are a lover of this kind of music and want to hear it in its full glory then I'd suggest carefully set up sub/subs will certainly give you the relevant party prescription. Are they absolutely necessary in this room? Nope! If you can accommodate a sub then you essentially give yourself a full-range speaker that images wonderfully and has marvelous mid and top clarity – the Gesaffelstein track Nameless has a sound on it that sounds like a fire crackling and I did find myself looking up to see if there was something amiss with the HiFi.

The rest of the review was carried out without the subs in place.

José James' version of Stange Fruit (it's a belting and pared-down rendition) is a natural partner for the Falcons and the pairing doesn't disappoint. That midband clarity projects James' voice into the room exquisitely and with so much natural feeling that it's hard not to picture him in the room with the backing "singers" behind him with the handclap cutting through to make you take notice. This is such a simple recording on the face of it, but it's also very easy for a pair of speakers to homogenise it so that it feels flat and lifeless – none of that here and I repeat the tune a good few times.

Listening to BBC Radio 4, even at 128kbs, voices sounded natural and with an "in-room" feel to them. The program that was on when I was listening closely was called A Life In Music talking about how music affects young people (very interesting it was too). An interview with a young girl from Leeds gave a real feel for the room the interview was recorded in and her ethnicity – natural detail again. I'm sure that not many people will use these speakers for listening to spoken word recordings, or speech radio, but they are the ideal partner for this kind of listening. Even at this woefully crap level of fidelity (128kbs) there is still width and fluidity to the voices. It seems sort of fitting that Radio 4 sounds so good through these speakers, though the recording of Femi Kuti speaking really highlighted how badly that interview was recorded with the mic clicking from time to time.

Neil Young (Young Shakespeare) and the tune Don't Let It Bring You Down is again really

natural sounding – one man, a guitar and a couple of microphones. Like with the Xavian Perlas and the Diptyque dp77s we have up here in this listening room, they allow the fragility of Young's voice to clearly be heard and in turn, you connect to the music and the artist on an emotional level.

Classical music (Hilarion Alfeyev: De Profundis with the Russian National Orchestra and the Moscow Synodal Choir) was a treat on the Falcons with the choir seeming to be spread in a tiered arc in front of me with female voices to the right and male to the left. Instruments sounded natural, and, again, it is the detailed effortlessness of the delivery that really shines out. I couldn't get these speakers to the same levels as I perhaps would with say the Xavian Perlas without them starting to sound as if they are struggling but, in fairness, at normal listening levels they sound fabulously good. Solo voice is sublimely rendered into the room on this recording. The image has height and a wonderful width to it. Being small drivers the speed and decay of instruments was apparent, as was the timbre of different instruments. Dynamically they are very good and this is down to that speed of reaction of the drivers. Genuinely, I don't listen to a lot of classical music, but I do listen to this record a fair old bit and this is as good as I've heard it sound – flicking in the sub for a few minutes lifted the sound to stratospherically good levels.

Yep, Motorhead sounds utterly lacking through these and the guy I mentioned towards the start of this review was probably right that it wasn't the right kind of music to match with them. Not wholly unlistenable, but not the best either, though some of that may be down to the recording/production being how it is – dirty and heavy. Turn on the subs and crank the volume up a bit (but not too far) and that changes somewhat to a much more filled out and rock presentation, though not perfect. I actually listened to the whole of the Overkill album and really enjoyed it again.

CONCLUSION

Look, these speakers don't do everything well – they can't, that's just a physical impossibility, but what they do right they do oh so right. I

haven't listened to other /5as in our systems and so this review should be seen as being done without reference to other LS3/5a models and iterations. What I can say is that if this is how the originals sounded then I can sort of see why they command such high prices on that auction site we all know the name of. However, without a doubt, I'd rather spend my dosh on a pair of new speakers with a guarantee, from a reputable company, with the correct licensing deal, and without having to deal with all the hassles that buying secondhand inevitably brings - hello, Falcon.

If you listen to small or large-scale classical music and you don't live in the Royal Albert Hall (other massive spaces are available) then these speakers offer a fantastic listening experience in many ways. If you listen to singer-songwriters then these are brilliant. Imaging is superlative and they just seem to effortlessly dig out details and noises that you knew were there but didn't take much notice of before, but all this is done organically and naturally.

The surprise of the show (and I'm quite glad of this seeing as they are a permanent fixture here) is that they can do well-produced dance music very well, though with obvious limitations in the very low bass.

The Falcon LS3/5a Golds are not a speaker for all occasions, of that there is no doubt, but they do some things so beautifully well that since they have been set up they haven't been out of the room – yes other speakers have been dragged in and out, but these have remained on their stands and in their carefully set up position - and that's where they will be staying.

This pair of speakers caused me many headaches (perhaps more so than any other product we have had for review) when it came to giving them an appropriate award. My heart wants to give them the highest accolade I can (The Editor's Choice) as I really do love the way they perform, but my head is insisting that whilst they really do excel in some areas they cannot be seen as being perfect in all circumstances (which has me erring on the side of a 5-Heart award). But then again I am the editor of this here publication and I have chosen to have them remain in this system as a future

REVIEW

reference, and so they are a defacto "Editor's Choice". But then the Editor's Choice award was designed for truly outstanding products and we give them out rarely and then always following a lot of discussion - there's been a LOT around these.

So, the award I'm giving these comes with caveats, as outlined in the review itself. However, keep these loudspeakers within what they were designed to do (and a bit more) and they are something really special!

Get yourself in front of a pair and have a listen!

AT A GLANCE

Build Quality:

Nothing at all to criticise. They look good and are impeccably put together. They are boxy but then that is the nature of this particular wee beasty.

Sound Quality:

They excel in mid clarity and offer up a supremely detailed sound with excellent insight into the instruments being played, particularly acoustic instruments. They do not go low at all, but what bass there is is presented tightly and without bloom – add a pair of subs and this is easily remedied. On spoken word they are brilliant. They can do dance music but in reality, they need that sub to enjoy this kind of music at its best.

Value For Money:

They aren't cheap and for a small box they look expensive. However, they are beautifully put together and sound splendid. Add a sub and you have a fully-fledged full ranger and so you do the maths.

We Loved:

Clarity of tone

Height, width, and depth of the stage

Natural sounding through the mids and without colouration

Smooth and not overexaggerated high frequencies

Easy to set up but time is needed to fine-tune to get the very best from them

We Didn't Love So Much:

Get a bit flustered when pushed to high volumes

Unforgiving on poor material – is this a negative?

Not great with all genres for obvious reasons

Not a lot of box for your money, but then gems are small and expensive

Need to be on good stands and at the right height

Elevator Pitch Review: A stunningly good speaker that excels with vocal reproduction and acoustic instruments, though they can do well-produced techno very well too – with obvious low-end limitations. They don't go low, and some will want to reinforce them with sub/s, but if you can forgive them this you will have a speaker that is accurate and with possibly the best midband performance you could hope for. They won't play at concert hall levels but do go plenty loud enough.

Price: From £2474





RAIDHO TD 2.2 LOUDSPEAKERS

Raidho TD 2.2 loudspeakers are made in Denmark and cost a not inconsiderable £38 000. Stuart Smith takes a listen and puts this price into context.



Stuart Smith

Raidho is part of the Danish Dantax group of companies that also includes GamuT and Scansonic. They have been trading for around 50 years. Dantax began life buying in the bits and bobs that go to make a loudspeaker from other companies and then assembling them into their own designs.

ScanSpeak will be a name that will be familiar to many readers as they are very well known for manufacturing drivers - Dantax took over their factory in 1977 whilst at the same time adding Scansonic to the brand's stable. They invested in new factory facilities in the late '70s and then in 1984 Dantax floated on the Danish stock exchange. As well as making their own loudspeakers and drivers Dantax also operated as distributors for such brands as Akai, Sanyo, Fisher, and Schneider.

Raidho came into the picture in 2009 with Scansonic being a "sub-brand" developed and built by Raidho. The family genetics are pretty obvious if you look at the Raidho and Scansonic ranges of speakers.

I've admired all three of Dantax' brands when at shows and always thought they sounded phenomenally good, although the prices of the Raidho offerings are wallet cringingly expensive. We approached them a couple of months ago with a "Can we get a pair of your speakers for review?" email and were surprised when we got the response "Of course, which of our flagship range do you want?" Now, this kind of a response is a bit of a double-edged sword – do we go for the top of the range knowing full well that they will be too big for the space and leave us nowhere to go (though we know reviewing such a product



would certainly generate a lot of reader interest) or do we do the sensible thing and go for something a little more practical. Of course, we were the height of sensibleness and went for the TD2.2 floorstander. There are five other speakers in this range including the TD1.2 stand-mounter and the TD4.8 topping the range. The latter is a beautiful behemoth of a loudspeaker with six bass drive units, 2 midrange units and the Raidho sealed ribbon tweeter that is shared across the range. You aren't going to get much change out of €140 000 if you buy the top model. You don't get much change out of £40K with the TD2.2s either, coming in as they do at £38 000 in their basic form. Add a custom finish and trim and the price goes up accordingly.

BUILD AND FEATURES

The cardboard boxes the TD2.2s arrived in are impressively large and were a firm favourite with Ali the younger of the HiFi Pig cats, who used them as a perch for the duration of their stay with us. The TD 2.2 are a 2.5 way design with rear-firing bass reflex ports with the drivers being a 6.5" Raidho Tantalum Diamond (RTD) midbass driver and another 6.5" RTD for the bass. The tweeter is the Tantalum Diamond Ribbon model made by Raidho. The mid-bass driver is a five-layer construction using the company's Tantalum-Diamond cone to provide better damping. The speaker uses an edge-wound titanium voicecoil. The tweeter is a quasi-ribbon affair that comes from the TD4.8.

Given the size of the boxes, I had expected the TD2.2s to be much more imposing in the room, but the truth is that despite their deep cabinets they really don't look that big at all. Their actual size is 200 x 1150 x 520mm and so they are nearly half as deep as they are tall.

The front baffle is angled back and stepped (which I assume is to help with time alignment) and the overall shape looking from the top is not unlike the prow of a boat.

The models we got sent were in a VERY shiny piano black but they are available in walnut burl...or any colour you fancy. They weigh in at 45kg a piece which is pretty manageable to be fair.

The speakers are already mounted on a substantial four-legged plinth that you level by turning the top knobs on top of them - simple and effective.

There is a single pair of binding posts.

There is nothing to say about the build of these other than it is superb and they look stunningly good.

Given that these speakers are pretty hefty, the setup was an absolute breeze, aided in no small part by that plinth and easily adjustable/leveled feet. The speakers don't really come with any instruction manual just a small booklet that tells you how and where to set them up... which I of course completely ignored.

Once in place and I'd got them well away from the side and back walls I sat down to have a quick listen and to read the setup pamphlet and then realised I had them set up wrong – but not that far wrong to be fair. Rather than pointing the speakers directly at the position where the middle of your head would be, Raidho suggests you fire each speaker to the side of your head. A laser setup device by Alan Clark helped me no end in this and I had them set up millimetre perfect within a matter of a few minutes. Raidho's suggested setup is better, it has to be said!

SOUND

Get your wellington boots on because this is going to be a bit gushing. There are in actual fact very few truly awful designs of HiFi out there at the moment and there is a lot of very good stuff that comes through our doors for review. However, seldom does a product arrive, get plumbed in and garner the response that these speakers got. Within about an hour of setting the speakers up into our reference system it was clear that these were very special speakers indeed and a conversation was had very quickly about selling our Avantgarde DUOS and getting a pair of these ordered. Was this all Emperor's new clothes? Read on.

The kit used for this review was the usual suspects and included a pair of Merrill Thor Class D monos, a Leema Libra DAC/Pre, and a combination of Auralic Aries G1 and Melco. Cables



were by Way, Atlas, and Tellurium Q and a DIY mains transformer in line before all the electronics. This is a system that changes very rarely and one I listen to on a daily basis...I know it well and love it as a reference as it's revealing but also musically enjoyable.

Spatially these Raidhos do something very interesting indeed! The term "three-dimensional" gets bandied around a lot when talking about loudspeakers but these really do present the stereo image in a very, very "reach out and touch" kind of way. As I'm listening to Gesaffelstein's Aleph there is the impression that there are sounds coming from the very far right and far left of the speakers and well into the room. It's almost as if there is a bubble of music around me with the left and right emphasis being more prominent than the up and down. When a sound comes from the centre of the mix it's almost like one of those camera shots in films that goes from a distant image of a face to zooming in to being up-close. This takes a moment or two to acclimatise to, but once you get it you really can't ignore it – I found it highly addictive and I would say that this imaging is a key feature of these speakers. No, the speakers don't disappear, but they come bloody close to it. There is a sense that you can reach out and pick individual sounds from the air around you. Does that all sound artificial and contrived to beguile the listener into falling in love at first listen? I don't know the answer to that but having listened to the Raidhos for ages now I don't find myself being anything but astounded every time I turn them on and play music.

As well as having that three-dimensionality to the sound there is also clear and defined layering of different sounds in the mix in every dimension – again, that reach out and touch quality. I listen to a lot of techno that is very well mixed and with meticulous attention paid to where sounds sit in the stage as well as to psychoacoustic effects – the Raidhos suit this kind of music absolutely perfectly. Even at low volumes, I'm not getting anything but detail across the frequency range ...and that image. Effects on individual sounds are not just easy to hear but they are unmissable. And I suppose that's one of the strengths of this speaker – you don't have to concentrate on listening to get the best out of them. Decays and reverbs were

absolutely perfectly done. Liken it to having your first pair of specs – you didn't really think you needed them but once you put them on it became clear you did. Or for the more psychedelically attuned – well, you know where I was going to go with that analogy already! My one criticism here is that to get that full effect of the three-dimensionality you do need to be in the hot seat, though it's still very impressive left or right of this – I'd be happy to be sat a metre left or right and feel I wasn't missing out on much other than the nth degree of their spatial presentation.

I did warn you this was going to be a bit gushing!

On the album I mentioned there's a lot of bass, but never once did I feel that it was overblown or exaggerated. Bass was always tight and in harmony with the rest of the mix. Bass is one of the compromises that the TD2,2 does have to make and that's purely down to the size of the enclosure and the size of the drivers – they are just never going to move as much air as the 2 x 12" drivers per side as found in our Avantgarde Duo XDs. With that said, we are splitting hairs here and, personally, I didn't miss that kick to the chest feel. I also didn't feel the need to whack the volume up beyond moderate levels, but in the same breath, I never found myself feeling like I was missing anything from the tunes I was listening to. However, it is worth hitting that volume knob (read remote) and turning the volume up to high levels as it's pretty astounding in that what happens is you lose nothing of their spatial presentation and just get more volume and impact. Very much my kind of presentation. Popping on the old school tinged The Bionaut's "Everybody's Kissing Everyone" is stunning and gives a goosebumps on the floor at four in the morning experience. That classic house bassline is relentless and sounds dry and as it should. Pads wash over you but everything is kept in focus – as the Shamen said "Hyperreal". I think hyperreal is quite a good description of these speakers, but then that suggests artifice and I don't think these present anything but what the guy behind the desk (or in front of the desk I suppose) was wanting you to hear.

As I'm flicking through the virtual record shelves



on the tablet I was looking for something female vocals-wise but got as far as Hawkwind's Hall of the Mountain Grill. It popped out at me and only a few days earlier I'd responded to a question on a Facebook group about when HiFi first made sense to me and it was whilst playing this album on a modest little system that had a pair of Wharfedale Diamonds making the sounds. What grabbed me was how the sound of this album was presented spatially and listening to it now I'm transported back to those days of Purple Oms and that first feeling of really getting that that was one of the things I enjoyed about proper HiFi. And that's what I'm getting here – only without the acid! Though this record did still get my head spinning on these speakers – in a good way! Wind of Change sounded utterly sublime!

Anyway, I did finally find some female vocals in the form of Nolwenn Leroy and her excellent album Bretonne. The song Tri Martolod (Three Sailors) is a traditional Breton tune and has the usual suspects with regards to Celtic instruments, but her voice is allowed to come to the fore without losing any of the impact of the music. You can easily pick out the instruments and they sound as natural as I've heard them on a HiFi. Details in the music and mix are there in spades, but by the same token I never once felt that I was being overloaded with information. Indeed, I'd say that these speakers manage to pull off something pretty special in this respect – a huge amount of detail and information but without ever a feeling of sensory overload. Switching to David Crosby's Croz by way of balancing out the genders, what is apparent is Crosby's stunning vocal delivery that whilst being beautiful, also sounds somewhat world-weary. It is small details like this that separate the outstanding products from the simply very good. There is subtlety when the track delivers it and there is power when it's there too. Again, this is delivered without the listener feeling any sense of overkill or overload. Set That Baggage Down off the Croz album has hard-panned guitars and (again) the mix is easy to pull apart and "see". Small inflections in voicing and instrumentation really shine when these speakers are playing – Natalie Merchant's Ladybird is as well done as I've ever heard...anywhere...at any price. Stunningly beautiful and spine-tinglingly emotionally por-

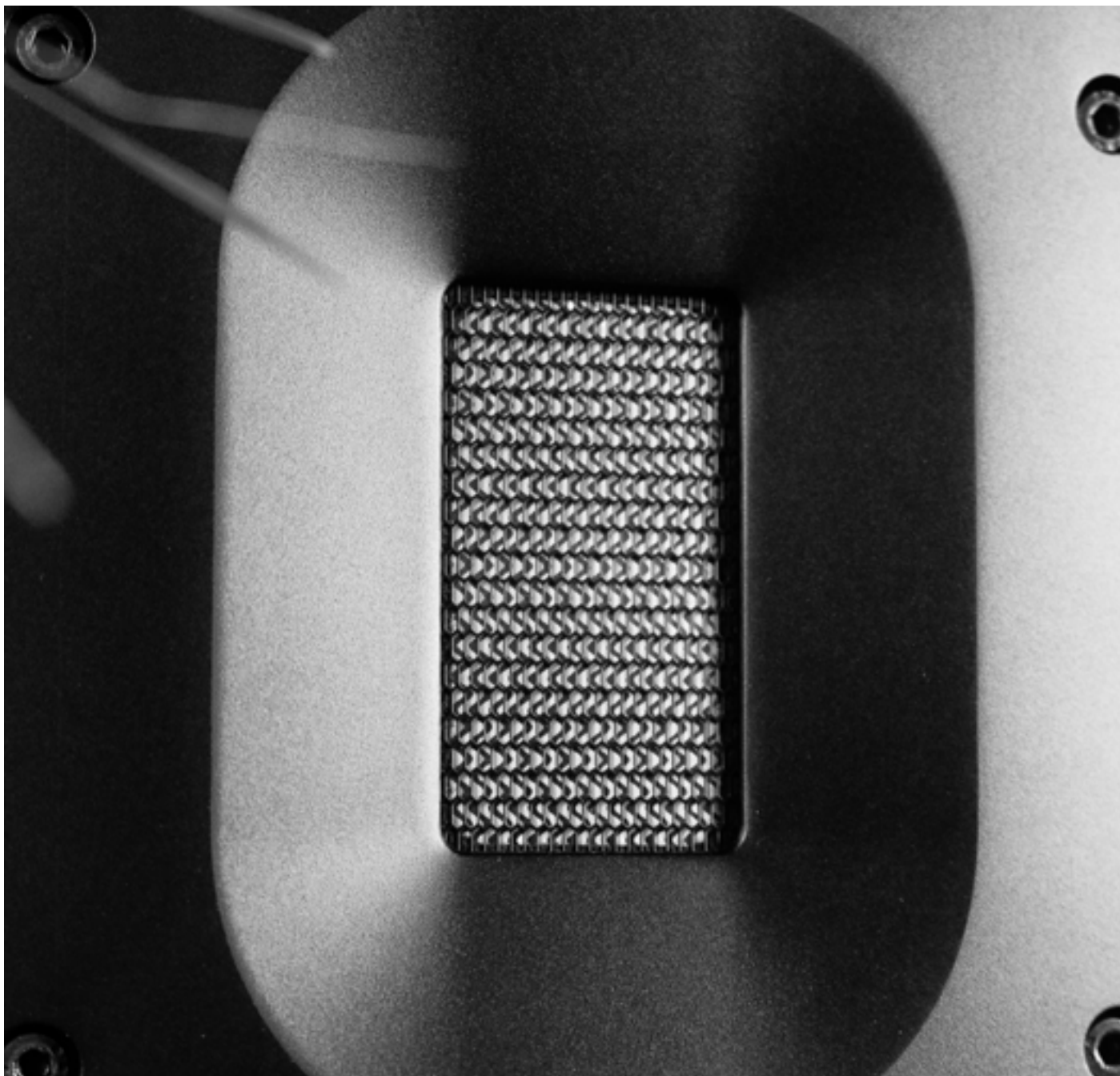
trayed. Small taps on the hats are there and easy to hear but don't take over – again, highly detailed without overkill. I rewind this track and play it at high volume and there is nothing but composure and class presented. Not once do I feel that I've pushed the speakers too far. "In the room" is another term bandied about by review folk, but this really is as good as I've heard. Merchant's voice is projected into the room with a reality and presence that is hard not to connect with. Towards the end of the record, the strings and orchestration just lift the track and that electric guitar just cuts through the mix and is panned to the left – like I say, easy to pick the mix apart but likewise easy just to fall into it and enjoy it in all its glory!

I'd like to say that I tripped these speakers up with a particular genre or other, or a piece of music that pushed them beyond what they were comfortable with. I didn't and couldn't, despite my best efforts. EVERYTHING I played through the Raidhos sounded fresh and new with the caveat that it needed to be well recorded and mixed.

I'm going to close this part of the review off by talking about the track Contact off Daft Punk's Random Access Memories (Qobuz Hi-res version) record. I know it's a track I use again and again, but it's a tune that can trip up even the best of speakers. It's freaking glorious on these speakers and in this room. Dynamically speaking these have it all (pretty much) and when the beats come in on this tune you sit and take notice. Likewise when the organ sounds come in at the start you take notice. It's not a mush of sound (it never has been and why we love it as a test tune) but it can sound less than great on a poorer system. There is also the bass (it's low and booming in the mix) that can get out of control on some systems...not here, though bass nutters may feel the need for a bit more oomph. The small details in the noises towards the end of the track are all there for you to hear, and whilst they come to the fore they never overplay the constant background music. Again, utterly stunning.

CONCLUSION

One of the best loudspeakers I have ever had the pleasure of listening to at any price. The



Raidhos excel in delivering a connection to the music that is rare. Detail without overload is their forte. I would say that they represent pretty much everything I am looking for in a speaker – they allow me to simply get on and enjoy my music without having to try. In this room I don't think I would want to go with the bigger models, but nor do I think the standmounts from the range would fill the space adequately – these are as near to perfect as I have heard in this room, though perhaps the extra driver in the TD 3.2 or the pair of bigger drivers in the TD3.8 would satisfy that urge for more movement of air.

They wield considerable power and do bass very well, although it is not as much a visceral experience as with our Avantgardes. But whilst

they may not have that bass oomph, they do caress you with beautifully presented music across the scale and they do go low. Really, I am struggling really hard to find a fault with them other than their price, which is considerable given the speakers' proportions.

Do I think these represent excellent value for money? Nope, I don't! However, at this price value is hardly going to be a consideration for prospective buyers and so I'm pretty much discounting it. I would love to say that they offer incredibly bad value for money, but, despite their asking price for such a relatively small speaker, I can't help thinking that if I had the means they'd be taking up permanent residence - or the 3.2...or the 3.8s.

REVIEW

Fit and finish are great as you would expect and I have looked hard to fault them in this respect.

I don't know if the accuracy they portray is real or somehow artificially enhanced. To my mind I don't find them artificial sounding, in fact, I'd go as far as to say they sound utterly natural, unforced, and effortless. That last word (effortless) sort of sums the Raidhos up beautifully, and I can sit for literally hours in front of them without feeling the need to get up. I find myself getting lost in the music and feeling part of it. Result!

The award these speakers are getting sort of puts value for money to one side and I need to do that to be able to try and convey what a thrilling experience it has been to have them in the house for a couple of months. The fact that they cost as much as a very nice car is neither here nor there in the realms of this level of fidelity!

I waffle on a good deal about really good HiFi being "Machines For Joy" and these really do fit that description very well!

AT A GLANCE

Build Quality:

Packaging is simple but effective. The actual speakers I can't fault.

Sound Quality:

Detail and accuracy are the main takeaways for me. Bass goes low but not overpowering or domineering - some may want more air moved. Spatially they present music in a three-dimensional way that I love. Clear and precise throughout the sonic range without anything overpowering the other. Go loud effortlessly. Easy to listen to and fantastically revealing at the same time. Bass was never going to be of earth trembling proportions but these do go well low enough at 32Hz, are very bouncy, and yet seemingly accurate.

Value For Money:

They are £38 000. Like it or lump it! If that's their asking price then so be it. They aren't good

value and spending this much on a pair of speakers is hard to justify. BUT, had I the means then I would!

We Loved:

The effortless musicality of the presentation and the spatial dimension to the stereo soundstage

Tight and tuneful bass

Great dynamics

Detail without fatigue

A luxury finish without being over the top

Easy to accommodate, though do read their setup instructions... just like I didn't

We Didn't Love So Much:

I am seriously struggling to find anything I didn't like.

Elevator Pitch Review: A high-end loudspeaker with a high-end price tag but with a performance to match. They behave well with whatever the music's genre. The spatial presentation and three-dimensional quality to the way they put the music in front of the listener really is addictive, as is the level of detail and clarity they put forth, whilst still remaining very easy to listen to for long periods. If you are looking for a more hefty bass (these are no slouches) then check out the couple of models above these.

Price: £38 000



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ELECTROCOMPANIET TANA SL-2, L2 AND SIRA L1 SUBWOOFER

Electrocompaniet's Tana SL-2 is the Norwegian brand's second-generation Tana all in one, streamer, amp and wireless speaker, from the EC Living wireless lifestyle audio series. Linette Smith explores its capabilities, along with its second speaker and sub, and is suitably impressed.



Linette Smith

It comes packed in a smart customer-friendly box and is stylish looking in an understated way with black fabric speaker grills and silver brushed aluminium detailing to the lower part, (the fabric and 'stripes' are user-replaceable). The Tana 2 updates the outgoing Tana 1 model with new software, a new cabinet, new functionality, and new packaging. It is a brand new product standing out from its predecessor with a re-designed stiffer aluminium chassis, with custom made passive grilles on the sides for maximum bass response. The in-house (as all Electrocompaniet's electronics are) designed amplifier is a 150W Class A/B amplifier and is built and designed on the same principle as the Classic Line amplifiers from Electrocompaniet. The 5" bass/mid-range speaker and 1" tweeter are designed by Electrocompaniet to match the amplifier.

It has new in-house developed software and accompanying app.

It is reassuringly heavy and seems much more substantial than many standalone wireless speakers. As well as being a system in its own right the Electrocompaniet Tana SL-2 has the option of a second speaker, to create a stereo pair, the Tana L2. Plus you can also go down the route of adding Electrocompaniet's wireless sub, the Sira L1. There are also stands available for the Tanas, though we didn't review these. The Sira L1 looks deceptively small but is actually very heavy, which I took as a good sign for a sub.

Electrocompaniet sent us all three to try so I used the Tana SL-2 on its own and then with the other two components.

DESIGN AND CONSTRUCTION



TION

The Electrocompaniet Tana SL-2 is designed for use in a smaller room, maybe as a second system in a bedroom or kitchen, or you can set them up around the house as a multi-room system. Although compact I found the Tana, particularly in its two speaker stereo configuration, worked well even in the large, high ceilinged living/listening room that we have downstairs.

I must admit to being someone who never used to enjoy hearing the words 'wireless' and 'speaker' used in close proximity. The market is full of cheap, almost disposable, options, however, the Electrocompaniet offering is in the class of the likes of the iFi Aurora, Devialet Phantoms and Naim Musos, being a high-quality build with 'proper' HiFi credentials.

SET UP

Set up of the Tana SL-2 was really simple. Just a matter of plugging into the mains and then checking there was a light on the top panel, and then doing the rest through the app. Electro-

companiet recommends setting up with a wired connection but I set it up wirelessly via the Android app and my phone, this can also be done using an iOS Apple device. I had no issues doing it wirelessly at all.

Adding the second Tana speaker was also very, very simple using the app. I moved the pair of speakers onto an IKEA unit that partially separates our main listening room from our living room, setting them up with a bit over 70cm space between them.

The manual advises a corner set up if possible for the Sira L1 subwoofer, though I had it below the Tanas on a low unit, which seemed to suit it well enough.

GETTING CONNECTED

The app is very simple to use. If you like listening to the radio there is a massive choice of stations, organised by country, through the app. So whether BBC Radio 4 or some obscure foreign Jazz station is your preferred media you are bound to find something to entertain you.



The app makes controlling volume etc simple and it is easy to set up the system, check all the components are assigned into the correct positions, and control and balance bass etc.

You can also easily access music on your NAS drive and use Qobuz, Tidal, and Spotify.

There are soft-touch 'buttons' to adjust the volume and turn the units on and off, on top of the unit that light up when you sweep your hand above them, these also have the useful option of being able to disable them from the app, which avoids any accidental turning off of the system.

Electrocompaniet uses wireless technology from Summit Systems, the makers of WiSA to transmit data between the wireless speakers. It is the only wireless technology created for the transmission of high quality sound in music systems and Home Theatres. It is used by many major manufacturers of wireless Hifi systems, like System Audio, B&O, Klipsch, Buchardt, Harman Kardon among others. WiSA transmits High Definition sound in a resolution of 24 bit /96 Khz. It works like this: From the

master Tana SL-2, a special 96kHz/24bit real-time link is used to transfer audio data to the other loudspeakers in a room (Tana L-2 and Sira L-1). This is done with a continuous data stream, as opposed to Wifi which is packet switched. It is specially designed so that the speakers are synchronized within one micro-second, which cannot be achieved with ordinary WiFi. Only the master communicates with the network and sources, and controls the timing with the other wireless units. This ensures a correct and wide stereo image, as intended during the music production.

I then switched to the iPad mini and Roon as this is the way we usually stream music around the house and on our various HiFi systems. The Tana 2 is Roon Ready which means it was just a simple matter of logging into Roon and it was there as an option to stream to. I really liked the fluidity of being able to pick up my phone or the Apple or Amazon tablet and control the Tana 2 from whichever is to hand, for example when I had set Roon playing from the tablet, I could then flick through tracks through the Electrocompaniet Play app on my phone.

Being Roon Ready is more or less essential for any streaming products as it is becoming the go-to choice for organising and selecting digital music. If a product doesn't have the Roon option it becomes very noticeable through its absence and to be honest, not being Roon Ready is becoming a bit of a factor in whether we would actually be able to live with a piece of HiFi or not.

SOUND QUALITY

Flicking through a few Radio stations with the Tana SL-2 in standalone set up I was immediately impressed with the sound quality. I had the unit on a normal piece of furniture. It doesn't really seem important where the speaker is as it does give a very omni-directional sound. For listening to radio the sound quality was great, I'd be perfectly happy using it as background music whilst getting on with other tasks. As a single unit it does have plenty of bass and doesn't distort at all when you turn it up loud.

With the pair of speakers, the sound was very good indeed. With them positioned as they were, on the unit, more or less in the middle of the listening space, their omni-directional quality was even more pronounced. It didn't matter where in the room I chose to sit, the sound quality and listening experience was very enjoyable.

Having lived with the Tana 2's for a while I found myself listening to radio, particularly BBC Radio 4 much more, and putting the Radio on rather than the TV. Documentaries and plays were particularly enjoyable with there being a very natural quality to the human voice.

I then added the Sira L1 subwoofer and switched to something that would test it out. With the two speakers plus the sub set up and using for music through Roon rather than radio, the Tana 2 HiFi credentials became very apparent.

The sound was very tight and controlled with no distortion at all, even when pushing them with high volume. My thoughts of these being 'good for background music' were banished. This system will obviously draw comparisons with Devialet's Phantom, which I have heard on

many occasions. Suffice to say you can push the Electrocompaniet to high volume without distortion, where I have heard the Phantom give in to farty and flappy bass. I'll leave you to draw your own conclusions there.

The little Sira L1 sub underpinned the bass with that nice, dry, fast sub-bass that I really enjoy from electronic music. The sign of a good sub-woofer is that you don't actually notice it until you turn it off, and this is exactly the case with the Tana 2 and Sira L1 set up. The Sira integrates perfectly, you can adjust the levels on the app to dial it in to your taste. Again, as I found with every aspect of these EC Living components this was all, very, very simple...and this is coming from someone who generally prefers to use a HiFi that I can operate with dials, buttons and a remote rather than an app on a phone.

Whilst the Tana 2s on their own are a very acceptable system, the Sira L1 just gives that extra bit of 'je ne sais quoi' and I think it is well worth adding to your Tana set up if you enjoy a full bass sound.

THE ROON RABBIT HOLE

Infected Mushroom are well known for their frenetic and bass-heavy tunes 'Becoming Insane' from Vicious Delicious gives the system a proper workout, in fact so drawn in am I, I work through several of the Mushroom's albums.

Roon takes over and I let it take me off down that famous Roon Rabbit Hole of discovery, one of the new tracks I find on the way is Modeselektor and Flohio 'Social Distancing'...which I thoroughly enjoy, finding myself happily listening to both tracks old and new with great pleasure.

The Chemical Brothers 'Don't Hold Back' from the brilliant Push The Button album sounds as energetic as it does on our second system. The stabbing string sound gives the track the edgy sound it demands and once again the bass and sub-bass is perfectly integrated. Particularly enjoying the Chems I switch to their 2015 album Born In The Echoes and their smash hit (and much used in TV adverts) 'Go'. This Electrocompaniet system really is a joy to use and



listen to, it's very much a 'chuck on what you fancy and enjoy' system.

Of course, this wouldn't be a proper HiFi Pig review without one of our favourite tests in the form of some Daft Punk. 'Giorgio By Moroder' from RAM is followed by the ultimate test of 'Contact'. This is where things can go wrong for a system that is 'not all that'. On this system there was the definition that one would expect from a well-put-together HiFi system and no muddling or jumble in the wall of musical noise that this track slams into you with.

I am aware that I've been drawn into listening to electronica, the system suits it so well, so as a transition to other genres I put on the new Reprise album from Moby, which we have been enjoying recently, the orchestral reworkings of his classic tunes on Deutsche Gramophon. The blend of electronic and orchestra is well suited to the system yet again, with 'Go' and 'Porcelain' being beautifully balanced, expansive, and enjoyable. Tops and mids have a wonderful and airy clarity with an emotional connection that I would not have expected from this kind of system, and of course, there is that wonderfully

integrated bass running underneath it all.

Switching to another genre I select Nirvana's classic, Nevermind. "Smells Like Teen Spirit" has exactly the raw edge that I am looking for, with Cobain's broken vocal cutting through the instruments.

Miles Davis's Kind Of Blue shows the system's jazz credentials, again engaging and toe-tapping, you really can just go anywhere in the Rooniverse and enjoy what you find...the system is definitely an all-rounder genre-wise.

CONCLUSION

Yes, this is quite a lot of money for a wireless system, however, I think it is well worth it. Rather than just being a 'second system', the Electrocompaniet Tana 2 and Sira L1 combination sounds like a 'proper' system. It is room-filling, defined, and detailed with oodles of wonderfully controlled bass. Electrocompaniet have got into the realms of 'get rid of all your boxes and cables' territory here, I was very, very impressed. Whilst discussing it, Stuart and I agreed that you could put a 'dummy' big system



in a room and hide this behind a screen and no one would suspect that it wasn't the big system playing.

It is safe to say that the Electrocompaniet Tana SL-2, L-2 and Sira L1 system has changed my perception of wireless systems. This isn't a compromise, it's a totally enjoyable and versatile streaming system and I have no hesitation putting it forward for our highest award.

AT A GLANCE

Build Quality:

Understated looking, built like a tank, don't drop the sub on your foot

Sound Quality:

Exceptional, this is 'proper' HiFi sound in a wireless package

Value For Money:

You are looking at over £4000 for the full complement of two speakers and sub, but when you listen to the sound you get and how much that would cost you in separates and cables and then add in the sheer convenience and ease of use that £4k starts to look like exceptional value for money

We Loved:

The easy-to-use app, fluidity of control, build quality, sound quality, Roon Readiness and the tight controlled bas...did we mention the bass?!

We Didn't Love So Much:

I honestly can't think of anything that I don't like about this system.

Price: Electrocompaniet Tana SL-2 £1439, Tana L-2 £1199, Sira L-1 £1599, Tana stands £200 pair in the UK.

The RRP's in Europe are: Tana SL-2: 1699 €, Tana L-2 1499 € Sira L-1 1999 €.

Elevator Pitch Review: A wireless streaming system for people that don't like wireless streaming systems, easy to set up and use, incredibly well made and sounds like 'proper' HiFi. Take my money.

Over to Stu...

I was asked to review the system by way of seeing if it got the seal of approval for the Editor's Choice Award. Read on for my take on this system.

I was in the upstairs review room all day yesterday listening to loudspeakers that are in for review whilst Linette had spent the day listening to the speakers and sub you are reading about here. We'd had them on in the background for a while for radio and Linette had listened to them by way of the usual review process, but

I'd not taken much notice – we've had a pair of the first model of these for ages and used them sparingly for listening to Radio 4. Yesterday was really the first time I'd taken any real notice of them for anything other than background noise. My comment on entering the downstairs room was along the lines of "My word, Linette, these sound really rather splendid!" Except perhaps with more expletives and with a much thicker Yorkshire accent than that conveys.

Anyway, Linette was coming towards the end of the review and asked if I'd take a serious listen to them by way of seeing if I thought they should get an Editor's Choice award. The protocol is that nothing gets this award without having my input – it takes longer and is a pain in the fundament but it's just how we do things here.

I'm not going to comment on the set up procedure as that's not my job here and will already have been covered. I'm also not going to go into massive detail about the product as I'm assuming that Linette will have covered all that, though as I write this I haven't seen her copy so as not to influence my thoughts.

Aesthetically the two speakers and their sub look pretty cool and unobtrusive. They were set up for me on an IKEA unit and with the sub between them. Perhaps the sub should have been in a corner but the truth of the matter is that with this kind of product the user is likely to be more interested in just getting them set up where they are convenient and look good rather than getting into the minutiae of getting them on stands and exactly measuring where they are placed in the room – they are a lifestyle product first and foremost, that is undoubtable!

They run Roon which is a must for me. I use it constantly other than when listening to vinyl. Set up is apparently a doddle and the app looks and works well, though my main interface was an iPad running Roon.

Saying these sound good for a lifestyle pair of speakers is doing them an injustice I feel. The simple fact of the matter is that they sound good...period! I'm going to talk about these as a system including the sub as that is how they were sent. I would say that the sub is essen-

tial as when you turn it off the speakers are a bit light for my taste and so factor this in when buying or thinking of buying. Talking about the sub – it's tiny and could be hidden away should you not want it on display, but it looks pretty cool anyway. The sub integrates very well and it's one of those "you don't know what you got 'til it's gone" kind of things. It adds great weight to everything but doesn't get in the way or honk away at you. A well-thought-out system!

Having the satellites set up where Linette has them isn't going to present the most ideal of soundstages but even so it's not bad at all. I position myself in the middle of them and they do image very well. They aren't on a par with the Raidhos we have in with regards this and they're not as open and spatial as the Audio-vector R3 Areté but they throw a good stage plonked where they are and I imagine on a pair of dedicated stands and properly positioned they'd be even better – but they aren't that kind of product and so I'm not going to fanny about doing that!

I've listened to a good few speakers of this type, most notable the Devialet Phantoms which I always find just a bit too much for my taste in the bass – look, I like bass but it needs to be properly done and not OTT! This speaker system seems to have a good deal more subtlety in its presentation, but then crank them up (Daft Punk's Contact is on) and they really do fill the room – great for when you have a few friends round for a party (remember that?) or when you just want to blast the tunes out and blow away the cobwebs. I could see us dragging these onto the window sill, flinging the windows wide, and using them to add music for when we are in the garden.

But they aren't all about the bass and no treble (to paraphrase Meghan Trainor). These do pretty much all I threw at them very nicely. They have detail and refinement to satisfy all but the most dedicated of audiophile – and all that in a package that is pretty much self-contained and good-looking.

Listening to Fun Loving Criminals at volume is a very good experience and on a par with a good quality full-on system costing this kind of money, only in a package that is more home-friendly.



There is plenty of detail there and there is subtlety and nuance to the delivery. As good as the mid-priced system costing around three grand a box? Nope! But that's not a fair comparison. The depth and subtlety of this system is evident on Miles Davis' *Kind of Blue* where the tape hiss is clear to hear and so is the rasp of the horns. Subtle changes in the piano chords on *So What* are easy to hear and there is a real dynamism to the presentation with the bass underpinning the whole sound. Face the speakers and sit in the middle and there is a good soundstage with the players set out before you.

In summary, this is a very good system for those that want to have a great sounding musical experience without the hassle of lots of boxes lying around. Get Qobuz and a Roon subscription and you are away. It does a lot of what a full-on system can achieve in a compact and good-looking three boxes. In comparison to the original Tana, they are more resolving and better sounding. That said it is the originals we

have, but having now experienced the latest iteration with their sub I will be considering purchasing the sub to add to ours. I can't help but give my sign-off on the Editors Choice award.

This is a very accomplished solution.

Stuart Smith



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FYNE AUDIO F1-5 LOUDSPEAKERS

The Fyne Audio F1-5 loudspeakers are a compact standmounter with a downward-firing port and point-source driver configuration. Stuart Smith takes a listen.



Stuart Smith

Fyne Audio is based in Scotland and their speakers look a little different to your run-of-the-mill offerings as they all, bar the F700 Series, use the company's IsoFlare driver technology. The IsoFlare drivers are essentially a dual-concentric design, or if you prefer a "point source" driver in that one speaker houses both the bass and tweeter. The drivers are built with a very rigid cast aluminium chassis and they use multifibre paper cones. The tweeter's diaphragm is made of titanium and uses a waveguide. Also used in the F500 Series upwards is what Fyne calls the Basstrax system that is a downward-firing port that is designed to allow for a wider tuning frequency and reduce cone excursion whilst acting as a "muffler" and stopping standing waves that the main internal port produces. Simply speaking there is a Tractrix

shaped diffuser below the downward-firing port that converts the airflow and sound wave into a spherical wavefront. The diffuser is housed on the speaker's plinth and can be seen if you look between the plinth and the bottom of the speaker cabinet proper. The final bit of proprietary technology used in the F1 is the Fyne-flute ribbing between cone and housing that is designed to eliminate "mis-termination" effects and reduce colouration.

The F1 is a fairly compact (321 x 186 x 289mm) 8-ohm loudspeaker and is said to have a frequency response of 48Hz to 28kHz from the 125mm driver. Sensitivity is 87dB.

The F1-5 is a good-looking speaker but it is going to divide opinions – some will love it and some will not like its unique aesthetic. What can't be questioned is the finish and build of

REVIEW



the speakers which is fantastic. As mentioned they sit on an integrated plinth that's supported by three columns and through the gap you can see the Basstrax diffuser. You get a single pair of very good quality binding posts around the back and there's also a grounding post, though there are no grounding cables included in the review sample. Having used (and being wowed) grounding cables on our Audiovector R3 Areté, I am convinced of their efficacy and I would have liked a set to have been included in the package.

Moving to the front of the speakers there is the driver and a large knob below it that reads "PRESENCE" which I'll have a play with later.

The overall shape of the speakers is, like several speakers we have reviewed of late, very much like the prow of a boat with the pointy bit at the rear.

You can have the F1's in any colour you like so long as it's Piano Gloss Walnut but even though this comprehensively limits choice the quality of the real walnut veneers and burr walnut inlay cannot be questioned.

The F1 series is designed, manufactured, and finished by hand in Scotland at Fyne's headquarters and factory in Glasgow.

The F1-5 is pretty compact but they are fairly deep and so I was careful to hold them in place on our SolidSteel stands with big blobs of blutak as they did hang over the front and back a tad.

SOUND

I had the Fynes set up as mentioned on SolidSteel stands in our smaller listening space and positioning was as straightforward as it gets, no doubt in no small part because of that downward-firing port. I pointed them at the listening position and had them about a metre from side walls and a little more from the back wall.

Throughout the time I had these speakers in the system I didn't feel the need to mess about too much with positioning and they seemed "right" from the off. Amp used was a big old Krell (very recently fully renovated in the US by Krell) with a LAB12 pre and LAB12 DAC in place before it. Tunes were piped in using Roon on a Raspber-

ry Pi running Roipée and with its own dedicated linear PSU. The speakers were fully run in when I got them and so a couple of hours loosening up and then serious listening began.

First up, more by accident than anything else, was Mouse Catcher General by David Tarrida from one of the Tresor compilations. It's got that wobbly and very deep bass that can sound overblown and just too much if not controlled properly but I'm happy to report that it sounds great here. The speakers are quoted as only going down to 48Hz but the detuned bass kick on this album really did have a good degree of oomph to it. Compared to our Xavian Perlas in the same system I'd say you actually get a better feeling for the bass and its depth. But bass doesn't over-dominate proceedings here but this is a bass-led track and the Fynes reflect that very nicely without everything else getting lost or muddled in the mix. Bass remained central in the mix where it should be on this track and the play between the bassline and the bass kick was easy to differentiate – they can become a bit of a gloopy mess on some speakers. Now, these speakers can go loud and when I cranked up the volume to neighbour-pestering levels I didn't feel overwhelmed or that the speakers were becoming out of control and breaking up – far from it. In fact, I'd suggest there is a bit of a sweet spot with the Fynes with regards to volume on this kind of techno where when it's too quiet you do feel like you are missing out a bit and too loud (and I mean LOUD) you feel the need to turn it down a bit. The F1-5s don't look like a speaker that should do techno and look like they should be partnered with more "refined" music but they love it...and they love a bit of power up them to get them really banging out the tunes.

Continuing on the electronic theme and pulling out Juno Reactor's The Golden Sun (remixed) record it's clear that these are speakers that really like to party. This is sophisticated Psy Trance (don't tell any of my cool techno friends I listen to this stuff) with lots going on in the mix and the Fynes manage to allow a lot of the barely perceptible little percussive noises to be clearly heard. Spatially they are great fun and that point source nature has sounds coming at you with laser-sharp accuracy. I don't think the speakers project as good a three-dimensional

REVIEW



stage back and forth as, say, the Diptyques or Audiovectors we use, or heaven forbid the Raidho TD 2.2s we have in for review, but they present the stage left and right very well with a very acceptable projection forward. I'd say they give the impression of being about the middle of the stalls, perhaps 6 or seven rows back. Turning the presence knob to its highest setting (I'd had it bang in the middle up until now) adds a little more air to the higher frequencies (presumably in the 4 to 6kHz range) and gives a little more three-dimensionality to the track and I liked that effect a lot. I can see other people liking this presence feature as it allows you to tune the sound a tad to your own tastes, or to compensate for recordings that need a little help. I'm all for this kind of thing and believe that folk who stubbornly refuse to allow any kind of EQ into their systems are missing a trick at times – we all have different tastes and the Fynes (and others) allow for these differences. It's not a huge or massively dramatic effect but it is there and it is useful in adding a little, more "in the roominess" to a recording.

These speakers do techno really well and, as such, I'd certainly say they match my tastes very well. They are tight in the bass and with plenty of oomph but present that without losing the other stuff going on. They feel very dynamic and exciting on this kind of material, and they like to be pushed loud. The Krell is a fab match for them I'd say!

Playing Rodrigo y Gabriela's 11:11 shows just what a dynamic and engaging speaker these are and they handle the speed of this pair's guitar playing brilliantly without getting all a fluster and losing it any. They are not as detailed in the mid-band as, say, the Falcon LS3/5as, but where they win over these speakers is in the energy across the full gamut of frequencies they bring to the table. I'd also say they aren't as pinpoint accurate in their sound-staging as the Falcons, but in the same breath they are more exciting overall – you pay your money and take your choice.

Natalie Merchant's Ladybird (I play and refer to this tune quite a bit more than I really should) is tight in the bass with Merchant's voice projecting well out into the room. The vocal sounds huge with these speakers and there is a good

deal of detail in there too. There's no harshness, no sibilance, and no feeling that things are being pushed too hard at the tops. On the stripped back intro to Maggie Said, it's easy to imagine Merchant in the room with you, though I did find myself getting out of my chair to dial back the presence knob a tad which had the effect of moving the recording slightly back in the room. When the song gets going a bit more there's no mistaking that these speakers present everything that is there, and whilst the vocal does dominate it's easy enough to just let the track play and enjoy everything that is going on – and that bass that walks along throughout is really well done on the Fynes.

Feed the Fynes something like Motorhead and crank up the volume and you really do start to get what they are about, though I'm not sure that this is the music they are intended for. They lay the band out before you on the stage and there is certainly a "live" feeling to their presentation which I really like – it's that excitement again. I confess to getting into a Motorhead vibe and playing several albums one after the other, which given these are small speakers that really shouldn't play this kind of thing well was a bit of an eye-opener. I particularly enjoyed the feeling for the guitar sound on Limb from Limb off the Overkill Deluxe edition – there was a real sense of it being there in front of me and with a great tone to it.

CONCLUSION

These are well-balanced speakers that play everything well, will suit people who have a wide range in their taste of music and I really enjoyed them a great deal.

They are easy to position and work well without too much thought going into their placement which will be a major plus for many. That downward-firing port with the Basstrax doodad certainly works very well.

The Fynes have enough detail and clarity to satisfy those who want to get right into the heart of a mix, but, and I like this a lot, they also know how to kick off their shoes and party when asked. That wonderfully tight and controlled bass helps them bounce along really well in the latter's respect and this is especially good on



REVIEW

rock and techno, laying down a solid foundation on which other elements can build.

I do think the Fynes come into their own when they have a bit of power up them and perform best at medium to high volumes and so you may want to take this into consideration with regards to amplifier partnering. At lower volumes they still perform very well, but give them a bit more juice and they just jump to attention and really start to get exciting.

AT A GLANCE

Build Quality:

Well put together and beautifully finished but only available in one colour which is pretty conservative and won't gel well with all home decors

Sound Quality:

Bouncy and great fun to listen to but can do detail and finesse to a sufficient level to make them a good allrounder. The Presence control is a useful little feature that lifts the upper detail a smidgen to make them airier in their presentation.

Value For Money:

This is a tough and competitive price-point but I reckon the Fynes represent themselves very well in that they aren't a one-trick pony.

We Loved:

Bouncy and tight bass

Great fun when pushed relatively hard

Detail and clarity isn't over the top or exaggerated

Beautiful finish and looks

Brilliant feeling of the music being laid out in front of you

Presence control is a very useful feature

Inclusion of a grounding nut

We Didn't Love So Much:

Not as three-dimensional a presentation as some

Looks will divide opinion

Not the last word in detail when compared to the very best

No grounding cables included in the package

Elevator Pitch Review: The Fyne F1-5 strikes a great balance between a speaker that is detailed and one that can get down and boogie. They like to be pushed a little harder than most to get the very best out of them but when you do this they really come to life and become very exciting to listen to. They are well put together but have looks that are a bit "Marmite" (not everyone will love them) and are only available in one finish. They are easy to get on with whatever genres you listen to and unfussy about their positioning.





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AUDIO SOLUTIONS OVERTURE 0305F LOUDSPEAKERS

Audio Solutions Overture 0305F Loudspeakers hail from Lithuania, are a floorstanding three-way, and cost €4100. Stuart Smith goes to a party with them.



Stuart Smith

Of all the different things that come into HiFi Pig Towers for review, it is without doubt loudspeakers that I enjoy reviewing most of all. Without wanting to stir up a hornet's nest of controversy, it is loudspeakers (in my opinion) that have the biggest overall effect on a system and, invariably, it is where I would always recommend you spend the bigger proportion of your budget. Many years before HiFi Pig was even a glint in my eye I read a comment on some forum or other that you should always invest most heavily on transducers (loudspeakers and cartridges) and I have taken this sage advice on board ever since, and still maintain it to be, by and large, a truth.

Audio Solutions was founded in the Autumn of 2011, are headed up by Gediminas Gaidelis and are based in Vilnius, Lithuania. The company

produce three ranges of loudspeakers; Overture, Figaro, Virtuoso, and Vantage 5th anniversary, with the Overture range being the entry-level to the brand's offerings.

The Overture range has a couple of centre speakers, a couple of standmounters, and three floorstanding speakers within it. The O305F tops that range with the O3 signifying that it is the third iteration of this line - the previous MK2 are prefaced O205F. Changes from the MK2 version of the speaker are "drastic" say Audio Solutions and it is a wholly different looking speaker – it's also changed on the inside with new drivers, cabinet and crossover. I suppose the question would be, why not call it something completely different if it is so changed a design, but that's not why we are here.



DESIGN AND BUILD

What you get with the rather conventional-looking O305F (I'd like a name, please) is a three-way floorstander that has a 2.5cm silk dome tweeter, a 15.2cm paper mid, and two 18.3cm paper bass drivers.

The tweeter is interesting in that it employs "Mini Horn" loading that is designed to overcome the problem of soft domes distorting badly and flexing when driven hard. Some loudspeakers overcome this problem by physically dampening the tweeter to stop the flex, whilst others stiffen the tweeter using the likes of titanium that is glued to the tweeter itself. Audio Solutions reckon that it is preferable to dampen the tweeter in this speaker acoustically – and I'm going to refer to their comments as it's beyond my ken. Basically, Audio Solutions have measured the frequencies at which the tweeter starts to flex and distort and then created the Mini Horn to dampen those frequencies accordingly. The louder the tweeter is driven, the more it is dampened by "acoustical impedance". Of course, a horn adds sensitivity and so it need not be driven so hard to achieve similar volumes to conventional design. I've always enjoyed speakers with horn-loaded tweeters with French brand Triangle being a case in point.

Also worth noting is the "Box-in-a-Box" cabinet employed in the Overture range. This, say Audio Solutions, is trickle-down technology from their Virtuoso range of speakers. The cabinet in these speakers employs a lightweight inner box and a more heavyweight outer box with a polyurethane layer between the two to act as damping. This is what Audio Solutions say about this structure: "The thin but stiff inner cabinet provides the necessary support for the structure itself as well as transferring the energy of the radiated "back-water" to the outer cabinet layers without storing energy inside the material and preventing the back-wave from being reflected to the listener." There is more information on the company's website (link at the bottom of the review) for those interested, but it is beyond the scope of this review to get into any more detail.

Sensitivity is a useful 91dB, they are a nominal 4ohm load, and they have a claimed frequency response of 33-26000Hz with them crossing

over at 500 and 3000Hz. I'm using our standard Thor amps from Merrill, but given their sensitivity, I reckon you could use a set of valve amps that had a reasonable amount of clout. They are a rear-ported design and so you may need to consider this if thinking about getting a pair.

In the box, well, actually in a separate wooden box, you get a pair of outriggers per speaker with spikes and spike shoes. These have M6 threads and so you could add aftermarket products such as IsoAcoustic's Gaia footers.

Around the back of the speakers is a very nice set of speaker binding posts that accept the usual terminations or bare wires.

The speakers are available as standard in gloss black (like the ones we have) and gloss white. Pay a premium and you can get them in Oak, Mahogany and Wenge. In the gloss black finish they look very nice, and whilst being a pretty big speaker ((HxWxD): 1110mm x 250mm (421mm with feet) x 390mm; 43.7 x 9.9 (16.6) x 15.4 in) they look purposeful rather than imposing. Weight-wise they are 46kg/106lbs each.

The Audio Solutions speakers arrived on a palette on which were tied two fairly substantial cardboard boxes that were easy to unpack – you'd be surprised how many manufacturers get this part so wrong and it really does spoil the whole process.

Set up is simple enough and I had them up and running within about twenty minutes from starting to unpack to playing tunes. I found them best with them toed in and pointing directly at the middle of my head – as usual, this is achieved by using Aland Clarks set up tool, though a laser pointer could be used, I'm sure.

SOUND

A variety of sources was used along with our Leema DAC/Pre and Merrill Thor amps. Speaker cables were by Atlas. I say this time and time again, but I know this system inside out and it has been chosen and set up to be able to highlight what an individual product brings to the overall system. To say it irks me when I see reviews written using other kit that is in for review would be an understatement, how can

they possibly be evaluating the product that is the subject of the review – though it's often fun to try different combinations, of course.

The speakers have done the rounds and so are run in, but I do like to give speakers a bit of a workout before critical listening and so a day was spent just blasting out the tunes – actually, I did sit and listen and we played the guess the price game, which I failed miserably and guessed the price of the Overtures WAY too high – you do seem to be getting a good deal of speaker for your money, but, as they say, the proof of the pudding is in the eating...or listening in this case.

From the opening notes of the Chemical Brothers' mix of Spiritualized's *I Think I'm In Love* from the excellent *Yoshiesque Volume II* album, it is clear that the Overtures have prodigious bass - they really move the air in the room as the modulated synth sweeps into the mix. But there is detail too, both within the texture of the bass and with the higher frequencies as the tune unfolds. Bass isn't as tight as with the Audiovector R3 Areté but it is lower and more enveloping. Likewise when compared to the Raidho's we've just reviewed, the bass isn't so compact and well formed, but the character of the bass is actually really suited to this kind of tune and style of music - think a club with a really good system transported and down-sized to your living room.

Whether the claimed 36Hz is optimistic or not I don't know, but these do go low enough for my tastes, that's for sure. One thing I did notice, and I noticed this with the Raidhos (still here and so easy to compare and contrast), is that the soundstage thrown by the Overtures is well beyond the speakers right and left boundaries, though they are well away from side walls which will always help in this regard. I listened to this whole album rather than trying to throw other test tracks at the speakers, which is a good sign. This record is pretty dubby (in a house style) and there is a lot going on with effects and little flourishes that come and go – the Overtures play this kind of music really well and whilst they aren't the last word in absolute finesse, they sure know how to belt out a tune. They manage to maintain those deep and tuneful bass lines whilst allowing you personally

to lose it in the detail, that isn't as pronounced as with some other speakers we have but it very, very acceptable and there is certainly no harshness thrown into the mix with this kind of music.

Phuture's *Acid Trax* is perhaps THE seminal acid house record and I pull it out by way of having a listen to how the Overtures deal with presenting the sound of an 808 and 303. The sounds are standards for me and pretty much like using test tones, I suppose. The unmistakable tone of the acid box is there, as is the bass kick of the 808 – nothing to whine about at all. If anything I'd say that the Overtures feel a little slower in their decay than either the Areté or the Raidhos (they don't feel as tight if that makes sense) but I simply don't have a pair of similarly priced floorstanders to hand by way of direct comparison – and I'm not going to pretend I can remember the exact character of a speaker that passed through a couple of months ago or more. What I did like was that the reverb on the kick drum was well evident, the cowbell sounded like a cowbell on an 808, and overall they seem a very well balanced speaker – these are a very detailed loudspeaker without feeling that they push into harshness, despite the 303 getting into frequencies that can prove painful on overly bright loudspeakers.

To continue the house-fest I whack on Mr Fingers' *Can You Feel It* (Original 12") and I'm really struck by how solid the basslines are presented, but without dominating the track. Everything is laid before me with the pads managing to hold their own in the mix and nothing seeming to dominate overly. There is a slight mushiness to the sound when compared to the other speakers I've just mentioned, but let's not forget that this is a sub-5K set of speakers and so we aren't really comparing like for like. In the final analysis, these do a very good job on house and similar material, but I'm well aware that not everyone listens to this kind of stuff and so I ought to talk about some other tunes. However, whilst searching for tunes I come across the excellent VCMG's *Bendy Bass* tune from the album *SSSS* and I just can't resist giving it a bash through these – I'm not disappointed. Really, there is a whole lot of welly here in the bass department, but there is also detail in that bass that can be lacking in some



REVIEW

other speakers. Again it's not the most refined sound but it's bloody good fun - to say the very least!! Long story short here is that if you listen to house, techno, hip-hop etc then these speakers will be a very good choice if your room can handle how low they go.

Sarah Marie Young's Little Candy Heart album on Snip Records is a funky, jazzy kind of record that is very well produced and recorded. Young's vocal is projected well out into the room and it's easy to pick out her tone. The electric guitar on Can't Stop is "in the room" real and the speakers manage to really present the simplicity of this record's intro' beautifully, invoking mental images of a small smoky club with the music being almost secondary, though vital, to the whole vibe – yeh, that sounds pretentious codswallop, but it's what I'm hearing here. As I've mentioned, the soundstage isn't as three-dimensional as I've heard with other speakers we have to hand, but that's not to say that the Overtures are lacking - they aren't and I'm able to see well into the mix. On the title track you can hear Young move forwards and backwards to and from the microphone and I do get a really good feeling of "being in the room". The piano on the tracks Black and White, and Lo and Behold sounds like it should and with terrific detail. Added to this detail there is enough separation of everything else for the whole not to sound muddled. There is nothing here to moan about and a whole lot to praise, especially for the asking price.

Switching style to Cocksure's industrial-sounding Corporate Sting there is a feeling of power and authority from these speakers. This is a bit of a racket musically, it has to be said, and there is always the possibility that it could descend into little more than a cacophony of noise, but the Overtures manage to cope very well with keeping their composure whilst losing none of the power of the music. Dynamically they have punch and weight to them with attack on drums being particularly good.

There is a volume level that these speakers perform at their best, and that is loud(ish) but not being pushed too hard. I listened for the most part with them cranked up very loud.

CONCLUSION

These are a very good loudspeaker that manage to work with a wide range of musical styles. They succeed in being able to bring power, punch, and depth when needed, but then also a good degree of finesse and subtlety when required to do so. They are not the last word in detail and finesse, but for the money they are very good in this respect.

What the Overtures do well is bring a sense of you wanting to listen to music through them - and you really do get into the music rather than dissecting the speakers...which is something I say about a lot of kit I like, I know.

If you have the space and are able to push these speakers to good volumes then you will love them. At lower volumes, they perform well but do like to be pushed to get the best out of them.

Bass is exceptionally good with the Overtures, and whilst it may not be the fastest out there (and I love fast bass) I really got into how they just bounce along in a party style. Bass is not all-pervading, however, and I really enjoyed the relatively balanced presentation of these loudspeakers.

Mids are good if not exceptionally rendered, but then whilst I say that I'm reminded of the "in the oom" feel I got from the guitar on the Sarah Marie Young record.

The proof of the pudding is in the listening, as I've said previously, and I really do think you need to get yourself in front of a pair of these speakers before ordering them on the back of this review. Personally, I loved what they do and they got me listening to the music I was playing without wanting to over analyse it - and I think that is a good thing.

What I think these manage to bring is a degree of "get-down", dynamic party attitude, tempered with enough subtlety to get away with being let into the more exclusive clubs. In that way, I'd like to think that if I were a speaker I'd be a bit like these – others may well argue this point to be somewhat wide of the mark!

How these don't have UK distribution I do not know! Someone is missing a great opportunity

REVIEW

here and I can't wait to hear the speakers further up the brand's range!

AT A GLANCE

Build Quality:

Nothing at all to complain about. Well finished and well put together. They look pretty utilitarian and purposeful as they are quite broad across the fronts. Dare I say, they look quite a manly speaker. The black and white gloss finishes will not suit everyone and so you may want to factor in an extra cost for a different finish

Sound Quality:

These speakers love to party and love to be pushed to loud volumes. Their bass is not the fastest I've heard, but it is plentiful - low and with enough control for you to really get drawn in. Tops are clear and bright without being harsh and there is plenty of detail presented within mix – the speakers manage to be able to present even very busy bits of music well. Mids are good if not exceptional, though for the money there's not a lot not complain about

Value For Money:

If I had €4000 to spend on a pair of loudspeakers and the space to accommodate their size these would be on my shortlist for sure, though they will not be to everyone's taste

We Loved:

A get-down-and-party attitude allied to enough classiness to make them sound more expensive than they actually are

Good finish and great build

A feeling you are getting good bang for your buck

Dynamic and punchy

We Didn't Love So Much:

Bass is not the fastest but it is addictive

They are a big speaker that look, well, they look

like big speakers

Not the last word in detail, but, again, certainly not bad by any stretch

Price: €4300 as supplied

Elevator Pitch Review: A very good sounding loudspeaker that performs above its relatively modest asking price. If you want a speaker that can party whilst still having enough audiophile qualities to satisfy that urge, then they are worthy of your attention with the caveat that you will need room for them. They aren't going to win any prizes in the looks department but then fit and finish are very good and they aren't trying to be something they aren't.



“This big loudspeaker has a massive, uncompressed, live soundstage quality,
with more than a hint of a classical large professional monitor about it.”

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SoundEngine2



NOBLE AND NOBLE NOBILIS SONUM

Noble & Noble based in the Netherlands has brought to market what they are calling the World's first seven-sided loudspeaker system in the shape of their Nobilis Sonum 98 Loudspeaker System. It's an interesting concept that includes onboard amps and digital processing with a cost of a few euros short of twenty grand. Stuart Smith plugs them in and takes a listen.



Stuart Smith

Noble and Noble are a Dutch brand based in Groningen in the North of the Netherlands. The team is made up of Rob Meijst who is the Chief Engineering Officer, Roderick Vos the Chief Design Officer, and Jacob Gunter who is the company's Chief Executive. I particularly like Rob's outlook and his life motto "Be unique, be different, and be excellent" as it is something that pretty much reflects the approach that we have had from the outset of HiFi Pig – though that uniqueness is often imitated in time. I also like Roderick's statement that "design is all about craftsmanship; we have always loved a minimalist approach towards simple design matters." This latter statement promises great things from this speaker system and suggests that there is nothing frivolous in the design and that form will very much follow function – a philosophy

for design that both Linette and I are very much attuned to. And then there is Jacob who has a long history in the importing and distribution of high-end audio and whose stated goal is "to have each and every music lover listen to the Noble & Noble speaker system so he or she can be submerged in all the emotions music can give us." I like this latter point very much and go on about the equipment we use being the bridge between the music and our emotions all the time. So, the right people with the right ideas seem to be in place - let's hope that the product that they have been working on since 2017 delivers on all these levels.

The Nobilis Sonum claims to be the first loudspeaker system with a 7th side and when they got in touch with us it was this unique and intriguing point that caught my attention. But



what is it? Surely pretty much all speakers (bar the obvious like open baffles) have six sides given that the majority of speakers are made up of boxes that inherently have six sides – four at the sides and then a top and bottom. Essentially this seventh side is a separate baffle (for want of a better word) that incorporates the tweeter and an “inert ring” designed to cancel “cone surround distortion”. Have a look at the pictures as they will explain what is going on better than I ever could. The idea of all this is to create what is essentially and outwardly a six sided box that is resonance-free. Let’s have a closer look!

DESIGN AND BUILD

At first glance, the speakers look pretty conventional. They are a modestly proportioned floor-standing speaker that has a slight back slope above the tweeter. They look very elegant on their integrated plinth, stand a couple of centimetres shy of a metre, and are 18cm wide and 29cm deep with their matt-black finish looking very elegant and unassuming. On the face of it they don’t look anything special design-wise, with only the waveguide around the tweeter giving any distinction from many other floor-standers. However, it is on closer inspection that things start to get interesting.

Around the back of the speakers and towards the bottom is a panel that allows the connection of three digital sources via S/PDIF, AES and optical – there is no connection to allow USB connection which I think would have been useful as this is my usual go-to connection type from streamer to DAC. There’s also a couple of analogue inputs via XLR or unbalanced RCA. Each speaker has a power inlet and the speakers are connected to one another via a supplied S/PDIF cable. Now, if you have a number of digital sources and a couple of analogue sources I can see cabling becoming messy as it just cannot be hidden away behind a rack as is the case with conventional speakers (bar the speaker cables, of course). As it is, in the pretty conventional set-up I’m using to test the speakers, the connections (and so cables) are: a power cable to each speaker, an AES cable to the left-hand speaker, a pair of RCA cables to the left-hand speaker and the S/PDIF cable that connects the two. That’s six cables in all that

cannot be hidden from sight. I’d love to say that this potentially mess of cables bothers me - it doesn’t, but I can see it irking some people who are a little more fastidious tidiness-wise than I. When I approached Noble & Noble about this they conceded that I was the second reviewer to mention this and they are now in discussions with the manufacturer of the amplifier modules.

Inside the speakers things get really interesting. Mounted behind the mid-bass driver that you see on the front of the speaker (actually it’s mounted on the rear front baffle (see pics)) is another mid-woofer. This back woofer is ‘connected’ to the front driver by a series of tubes and an aluminium rod and then to an internal panel. This internal panel sort of floats but is connected to the back panel – again, see pics. The rear driver’s back exits through a hole in the back panel of the loudspeakers. In turn, the front woofer is dampened by an inner ring on that “7th side”. It’s a complex design but the long and short of it is that it is designed to stop vibration and resonances. To demonstrate this lack of resonances the Noble and Noble website has a video in which a coin is placed on the top of the cabinet and which I will try and recreate during the review or more likely I’ll use some kind of app to measure vibrations. The whole point of all this attention to reducing mechanical resonances and having a resonance-free cabinet is to avoid their effects on the final sound we hear.

Along with the speakers comes an installation guide with an Allen key to uncouple the bolt that holds in the 7th side – there is a bolt at the bottom but this must not be touched but this is not mentioned in the set up guide and I had to ask for clarification before I set about installing the speakers. In fairness to Noble and Noble they immediately acknowledged this and said they would make this clear in future manuals. Updates of the firmware used in the speakers is made by connecting the speakers to the internet and Noble & Noble will do the rest – this will be automatic and free for all time say the company. To be clear, there is a USB input but this is not for audio and is used only for the manufacturer to configure the system.

Inside the speakers you have a pair of digital amplifiers and a digital processing system - so



this is essentially a standalone system with you only needing to add a suitable source. The processor can handle files of up to 24/192 via the AES and S/PDIF inputs and 24/96 via the optical input. Again, it is worth mentioning the lack of USB input for audio. The sample rates should be sufficient for most but some may say that having provision for DSD would have been useful – personally, I rarely use DSD files and so this is of no issue whatsoever.

Along with the speakers comes a little remote that is small and plasticky but perfectly adequate. This remote will select the function (source), adjust volume, and also has a mute button. I do think that a better and more weighty remote would perhaps add a little to the overall feel of using the system as it is pretty much your only connection with the speakers. I spoke to Noble & Noble and they are working on a better remote.

That's it. Unboxing and set up instructions are for the main part clear and simple to follow with only that second lower bolt causing any point of confusion during the process. I chose to set the speakers up using our Raspberry Pi streamer running Roipee and using a USB to S/PDIF converter for the main part plus a Leema CD player via S/PDIF and also via analogue outputs. This simple set-up covers pretty much all bases I see that the Noble & Noble system will be used in other than for use in a simple two-channel Audio Visual configuration where you can connect the speakers to a television or media player. The speakers were set up well out into the room and with a metre or so either side of them in a well-damped and acoustically treated space.

SOUND

The review wouldn't be complete without me cranking the system up and checking the amount of vibration generated by the cabinets when played at volume. The results of the vibrometer test are impressive but the cabinets are not absolutely inert at volume. I used a simple android app on the phone and got a measurement of 0.3. To put this into context tapping gently on the arm of the chair when the phone was on it had the app jump to above one. A hefty thump with my fist had it jump to

six. Playing the same tune at similar volumes on the fabulous Raidho TD 2.2 that are in for review (read it [here](#)) had them show a maximum of 0.6. So the system works as intended at reducing vibration but it doesn't completely cut out vibrations.

From the off, it was clear that these were sonically a very good loudspeaker, but I let them play a good few days without really listening to them with a critical ear. Noble & Noble don't actually suggest a run in period but it is something that all speakers get when they come here unless the manufacturer specifically says they have x number of hours on them – it's time-consuming and slows down the process but I believe it is essential – YMMV.

Bad Brains was first off the shelf in the form of I Against I and the classic track Sacred Love. I don't know why but I was expecting these to be polite and lacking excitement. However, what I'm hearing is tight and dynamic, clean and relatively uncoloured. Indeed, there's not that level of excitement and edge-of-your-seat experience as with the Avantgarde Duos, but the Noble & Noble do manage to convey enough of the albums vim and vigour to have me listening to it all the way through. The feeling is a small-scale but correct portrayal of the mix. There isn't the same "pluck the instruments from the mix" separation that I experienced with the Raidhos, and nor do these have the same three-dimensionality in their presentation, but there is separation and there is dimensionality to the soundscape, only it's a little more between the speakers and up and down rather than all-enveloping and out into the room.

Keeping with the rock theme I pop on AC/DCs Back In Black and the excellent You Shook Me All Night Long (and at volume) things really did pick up, and I think this is down to the better production on this album than the former record. Bass guitar was really good and easy to follow. That same bass guitar didn't have the same depth that I'm used to with the Avantgardes but it was very easy to follow amongst everything else that is going on in the track. The kick drum is also easy to pick out of the mix and there is an overall tightness to the way the track sounds. Vocals are delivered really well and Brian Johnson's inflections are clear to hear. I

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want to say that these speakers have a dry sound and in many ways, I'm sure that this is what the folk behind them were looking for when they designed them - dry and without colourations. Often when I listen to speakers I think if I'd be happy to have them in front of me in a studio and I reckon these speakers fall into that category – they do have that monitor-type sound that I refer to a fair old bit. Some may say that monitors don't belong in the home – I disagree but realise that they won't suit some folk.

As I'm writing up my notes I've got Bush's Sixteen Playing in the background and realise I've played a whole lot of rock music on these. Glycerine's distorted but simple guitar sounds like it's coming through a small amp that's been close mic'd (I have no idea if it has or not) and really overdriven. Bass comes in at a minute eighteen and it's deep and low and manages to stand apart in the mix. Everything is there with this tune and there's really nothing to moan about and I think that these will suit a person who is simply looking for an accurate portrayal of the music – I suppose that there is the argument that that is exactly the essence of what HiFi should be about. Personally, I found myself not getting as engrossed in the music as I do with our Avantgardes, but there is no denying that what these speakers strong points are is more to do with what they don't do rather than what they do do – that's a backhanded way of saying that they are actually very accomplished and accurate. Certainly, the 7th side and the company's striving to reduce distortion and colouration has worked well and we have a very clean sounding pair of speakers. That cleanliness is apparent across the frequencies but is most apparent on bass where it starts and stops on a penny. No, you don't have the level of bass from bigger speakers but I'm not sure I'm missing that and I feel that what is there is sufficiently strong to keep me happy. In fact, I'd go as far as to say that the tight, fast and precise bass these speakers do is one of their strong points. Take for example Rebolledo's Momento Drive album and you have the pared-down and sparse production presented beautifully and accurately and with poise and balance. Do I want to get up and dance? Not really. There's not that level of excitement and pizzazz here. Do I want to sit and listen? Yes, I find I fall into the

mix and the music without really noticing that that is what is happening. This is a good thing and something I found throughout my time with these speakers - I just listened and listened to full albums without really wanting to over-analyse the music I was listening to. However, if that is what you want to do these speakers do allow for that.

I always write my notes up in one go and as I'm reading this review back it may come across that I didn't gel with the Noble & Noble offering, but the truth of the matter is these are certainly a speaker I could live with and enjoy very much.

CONCLUSION

These are a well balanced and very accurate sounding loudspeaker that I can't help but highly recommend. They excel in the bass department, which for such a small speaker is pretty incredible – it goes just about low enough to satisfy but it's tightness and dryness that are the bass' key characteristics.

It would be very easy to dismiss this kind of speaker system as a "lifestyle product" given its built-in amps, and digital processing but I think that is selling them short a bit. Yes, they look good, but they also sound pretty damned good too.

On the looks front I find the number of wires hanging out them a bit of a pain when everything is connected and others will find this more annoying than I – perhaps incorporating a wireless streamer into the box and making the connection between the speakers wireless would be a good thing – I have no idea if this is feasible or even desirable to the many, but it would certainly make them less cable heavy.

Personally, I found the speakers a little too lacking in excitement for my own liking but then I fully admit to enjoying a degree of embellishment to a speaker's sound signature. That is not to say that they are not very good – they are. They don't throw a huge soundstage and don't disappear but they do layer elements of the mix very well.

Overall these are a very accomplished loudspeaker that deliver on their promise of an

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uncoloured and low distortion sound. They will appeal to many and particularly if you enjoy a dry and accurate presentation.

Inputs are adequate for the many but I would have liked to have had the provision for USB input.

To my mind, these are a speaker for the music lover as opposed to the HiFi nerd! They are easy to get on with and to listen to. You find yourself just listening to the music and not the speakers and that is surely a good thing

AT A GLANCE

Build Quality:

Clever packaging and well put together. They work straight out of the box with only minimal effort to set them up. The manual is perfectly good and explains things very well. The all in one box design will split opinion depending on what folk want from their HiFi. These are a plug, play and forget solution if only they had less wireage.

Sound Quality:

Dry and uncoloured presentation that some will love, whilst others will find them lacking in excitement. Balanced throughout the frequency spectrum they are a great all-round speaker that play everything well. Bass is a standout but doesn't dominate. High frequencies are smooth and without tizz. Mids, where the business happens, are in keeping with the rest of the speaker's output and are, like everything here, dry and unembellished.

Value For Money:

Amps, DAC and a complex speaker design for less than twenty grand is a reasonable deal in my book. They are, in my opinion, a speaker that people will buy and not look to upgrade for a very long time

We Loved:

A balanced and beguiling sound presentation

Good looking

Well connected

Decent enough price

Tight and uncoloured presentation, particularly in the bass

We Didn't Love So Much:

A bit dry for my taste

Too many cables when fully connected

I want a better remote for the best part of 20K

Elevator Pitch Review: Noble & Noble's all in one speaker (just add source) offer an upmarket and high-class sound that will appeal to those who just want to enjoy the music they love without needing to fanny about with loads of boxes, though there's a good few cables on the go. The clever design and 7th side concept sounds gimmicky, but it works in achieving what it sets out to do, and this is reflected in the clean and uncoloured presentation across the sound spectrum. Not stupidly priced given where they are pitched in the market.

Price: € 19,889



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AIRPULSE A100 ACTIVE SPEAKER SYSTEM

Following the release of the Airpulse A200 and A300 speakers (which we reviewed a couple of years ago), the all-new Airpulse A100 small bookshelf speaker with a 5" woofer joins Airpulse's family of active loudspeakers. Linette Smith has a listen.



Linette Smith

DESIGN AND CONSTRUCTION

The Airpulse A100 has a lovely piano lacquer appearance, our review pair comes in an attractive lipstick red. The brand says that the A100 inherits the appearance and sound characters of their flagship model 7001 near-field monitor speakers designed by Phil Jones, the founder of the British loudspeaker brand, Acoustic Energy.

The A100 features the same XMOS core as its bigger brother A300 and continues to use Airpulse's horn-loaded aluminium ribbon tweeter and a proprietarily-designed 5" aluminium chassis low-distortion bass and mid-range driver. They are housed in an 18-mm thick high-strength MDF cabinet. The oval vent to the rear has been designed to minimise wind noise.

The analogue front end uses specially configured components from Texas Instrument. The chipset works at 96 KHz to offer a frequency response up to 40 KHz. To avoid cross-talk between the two analogue ports, A100 uses a relay instead of a semiconductor switch. The SPDIF receiver is the PCM9211 also from Texas Instrument, which supports an input sample rate up to 216 KHz. The Bluetooth audio receiver is built on Qualcomm's Bluetooth chipset, which supports APT-X decoding.

Internal cabling in the Airpulse A100 is by the high-end American brand, Transparent. The active speaker has a high efficiency Class D amplifier with digital signal processing (DSP) system, powered by an efficient power supply. The system in the A100 supports

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multiple inputs, including Bluetooth, AUX, PC, USB and fibre optic. It supports Hi-Res high-quality audio playback and has obtained a Hi-Res official certification. Bass, treble and volume controls are located on the back panel and the A100 come with a remote control too, which is at the nicer end of mini plastic remote quality. A subwoofer can also be connected if required.

MID-WOOFER DESIGN

The Proprietary Aluminium Alloy Cone (PAAC) of the mid-woofer was designed after an in-depth analysis of all types of cone geometry and materials using a Klippel Laser Doppler Interferometer. The 35mm diameter voice coil is unusually larger than many loudspeakers of this size, it was chosen as it runs at a cooler operating temperature. The cooler running temperature of the voice coil also has the benefit of a more reliable loudspeaker since a cooler voice coil means much less chance of speaker failure. Instead of using round copper wire in the voice coil, the Airpulse uses a single layer edge-wound copper-clad aluminium ribbon. The mid-woofer features an under-hung high power neodymium motor to provide a high magnetic flux to cover the whole voice coil of the loudspeaker. The A100 woofer uses a hyper-rigid cast-magnesium alloy frame. Its rigidity is designed to reduce speaker colouration, and its material helps to dissipate heat quickly and efficiently from the voice coil.

AMPLIFICATION

The power amplification of the Airpulse A100 is built with 2 pieces of TAS5754 Class-D amplifier from Texas Instruments, which combine high input sample rate support and high output PWM carrier frequency. The input sample rate is up to 192 KHz and the amplifier's 768 KHz output PWM carrier frequency is twice the 384 KHz of a traditional Class-D amplifier. One TAS5754 is connected in bridge mode for the left and right channel woofer and the other amp is connected in bridge mode for the left and right channel ribbon tweeters.

The Airpulse A100 come with a selection of cables, the remote, instructions etc and as a nice touch, a pair of white gloves and a cleaning

cloth. Also included are a pair of high-density foam 'wedge' stands - these would be very useful if using the speakers on a desk so they fire up towards ear level.

SETTING UP

This was nice and simple, I popped the Airpulse A100 in the same position as the Electrocompaniet Tana 2 system that I reviewed last, on an IKEA unit that houses records in our main listening room and divides it from our living space. It was just a simple matter of plugging in the 'master' speaker to the mains and connecting the two speakers with the supplied cable, which then tucked away out of view. All in all, the speakers looked really cool and made a good visual statement in their glossy red finish.

SOUND QUALITY

I started in Bluetooth mode and went straight in with Amazon Music on my phone.

First up was Disclosure's Settle. This deep house album has a laid back, late at night feel to it but with a good bass thump, and I was immediately impressed by the playback from the A100s. The bass had a nice tight quality and I adjusted it slightly with the controls on the rear of the speaker to give me the right level. 'White Noise' showed a great balance between the vocal and the driving bass and 'Stimulation' was danceable and funky.

The clarity of the high frequencies came across well on the Pet Shop Boys 'Always On My Mind (2003 remix)' with the sharp synths sounding just right. I then let Amazon Music go with a 90's Dance Mix featuring tunes like DJ Jean 'The Launch', Stardust 'Music Sounds Better With You' and Robert Miles 'Children'. I was impressed with the sound quality, not really a 'High-End HiFi' sound but much, much better than one would expect from Bluetooth speakers.

However, I quickly got a bit bored with the free Amazon music service and their 'you have reached your skip limit', so I decided Roon would be a better option.

'But these speakers don't have a built-in

streamer and are not Roon Ready', yes, I hear you. But rather than lug the speakers upstairs to pop them in the second system (running them off the very high-end system would not really have been a fair comparison) I do something that I wouldn't normally do and add the little PolyVection DAC 32 that we have just reviewed, switch to the AUX input on the A100set voila, the speakers are instantly Roonified

I'm still feeling a dance vibe so start with Freestylers 'Raw As Fuck' followed by Dizzee Rascal 'Bonkers'. There is plenty of bass here and no need for a sub to compliment the sound. The tops and mids have clarity with a warmth to the midrange that is very enjoyable. This is evident in my next musical choice as I sample some female vocals. Greentea Peng's Man Made has a wonderfully laid back but street feel to it, she describes her music as 'Psychedelic R&B' and it's a perfect summer album, whether your summer is baking hot or on rain-soaked city streets. She has a gorgeous voice which comes across really well on the Airpulse A100s. The mark of good HiFi is that you can push it loud, but you don't have to. The Airpulse A100 are equally happy cranked up loud or at more conversational/work levels.

As this kind of speaker lends itself to being multi-use I then moved them into the TV lounge and popped them onto our Solidsteel SS6 tripod stands, which they looked perfectly at home on. Placed either side of the TV I connected them with an optical cable and they were immediately a hit. Great for standard TV with voices sounding very natural and no syncing issues. I had them in place for a couple of films too. Interstellar came across with a wonderfully full soundtrack and Inception was also a pleasure to watch with a real cinematic feel to it. We usually use the Acoustic Energy Aego 2.1 small speakers and sub but the Airpulse A100 without a sub did home cinema as well as you could expect from using a stereo setup. The tone controls were perfect allowing you to give that bit of extra bass that is needed for the cinematic experience.

While I had the Airpulse A100s on the Solidsteel stands I switched back to some more music. Dipping into some jazz the quality of the mid-range really became apparent as did the sur-

prisingly wide soundstage.

Duke Ellington and Louis Armstrong 'Duke's Place' came with a lovely, honeyed mid-tone of the trumpet, deep double bass and lively piano. It had that fantastic 'skipping along click your fingers' jazz sound and a fantastic placement of the different instruments, you really could Close your eyes and hear exactly where all the musicians were.

Daft Punk Random Access Memories, of course, came out to test these little speakers. Biiiiiigggg sound from the little Airpulse A100s which didn't disappoint. They really sing on a pair of stands with proper placement in a fairly small room. The disco bass on 'Giorgio' was all there and the ultimate test of 'Contact' came over as well defined with balance between the hi-hat and the deep symphony of bass that builds to a crescendo. They coped remarkably well, obviously not the best I have ever heard this tune as I have listened to it, both in our listening rooms and at shows, on many high-end systems and components, but they really didn't let their side down.

CONCLUSION

The Airpulse A100 are much more than a 'pair of Bluetooth speakers'. They will work well on your desktop for you to play tunes via Bluetooth from your phone or tablet, but they are equally at home in a HiFi system. Simply pairing them with a streaming DAC opens up a whole world of HiFi potential without breaking the bank, and very enjoyable sound quality.

I would definitely recommend them to someone starting off on a HiFi journey, they would be perfect for teenagers or anyone wanting an affordable and listenable no-fuss system that will grow with you and your listening preferences.

AT A GLANCE

Build Quality:

Solid and well made, look and feel good quality. Good range of accessories in the box.

Sound Quality:

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A full and detailed sound. They are not the last word in Hi-Fidelity but you wouldn't expect them to be, neither do they come up lacking. Bass and treble controls add the ability to tailor the sound to individual tastes.

Value For Money:

A ready to go HiFi in a box for under £700, good value as not just a one-trick pony, they are easily adapted to different situations and uses, whether on the desktop, with the TV or stand mounted.

We Loved:

Versatility and build quality along with great for the money sound quality.

We Didn't Love So Much:

Bass and treble adjustments have to be done around the back of the speaker without the option to do so via the remote, which is a bit

fiddley if you have them against a wall.

Price: £659 or \$799

Elevator Pitch Review: An almost perfect 'Hi-Fi-in-a-box' starter system, these speakers are adaptable enough to start you on your musical journey, growing with you from Bluetooth off your phone to adding streaming capabilities and getting you into "proper HiFi". Very good sound for money ratio.



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MITCHELL ACOUSTICS USTREAM ONE SPEAKERS

Mitchell Acoustics uStream One is made by Mitchell Acoustics who are headed up by Paul Mitchell, a professional musician and previously known as part of the management team of the British HiFi brand Mitchell & Johnson.



Linette Smith

The Mitchell Acoustics uStream One system consists of two bookshelf or stand-mounted active speakers which feature True Wireless Stereo (TWS) Bluetooth 5.0 technology to connect to each other with no cable between the two. They come with the promise of being easy to set up and use. The pair of speakers cost £499 and come with remote, power cables and power adapters for each speaker, RCA cable and 3.5mm jack cable.

The uStream One also work with Amazon Alexa/Google Assistant, however as I refuse to partake of such witchcraft, I didn't test this option.

DESIGN AND CONSTRUCTION

The pair that we had sent for review arrived well packaged. They have a good weight to

them and feel solid. The finish is a lovely high gloss white and this combined with the rounded corners gives the speakers an understated modern look. The remote is a standard black plastic type and the soft-touch controls on top of the speakers fit flush to the cabinet surface without interfering with their design.

The glossy white finish is complemented by the copper colour of the bass driver, which sports the Mitchell Acoustics logo. The uStream One wireless speaker system features custom-designed Clarit (pronounced the same as 'clarity') drive units. The 4" Clarit designed woofer has a magnesium alloy diaphragm, metal alloy voicecoil and spider, and a 566g front and back neodymium magnet set. The same bespoke technology drives the 2" tweeters. The amplifiers in these active speakers are

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class D from Texas Instruments. The Mitchell Acoustics uStream One are designed in Britain and manufactured in China.

GETTING CONNECTED

The Mitchell uStream One have a good choice of connection options. These include a Stereo L + R RCA connector for a line source, a Digital Optical connection, a 3.5mm Line-In connector and a USB connector. Of course, the main connection intended to be used with them is Bluetooth 5.0, which enables pairing with your phone to stream your chosen music provider, YouTube music, or internet radio.

SETTING UP

The uStream One speakers are identical, there is no physical master and slave or left and right designation, so this makes things really easy. I just put them where I wanted them and plugged in the power cable for each, switched on around the back, and then pressed the power button on the top. They then talk to you to tell you that they are on and go to Bluetooth by default. By pressing the TWS (True Wireless Stereo) button on one speaker, it then connects to the other, telling you that that is what is going on. Once you have pressed the TWS button on one speaker, that automatically becomes the master, so if you are using AUX, Line-in or Optical connection, that must be to that speaker. USB connection does not work with the TWS connection and so sound will just come from the speaker that is connected by USB.

Mitchell Acoustics say that the uStream One work best on speaker stands, however, they will work happily on a bookshelf or any suitable furniture. Being designed for the smaller modern home, I started them off placed either side of the TV, so that they could multi-task and be used both for music and to enhance the TV sound.

Our usual TV speakers are the Acoustic Energy Aego 3 2.1 system, which features two dinky satellite speakers on either side of the TV and a neat sub that sits on the unit under the TV. It is quite a budget option at £199 but serves its purpose very well. This is wired in with an optical cable, so it made sense to put the (some-

what larger but by no means obtrusive) Mitchell speakers in place of the Aego 3 satellites and plugged in with the same optical cable from the TV, (the uStream One doesn't come with an optical cable).

This immediately caused an issue, there was a problem with speech and lips not syncing, which we didn't have with the Aego 3. Not an insurmountable problem though, the connection options allowed me to use the headphone out from the TV into the 3.5mm stereo jack into the speakers and the lip-sync issue was solved.

SOUND QUALITY

I did think that these would be a great all-rounder of an active loudspeaker but they just didn't seem to work for me for use with the TV. With optical connection there was the syncing issue, which wasn't there with the 3.5mm jack input, however, neither really delivered on sound with TV shows or movies, with any voices coming over as thin and too high pitched, a bit like the little people in the TV had been on the helium. Perhaps this could be helped by using one of the new, tiny, micro subwoofers that are being seen on the market. This could come as an add-on purchase from Mitchell themselves and would probably sell well as a complete system for AV use. I did try playing around with the different EQ settings but still couldn't get a TV sound that I really enjoyed.

STREAMING TUNES

With the speakers in the same position, either side of the TV, I switched to Roon on my Amazon Fire 8 HD via Bluetooth connection to the uStream One. I also used the Music EQ setting on the speakers. It is worth pointing out at this juncture that the TV and our usual TV speakers sit on a low IKEA unit rather than 'proper' HiFi furniture, but again, this is likely to be a situation that the speakers will be used in the real world. I kicked off with the Daft Punk classic album 'Alive 1997', which was recorded live at a gig of theirs and perfectly captures the feel of the gig. It is a real favourite of ours and kicks some serious bass right from the start with 'Da Funk'. Again, something seemed to be lacking and I just wasn't getting the bass I would expect from the French robots. I moved on to Primal

Scream's 'Screamadelica', which is another favourite album with the first track 'Movin on up' giving a speaker a good all-over workout in vocal, guitar, piano and bass. The bass was still quite undefined but tops and mids were overall pretty good, crisp and clean.

On their website, Mitchell are keen to point out that the most popular way that the world streams music is via YouTube, which can be streamed by Bluetooth, so it seemed sensible to switch to YouTube for the next part of the review. YouTube isn't really something I would usually use for listening to music but there is a never-ending supply of tunes, particularly a lot of live gigs and DJ sets. I fired up my Huawei laptop and connected, once again really easily, to the uStream One via Bluetooth, and started exploring. First up was a bit of Avicii with one of his biggest DJ sets live from Portugal and then the grandmaster himself, Carl Cox, at the Space 2016 Closing Party, a nine-hour plus set. I really wasn't feeling the atmosphere so I decided to move the speakers from their spot on the IKEA unit and get them onto some proper stands.

STAND TO ATTENTION

Putting them onto our Solidsteel loudspeaker stands I noticed an immediate improvement in sound, proof, if anyone needs it, that what you plonk your speakers on does make a difference. Things immediately tightened up and there was much more in the bass department, which was obviously needed for listening to Mr Cox in Ibiza.

Tops and mids were even more improved in their clarity and whilst not quite a 'close your eyes and you could be there' the sound was much more enjoyable and engaging.

As YouTube is not my usual music source I swapped over to Amazon Music from the Fire tablet, another popular source of streamed music. 'Insomnia' from Faithless is a classic that doesn't date. The uStream One system obviously likes being on proper speaker stands as I felt that I wasn't missing anything, the tune came over as expansive and atmospheric.

'Rez' by Underworld is a tune with a lot going on

that can sound a bit messy but I was impressed with the definition from these little speakers. They also coped well with 'Energy Flash' from Joey Beltram, giving that deep and dark techno ambience.

A dip into the world of Amazon Music had me listening to a selection of 70s tunes including 'Mr Blue Sky' by ELO, the Eagles 'Hotel California' and Queen's 'Bohemian Rhapsody'. Overall it was very enjoyable and the Mitchell brothers seemed to work well with the different genres with music being very listenable, fun and much more engaging than using a single Bluetooth speaker. I also switched back to Roon and Qobuz to the tracks that I had tried whilst the speakers were on the IKEA unit and the sound was much improved from previously.

Sound-wise overall I would say that imaging is good with instruments well placed. Soundstage is not massively wide but the uStream One manages to convey a bigger sound than their size would make you think possible. Bass is a little lacking, but then I am a bass junky, again a little compact sub option would work, however for small speakers they are decent in the bass department, and once on stands, it is tight and controlled. Tops and mids are clear and detailed but with no harsh brightness.

CONCLUSION

The Mitchell Acoustics uStream One are a stylish looking and compact wireless speaker system that have a nice quality weight to them. They perform well for music, not so great as TV satellite speakers, and really do need to be on proper speaker stands to get the best from them - which will of course add to their cost.

They are very easy to use and would suit people that prefer to source their music from a phone, tablet or laptop using Bluetooth to stream but that want a two-speaker stereo set up rather than the ubiquitous single Bluetooth speaker. They would make a nice simple system for a small room or bedroom system, perhaps a first system for a teenager, with the option to add a CD player or streamer. A matching compact micro-subwoofer would be a great addition to have available with them.





I have given these a three heart rating but I would say they are actually a three and a half, almost a four. I think the market that they are aimed at would want more versatility from them and would want them to work well as TV satellite speakers as well as for music for the price that they are. They also really do need reasonably good stands to get the most from them.

AT A GLANCE

Build Quality:

Great finish, they look and feel high quality. The remote is a bit cheap and plasticky.

Sound Quality:

Not great using with TV. Much better for music with a well defined and engaging sound and greatly improved when using dedicated loud-speaker stands.

Value For Money:

At just shy of 500 quid these are competing with a lot of Bluetooth speakers but they are well made and do the job better than a single speaker for the music listening experience. For the price though I would expect them to also work well as TV satellite speakers.

We Loved:

High-quality finish and they look stylish. Good build quality. Easy to set up. Easy to use.

We Didn't Love So Much:

Using as satellite speakers for the TV they came over as a little 'tinny' with voices sounding thin. EQ settings: didn't really find one to suit general TV, stick to using them for music.

Price: £499

Elevator Pitch Review: A well built, easy to use compact speaker system for small room music listening, designed for people that like to stream using Bluetooth but want a two-speaker stereo setup.





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SYNTHESIS A50 TAURUS AMPLIFIER

The Synthesis A50 Integrated Amplifier with DAC costs £6199 in the UK and is now distributed by Henley Audio. It's a behemoth of an integrated amp with plenty of inputs, a remote and an onboard DAC. Stuart Smith lifts it into place and takes a listen.



Stuart Smith

Synthesis is an Italian brand founded in 1992 by Luigi Lorenzon with all their amps being handmade in the city of Morrovalle. The company's history goes back further than that, however, with Luigi's father having founded a company called FASEL in 1961. FASEL made output transformers, power transformers, chokes, and inductors for instruments. With this kind of background in the family, it would seem somewhat a logical step for Luigi to have gone into the production of valve amplification for the home market. Janine Elliot took a listen to the company's Roma 98 DC monoblocs last Autumn and liked them a lot – you can read the full review of the Roma 98 DC monoblocs [here](#).

CONSTRUCTION, FEATURES & SPECS

First of all, and let's not mince

our words here, the Taurus is a beast of an amp in both size and weight, though it fitted on our Soundsteel amp stand with no problems at all. Dimensions are 42 x 45 x 26 cm and it weighs 35Kg. To support this heft there are four CNC machined aluminium feet that have a natural rubber insert whose depth and form have been calculated to minimise vibrations.

The amp is really well finished and looks very nice, though I'm some won't like the front panel with its massive volume 'knob' and silver trim – personally, I think it looks rather splendid and certainly a standout from the plethora of black boxes that have been doing the rounds for years. The volume knob is actually pretty cool, sits flush to the casework, and has an indent for your finger – nice touch.



The case itself is very well finished and along the front has a series of six input LEDs. However, the red LED's are also selection buttons which I really liked, though the CNC machined remote is an absolute delight to use and does everything you need it to – standby, volume, mute and six buttons for selecting the input channel.

WELL CONNECTED

It's around the back of the amp that things get interesting, and, as well as a pair of speaker binding posts (yes, all usual suspects accommodated) and the five RCA inputs for line-level sources, you also get inputs for USB and S/PDIF. The latter is a pretty cool thing to have on an amplifier like this I reckon. The DAC is a 24Bit 192KHz Wolfson affair and will decode PCM 32-192KHz/16-24bit via the S/PDIF input or 16Bit/48KHz via the USB input. I really liked this feature as it meant I didn't need to fanny about with a separate DAC and could simply add a line level source, or, as I did most of the time, a digital source like the Melco or Auralic units we have. Obviously, you can connect anything with an RCA S/PDIF output too and I did try this with our little Leema CD player with great results. Essentially, you could have a fully functioning streaming HiFi by adding the streamer/source of your choice, and a pair of speakers.

The amp has a cover to keep fingers and pets away from the valves but personally, I think it's a crime to hide them away. Tubes used in the Taurus are 2 x KT88s (6550) in the power stage, a 12BH7 in the driver, and a 12AX7 (ECC83) in the input stage – this is per channel. One point here, one of the 12AX7s blew pretty much as soon as I turned on the amp. I contacted Ludovica at Synthesis and the next day but one I had a replacement - I like this kind of service! All the tubes utilise DC stabilised heater circuits to reduce hum, and through all the speakers I tried the amp with, I found it to be dead quiet. The ceramic, gold plated ceramic valve sockets were nice and tight when putting in the new valves, and this inspired confidence.

The output from the amp is a very healthy 50 Watts a channel in an ultra-linear, push-pull configuration and so all but the most pow-

er-hungry speakers will be absolutely fine. The Taurus, like the A100 Titan that outputs 100W a channel using 4 KT66 power tubes, features newly designed output transformers that use Hi-Grade Iron-Silicon, which Synthesis says improves "frequency reproduction and width". Both power supply and the output transformers are held in a rigid H structure which the company says keeps them safe from unwanted vibrations that may otherwise find their way to the tubes and affect the sonic performance of the amplifier.

On start-up, there's a button on the right of the front panel for this or you can click the remote, the amp goes through a warm-up cycle that is over when the red buttons on the front stop flashing.

THE SOUND

I listened to the A50 Taurus using predominantly a Melco Library via USB and a Leema CD player via both S/PDIF outputs and line output. Loudspeakers were in the main the Audiovector R3 Arreté but also the old Celestion SL6S which are famously a difficult loudspeaker to make sing.

RESPECT MY AUTHORITY

From the off, it was clear that the A50 has a certain authority and I was particularly drawn to the way that it handled bass frequencies on the new Steven Wilson album (great record by the way). It certainly seemed that the amp was in control here without adding any bloom or overhang of its own. Actually, it's pretty difficult to describe the feeling I'm getting when listening to this combo with regards to the bass – it's sort of like having a car that you know can really let go when you hammer it, but still feels perfectly comfortable and even-tempered at lower volumes. A feeling that the amp can give a lot more power, I suppose. Power is of course nothing without control, and there's never anything but the feeling of the A50 being in charge of the bass frequencies. Even at these relatively low volumes, the bass frequencies have great body and texture. Actually, it seems like the amp is playing a lot louder than it is, and by this I'm suggesting that there doesn't seem to be anything missing from the recording as a whole



- I'm getting the whole picture. Actually, and I've found this throughout my time with the A50 Taurus, the whole listening experience has been nothing but a joy.

From a soundstage perspective, the amp allows the speakers to do their job properly and I find myself enjoying the soundscape rather than trying to over-analyse it. This is a good thing in that the amp settles you into a comfortable place immediately (well, after a bit of a warm-up period) with regards to the way it delivers music. And I suppose that's the thing here – the A50 allows the music to flow and without it feeling constrained in any way. Does that sound a bit like the A50 is a bit "pipe and slippers" and soft focus? Well it isn't, and the amp is as insightful as it is comfortable to listen to. There's just an even-handedness to the presentation that relaxes you into the music you are listening to. Yes, I can hear little details in the background and, should I feel the need to, I can focus in on these and dissect them, but the truth is I don't feel the need to (though that would make for a boring review) and just want to listen to my tunes. One of the things that helps here with the soundstage is the apparent absolute silence of the amplifier – the noise floor is very low and so you hear more accurately the music. Stereo imaging is very stable and perfectly presented using the R3s.

An amp really shouldn't add anything of its own make-up and the A50 sort of doesn't, though I want to use the word warm...but that's not really the right word. Warm would suggest a woolly and rolled-off presentation that is perhaps smeared at the edges, but it's not. I suppose it's perhaps better to describe what the A50 isn't – it isn't harsh, hard, or etched in its presentation. It is even-handed and has a delicateness of touch that just draws you into the tunes you are listening to. Vocals are silky smooth and then Fish's Garden of Remembrance comes on via Roon as I'm scribbling down my notes. It's not a record I know at all, but the vocal is sublimely projected into the room – well forward, and full of richness and emotionally connecting. I bat on plenty about that emotional connection thing and so won't bore you with how important I find it again!

Electronic music is equally well presented and

on Koenig Cylinders' 99.9 you really do get the full spectrum of sounds presented and without the amp adding very much at all. It's all well and good an amp pandering to folk who listen to music to make their HiFi's sound great, that's pretty easy, but what a good amp should do in my opinion is play everything well and without adding too much of itself to the final sound coming out the speaker, and the A50 does this. On the 99.9 track you can delineate all the individual sounds – the hats are sharp as they should be and the kick has power and texture. This music demands to be played loud and so the volume goes up and here is where the amp really does deliver. It's not that the amp is doing anything different to what it was doing when playing at moderate volumes- there's just more impact and volume. There is still the same feeling that the amp is barely breaking a sweat and that same feeling of control. There's also that same detail to individual sounds if you do want to pull the track apart. This track gets a bit mental towards the last quarter of it but the A50 doesn't get flustered at all! From a volume perspective, I'm able to listen LOUD without feeling overwhelmed or getting that cringing feeling (you'll know what I'm on about) when something just feels pushed too far and begins to break up.

A key feature of the character of the A50 is just how dynamic it is and this was evident whatever I music I played – the Sabres Of Paradise Mix of Chemical Brothers' Leave Home's kick is tremendously portrayed. A sound starts and it's there in front of you and gone thereafter if that's what the mix does. However, effects like decay and reverbs are properly represented and can, again if the mix demands, hang in the mix. Intimate recordings Basement Jaxx' Romeo (Acoustic Version) gives a great sense of the recording.

One of the major features of this amp is the onboard DAC and it's certainly no shirker. Is it as good as our standalone LAB12 dac1 in our second system or the Leema Pulse DAC in our main system? Well, no it's not. However, unless you have better DACs there to switch in and out as we do then you really aren't going to think the DAC on the A50 is anything but a fabulous addition to an already very good amplifier. I have no complaints about it all.

REVIEW



REVIEW

One small niggle is that the amp picks up that annoying noise you get from time to time when a mobile phone is in very close proximity to it – you know the noise I’m on about. It only happened maybe three or four times whilst I was listening to the amp in our system, but it is worth pointing out never-the-less.

So, the A50 is comfortable with the relatively easy load and temperament of the Audiovector R3 Arreté but the point of reviewing something is to see if you can push it beyond what it is comfortable with and give it a bit of a challenge – within the constraints of what it can feasibly cope with. And so without further ado, we wire up the Celestion SL6S loudspeakers. These are a great loudspeaker from the 80s but are notoriously a pain in the arse to get singing, requiring, as they do, a fair bit of oomph up ‘em. This should be interesting!

I think it’s fair enough to use similar kinds of tracks as I used through the Audiovectors, but I’m not going to go into detail about each track and will talk in broader terms. First of all it’s clear that these speakers do prefer a bit more of a click on the volume button on the remote than the R3s but they do seem to get on very well with the A50. Overall I think they prefer the Class A power of our Krell but the A50 really did energise them very well and to a good volume.

CONCLUSION

First of all, let me say that the A50 is a terrific match for the Audiovector R3s – the amp really did bring them on song and if you are an owner of these particular speakers or the R1s we recently reviewed (yes I did sneak a quick listen with the A5 powering them), then give this amp at least some consideration.

With the above said, the A50 also coped very well with the more difficult challenges I threw at it – the SL6S, for instance.

In more general terms the A50 represents all that is good in high-quality, high-powered valve amplification. You have that required grunt and headroom that decent power delivery gives you, but you also have an almost indefinable textural quality to the music that is presented, particularly in the mid-band.

The noise floor on the amp is incredibly low and there always seems to be a little more to give in terms of power. I pushed the amp hard and never felt it was running out of puff.

The A50 digs down low and deep but doesn’t overblow the bass, tops are an easy listen and not piercingly sharp (though neither are they rolled off) and mids, particularly vocals that are mixed forward, are really wonderfully projected into the room.

The A50 Taurus looks good, is well built, and has a great remote control plus there is the addition of the DAC that just adds to the value of the package.

Perhaps a headphone amplifier would have been a nice inclusion, but that’s just being picky!

AT A GLANCE

Build Quality:

Well finished and good looking, though certainly not run of the mill. Very heavy and with a great remote that is simple but a delight to use. Overall it feels and looks more expensive than it actually is

Sound Quality:

A dynamic and yet subtle amplifier that has enough grunt to power difficult loudspeakers. Very low noise floor from which music just flows effortlessly. A real joy to have had in the system, whatever the music.

Value For Money:

It’s a beast of an amplifier that sounds great and has a perfectly good DAC onboard. Very good value.

We Loved:

Build and remote

Dynamic, detailed, and powerful sound

Subtle and engaging when needed



Price: UK £6199, EU € 6750, US \$6900

Feels like a high-end product at a mid-fi price-point

Decent enough DAC

Flexible with regards to speakers you can partner it with

We Didn't Love So Much:

Could do with a headphone amp for late-night solitary listening

Takes a little while to get on song after powering up

No onboard phono stage

Not everyone is going to like the styling

Picks up phone noise if one is very close

Elevator Pitch Review: A keenly priced amp with a perfectly good onboard DAC and with power enough to satisfy all but the most power hungry of loudspeakers. Just add speakers and a source





COPLAND CSA 150 INTEGRATED AMPLIFIER

Copland CSA 150 Integrated Amplifier is distributed in the UK by Absolute sounds and costs £4988. It's an integrated amp with an onboard DAC and a moving magnet phonostage. Stuart Smith takes it for a whirl.



Stuart Smith

Integrated amplifiers make a lot more sense than separate preamplifier and power-amplifier/s in many ways. First of all, you have everything in one neat box, there are less (potentially) expensive cables needed and you know that the pre-stage has been made with the power stage specifically in mind. However, the panacea for audiophiles the world over seems to be for separate pre and power amps – I suppose, at least in part, this is to do with lots of boxes looking more impressive on the rack, though there are other potential benefits much-touted. In recent years integrated amps have come to be, well, much more integrated and with streaming devices and the like. Today there is no reason that a good integrated can't be the heart of a very high-quality audio system for the home and without taking up acres of real estate.

Enter the Danish-made Copland CSA-150, a multi-faceted hybrid integrated costing £4988 and being what could well be described as “fully loaded” and distributed in the UK by Absolute Sounds. I'll look at the individual features of the amp in more detail but to summarise what the CSA-150 can deal with, we have a moving-magnet phonostage, an onboard DAC capable of playing high-resolution files, aptX Bluetooth connectivity (an option), tape in and outs (not so common these days as they once were) and of course the bit that makes your music come out of your speakers.

BUILD AND FEATURES

Build is fantastic and the amp looks purposeful sat on the rack, its cool and minimal brushed aluminium faceplate having a distinct retro feel about it, though it looks thor-

oughly modern at the same time – modern-retro, perhaps?

The centre of the front-plate is dominated by the circular display with LEDs around it to let you know what source is playing and whether the amp is in standby or on mode – the on light flashes for thirty seconds when the amp is first turned on and then it goes through its ‘start-up procedure’, and then there’s another twenty-second wait before the amp will make any sound.

Left of the main display you have the source selector which is pretty self-explanatory and on the right of the display you’ve got the volume knob. Both feel really nice to use if knob-twiddling is your thing. Other buttons include Tape Monitor and a standby button – both pretty self-explanatory. All the main features of the amp can be controlled by the remote that is pretty nice to use but not in the same league as the likes of Devialet, but then we’re not talking Devialet money here. There is a nice click when changing inputs and the volume is smooth as you like.

Finally, the front panel has a headphone output socket.

Far-left on the front you have a small knob that selects which digital input you are using and you can choose between Bluetooth, coaxial, optical 1, optical 2 and USB, with the relevant inputs being grouped around the back. There’s plenty of inputs here to cater for your streamer, CD player, DVD etc. However, before you can select the input on this smaller knob you need to select D on the main input selector.

The USB input will work with MAC and Linux machines without drivers, but for Windows machines you will need to download and install the ubiquitous Amanero driver on your machine. The USB input is asynchronous, has a power supply and power transformer with its own winding and will work with files up to 32-bit/384 KHz with Copland recommending you listen to files at their native resolution and not upsampled to 384KHz. It will also deal with DSD files up to DSD64/128. The internal DAC that sorts all the above out into tunes you can listen to is based on the ESS9018 chip. There’s no way to

stream directly to the Copland which I reckon would help bring this amp very close to being near-perfect, though there is the aptx Bluetooth option to ‘stream’ to.

There an onboard phonostage for moving magnet or high-output MC cartridges, and whilst most will find this perfectly adequate, I reckon the amp could well do with being able to handle the usually more expensive low-output moving coil variants. There’s no way to change settings of the phonostage and you are left with an input impedance of 47K ohms and a capacitance of 200pF. I had no issues at all with the Sumiko MM I used.

Over and above the record player inputs and the digital inputs there are three unbalanced RCA inputs and a balanced XLR input.

Should you wish you can output the pre-stage out to another amp and there’s a tape out that will record whatever is playing on the CSA-150.

Output is a healthy 2 x 145 W of Mosfet AB power into 8 and 2 x 230 W into 4 ohms with a single 6922 valves being used.

Connection to speakers is via a pair of nicely done binding posts but there’s a section of the user manual that talks about “Speaker Polarity”. In short, the absolute phase at the speaker terminals is 180 degrees with the black speaker terminal being grounded. So to get the speakers in-phase you need to connect your speaker cables red to black and black to red. I found this a bit confusing but Copland reckon this has been done because of the tube line stage and its design and that the black terminal should be recognised as the ground. There is the danger here that some may well not read the manual and connect the speakers up incorrectly.

So, on the face of it what we have here with the Copland CSA-150 is a great looking, well built integrated that covers just about all bases with regards what the average user is going to want, and at just shy of five grand it seems to offer a good deal for the money, whilst clearly exuding a goodly measure of high-endiness.

THE SOUND

REVIEW



There's no doubt that from the off this amplifier is a nice bit of kit and I first slotted it into our second system where we try to stick to under five grand a box. Truth is this is a very good and revealing system that, despite having a modest Raspberry pi as its front end (albeit feeding zeros and ones to the excellent Lab 12 dac), I absolutely adore listening to. The power amp in this system is usually the big old (but totally renovated by Krell) Krell with a LAB 12 pre1 which is, at this price point, a formidable duo. This system also gives us the opportunity to switch out various speakers easily and quickly to offer a more rounded and relevant overview of the products we get to review.

First up I connected the Copland to the DAC and had the Falcon LS3/5a Gold Label speakers wired in. These speakers have, despite my liking for wholly (apparently) inappropriate music, become a bit of a favourite and are really revealing through the mids and tops, and whilst the bass may be limited, in this room I have no desire to connect up the couple of subs we have to hand.

Streaming Cat Stevens' Teaser and the Firecat is a real pleasure with the amplifier having a deftness of touch that allows the highly distinctive vocal to shine through. There is a sweetness and slight warmth to the amp through the mids that really allow this album to come to life and engage the listener. There is speed to the acoustic instruments that makes them clean and without haze or smear. The amp is also dead quiet with music coming from a silent background which adds to the cleanliness and precision of what you are listening to.

However, switching out the Falcons for the more difficult to drive Daptique dp 77 things really come alive and I can't help to turn the volume up. The Copland powers these speakers to volumes I'd be worried about pushing the LS3/5as to, and whilst the volume is increased I'm still able to enjoy that sweet and mellifluous mid-band. Here we have a very good match between amp and speakers indeed. Very good! Occasionally I've had amps run out of steam pushing these speakers and that's why we have the Krell in place, but I'm happy to report that the Copland demonstrates no such inadequacies. I put a lot of music through the partnering

and whether it was pounding techno or more subtle classical piano, I never felt I was listening to anything but a very good system. I've sort of given my thoughts away there, haven't I! Bass heft and clout were wonderful but without taking over.

Jeff Buckley's Hallelujah sounds splendid with real presence and attack to the sharp guitar. Effects used are very apparent, and whilst the presentation is highly detailed I'm not getting the feeling that it's exaggerated for effect. In fact, this is a real goosebumps experience of a listen. As mentioned the amp is dead quiet and it's very easy to hear the tape noise on this track which adds to the ambience somehow. The vocal sounds absolutely wonderful and "there" in the room and with excellent insight into Buckley's delivery. The amp adds a slight warmth to the midband that I really enjoyed, but in the main the Copland let the LAB 12's character shine out.

Now the Copland, pi, LAB12 and Daptiques is a combo that comes in at around ten thousand of your English beer tokens and I think for that you are getting an exceptionally capable HiFi. Ordinarily, I'd always suggest spending the majority of your budget on loudspeakers, but this amp brings something to the party that just makes it a bit of a standout, though of course, we have the LAB 12 adding its little bit of magic.

Switching the reference DAC out and using the onboard DAC is as easy as you like. Plug the Pi into the back of the amp via USB, find the amp on Roon set up, click it as the source, and hey presto you have music. Drivers are needed for Windows, as I outlined previously.

Playing Hallelujah still sounds very fine indeed, though the former set up has it by a smidgin, though you are of course making a saving of the best part of three grand on the deal. There is still the clean and mellifluousness of Buckley's vocal shining through, and there is still plenty of detail to the presentation, with the former DAC really only having it on that sprinkling of magic that it brings to the sound that's hard to put a finger on. Changing the tempo up a gear and playing Underworld's Drift Episode 1 and you have that heft and weight to the delivery, but there is speed from the amp too – no

REVIEW



overblown bass and no loss of control of the speakers. On the bass front, and even with these difficult speakers in the chain, the amp doesn't skip a beat. I'd sort of liken the Copland to the Krell power amp in a lot of ways – it just gets on with the job in hand, doesn't make a fuss, and delivers music!

Thinking about it, this amp gives you real options from the off in that it has everything on board that you need for a streamlined digital system that really delivers on sonic performance. Out of the box you can add the streamer of your choice and a pair of speakers and off you go. Should you get the urge down the line you can always add a better DAC – most will not feel this need as the onboard DAC is more than adequate to my way of thinking.

But the CSA 150m is a bit more accomplished on the features front, and those looking to embrace vinyls (sic) are given the moving magnet phonostage as a plug and play option. Now here is where the Copland comes into its own and in the same breath misses a trick. Personally I pretty much exclusively use low output moving coil cartridges and have just one moving magnet cartridge in the collection to allow for reviewing phonostages fully, and of course, amps like this that don't have the provision of an MC input. Now, I say that this is missing a trick in that I reckon the amp is well good enough to handle a very decent MC vinyl front end. However, that would add to the cost, and in having a moving magnet stage that will satisfy most folk investing this kind of money the amp makes great sense – if not then you can add either an all-singing phonostage in front of the amp, or add a step-up transformer. With our Sumiko Olympia cartridge, it's a very enjoyable listen, being dynamic and quiet. But, there is a clear step up in performance when adding our reference phonostage and a good MC cartridge which sort of suggests that the pre and power stage of this amp are very, very capable. These are choices you can make and spend more on if you feel the itch down the line – the vast majority will not feel this need!

Plug in a set of headphones into the properly sized quarter-inch jack socket on the front panel and the sound through the speakers stops. I plugged in our Audeze LCD closed backs and

the amp drove them very loud indeed – to the point I had to crank back the volume knob a good few steps. Again, there are better headphone amps out there, but the folk that buy the Copland aren't going to be using headphones as their main listen, and as such the onboard offering will suffice. Actually, it's very enjoyable and it didn't feel out of company or depth with the Audeze cans.

Bluetooth is something I really just don't get, but that's more to do with me being a bit of a stuck in the mud old duffer. However, I understand it is something that young folk, and those more in tune with the modern world use a good deal and so its inclusion on the CSA-150 is sensible. The version here is the superior aPTX which is supposed to offer better sound quality over standard Bluetooth. Using it is easy enough – select D for digital on the amps selector knob, switch to BT on the amps digital selector knob, open up your phone, press Bluetooth and then “pair new device” and the phone talks to your amp in a matter of a few seconds. Sound quality is clearly inferior to the other digital inputs and to my ears by quite a margin, but then we are dealing with an inferior mode of getting the tunes to the amp in the first place. I'd be happy to use the Bluetooth input whilst pottering about or for playing playlists for a party but, and this goes for all Bluetooth, that's about it.

CONCLUSION

Here's how I see the CSA-150: Imagine you buy a “forever home” that has everything you could possibly want for you, your partner, and a couple of kids. You feel wonderfully comfortable and completely satisfied with your lot, but through life you see wages increase and fancy a bigger kitchen, though you don't actually need a bigger kitchen as the current one is perfectly good. Do you move to a new home and start afresh, or do you think that the core home you have is so wonderful already that you think that adding a nice extension will be the better option? Like the forever home, the Copland is perfectly good, but you may feel that you want to add a better phonostage, a different DAC, or a better headphone amp at some point, whilst the core of the system (the pre and amp) provide a solid foundation on which to build... should the urge take you. Personally, apart from

REVIEW

perhaps adding the SUT/MC phonostage, I wouldn't bother.

Power and an ease of delivery are the main things that I took from my time with this integrated amplifier. There is detail, control and not a little feeling that you are getting a whole lot of amplifier for your money. It is well featured and built very solidly. I'd certainly have no qualms in having this amp at the heart of one of our systems.

For those starting out on their HiFi journey, the Copland, partnered with a suitably good pair of loudspeakers, could well be an ideal starting point that you may well never feel the urge to build on, though it is by no means a drop in the ocean financially speaking.

The long and short of this amp is that it packs an awful lot into a package that could become the heart of any system. I loved it, and had it had an MC phono and perhaps onboard streaming it would have got out highest Editors Choice award.

AT A GLANCE

Build Quality:

Very nicely put together and looks seriously good on the rack. The feature set is very good with the onboard MM phonostage, DAC and Bluetooth connections over and above the usual standard fare. Remote is pretty good and proportionate with the amplifier's price.

Sound Quality:

Powerful and yet subtle and detailed when needed. Will drive difficult loads with ease.

Value For Money:

It's not cheap by any stretch of the imagination but it packs a lot into the box and offers enough by way of features for most people as it stands, safe in the knowledge that the pre and amp are good enough to warrant the addition of a better phonostage down the line.

We Loved:

Solid Build

Great looks

Well featured for most circumstances

Good headphone amp

Solid bass and very smooth and enjoyable mid-band

Upper frequencies never became over-bearing

Tape monitoring onboard

We Didn't Love So Much:

No MC cartridge provision

The speaker connections are confusing, though explained in the manual

Be nice if you could just plug the amp into the home network via RGB or even better wireless

Price: £4988

Elevator Pitch Review: A well-featured and very nicely put together amplifier that deals with digital and analogue sources with aplomb and with onboard DAC and phonostage. It sounds as solid as it looks, but also has a good deal of subtlety to its presentation. If you are looking for a one-box solution that you just need to add a source to, then you could do a lot worse than this Danish offering. The downsides are that its phonostage is MM only and there is no onboard streaming.





NAD MASTERS SERIES M33 AMPLIFIER

Costing one pound shy of £4000 the NAD Master Series M33 amp certainly looks to be very feature-rich. How does it perform? Dan Worth finds out for HiFi Pig.



Dan Worth

I must admit, when I received the M33 I was shocked at how lightweight it was in comparison to its boxed weight. After man-handling the delivered box into my listening room and beginning to unpack it, I had an instant appreciation for how substantial the packaging protecting NAD's flagship M33 Master Series actually is. In all honesty, I hadn't read up on the unit prior to receiving it - I generally don't, as I think it's best not to have any preconceived opinions of a review product.

After working my way through the packaging's multiple top flaps and removing the substantial inner carton's bullet-proofed cardboard ceiling, lifting the M33 out was a doddle. I literally straddled my legs and braced for a back-breaking removal of the M33 and almost fell backward when my expectations were greeted by

a much more modestly weighted unit. This is not down to a lack of quality materials or build quality, it's simply down to the lack of huge and unnecessary power transformers in NAD's design, which incorporates Purify Audio's 'Eigentakt' Class D amplifiers. The M33 isn't exactly light but it's deceptive in comparison to its size.

The M33 has a very distinctive front panel with a huge screen and large volume knob. Its casework design is a great match for any modern home entertainment system with its black and aluminium accents, and will look beautiful in a cabinet or next to a large tv screen.

The rear of the M33 has a wealth of inputs and has clearly been designed by a very thoughtful team of engineers to incorporate every wired and wireless connection needed

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- with 2 future proof MDC expansion card slots too.

The underside of the M33 has 4 conical feet which go to a blunted point. Thoughtful from an isolation standpoint, but I did consider potential scratches on my nice bamboo shelves. I needn't have worried, and as I dug through the individual accessory containers inside the main box I found 4 matching shoes for these spikey feet - excellent! "Going to have to be careful when lifting the chassis to pop these underneath" I said to myself. However, when I offered foot to shoe prior to install they actually magnetically attracted to each other - again, massively thoughtful!

Also included is a remote control, aerials for WiFi and Bluetooth AptX HD, ethernet cable, power cable, and literature.

OVERVIEW OF NAD's M33 MASTER SERIES

There's a lot of different aspects to NAD's M33 Master Series compiled together into the 'all in one streaming amplifier'. First of all I'll expand on that sentence by saying there's more to the M33 than the simple amplifying of a digital online streaming source. The M33 has every digital input one would want integrated through its 32-BIT/384kHz ESS Sabre DAC - albeit its shortfall of not allowing for a USB input focused on taking a digital signal from a PC or a Mac. Now in this day and age it seems expected of such a device to offer this amenity, but from NAD's point of view would this really enhance the experience of the M33? The answer is a debatable one. The M33 can already stream internet radio, Tidal, Qobuz and Spotify Connect, alongside Airplay 2 and Bluetooth AptX HD for such duties as YouTube from say an iPad or related iOS device. It will also stream any audio content the user can cast from Android devices. And if that wasn't enough then simply install BluOS onto your Windows PC or Mac to integrate and control playback of files stored locally.

Furthermore, an option through BluOS will stream files from a connected hard disk or flash drive through its rear USB A port, which will also charge a smartphone or tablet device - you could simply attach a USB dock and have this

sat on your entertainment unit for a very neat solution. There's also the ability to stream local files from a NAS drive through the M33's wired Ethernet or WiFi connections adding a platform for users' own library files. So I think I can safely say that NAD have you covered and the direct link from computer to M33 is really not necessary.

Alongside all of the integrated digital aspects of the M33's front end, NAD has also implemented an entire analogue section for users to utilise. The M33 adequately supplies inputs for both RCA single-ended and fully balanced XLR source devices, allowing users to connect any additional analogue output source such as a CD Player, FM Tuner, cassette deck, or any analogue output from an MP3 player or television, etc. To complete the analogue section of the M33 there is a phono stage that will accommodate both MM and MC cartridges. The RIAA eq for phono is optimised in the digital domain through analogue to digital conversion and therefore can utilise the onboard room correction software from Dirac Live which is a handy feature.

And just to top things off the very thoughtful guys at NAD have even included twin subwoofer outputs and a dedicated headphone amplifier which will very respectably drive headphones with low or high sensitivities.

BlueOS – FEATURE RICH AND INTERACTIVE

NAD uses Bluesound's BluOS operating system as its digital platform for control and playback of all configurable inputs and media supported by the M33. Overall BluOS is a fantastic platform to use. Its simply designed menus, features and GUI combine practicality with functionality.

NAD do include a physical remote control alongside app control from any iOS or Android device, Windows or Mac-based computer. The front screen on the M33 is not just a pretty view of what's currently playing either, it's actually a fully interactive touchscreen. A physical volume knob also graces its fascia, and top centre is a capacitive touch button to put the M33 in and out of standby mode.

I've used many Bluesound products in my time. I started with a Node, then a Vault and moved on to the 2nd generations of these products, and although not in any of my current systems I have found great fondness with the full-sized Pulse streaming speaker which lives on top of a kitchen cabinet with an old iPhone 6s Plus on the wall as a control point.

FULLY AUTOMATED AND SMART HOME INTEGRATION WITH ALL LEADING BRANDS

Being a BluOS based system, if a slightly more elaborate one, the M33 has a further trick up its sleeve - it can act as part of an entire home integration package. For those who are looking toward a more high-end option, the M33 serving as the main room's star performer alongside its Bluesound partners in other areas of the home (with say a Vault 2i for local file storage) would allow for a real premium feel to the household's multi-room audio system. This option gives users the ability to move rooms with the sound following them or playing throughout the entire home simultaneously, and, more importantly, in sync - through app control, select zones, and multi-room party modes, I was even able to control playback of the M33 through my Apple Watch! The ease and flexibility of the system become quickly apparent, with the M33 integrating beautifully from the main listening space and the premium sound now obtainable from Bluesound and their partners such as Roksan, Peachtree, Dali, and Monitor Audio.

BluOS also allows control from Amazon Alexa or Google Assistant devices. Through Airplay 2, control is also possible with Siri. The M33 is fully compatible with all the leading smart home systems from leading companies like Apple, Crestron, Control4, Lutron, KNX and many others. This means that along with lighting, window blinds, HVAC, and security, users can seamlessly control the BluOS multi-room music eco-system from a common interface. All integrations are certified for reliable operation. The BluOS Apps for iOS and Android tablets and phones, as well as desktop control from Windows and Apple OS are available free-of-charge and are updated regularly.

MDC SLOTS FOR FUTURE COMPATIBILITY

NAD has gained a reputation in recent years for future-proofing its designs with upgradable card slots. An optional DSD MDC card will be available for users to playback the highest bit rates possible today. Other options of MDC compatibility will be introduced as the technology moves forwards.

PLENTY OF JUICE ON TAP

The M33 is a bit of a monster when it comes to power delivery, with an output of 200 watts into 8ohms and 380 watts into 4ohms, speaker selection seems somewhat limitless. Now I hear you say "you said that NAD's implementation was thoughtful? What's thoughtful about that much power when it comes to my electricity bill?". "Furthermore, I don't need that much power and I'd rather not pay to not use it either". I hear you! However, NAD isn't using conventional amplifiers. They're not using a power-hungry non-efficient class A technology, not even the more affordable class A/B which switches after the first couple watts of class A to class B. They are using a Class D-based amplifier and one that is technically more advanced than the previous M32. Again I hear you say "Class D has been around for a while now and yes it's very economic, so what's different in the M33?".

PURIFI AUDIO 'EINGENTAKT'

There has been a lot of talk amongst audio-philosophes recently about Class D. The Eigentakt (meaning self-clocking) analogue Class D modules are self-oscillating and load invariant. It was developed by Lars Risbo and Bruno Putzeys whose names will be familiar to those who know a little about Class D amps. The measured performance speaks for itself, and the correlation to sound quality is noted to be immediately apparent. The associated power supplies work less hard, can deliver transient peaks instantaneously, and can replicate the power output of large A/B amplifiers but without the large power transformers.

B&O was one of the first to implement Class D technology into other brand's amplifiers. These include Jeff Roland, TACT/Lyndorf, TEAC, and Primare (which had a particularly good design). Unfortunately, even at its best with the Hypex and NCore modules, Class D could still be



considered a colder sound more often than not, but, in my opinion, it would take great user integration to forge a good relationship and sonic signature that was ultimately pleasing. I know a few people who managed this with huge success - Hifi Pig's own Editor Stuart runs a pair of Merrill Class D mono-blocks into a big pair of Avantgarde DUO XDs with great success – in fact, these are the reference amps used for most speakers he has in for review.

It was previously a bit of a task to find good synergy within a system that was based around Class D amplifiers. NAD does all the hard work for you here. They have analysed and tuned the sound until they feel it has the coherence they endeavored for and with the Eigentakt modules sounding as unimposing as they do NAD's technicians were able to impart a sound which they could tailor to their tastes.

DIRAC LIVE – TURN YOUR ROOM INTO A CUSTOMISED LISTENING SPACE

Dirac Live is a digital room analysis software and equaliser, which will listen to your room's acoustics and considers your seating arrangements to discover what anomalies your room has which are affecting the sound you hear.

NAD has included a calibrated microphone which you can place in one single spot on the sofa for pinpoint accurate listening and eq determinations, or appropriately adjusting the sound for yourself and the family if all snuggled up on the sofa together and saved as presets depending on when and who is listening. I think this adaptiveness is a very useful feature.

They have built into BluOS a portal to Dirac Live where a full lifetime subscription can be purchased for \$99. The full version will sweep and address all frequencies within the room through test tones and then configuring the sound so that is best for your space.

Although in my personal opinion the full software is a much better fit when equalising a room, a free version is available to deal with room anomalies up to the 500hz point, which in many cases will work wonders. Most anomalies are confined within this region and for integrating a subwoofer well and getting an overall

better bass response the free version could be all that's required. As I said, personally I prefer the full version as many of us have hard floors and furniture, with more absorbent soft furnishings being minimal. Therefore, unwanted high-frequency room reflections can plague the listening room and cause timing errors.

THE SOUND

The first thing to note is that you will need to be very patient and for a good couple hundred hours for the M33 to come on song and sound at its best - it is certainly a little thin sounding until everything beds in. Another important note to mention is that it's very much best to leave the M33 in standby mode when not in use - don't worry about power consumption, the M33 will use very little electricity in standby, plus it gives you an excuse to use the pretty cool touch-sensitive capacitive on/off button on top of the front facia. Or you can switch it off via the app or voice commands – pretty cool, eh?

My first impressions were that this amp does indeed sound similar to other Class D amplifiers I have heard. Streaming music from Tidal via the BluOS app on my iPhone sounded good. The M33 is very transparent, it's clean and grain-free but at the same time holds good tonality throughout notes and has a notably richer feel to textures than many other Class D implementations I've heard. The sound isn't bright (even through my all ceramic-based speakers) nor does it sound analytical and reveals good texture in decaying guitar notes that give a good deal of realism to a performance.

A touch of sparkle in the top end is a nice way of describing treble performance. With sharp leading edges and great spatial cues. The M33 displays a great soundstage and instrument placement is clearly definable, with vocals shining proudly even in busier music. I enjoyed quite shocking height to the soundstage and with great recordings was given realistic singer height, which just reinforced the rest of the soundstage's shape wonderfully well.

I spent some time listening to Spotify, which always has better playlists in my opinion, if not a sacrifice in resolution when compared to

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others. However, the NAD made great work of lower bit-rate material, with even the internet radio sounding perfectly acceptable for non-critical listening.

There's a healthy bass-line from the M33 which carries a beat tremendously well - the inclusion of two subwoofer outputs will enhance bass performance further if so desired. I hooked up a REL S/510 and was very happy with its integration and overall performance. The additional weight given across the frequency range took the M33's sound to the next level for me. My speaker setup is kind of optimised to my room, so rest assured that even without an additional subwoofer or two the M33 will replicate these results for you with the addition of faster and tighter bass which the Eigentakt modules deliver.

Dynamically the M33 can turn on a dime. It can be subtly inoffensive one minute and slam into action the next. The ability of this is no doubt handled in big part by the Eigentakt modules combined with the fast power supply NAD has implemented.

To confirm these thoughts I decided to hook up my own front-end streamer, re-clocker and DAC - Xodos xolone, Audiobyte Hydra Z, and Bricasti M3 via both sets of analogue inputs, balanced XLR and single-ended RCA as the M3 has both outputs on simultaneously.

Knowing this combo very well and switching between both balanced and unbalanced inputs on the M33 did actually confirm how impressive the Eigentakt amplifier is and does indeed get out of the way, albeit running through the conversion processes within the M33. I'd be interested to explore one of NAD's standalone power amplifiers using the Eigentakt modules to really single out their performance with other kit.

Through Bluetooth and Airplay 2 sound was good but not as sharp and detailed as the onboard devices. I found Airplay being a little more enhanced than Bluetooth, but the new AptX HD standard is a notable upgrade over previous versions. If using a television with the M33 I'd strongly suggest the eARC HDMI hardwired connection method rather than Bluetooth. Bluetooth often causes lip-syncing issues if found.

Some televisions have an audio delay feature to correct this and not all channels or tv sources will reflect the delay programmed in. eARC is a far more stable solution and again it is very thoughtful of NAD to include this on a two-channel amplifier.

I plugged a solid-state hard drive in on USB and was very impressed with this. Although I have a NAS on the network I would be wholeheartedly pleased with a USB hard drive feeding my local files through the M33.

I use a Bluesound Pulse 2 speaker in the kitchen on most days. With BluOS in control, the Pulse 2 Speaker and the M33 work perfectly together. It's great whilst going from room to room to be able to have a seamless continuation of what I was listening to. An entire array of Bluesound or BluOS associated products throughout the home would no doubt be the sensible option and incorporating the M33 as the heart of the main system. I didn't use it often, but I did try the Amazon Alexa to control the BluOS functionality within the M33 (even at louder volumes she still hears you.)

Whether it is your phone in your pocket, an Apple Watch, a computer or laptop, a device such as an Alexa or Google Home, the included remote or fully functional touch screen on the front of the M33, you're never too far away from being able to have complete control over your music, and I really like this.

CONCLUSION

NAD has brought music lovers the flexibility to obtain more enjoyment and control over their music than ever before. The M33 has to be one of the most thoughtfully implemented, well thought out, and feature-rich product in audio to date. I personally haven't come across anything more complete in terms of hardware and software.

Its stylish looks and that reasonable footprint will sit complementarily in any modern space. Whether you simply have a large television which you stream through or a more elaborate setup, music lovers, gamers, and film buffs alike will be happy with this 2 (2.2 including sub outputs) channel amplifier.

Every streaming service is catered for, local files are embraced, analogue devices are given thought, and home integration with other Bluesound and BluOS smart devices, home cinema setups, and streaming devices, NAD opens up a world of options for high-end listening and multi-room home integration. Along with the multitude of control options, the M33 is as high-spec as it comes right now.

Include the option for upgrades with the addition of NAD's MDC cards and the future is bright! Combine all this with an exciting, captivating sound and the NAD M33 could be just what you and your home were looking for.

AT A GLANCE

Build Quality:

Good quality materials and aesthetics. The isolation feet are a fantastic touch. With a large vibrant touchscreen, capacitive on/off button, and great layout the M33 is a premium looking and feeling product.

Sound Quality:

Enveloping, engaging, and dynamic. Fast yet delicate. Great vocals and with ability to utilise room correction through Dirac Live, essentially tailored to suit you and your listening space.

Value For Money:

For a unit that will give you years of pleasure and combining everything you ever need in one box and further-proofed through MDC upgrade cards a very worthwhile investment.

We Loved:

The abundant features

The BluOS control App

The integration with smart devices

The multi-room features

The touchscreen and aesthetics

The engaging, dynamic sound

Tight and tuneful bass

Encapsulating sound stage

Easy positioning

We didn't Love so much:

Returning it

Price: £3999

Elevator Pitch Review: An incredibly well specified and adaptable product the M33 from NAD has an engaging sound that can be enhanced to your specific listening environment using the onboard Dirac room correction.





CLONES AUDIO 25iRX INTEGRATED AMPLIFIER

CLONES Audio 25iRX is a small integrated line-level amplifier from Taiwan that costs less than \$2000. The amp's predecessor was a firm favourite and a real bargain of an amplifier. Will the new amp impress in the same way?



Stuart Smith

Pretty much exactly eight years ago HiFi Pig reviewed the original power amps from Clones Audio, and the reviewer liked it a lot and I personally used the integrated as a reference for a long while. The integrated was shamelessly a gain-clone design that used relatively inexpensive parts because the owner FunJoe (Mat) reckoned they sounded better, and it cost the princely sum of \$629 and came with a five-year warranty. I ended up having the amp at home for a good while thereafter and used it in systems that far outweighed its price, and to very good effect I must hasten to add. Indeed, it powered our €30K Avantgarde DUO XDs very nicely – in fact, it was an excellent match for the DUOs and I used it a lot on them in preference to many other far more costly amps. Stupidly I gave the amp away to someone who ‘needed’ an

amp but who then promptly sold it. Had I not given it away I think I’d still be using it on the Avantgardes in place of the Hiraga Le Monstre. You live and learn!

I recall having Gilles who makes the Leedh brand of loudspeakers round to pick up a pair of his speakers we were reviewing and I asked him to allow me to show him a little amp that really shouldn’t drive his inefficient speakers at all. He was amazed by the Clones’ performance to the point he went away and designed an amp for his own use using similar principles and for his own personal use.

In short, the original 25i punched well above its weight and, to my mind anyway, was way under-priced – really, it was the HiFi bargain of the decade in my opinion.

Time moves on and Mat has moved from Hong Kong to Taiwan, his then newborn son we exchanged loads of emails about back then is eight years old, and he has a daughter too. I've followed his business with interest in the last few years and it's been a joy to see it grow. I was chatting to my friend David Cope in the States who runs Old Forge Audio in Connecticut and he was enthusing about a new amp he was trying out with various set ups he had. We chatted and it turned out David was talking about the Clones 25iRX that we are talking about in this review. An email to Mat (I still find it hard not to call him FunJoe) and a few days later we had a unit at Hifi Pig Towers.

FIT, FINISH, AND FEATURES

The 25iRX is a completely new design of amplifier to the original 25i and I can't for the life of me understand why Mat didn't choose to change the name of it to something that differentiated it from the initial integrated because in my mind the comparison, particularly the price comparison, will always be there in the back of my mind.

The 25iRX is still an almost square box shape of diminutive proportions (190mm x 170mm x 130mm) but feels slightly bigger and more substantial than the 25i had – it's 6kg in weight. It's also still handmade to order, and still pretty minimalist in its aesthetic – which I really like. The front panel is black brushed aluminium and the finish really cannot be faulted in my book. The metal frame sits on a dark wood block (see pics) and there are three adjustable feet to level the amp.

On the front panel you have the little Clones' logo, a volume knob which you press to change the three source inputs, and a small display that displays the volume...or input.

Around the back you have three RCA line inputs - channel one inputs are far right and far left which is a little different from the norm but pretty cool, I suppose. There are a pair of five-way speaker binding posts that are really nice quality and accept - yep, they accept all the usual kinds of speaker connections including bare wires - and apart from the IEC power input and switch that's it.

Along with the amp, and a departure from the original, you get a basic little remote that changes channel and volume and has a mute function. All this works very well and as you'd expect.

You get 30W into 8Ohms instead of the original's 25W, which leads me back to the question "Why call it the 25iRX"?

The circuit of the amp is based on Clones' AP2 preamp as buffer, though in a simplified form, and a LM3886 based power amp. One of the key differences that is immediately evident with this new amp is that the chassis is different, with Mat suggesting that the small cube shape has been used to control and reduce vibrations in the chassis. He also says that he considers every part of the design plays a part in the overall sound – and that goes down to the "screws, the size of the PCB, spacers, and cables...". All soldering (silver) is done by hand. Most parts are now also from Taiwan including the toroidal, the binding posts, the AC input, and even the cable mounting block. All cables inside the 25iRX are from Japan.

SOUND

For this review I used the Clones amp with a LAB 12 DAC being fed by a Raspberry Pi with a linear PSU and running Roon. Speakers used were a pair of Falcon LS3/5as, Diptique dp77s, and Xavian Perlas – I also hooked the amp up to the DUOs for old times sake.

From the first proper listen of the amp (and with the Falcon LS3/5as in place) it was clear that this was a class act, much in the same way that the original 25i impressed from the very off. It's replacing a big Krell in the system I chose to slot it into and so that's a bit of a tough act to follow. However, it did very well in the main, and one of the first things I noticed was the very detailed image that was being cast before me. There isn't the same amount of welly that you get with the Krell, nor the effortlessness of delivery, but at lower levels, it sounds very impressive indeed.

Stereo imaging is often the first thing that grabs attention with any bit of kit (it's one of those

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things that I've always looked for when listening to music from when I first started to get into proper HiFi) and the little Clones has this down to a fine art. Stability is key to generating that image and the 25i seems to be controlling the speakers very well and allows a degree of separation of instruments and effects that is pretty impressive at any price. I'm given a full and wide soundstage that is deep and with everything present and correct, even at these low volumes.

I've been listening to a lot of Neil Young of late and the recently Young Shakespeare is one album I've really been enjoying - it feels as though you are with the audience, the recording is fab and there is an intimacy to the recording that really comes across when listening. The Clones amp allows all of this to come through, and what is particularly impressive is the purity of the recording being kept intact. At low volumes it's almost like being sat looking up at the performance from a few rows back. The warmth of this recording just shines out and the fragility of young's vocal is expressed really beautifully. There is a distinct absence of anything feeling brash or being pushed to the fore, and little details like him hitting the body of the guitar aren't missed or glossed over by the amp. I very much enjoyed the combination of the Flacons and the Clones.

The LAB12 is a very organic sounding DAC and you "get" that with this amp in the chain – actually, I'd suggest that the two are a very good match in that they combine to give an effortless and totally natural feeling to the music you put through them. Of course, this is pretty simple music and I'm playing it at low levels, but the detail and 'feel' is there in buckets. Turning up the volume a tad and Cowgirl in the Sand is still delivered effortlessly and with the same level of detail being present. Look, this is just a bloke and his guitar, but I feel connected to the music to the point I feel almost part of the audience and can virtually smell the weed and patchouli hanging heavy in the air.

Switching out the Falcons for the Diptyques I thought that the 25i would really struggle - these are pretty demanding loudspeakers and do like a bit of power up 'em. However, despite having to turn the amp up a bit, I felt that same

level of connection and the same feeling of being in the audience as at lower levels. To get the Diptyques up to a level I'm used to listening to, however, I had to push the amp a little and in crept a tad of upper-end distortion to the point I had to turn the amp back down again – clearly, these are not a good match for the Clones, which is no surprise really given that they are a demanding and power-hungry loudspeaker (hence the Krell being in the system) and the 25i is a pretty modestly specified amp. I give up on this partnership pretty smartish and put in the Xavian Perlas.

One small point here is that when you turn the amp on and off it goes virtually silent and you have to increase the volume to the level you were at previously – I found this a bit annoying until I got used to it.

This again is a very good partnership from the very get-go and I was able to crank up the volume to good and loud levels when listening to Cowgirl In the Sand...for about the tenth time on the trot. That purity of tone that was allowed to come through with the LS3/5as was still there, but I felt that this partnership of the Clones and a much less demanding loudspeaker really created the perfect storm. I'm not a huge believer in that whole synergy thing to be honest, but with amplifiers and loudspeakers it's important to get things that work well together and these work very well together and so the rest of the review process was carried out with the Xavians in place.

Daft Punk's Random Access Memories (24/88) was presented with the solidity and weight that it deserves, and yet that level of detail the amp gives was maintained. Basslines bounced along with speed and underpinned the whole of the mix. The guitar chops were likewise speedy and on point. I pushed the volume pretty hard and the amp does indeed break up a little when pushed too hard, there I no doubt of that, but keeping the volume to sensible levels there's very little to moan about and plenty to commend. In a bigger room this partnership would struggle to get to levels I enjoy but to be fair this room is probably around the size of a standard UK semi's living room – I'd actually like to hear this amp with a pair of high-sensitivity full-range drivers as I think that would be a good match

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– and indeed for the brief spell I had the amp on the DUOS I had absolutely no complaints whatsoever. This may seem completely stupid, but the \$2K Clones amp on a €30K pair of Avantgardes is a very commendable partnership and one that may allow folk thinking that they have to spend tens of thousands on an amp to partner these speakers pause for thought and to re-evaluate their options.

Back to the Perlas and on the new Dr Lonnie Smith (and Iggy) album Breathe the tone of the Hammond B3 is presented beautifully and the dynamics of the first track (Why Can't We Live Together), particularly the drums, come across...errr...dynamically. This is a speedy little amp, for sure. There's a really cool and typically jazzy guitar solo that is slightly muted in its playing and that is presented really well too. Small details shine through with this amplifier in place.

Dylan's Hurricane (192/24) is a real treat at a reasonable volume and there is that level of detail that really draws you into the recording and lets you forget about the actual performance of a system and get on with listening to the music. And I did listen to a lot of music through the Clones and Perla combo - from Bad Brains to Piano, and Violoncello classical music to Dagnasty. I think that is a part of what some folk don't really get about a high level of audio, it's not about over analysing a sound and questioning every nuance. No, when a system gets it right you are able to relax and forget about the system and that is something worth paying for and seeking out in my book. I got this with the Clones amp when appropriately paired with the right speakers and thoroughly enjoyed my time with it.

CONCLUSION

This is a very fine sounding amplifier, of that there can be no doubt, however, there is a large-eared, off-white Loxodonta in the room making trumpeting noises with its trunk regarding the price of it. I worked in sales for years and one thing when we were told when working out the price of a product was that it was easier to go down in price than it is to go up. The old price of the 25i was US\$629, whereas the new unit (with the same name...pretty much) costs

US\$1979...and you still have to add import duties if they apply to your place of residency. By anyone's standards, and whatever may have changed under the hood, that is a big perceived increase in eight years, and folk who remember the price of the original, as I did, may well take a step back at the US\$1350 price hike – it's more than three times the price of the original! And you get three years less warranty than with the original's five years. With all that said, I think the original amp was way under-priced and the new amp has better casework, better components, and, of course, now has distributors and dealers in place, and these all things that will naturally increase the final market price of any product.

However, get beyond this moaning about comparing apples and pears (though in this particular grocer's shop they seem to be called pretty much the same) and you will be rewarded with a gloriously clean, dynamic and entertaining amplifier that really excels on music that has been well recorded and well mastered.

Even-handed is a phrase I'd like to use with regards to the Clones amp, and whilst it is best with relatively simple tunes, it can rock out and rave a bit too. It has good control across the frequency range with good solid bass and well presented tops. However, it is detail through the all-important mid-band where the Clones amp shines and particularly at reasonable volumes.

Clarity and detail are the Clones amp's main attributes, but you do need to pair it sympathetically. Get this pairing wrong and things can get a bit too much for it – as they did with the Dipyques - but get it right and you will be a very happy camper.

AT A GLANCE

Build Quality:

This is a very nicely put together amplifier that looks so much better than its predecessor. You can see the level of detail that has gone into the build of it and it looks great. The wooden base is a nice touch. The speaker binding posts on the back are very good.

Sound Quality:

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I'd describe this amp as an audiophile amplifier in that it excels in detail and clarity of the mid-band. However, the speed and dexterity of the bass is very good too. Overall it is an amplifier that really oozes quality and class when used within its limits. Push it just a little too far and it gets a bit upset! Personally, I think it could do with a bit of an increase in its output but that is something all prospective buyers will obviously (hopefully) take into account.

Value For Money:

I'm finding it very difficult to look at this amp and not see that it is called (pretty much) the same as an amp I had the pleasure of owning seven or eight years ago and yet it costs a LOT more. With that said, it is a sub \$2000 amplifier (though import taxes will apply for many) and it performs accordingly. I wouldn't say it was the bargain that its predecessor was, but it's not daft expensive either. Actually, it still represents excellent value for money.

We Loved:

Fit and finish

Detail and clarity

Solidity of soundstage

Good bass performance that underpins the whole delivery

Excellent mid-band clarity and tone

Relatively neutral in character, though slightly warm through that mid-band

We Didn't Love So Much:

Needs to be partnered sympathetically

Pushed too hard it becomes harsh to the point of being pretty much unlistenable

Not enough headroom for playing at volume through inefficient loudspeakers

No balanced input

That price hike

Price: \$1979 plus any import duties.

Elevator Pitch Review: A well put together and well thought out amplifier that has a clarity of delivery that is enviable when kept within its modest limitations. Partnered with sympathetically specified speakers and in a suitably sized room it will please many. Pushed too hard and beyond its limits it becomes a tad harsh in the top end. It performs very well for its price but it's not the cold stone bargain its predecessor was.





STRUSS AUDIO ULTIMATE INTEGRATED AMPLIFIER

Struss Audio is based in Warsaw, Poland, and has been in business for forty years. In this review, Janine Elliot checks out their Ultimate integrated amplifier costing £6500.



Janine Elliot

I had no idea that Struss Audio from Warsaw, Poland, had been in existence for some 40 years, a company specialising in the design and production of high-end amplifiers, a name that is well known in its home country. The ULTIMATE integrated amplifier is the ultimate of a present range of two integrated amps and comes in at 7430 Euros or USA dollars. The other integrated from Struss is the DM250, a 250Watt 4Ω (hence the name) class AB dual-mono affair. As I write, a third product is being finalised for release. All Struss amps are designed by Zdzislaw Hryniewicz-Struss who specialised in engineering and electronics at the Polish Academy of Sciences before starting to make amplifiers for himself. Like many audio designers, he simply found existing amplifiers couldn't afford his music a satisfying listening experience.

His past employment has included stints at Philips and Studer, and designing a pre-op circuit called "Harmonics and Phase Conversion System" or HPCS.

HPCS

HPCS is constructed on the basis around a J-FET design, with the intention of generating even harmonics (just as valve amps do, which makes them sound so musical) whilst reversing the phase of the signal. HPCS, therefore, introduces some subtle modifications to the spectrum and dynamics of the acoustic signal, giving a unique but very pleasant and musical sound matching the needs "and characteristics of human hearing". The Struss website affirms that the sound quality for the amplifier matches that of the very best out there and that "According to some of our most experienced

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and demanding listeners, the sound is even better!" Quite a tall statement and one that made me really excited to try out the product. The Ultimate also uses an advanced constant input impedance, high sensitivity circuit "that matches the line input specification".

PASSIVE PREAMPLIFIER

Struss wants the minimal amount of electronics in the circuitry to maximize the authenticity of the music and to this end the Ultimate has a passive preamp stage. That means that RCA and CD/DAC/streamer signals go direct to the volume control and onto the power stage. The only pre-amplification will be in the phono-stages.

WELL ENDOWED

Certainly, the Ultimate is made to very high standards of electronics and design philosophy, with two separate toroidal transformers (each supplying 600VA) for the two independent amplifier circuits. For around £6500 you get a lot; this is a 250W 8Ω (400W 4Ω) power amp and passive preamp in one box. There are a considerable number of inputs including 5 RCA and 1 XLR line inputs, a pre-in to allow for an external pre-amplifier to be used, a pre-out to drive another power-amp and to top it all it comes complete with a 47KΩ MM and 100Ω MC phono-stage.

Alas, digital inputs are not supplied, but there is an additional analogue RCA input using higher grade WBT sockets labeled "CD/DAC". The specifications for this socket are the same as the other 5 RCAs, namely 500mV/100kΩ. The main RCAs are quite close together meaning you might have problems if using really obese plugs.

All components such as capacitors and FETs are chosen with great care and electronic circuits assembled based on surface mount technology. The build quality is good and the amplifier with its distinctive front panel is available in black or silver. All switches are mechanical, with a basic "off/on" at the left and a 10-way switch on the right to change between the inputs, with blue LEDs to the left indicating what you have selected. The good thing about it being me-

chanical is that it obviously retains what you last used before you switched off, rather than you having to cycle through all the inputs each time you turn the amp on!

The potentiometer is an excellent Alps Blue Velvet with a red indicator (pity it doesn't match the blue source LEDs). The unit comes supplied with a unique and circular (and very heavy) remote control which allows for volume up and down. This is a lovely-looking remote and continues the excellent quality of the build. Due to the mechanical nature of the amp, there is no remote sleep facility or function select, though a mute button would have been a useful feature to add. The loudspeaker connections are provided by WBT. Headphone lovers will also see that there is no headphone facility. Internally the amplifier is excellently constructed throughout; the separate toroidals for each channel sitting on the left and having the phono-stage circuitry placed well-away on the right is only common sense. The toroidals are close to the amplification ensuring short wiring.

Whilst there is a lot of detail spent on quality of build and technical standards (just read their website for a full list, such as the cleanliness of PCBs!) I hoped I would similarly find a lot of detail in the sound... and I wasn't let down. Certainly, Struss spend considerable time listening before a product goes to sale, and my wait of nearly 6 months until one was available for me was well worth the delay and I then patiently spent 200 hours running it in before auditioning!

THE MUSIC

I am a lover of passive preamplification, using a TVC preamp regularly, so finding that the Ultimate was passive was to my liking, though I'm not generally in favour of direct-to-potentiometer designs. That said, the sound quality was very honest and didn't take away or add anything to my sound sources, thus showing the Struss philosophy works so well. It allowed me several weeks of detailed and honest listening, my only real criticism was the amplifier wasn't the very quietest I have reviewed when turned right up, though it shouldn't cause an issue in most circumstances. The amplification is Class-AB and the amp will work in Class-A for most of

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your requirements.

Listening began with a reel-to-reel recording of the ELP concert broadcast on BBC Radio 2 many decades ago, a brilliantly engineered and performed event. I was surprised at how beefy the bass end was, though it was well controlled and agile. "Lucky Man" had great guitar and synth performances with very clear vocals, despite this limited quality FM broadcast. Next, I turned to Queen, and the excellent 'Studio Collection' comprising all of their albums on 18 coloured vinyl discs. "Spread your Wings" ('News of the World' coming on a green LP) had a clear bass and careful but sensitive acoustic guitar. The bass guitar in "Fight from the Inside" proved again how good that bass end was, and all tracks had good depth of field as well as left to right soundstage (particularly noticeable in "Get Down Make Love"), the HPCS almost adding a three-dimensional soundstage. Nothing stood out as being OTT, rather everything was just there in the right place and time, but perhaps just a little too cautious.

The Ultimate exuded neutrality of presentation, something very desirable to the audiophile who just wants to listen to the musicians rather than the HiFi.

Turning to Patricia Barber 'Café Blue' the atmosphere was very much like the album's name; a casual social environment where you could almost smell the coffee and cigarette smoke in this very fluid and atmospheric live performance. Not that the presentation was hazy, just that the Ultimate orchestrated the mood magnificently, being slow and relaxing where necessary, such as in "Mourning Grace" or "Thrill is Gone", and upbeat in tracks like "Yellow Car III". Whilst the bass end was again particularly clear and quick, vocals too were accurate and precise. This integrated amp 'integrated' all the elements of the music and musicians with pizzazz. Its performance was more like a power amp with separate preamp, pulling out every element of the music, like a magician producing a rabbit from a hat. Perhaps "Houdini" could have been a better choice of name than "Ultimate". Changing the mood to "Cjam" from Oscar Peterson's 'Night Train' this starts and ends with a repeated piano ostinato containing G's and C's (hence the title) suggest-

ing initially quite a boring number, but the music soon lets' rip with excellent melodic patterns that are sprightly and have a thick timbre ably performed both by the jazz trio and the Ultimate. Only in "Bags' Groove" were the cymbals just a little too tizzy for my liking.

Lemba was an Estonian composer from the end of the 19th century whose first Piano concerto is his best work. He composed no less than four operas, three cantatas, and five piano concertos. His Symphony in C# minor played through the Struss gave a strong grasp of the instrumentation, particularly the strings. The performance was accurately addictive. The mid frequencies were warm and enlightening, much as one would expect from a valve amp. Tartini's slow movement from his violin concerto in A (D96) from Chasing the Dragon was again warm and satisfying but not quite as delicious as I have heard on several other amps at the same price. Everything was all there – well-timed and detailed – just that it wasn't as scrumptious as it could have been. There was more emphasis on detail than musicality, though it was still good. Perhaps an ECC83 in the preamp would have helped!

Whether I was using my AT33sa MC cartridge on my Pre-Audio turntable or the Shure V15iv MM cartridge on my aged Michell Hydraulic Reference the phono-stage was really good unless turned up very loud where it was a little noisy. Indeed, it would work well as the basis for a separate phono-stage unit in its own right. Here the RIAA curve was excellently flat with its circuitry being based on a J-FET design. 'Bitches Brew' from Miles Davis had an excellent bass end from the Struss plus clean trumpet solos. The electric piano from Chick Corea in "Miles Runs the Voodoo Down" was compelling and detailed. The repeated and concentrated rhythmic phrases had lots going on but at no time did the sound get out of control. The semi-tone and even clever quarter-tone notes at the very end were as clear as I have ever heard, even on separate phono-stages. Music from this and other jazz albums I played was energetic and dynamic. Turning to Jean Michel Jarre's 'The Concerts in China' those mid-frequencies were further shown to be a forté in the design, plus of course that bass end was clear and precise. Jarre loves to add electroacoustic

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elements to his music, and this double album is full of them. Track 2 (side 3) starts with a game of table tennis and a train passing in time with the rhythm and making way for an Eno-esque relaxed section with an additional electroacoustic rhythm. The Ultimate handled it all with ease; this amp is fast. Bell noises were energetic and tested my supertweeters. As a contrast in musical style, Elgar's 'Introduction and Allegro for Strings' gave me a good chance to listen again to the excellent mid frequencies. However, I did find they sounded rather digital; everything is there but not quite as full and musical as I would like. That said, however, in Beethoven's Piano Concerto No1 op15 (Claudio Arrau) the strings and piano were more controlled and realistic and the fast piano runs were more controlled and energetic. Whilst the amplifier, in general, is fast I did find the phono-stage the more relaxed, though its presentation was well worth inclusion in the Ultimate.

CONCLUSION

The Ultimate was a very interesting amplifier to review; bags of facilities and inputs and an overall sound that is highly detailed. It takes nothing away from your sound sources, which is a good thing, having an unforced musicality that only at times sounded a tad clinical, something that improved significantly as I ran the amp in – so don't expect miracles until around 200 hours of use. The looks are good, and I loved the remote control! This amplifier is based around the HPCS design and as such is designed to match the ears of the listener, and my ears enjoyed the results.

AT A GLANCE

Build Quality:

Excellent build and use of components

Sound Quality:

Excellent bass end and good speed. Very neutral sound.

Value for Money:

Hits the right price band for an integrated with built-in phono-stage.

We Loved:

The HPCS design

Very neutral sound

A detailed and full bass

Excellent mid-range, particularly vocals

A large number of inputs and outputs plus phono-stage

The remote control

We didn't love so much:

I felt at times the sound could come across as a little too detailed and critical.

Elevator Pitch Review: A very natural and detailed sounding amplifier that excels particularly in the mid-range. It comes with a very usable phono-stage and a good number of inputs. The remote is a lovely thing to use.

Price: £6500, €7430, \$7430





POLYVECTION DAC 32

The PolyVection DAC 32 is a wireless network streamer that brings Squeezelite functionality to the masses with DAC that costs £65. Stuart Smith checks it out...and then checks the price again!



Stuart Smith

DAC 32 is a wireless network streamer by the German-based company PolyVection. The company is headed up by Philip Voigt and Bob Abraham. Voigt PolyVected in 2013 after working for a well-known Danish HiFi brand. The company originally started out developing software but then moved quickly towards being more hardware-centric. Abraham's name will be known to many, I'm sure. He co-founded QED back in 1973, Systemline in 1988, and was one of the three-strong team that launched the popular Q Acoustics brand. The company does contract design and engineering but the reason we are talking about them today is the DAC32, a high-resolution streaming DAC that supports AirPlay, Bluetooth, and Squeezelite for use with a Squeezebox or Roon server. They also make a product called Core32 which is de-

signed to be a hub for locally stored files and online music streaming services.

WHAT IS IT?

DAC32 is a wireless streaming network player with an on-board DAC that is based around the ESP32 microcontroller – hence the name. It uses the open source software Squeezelite-ESP32 and the software, being open-source, is continually being updated and peer-reviewed. Essentially Squeezelite allows the DAC32 to behave as it were a Squeezebox – remember them?

For those that don't remember the Squeezebox, let me explain a little. Not that long ago, though it seems like an age away given the speed of progress in the streaming world, Logitech created a series of streaming boxes called Squeezebox – I had several and



loved them. Squeezebox was an early and very accomplished early streaming box that cost not a lot. This to me was revolutionary as it did away with the need for a computer being attached to the HiFi all the time and allowed me to access files elsewhere on our network. It was simple but it worked. However, since then the streaming world has moved on and Squeezebox, to me at least, seems like one of those landmark products that spawned a whole revolution in how we access and listen to music. I'm sure there'll be a lot of folk reading this for whom Squeezebox was their first foray into streaming.

The DAC 32 deals with files of 44.1, 48, 88.2, 96, 176.4 (with automatic resampling to 96 kHz), 192 kHz (with automatic resampling to 96 kHz) at 16 or 24 bit. Impressive stuff.

BUILD AND FEATURES

DAC32 is designed to be connected directly to your amp, active speakers or soundbar and is absolutely tiny – about 7cm square and 2.5cm deep. It doesn't come with its own power supply just a jack to USB-A cable so you can use

whatever power supply you fancy, with the caveat being that it should have a minimum power rating of 500MV and be 5V – I'll be using the USB out on the linear PSU for the Raspberry Pi I use for streaming in the smaller of our systems. It's not a fancy box by any stretch of the imagination and it's not trying to be anything it's not. The box is lightweight and plastic with a red sticker on it that tells you what it is and it has four little plastic feet. The only outputs are a set of two RCAs (left and right) and the power input. That's it! I like this approach and it will appeal to many, I think. The box the DAC32 comes in is likewise a brown card box with a sticker on it. It all screams back to basics simplicity and I really like it. It's small enough to hide away from view should you want to but it's also not so unattractive that you wouldn't be happy to have it out and on display. To be fair, it's that small you aren't going to notice it whatever you do. I do see a problem for people that use massively heavy RCA cables in that they may well topple the unit backward, but a blob of Blutak would sort that issue out cheaply and effectively.

I'm going to mention the price again here be-

cause it's hard to think that this kind of thing is available for this kind of money. It's back to basics packaging-wise but that's no bad thing in my opinion. The question has to be asked that whatever the DAC 32s performance, and that has yet to be seen as I write, will people be put off by the ludicrously low price and will they think of it as a bit of a toy?

SETUP

I hate setting this kind of thing up – anything that involves setting up stuff on a network invariable causes headaches and I always seem to run into issues. The DAC 32 was no different, though this seems not to be the fault of the manufacturers.

Setting up the DAC32 itself is simple enough; Plug it in, open it on your WiFi settings as a hotspot, enter the supplied password (Squeezelite), follow the onscreen instructions, and then enter your home network's password. All simple so far and I did all that on a tablet. You then need to install Logitech Media Server on your computer. However, going to the logical source for the program (mysqueezebox.com) results in you not being able to download it (not on Windows 10 anyway). Basically, clicking on the relevant download results in nothing happening and I did try this several times. A quick google search later I found myself at downloads.slimdevices.com where I was able to download and install the relevant version of LMS. Whether this is a problem peculiar to me, Windows 10 or what, I don't have the answer to, but it is a bit of a pain – perhaps a link in the set up instructions would be useful? Once installed you need to add your library and tell LMS where to look – in my case our NAS drive. All simple enough but you do need to make sure you are running LMS as an administrator. LMS then scans your library and you are ready to go – this took a good half hour to scan the full library. You then set LMS to open the player interface and it opens in a browser with all your tunes there ready to play. My last words as I went to turn power on the system and waited for the preamp to go through its warm up procedure were “If this works I'll be gobsmacked”.

Colour me gobsmacked! There was music!

Installing XSqueezelt on the tablet now allowed me to control LMS remotely from the tablet, though LMS does need to be running on your main computer. It's a tad clunkier than I'm used to with running Roon installed on a NUC and controlling it through the Roon app but it does work.

Now all this is clunky and it's a bit of a pain to set up -though if you got through the procedures methodically you get there with minimal fuss. However, at the end of July, there will be a new product from PolyVection called CORE 32 that will have all the above done for you and so the setup experience should be all but plug and play.

There is Roon support for the DAC 32 and the setup is pretty simple if you follow stuff through logically. As a dedicated user of Roon this is pretty much must-have functionality for any streaming product. First of all you need to enable “Squeezebox Support” in the Roon app's Set up tab. Then find the DAC 32 in your Roon app and set it as the player as you would do normally. All done and no music, though I could see the DAC 32 playing as the source. Turning the DAC 32 on and off cured this and I now have Roon and all the associated services it offers running through this tiny box of tricks.

Having something that is you can use Roon with for 65 quid seems a bit mental to my mind, particularly given that it's got an onboard DAC! Yes, you can go the Raspberry Pi route with similar but more expensive features. In fact, in the second system I'm playing the DAC 32 in I do exactly that and have the Pi running into a LAB 12 DAC – and I do wish that the DAC 32 allowed for connecting an external DAC!

So it all works, but how does it sound?

SOUND

From the off, I wasn't expecting much at all from the DAC 32. I fully expected set up to be a pain in the arse of epic proportions – it wasn't. I was also not expecting it to play with Roon... at all – it does. So it's gonna sound crap, that's got to be a given.

Let's see.

I've got this set up in the second system with it directly into our LAB12 pre1 that is plugged into a Krell KST100, and for the duration of this review I hooked up our Falcon LS35/As. The ancillary kit is wholly out of proportion with regards to the price of the DAC 32 but it is what it is and it's what we use. Linette is midway through a review of some powered speakers and as I understand it she's going to plug the DAC 32 into the back of them which, if it works well makes for a very compact and cost-effective system – review coming next week.

I listen to a good few records that demand gapless playback and the first album I went to was the Deep Dish Yoshiesque Two mix album... and blow me down with a feather the DAC 32 does gapless. This may not seem like a big deal but I've got a couple of cheap (not this cheap) players lying around that have been confined to their boxes because they don't have this functionality. For anyone that listens to classical music this will be a major plus point and will increase the marketplace for this little box immediately!

The setup I have here allows me to switch between the DAC 32 going straight into the Preamp and our little Pi running Roipee into the LAB 12 DAC. The Pi/LAB 12 is better sounding immediately, it has to be said, with a much more detailed and organic presentation across the board – but then it's in the order of fifty times more expensive than the whole of this streamer/DAC. Yep, that's an unfair comparison but that's what we run as our reference in this room.

Now, the above statement may suggest that the DAC 32 sounds a bit crap, but that's just not the case. Yes it is flatter and less three-dimensional in the soundstaging department and it's not got the finesse and overall fine fidelity of the Pi/Lab 12, but then the latter is using what is to my mind a very accomplished DAC. Mid-bass sounds a little muddled and less defined and the vocal seems to sit further back in the mix, but it's pretty astounding sounding considering we are talking about a box that costs the same as three records – personally, I think that is nuts!

As it does, Roon read my mind and threw up

Hilarion Alfeyev: De Profundis with the Russian National Orchestra and Moscow Synodal Choir. This is a big sounding record and with the DAC32 there isn't the same feeling of scale or majesty you get with the more expensive setup, but again it's far from unacceptable and had I not had the two to compare I'd have been well chuffed with the DAC 32's performance. There's a slight sense of digitalness to the top-end and things are a little recessed, but decays at the end of the tune where you can hear the space is certainly there, but so is a very slight sound of digital hash – very quiet, but there none the less. I guessed the latter was something to do with interference on the network but it turns out to be the fact I've got the Pi and the DAC 32 plugged into the same PSU - removing the Pi's cable immediately removed the hash during silent passages. I really am trying hard to find fault here!

Streaming Fleetwood Mac's Rumours from Qobuz showed there to be lots of detail present with the DAC 32 and it was easy to hear individual bits of the mix, particularly steely guitar bits that come and go throughout Second Hand News, though there is definitely a little muddying of the mids that manifests in an ever so slightly muffled vocal on this track. But then Dreams sounds fab! Bass guitar on Dreams walks on in its distinctive style and underpins the whole, and again is easy to follow. If you give yourself a break and stop trying to find fault, it's dead easy to just get on and enjoy the music – which is a good thing, and so I do just that and listen to the rest of the album quite contentedly. The same thing happens with Zappa's 88 The Last U.S Show – it pops up and I end up listening to it all without really thinking about the sound too much and just get into the record – which I then nipped out to the shops to buy and it cost pretty much exactly what this whole streamer/DAC costs!!!

As I'm writing up my notes on this I have the product playing in the background as I often do. A techno album called 313 Detroit comes on with Dark Comedy's War Of The Worlds and I find myself looking up, taking notice, and turning it up to listen properly. It strikes me that there is a lot going in the record that the DAC 32 presents really well. There are lots of effects and spacey sounds that sound right, and little



electronic noises that come and go sound very convincing and very enjoyable. Bass is certainly low and controlled. Then Porn Sword Tobacco (new to me) comes on and I put off nipping out for yet another album's worth of tuneage!

CONCLUSION

The DAC 32 has so much going for it that it is hard not to love it from the off. It's a cinch to set up and the fact it does Roon is just the icing on the cake. Not only does it do Roon but it also does gapless playback – two things that are pretty much vital for me in a streaming product nowadays.

Is it the very last word in fidelity? No, it isn't and it falls a little way behind what I'm used to in this regard, but then it is easy just to forget about all that and get on with listening to the tune that is playing without getting hung up on this or that not being the very highest fidelity. I did that a fair old bit with the DAC 32. This is not to suggest that the DAC 32 isn't very accomplished sonically, it is!

Some may want to have it in a nicer box and I'd be willing to pay a few quid extra for a better

box in metal and I reckon that PolyVection could well do with offering this as an option.

My only real complaint about this unit is that it doesn't have a facility to spit the digital signal out to our DAC. Had it this option then the unit would have got the Editor's Choice award for certain!

I only have a linear PSU to use and so cannot comment on its use with a normal PSU option – the PSU was about £60.

Frankly, this is a mental product for €65, and had it the digital out I'd have given it our highest award – I very nearly gave it the award anyway!

Forget the price. Forget over-analysing stuff and just listen to your tunes is the suggestion here, I think!

AT A GLANCE

Build Quality:

It is what it is – a cheap but adequate plastic box with a sticker on it



Being light, heavy cables may tip it backward

Sound Quality:

A little muddled through the mids

Good and controlled bass registers

Overall, a good level of detail

Value For Money:

Stupid value for money

We Loved:

Gapless playback

Does the Roon thing

Easy setup

No-frills design

Basic packaging and instructions

We Didn't Love So Much:

No digital out

Slightly muddled in the mids when compared to our reference costing 50 times more

The non-Roon interface is a bit more clunky

than I'm used to but it does Roon too

Box is a bit no-frills – I'm really grasping at straws here!

Price: *€65 (The same as I'm about to go and spend on that Zappa record I mentioned on vinyl)

*Within the EU DAC32 is available directly from PolyVection for 65€ + shipping cost. Outside of the EU, Audiostore can supply UK customers for £65 + shipping cost

Elevator Pitch Review: A no-frills Squeeze-box-based streamer and DAC in one tiny box that can be used as a gapless playback Roon endpoint and that manages to sound a whole lot better than anyone could expect for the money. I can't wait to try CORE 32!!





CHORD ELECTRONICS

HUGO 2 & 2GO

Chris Baillie, a veteran user of Chord Electronic's Poly/Mojo combination, takes a look at the mobile combos bigger siblings in the form of the Chord Hugo 2 and 2go costing a total of £2794.



Chris Baillie

Following on from my review of Mojo Poly, those lovely people at Chord have sent me their big brother components, Hugo 2 and 2go. I gave the background of the original Hugo in the last article, so please feel free to browse it. Hugo 2 has been around for approaching 4 years now, following Chord's astounding success with the original product. Hugo 2 brought almost double the tap length of Hugo, sleeker design, ability to play the highest resolution DSD and PCM files, plus a host of filter and headphone output tuning options. The headphone output was also upgraded, so it's now able to drive all but the most power-hungry cans. For convenience and casual use, Bluetooth aptX is included.

FORM POLY TO 2GO

Simple, twice the price, twice

the SD card slots! Thankfully there's a bit more to it than that. In addition to Poly's WIFI, you get the all-important Ethernet connection. Essential, not just for the best Qobuz or Tidal experience, but as we'll read later, it allows you to stream local files from a NAS or an audiophile server in the best quality. Amazingly, 2go takes up to 1T Micro SD cards, and so effectively you can have a 2 terabyte server on your bedside table, or even on your sun lounger... or yacht! Just as with Poly, you initially configure the system with Chord's own App – Go Figure. I noted that whilst the first set up had to be done over Bluetooth, the future connection between the app and 2go can be made over Wifi, which I don't remember being the case with Poly. The playback of files is exactly the same as with Poly. I used Bubble UPnP for networked music and M.A.L.P. for SD



card playback from my Samsung Galaxy S21, from iPad I used mconnect, and this app was only used when 2go was connected to my main system.

BUILD QUALITY AND DESIGN

This was the first major shock involving Hugo2/2go in our house. I will go on record as saying my wife hates the look of every piece of HiFi I've ever owned! However, she LOVED the look and design of this Chord pairing. So here's a quote from Rosa, my beloved: "Aesthetically it's the best looking piece of HiFi I've ever seen, why can't you get speakers designed by these people? I love the proportions of the unit, especially the design of buttons and the colours!". I'll add it's extremely solid, and the leather case really finishes off the package brilliantly. It really is an object of desire, which I'm sure can't be any accident on the part of Chord's designers. However, in view of the combinations size and weight, it has to be described as 'transportable', rather than a true portable. Of course, we'd have less need for Poly/Mojo if this fitted in your coat pocket as well!

IN USE AND SETUP

Being a veteran Poly/Mojo user, it was a bit of a breeze to be honest, bar one small issue. Each time I set up a new Wifi Connection, either with a home network or my phone's hotspot, I found Go Figure needed me to exit and reconnect before it would show me the IP address, which I'd need in order to configure M.A.L.P. on my phone. Not a big issue, and wasted precisely 20 seconds each time, but worth remembering if you're reading this as a first time user. A further mild annoyance which is perhaps unavoidable is with the two SD cards in 2go - each time you switch on the combo, it defaults to reading the left side slot. So if you regularly want to play from a card in the right-hand slot, you have to open Go Figure and reselect it each time you start up the player. I guess the only way around this would be for Chord to develop Go Figure to include full MPD control. To be honest this shouldn't be beyond the ability of their software team and if you're reading this Mr Franks, I urge you to consider it! The batteries here have far more juice and I haven't

noticed 2go running down between listening sessions in the same way that Poly does.

Having unboxed the two units I put them on charge, configured 2go with my network and went on a bike ride for a couple of hours whilst it cooked. Although the pairing seemed to be brand new units, upon my return I fired up the system via my Hifiman Sundara 'phones and was pretty darn impressed from the moment the music began. I can't put into print what I wrote to Stuart the Ed' via Messenger, but you get the gist!

As well as the Sundara's, I listened with Cardas A8 Anniversary and Obravo Cupid IEM's.

My main system is as follows: Simaudio Moon 280D Streaming DAC, Moon 600i amp into Totem Forest Signatures. Melco NA1/2 digital transport, Silent Angel Bonn 8 Network Switch, Supra Cat 8 cable to Melco, Audioquest Vodka Ethernet from Melco to Network DAC. Tellurium Q Ultrablack 2 XLR analogue interconnect (between 280D & amp) and matching speaker cable. Unfortunately, all of my preferred phono interconnects had WBT plugs, which proved too big to fit into Hugo2's phono outputs. Therefore I made do with some elderly, but high quality, Russ Andrews/Kimber interconnects between Hugo2 and the Moon amp.

SOUND QUALITY

I've made no bones about being a long term user of Poly/Mojo, so that needed to be the first comparison. Compared to the smaller combo and regardless of the 'phones I used, there was a far greater sense of power and scale to the sound. Far more open and detailed sounding, with more extension at both of the frequency extremes. The soundstage expanded further beyond the width of my head and it was much easier to follow placements of instruments within the soundstage. The experience was like a musical performance occurring around my head, as opposed to just a nice sound. Obviously to my mind, the amp section can take as much credit for this as the DAC. With the Sundara's connected to Mojo, there's always a sense that you've only just got enough power, something that really isn't a concern here.

REVIEW



Now would be a good time to start talking about the output filters and settings on Hugo 2. Filter 01 is, in Chord's words 'incisive neutral'. 02 is as previous but with some HF roll-off – intended to be ideal with DSD. 03 is 'warm', and 04 'warm' with HF roll-off. I gather 04 is for poor recordings. I found 03 and 04 brought too much colouration for me. I flitted between 01 and 02, depending on the phones used and recordings. Mojo purposely errs on the slightly warm side, due to the intended market and the phones that may often be used with it, especially whilst on the go. With Hugo2 the balance can be on the cool side, but for me not enough to get in the way of me enjoying the music. With the Sundara's, which are on the forgiving side, I tended to use setting 02 with some DSD recordings, but 01 with others. I'd use 02 with FLAC files with a lot of treble energy, just to take the edge off. The Cardas A8's use a single, full-range driver. These phones can sound a bit on the dark side with some music, so setting 01 was ideal with everything I played through them. There also got a button labelled X-PHD. This gives a more centralised image to vocals and lower frequencies, to give a more 'speaker like' listening experience. To be honest, it wasn't for me and so after trying it, I left it defeated.

I was lucky enough to acquire the entire Dead Can Dance catalogue on SACD at the end of last year. Devilish magic and sorcery enabled me to rip them as DSD files, so I copied to Micro SD and loaded the entire catalogue into 2go's slot 2, on a 32gb card. Their early/ mid-period albums were recorded in a church, with some albums featuring all acoustic instruments. I was able to fully enjoy the natural recorded acoustic and with a sense of 3D that Mojo could only hint at. One of the things my main system does so well, especially since the arrival of the Totem Forest Signature speakers, is to give a sense of the human element of the music. With the right recordings, you really get the sense that something is being played, rather than simply being a facsimile. This is where I felt the bigger Chord combo scored over the smaller one. Although music via Mojo is very enjoyable, that's where I felt it was lacking compared to my main system. Hugo 2 brought much of this element, which I enjoy so much in my main system, to my headphone experience.

Having spent a good few hours listening with headphones, it was time to hook the combo up to the main system. Initially I played music directly from 2go's SD card. It was plain to hear that this pairing was far more at home in a high-end system than the Poly/Mojo combination. It put up a good performance against my reference Moon 280D, indeed giving a slightly more detailed presentation. The timing of both my Moon and the Hugo 2 / @go was exemplary. Putting aside the Chord's more forward presentation and soundstage perspective, soundstage depth and width were about equal. I will say, compared to the Moon, the Chord's lacked some sense of tonal colour and I felt the Moon put more meat on the bones of the music. The Moon at this point sounded more natural and relaxed.

I then hooked up the Ethernet cable from my Melco NA1/2, to 2go's Ethernet input. The NA1/2 is fairly low in the Melco range and has a less sophisticated PSU than their higher-end models. I was fully expecting 2go to outperform it, being that 2go is battery powered and specifically designed around Hugo2. Surprisingly playing music from the Melco via my AQ Vodka cable, lifted the sound quality much closer to that of the Moon 280D! I can't explain why and indeed I messaged a dealer, who was previously involved with a manufacturer of very high-end digital sources, and he couldn't understand it either! However track after track, I got a more airy and natural sound from the Melco, connected via Ethernet to 2go, than from the same sourced files played from 2go's SD card slot – go figure if you'll pardon the pun!!! I thought I'd now try the Melco connected directly to Hugo2 via USB. I didn't have a high-end USB cable in the necessary A to micro size so had to use Chord's supplied one. Connected this way the sound was comparatively shut-in and lifeless, compared to that of both SD or Ethernet via 2go. I can't answer why this was the case but it was obvious to the ear the Melco via Ethernet was giving me the best results of the three configurations.

The final thing I decided to test was performance over Wifi vs Ethernet. I tried the latter both direct from the router, which is placed next to the PC in my office, and connected to the



Network Switch in the living room which feeds the main system. Streaming the latest Nitin Sawhney album, 'Immigrants' from Qobuz, there was a definite increase in detail, separation and soundstage definition, along with a clearer sense of timing, when connected this way. Moving over to the Network Switch, the vocals, in particular, seemed more detailed, and the music was delivered with a greater sense of focus. These differences weren't huge, but definitely worth pulling out a half-decent Ethernet Cable, if you're near your router, or better still your switch. If you're playing from an SD card, via an MPD App then this shouldn't be necessary of course. Putting things into perspective though, having done the comparison I continued to listen to the album upstairs over Wifi and quickly adjusted to the slight loss of fidelity, so it's certainly not essential to use Ethernet if not convenient.

It is worth noting that, unlike Mojo, Hugo2's battery stops charging after being powered up for 24 hours, so doesn't run as hot as Mojo when left connected to mains.

CONCLUSION

Clearly, this is a quality piece of kit and a whole level above the Poly/Mojo combination, which of course you'd expect at around three times the cost. Is it three times as good? I'd say definitely in certain situations, but there's going to be times I'd reach for the smaller setup, especially when using IEM's on the move. I'm not sure, if I owned both, I'd want to take the bigger, more expensive player away on a beach holiday, despite knowing there'd be times I'd miss what it could do. I'd say there are two potential groups of people who'd buy Hugo 2 /2go. Firstly the person who wants what must be a contender for the best transportable device on the market, to use around the house, office, train, hotel room etc. Secondly, the person who wants a great streaming DAC for a decent, although not an absolute high-end system, that they can pack into that lovely leather case and accompany them on their travels.

Would I buy it as a permanent solution for my main system? To be honest, my existing DAC is more satisfying to listen to and costs similar money, so I'd say no for my system, but that's

not to say the results between the two sources might be insignificant in another system, or even reversed.

However, what I will say, after carrying out this review, is that I am impressed sufficiently with the level of quality on the move, I'm exploring where I can find the funds to buy the Hugo 2 / 2go combination!

AT A GLANCE

Build Quality:

Absolutely first class build and truly brilliant design features. Certainly feels built to last and I don't think the looks will date for years.

Sound Quality:

Surely unrivalled as a transportable device, which can double up on duties in your main system. Ultimately it's a little lean sounding compared to my similarly priced Streaming DAC, but that lacks a headphone output, battery and can't sit on my bedside table! Perhaps there's a slightly forward balance that means you'd want to be careful with system matching. Overall it gives a very musical and insightful experience.

Value For Money:

At this end of the market it's all relative and I know of no competitor that allows you to split the unit in half and use the DAC with the output of a phone or laptop. You could even buy Hugo 2 first and use initially as mentioned, then add 2go as funds allow. I'd have to say it's worth the asking price.

We Loved:

Stunning design

Solid Build Quality

Flexible connection options

Storage capacity

Lively and detailed performance



Big Soundstage with accurate instrumental placement

Strong, deep, detailed bass

Great sense of timing

Powerful headphone output

We Didn't Love So Much:

Some may find it operationally quirky

I think it's about time Chord added an MPD player to Go Figure, specifically to make it easier to swap between which SD card you're using without having to frequently swap via goFigure

Can sound a little forward and lean with certain recordings, so the user needs an understanding of the various filters and must take a little care with system/headphone matching

Perhaps won't suit those who like a warm and cuddly sonic balance

Not everyone can afford it!

Elevator Pitch Review: The addition of 2go has turned what was already arguably the best transportable DAC, into what must surely be the best transportable Streaming DAC! Awesome design and build quality. Insightful, detailed yet powerful sound with a big and accurate soundstage.

Prices: Hugo £1799, 2go £995, Leather case £99.95





CHORD ELECTRONICS POLY & MOJO

The Chord Poly and Mojo have been around for some time now and are a well known portable combo. In this review, Chris Baillie looks at Poly and Mojo as a source for music on the go as well as in a home system.



Chris Baillie

Since the introduction of the Chord Mojo - MO(-bile)JO(y) geddit?, late 2015, Chord have gone on to sell tens of thousands of units and won countless awards and plaudits from both the Hifi and Tech press alike. Following on from Hugo which was launched the previous year, Mojo brought to mobile phone users what Hugo brought to PC users... and inspired a whole heap of similar products. Indeed, Chord inspired a whole genre with beautifully built, sonically class leading DACs that could turn your laptop or Smartphone into an audio-phile-level source. The initial appeal of each product was it gave you a transportable and portable DAC, primarily for headphone use. However, such was the performance of the DACs that both products, particularly Hugo, would be used in some very expensive systems and often replacing

full-size DAC's.

As a fairly early adopter, I used Mojo with both my PC and mobile phone. To be honest, whilst Mojo was wonderful to listen to with my phone, it could be a bit of a bind fastening the two together whilst out and about. Being a user of Samsung phones, I was unable to stream listening via Mojo, from Qobuz or Tidal due to Android restrictions. A further issue, probably caused by the phone rather than any design issues on Chords' part, was that I'd get some noise cutting through whilst listening. On the Apple side of the fence, you were able to stream to Mojo directly from Streaming Apps. Any issue here is because you aren't able to insert Micro SD cards to Apple mobile products, so storage for those full fat juicy FLAC's was often an issue.



HERE COMES CHORD POLY

Clearly, there were grounds to develop the products in order to both liberate them from the need to be connected to a computer or phone and potentially improve sound quality. Initially, the thoughts were that a small screen would be needed on such a product but fairly early on in the design process, it occurred to Chord that the Smartphone could be the screen. This would bring obvious savings on the packaging and power requirement. Very quickly from that point, the idea was formed Poly could be designed as a fully Roon-Ready, WIFI/DLNA Streamer, with its own Micro SD card slot. This would instantly remove the need for a physical connection to its controlling Smartphone or tablet.

Note: Poly can only be used in conjunction with Mojo, so that's what this review will concentrate on.

As with Mojo, all-important formats are supported, from MP3 to DSD256. No native MQA here. However, using Roon you can unpack MQA files to a max of 24/96 and MConnect can do up to 24/48. I have tried both and it works as expected.

No doubt about it, both items fit together in a seamless fashion and the combination exudes quality. There's a lovely premium feel to both units and a nice weighty quality to the casing. Effectively you don't get any controls on Poly, although there is a recessed, pin operated configuration button. To be honest, the latter hasn't been needed since the launch of Chord's own App called 'Go Figure'.

Mojo has just three buttons, in the form of funky coloured balls. Two of them work as volume control +/- and the other will switch on both units at once, assuming they are connected together. The volume balls change colour depending on volume level, and the ball that operates power changes colour to correspond to the sample rate of the file being played through the units. Poly & Mojo push-fit together and are held in place by the plugs protruding from Poly which slot into the sockets of Mojo and so effectively they become one, seamless pairing. I still prefer to put them both in the

dedicated case in order to protect them from knocks and scratches etc. Almost a shame to put them in the case to be honest as they feel so nice to hold, but it protects them from potentially expensive damage!

THE REMOTE CONTROL

You have two options here, UPnP App or MPD Player. For those unfamiliar with the terms, an example of a UPnP (Universal Plug and Play) App would be Bubble UPnP for Android or MConnect for IOS/Apple. Both of these apps rely on information being sent across your network. Occasionally with UPnP Apps, there can be issues with setting up things like gapless play and playing DSD files. You must use a UPnP app to play files from your local network. Examples of this would be a NAS or even something like J.River, installed on your PC. You also need a UPnP app for playing files from a Cloud provider, such as Qobuz/Tidal. You can also use the same app to play files from Poly's SD card. Playing the music from SD card via and MPD Player, such as Glider for IOS or M.A.L.P. for Android, keeps things much simpler as the music is effectively sent directly from POLY to MOJO, without going through the App itself, so any limitations regarding Gapless Play or DSD format compatibility are at once eradicated. I did find the sound quality direct from SD card to be considerably more defined, focussed and tonally varied than over WiF. There were similar benefits, although less pronounced using an MPD App, rather than UPnP to stream from Poly's SD card.

IN USE AND SET-UP

I will admit that with certain routers I've used in the past, I have experienced issues with Poly not showing up on the network. These were solved entirely by using a higher quality router. It's worth setting your router up so it always designates the same IP address to Poly, as it will cause issues if the IP address changes each time you log on, especially with an MPD Player. I get a 100% stable connection using my current ASUS router and few issues with a previous BT Smarthub, or indeed a friend's Virgin Hub.

Whilst out and about you still need Poly on a

REVIEW



network. The simplest way is to use your phone's WiFi Hotspot. This proved a totally reliable method with every phone I used. If your phone or device isn't capable of providing a hotspot, you can create a Hotspot via Poly, although you will lose internet capability on your controlling device. There are ways of setting up Poly to play directly from a playlist created on your SD card, which I gather can continue to play even if you move away from a network. To be honest I tend to play entire albums so I have never done so. A good friend of mine uses his this way all the time, so horses for courses. You can also put your streaming account details into Go Figure, which allows the use of Apps that don't natively offer these services. Both Qobuz and Tidal are listed as options in Go Figure.

HOW DO THEY SOUND?

I am going to break this into two parts - home and away. I have been using the combo for quite some time now but almost always as a portable with headphones. However, our editor really enjoyed using it in his smaller system with speakers and so set me the task of testing it in this configuration in my main system, which proved good fun. I've used the combo with headphones such as Sennheiser HD25-2, PSB Audio M4U1, Cardas A8, Obravo Cupid and more recently, the HiFi Man Sundara. To be honest the Sundara is at the limit of what Mojo is happy driving and they do need the volume turning up pretty high before they come to life, but still a very enjoyable combination.

Overall I would say the Cardas A8's are a great combination and they complement the Mojo well. They give a slight bass boost and have a similar, slightly warm balance to Mojo and bring out the abundance of detail on offer, without a hint of hardness or harshness. Soundstage with all of the phones I used, was wide and with some sense of depth. Bass is full and firm but perhaps lacking in ultimate depth compared to more expensive set ups. Vocals are slightly forward, but never too much as long as the headphones don't exhibit the same balance. The sound is dynamic and involving with all formats, especially DSD, which in my opinion tends to possess more low-level dynamics when at its best. I felt the music possessed a

great sense of timing and rhythm and I found it easy to get emotionally involved with what I was listening to.

I am listening now to an SACD rip of Love Kraft by The Super Fury Animals in DSD, via the Sundaras. It's a pretty bright, brick-walled recording and can have a bright edge in the wrong system. With the combo, I can hear the limits of the recording. It doesn't mask the slightly harsh edge to some of the instruments but the balance doesn't tip too far towards harshness. Some of the tracks are very busy, but I can follow each instrument and things never lose their composure. Each track here bounces along nicely, underpinned by a firm bass line that drives the music along. Next up is another SACD rip, this time of Dead Can Dance's Serpents Egg. I'm hearing the sense of acoustic of the church where it was recorded and some sense of soundstage depth. It's not quite to the level I've experienced with the best setups, but I'm not missing and to put things into context we are talking about a portable rig, with a battery that's expected to last most of the working day!

POLY AND MOJO AT HOME

Now would seem like a good time to try Poly/Mojo in the main system. Ideally, I'd have liked to try it within the context of a system where the amp and speakers are somewhere in the region of £1000 each. In such a system, I do think it would sit as a great component for occasional use, especially as a second source. Perhaps a great way to introduce one to the joys of streaming, whilst doubling up as the source in a killer headphone set up. My main concern using the combo for regular long listening sessions would be the toll on the battery. Yes, you can charge and listen, but both units do get very hot when used in this way. These concerns aside, it did a pretty good job in my main system, which costs several times more than the Poly/Mojo combo – my Moon 280D Streaming DAC alone retailing at several times the price! The amplifier was Moon 600i, with Totem Forest Signature speakers. I used a Sean Jacobs RCA cable with an RCA/Phono adapter from Poly/Mojo to the amp.

The first track up was 2 Far Gone from Moses



REVIEW

Boyd's Dark Matter album, in 24/44. Initially, I listened via my Moon 280D, My Melco NA1/2 and then swap to the Poly/Mojo. I am able to stream via the Melco, but as Poly doesn't have a wired connection, this isn't a fair comparison. I'm able to stream the same file directly from Poly's SD card, so I use it this way to level things up. Considering the price difference here compared to the Melco/Moon combination, Poly/Mojo do a pretty good job. We get almost as wide a soundstage and similarly lively presentation. We get a similar sense of timing and the bass propels the song along in a similar fashion. Where we lose out is lack of the deepest bass notes and bass power and there is a comparative lack of air, space and sense of depth. There's also a slight hardening of the upper frequencies, which affects the lead piano slightly. This slight hardness isn't to the point of becoming offensive and I'm aware the rest of the system is very revealing and comparatively MUCH more expensive.

Next up is The Lost Sky, from Jesca Hoop's Memories Are Now, in 24/96 – Melco to Moon, direct from SD card via Poly/Mojo. Again comparing the two, we get a similar sense of soundstage width, this time well beyond the confines of the speakers. Here there is slightly more depth to the soundstage with the Moon and better sense of acoustic. Again, there's more space around each instrument and generally more detail, but the rest of the important parts of the performance remain intact. With this being an acoustic recording, albeit with a generous amount of reverb added in the production, I am noticing the Moon sounds more natural. The Poly/Mojo does seem to have a more forward balance, especially in the vocals, which do have a slightly hardened quality here. Again this wouldn't be noticeable to most people in isolation, especially via a less revealing system and even for me it wasn't to the point it became in any way offensive.

Where I did manage to trip up the Chord combo, was streaming Polythia's G.O.A.T., in 24/96 via Qobuz. This is a typical modern rock recording, very upfront distorted guitars, with a lot of compression. I had played this a few days before via the Sundara headphones and whilst the limitation of the production was evident, it was perfectly enjoyable. Via the main system,

however, the balance tipped towards harshness to the point it wasn't particularly enjoyable. The Moon DAC was able to resolve much more detail and separate the instruments much better. This meant things could be kept under control and I was able to concentrate on the virtuoso performance unfolding before me. Taking the price difference between the two sources into account and the revealing nature of the rest of the system, it's hardly surprising these limits are exposed - and that REALLY must be taken into account! The fact this last piece was far more balanced via my headphones, shows how system matching is crucial. These comparisons have certainly got me eager to hear what the combination of the recently launched 2go, paired with the extremely well-regarded Hugo2 are capable of.

CONCLUSION

Poly and Mojo combined make a truly unique combination and they are still unrivalled at their price point as far as I'm concerned. I am hearing through the grapevine that the Astell & Kern KANN Alpha may rival our combo for sound quality. However, it does cost £200 more and you lose the ability to split the two components and use Mojo as a DAC from a computer/phone or even CD player when required. It is this versatility where the Poly/Mojo combo will win out.

As written above, in the right system the combination can also make a great streaming source at home. Clearly, it's going to work better in budget and mid-priced systems, but we have 2go/Hugo2 for more revealing systems. I'd certainly love to give that combination a try at home to find out just what it can do!

AT A GLANCE

Build Quality:

Definitely feels like a premium product

Feels built to last

No cheap materials evident here

Sound Quality:



Used within its limits, brilliant, especially considering it's a portable product. Slightly warm balance overall. Maybe a hint of forwardness to female vocals and piano. Possesses a great sense of pace and timing.

Value For Money:

Worth every penny in my view. Very little competition, if any.

We Loved:

Musical presentation

Fabulous build quality

Can double up as a second or lesser-used source in a main system

Can separate and use Mojo as DAC in a main system or with a computer if required

We Didn't Love So Much:

Poly can be fussy with some networks

Poly never completely shuts down, so battery drains when not in use

Can get hot if you are charging the battery whilst playing music

Price: Poly £499, Mojo £399. £899 as a gift pack

Elevator Pitch Review:

Unique streaming combo with a premium build and premium sound to match. First-class as a portable and pretty good as a stand-in or second source for a home system. That the two units can be split so that Mojo can be used as a DAC in a system or computer audio set up gives it the edge over many alternatives.





432 EVO MASTER MUSIC SERVER

The 432 EVO Master Music Server is a £14 000 USB-only server with its own dedicated power supplies. Alan McIntosh takes a listen.



Alan McIntosh

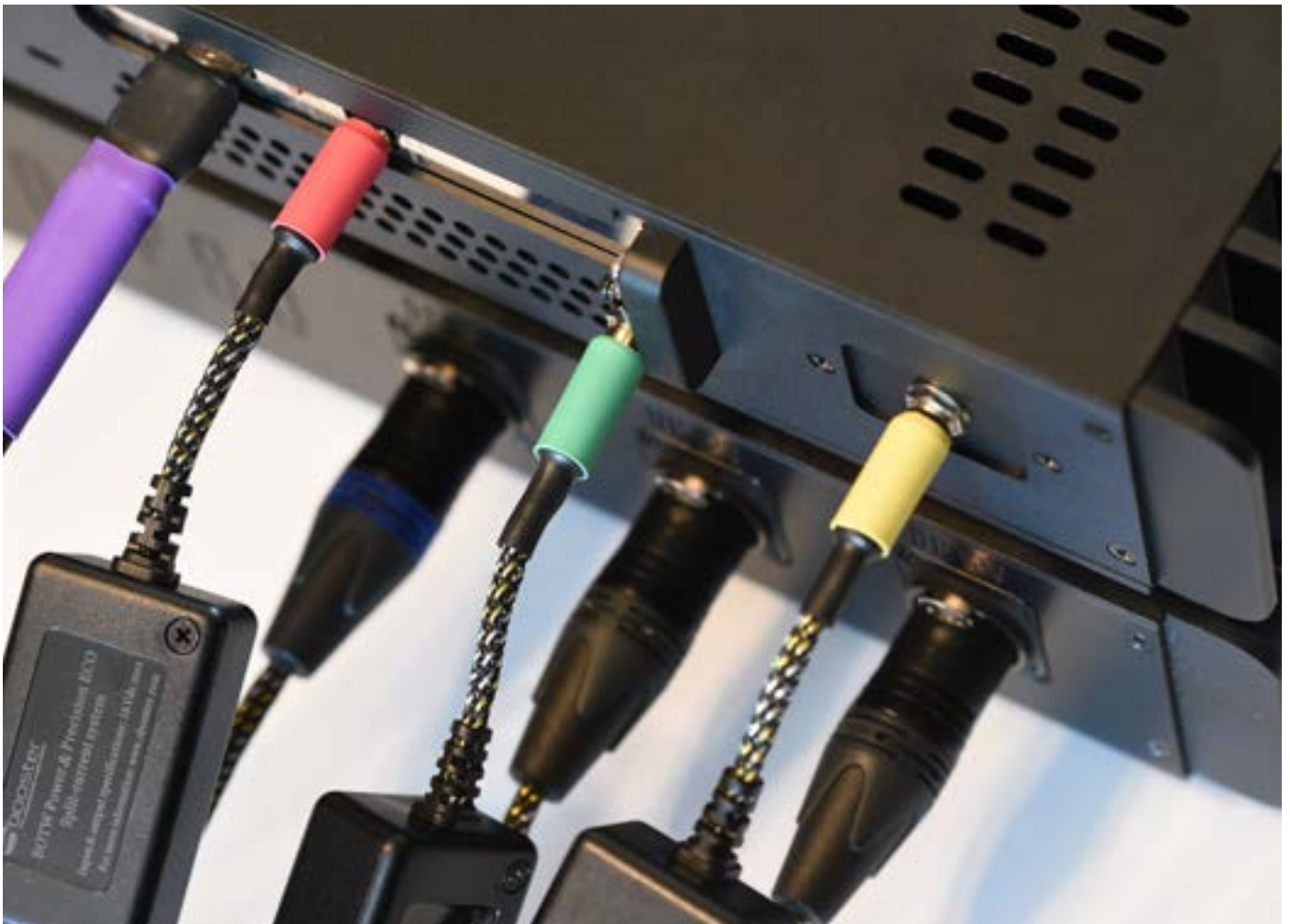
Digital streaming is becoming a very congested market, between integrated streamers with DACs, streamers without DAC's, integrated amps with streamers built-in, and all combinations in between so it's a tough market for listeners when trying to choose where to invest, and manufacturers to clearly differentiate their offerings. Now and then, however, something a bit different comes along and my ears prick up. I've had streamers based on Raspberry Pi, standalone, ones integrated into SACD players, integrated into amps (in the latter 2 cases I still do) and currently, I have a standalone streaming transport, but what I've never had is a ripper, ROON Core and streamer all in one and so when I was asked to take a look at the 432 EVO I didn't need to think twice. Then when I started to read about the 432

"tuning" concept I became even more intrigued, this wasn't going to be the usual fare it seems.

CONSTRUCTION

The 432 EVO Master Music Server is the top of their range offering from 432 EVO that come as a two-box design. One box is frankly packed to the rafters with a TEAC ripper drive, Roon core, internal 4TB SSD storage, dedicated master clock, isolated USB, and bit-perfect capable streamer. It's supplied with a snazzy wooden USB with the instruction manual pre-loaded. The main streaming box bears the rather funky 432 icon, a slot loader, and simple power button and white power LED. Around the back the first thing you notice apart from 3 power supply inputs (yes you read me right – 3), and what looks like a standard PC back-end

REVIEW



with RJ45 network connector, USB slot (for DAC connection), and other legacy connectors. That's because like almost all streamers and music servers it essentially is a computer – it's just that most manufacturers try to pretty things up. We spoke to EVO 432 about this and they made the following comment "The 432 EVO Master server back panel includes an interchangeable ATX back panel plate as 432 EVO wants to continuously research improvements in motherboard designs and test them for sound quality. Thanks to not having a custom milled back panel compatible with one specific motherboard, 432 EVO can implement newer motherboards and offer those as an upgrade to existing customers. This is the "EVO" part in 432 EVO: upgradability. Now the customer can just have their motherboard upgraded to the latest specification."

Passive heat sink fins flank each side with top vents as well for heat dissipation as this, of course, is a fan-less design – another welcome noise and vibration reduction feature.

Box two is that triple power supply and 432 EVO have really here and I think truly it differentiates for those listeners who appreciate dedicated power implementation. Along with separated transformers you get 3 separate Sbooster power cables to feed key components in the main box meaning you get truly discrete power for the motherboard, master clock, and USB output to the DAC - I believe this can only be a good thing.

My demo unit was supplied without a power cable or USB cable to allow the user to decide their own approach, so I am using my Titan Audio Nyx cable and a pretty budget A/B USB cable. SPDIF/Coaxial is not an option and nor is AES which is a shame as it does limit choice. However, in this regard 432 EVO has this to say: "The 432 EVO Master was designed to be the best possible USB transport. As the clock is custom-tuned for the USB output board, there is no space left in the chassis to include more digital output boards". For users who want the added flexibility more outputs would give, 432 EVO do have their Essence model, which, however, has 24/192 DAC board built-in, but also has a SPDIF optical and coaxial output, and also supports USB and HDMI DAC's.

The digital audio processing end of things is built on a proprietary Linux OS running a modified Vortexbox web interface which allows configuration via a single weblink address. The streaming and music end of things is handled in one of two ways. You can also manage it via Logitech control apps such as iPeng or Squeezebox app variants, but 432 EVO recommend ROON to get the most out of your metadata and user experience and so you will need a subscription, but for anyone already familiar, you'll immediately see the value.

I mentioned something that really piqued my interest was 432 EVO's unique tuning capability via its special 432 Hz plugin (accessed via the config page). 432 it turns out is a bit of a special number in maths and among many theorists in terms of healing frequencies being at 432 Hz and more importantly, recognised by many musicians as a preferred tuning frequency to the universal standard tuning of A4 at 440 Hz – lost yet? The general theory goes that some musicians feel 432 Hz is a less aggressive, more laid back, organic frequency – but is it "better" – of course, that is going to be down to the listener's ears. Go ahead and google 432 Hz and try not to disappear into a rabbit hole! It appears over many years that global orchestras tuned up at different frequencies until a standardised A4/ 440 Hz approach came in. Some feel 440 Hz can be a bit harsh or sharp so have tried to champion a return to 432 instead. I'm neither mathematician nor a musician so cannot refute or support the theories – what I am interested in however is – how does it sound?

SOUND QUALITY

This is where things get interesting. As always, I start with playing a stack of well-known works via Roon and Qobuz with all tuning tweaks turned off just to get used to the usual sound. A joy to use via Roon, it sounds very good and I'm enjoying myself incredibly. Ripping some favourites is easy and that slot loader is very satisfyingly smooth to use – pop in a CD and in 12 minutes (I timed it) it spits it back out and lo-and-behold the album appears in your library – all artwork and metadata intact thanks to the particular ripping software employed – nothing else required ! You can even use the integrated Ripper Log to confirm metadata. That I do like

– a lot!

Sound playback is of course tied to the DAC you feed it through, in this case, the very capable integrated one in the Hegel 590 amplifier, then a Hegel HD30 into a Hegel 190 just for interest and the overall feeling is sound quality is not dissimilar to my reference Auralic Aries G1 Streaming Transport. Everything is big, textured and clean, full delivery across the spectrum, solid bass, and lovely imaging and resolution. Certainly a solid performer in the sonic sense. Then I started to fiddle with the tuning setting and that's where things got, well - unexpected!

David who set the 432 EVO Master up for me gave me a quick tour of the plugin configurator accessed via a link on the iPad. You can tweak many elements but where things really got interesting was when I started to try different tuning settings.

First up it's Yello's new "Point" album ripped to the 432 EVO Master. I'm thoroughly enjoying its solid, tightly resolved and bouncy electronic loveliness which is presented wonderfully and so after a few tracks I take a quick pop into the config page and I changed the target frequency from the standard 440 Hz to that esoteric 432 Hz and hit play to find now I'm hearing "Waba Duba" but a slightly laid back, less frenetic version. For anyone like me (and our esteemed leader Stuart at Pig HQ) who has been a vinyl DJ and used to using the adjustment on the right of a 1210, you will know it's not called a speed or tempo control and instead it's called a pitch control. Yes - it slows and speeds the BPM, but it also takes the pitch tuning up or down. This 432 plugin somehow manages to slightly reduce tuning pitch so everything is a bit more relaxed, less energetic but does not slow the tempo any.

The effect then, is that it's like the players and instruments have all taken a bit of a chill pill but still delivering what's expected overall. Hopping back to 440 Hz and the energy and extra drive comes back. I bang on Simple Minds "Someone, Somewhere (In Summertime)" a key reference piece for me and listen loudly at 440 Hz then flip to 432 Hz. A brief gap and its back – again with that down tuning and relaxation of

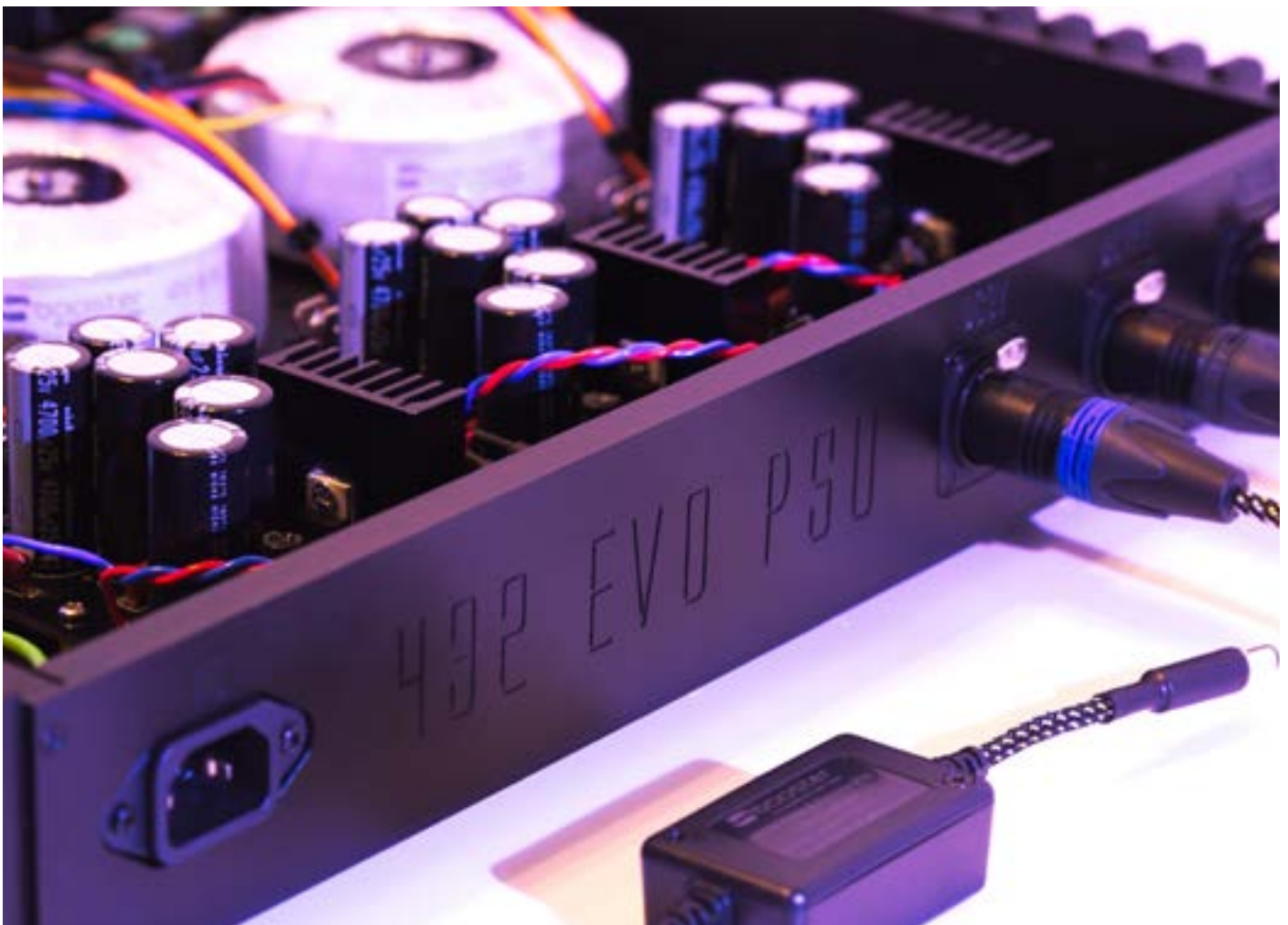
delivery – I did feel initially at times between quick A/B testing on music like rock or electronica that there was a drop in energy.

But giving it time changed this and, in fact, the more I listen the more organic and akin to analogue I think it sounds - more relaxing, slightly less bright, and potentially less digital – but possibly on some works lacking that final edge and spark. It's here I know every Audiophile has their teeth on edge... fiddling with reproduction indeed! And I probably fall in that camp. But again, this is a unique approach and it does bring something new to the party. Does it sound better? The jury's still out but certainly different and that decision is going to come down to your personal preference. On classical pieces, it's certainly deeply engaging and draws you in. Mozart's "String Quartet No16 in E Flat Major" by Quatuor Van Kuijk (Qobuz 24/96) feels less forced forward by the technology, more enveloping, more human - less hurried in a way – perhaps confirming the 432 Hz preference of classical music. Over time at 432 Hz it's easy just to sit back for a long time and enjoy, perhaps it's less fatiguing and does seem to overcome that digital edge that often lurks.

CONCLUSION

There is a lot to this system. Not only are you getting a ripper, storage, music server, separate master clock and Roon Core all in one solution, but you're also getting a very impressive triple dedicated power solution and a unique level of configuration - including some very intriguing tuning options. The sound overall is beholden ultimately to your DAC, but implementation matters, and dedicated power, re-clocking, fanless designs and that tuning option make a big difference in my opinion – none more so that the tuning in fact. The overall sound is great, ripping is a bonus and having a Roon Core is gold for many users wanting to take advantage of what Roon has to offer. I'd have liked other connection options such as SPDIF/Coax or AES/EBU but that's a fairly minor consideration for most. The 432 EVO Master Music Server just works – and works well – and that matters in digital audio. To use it is a joy – no glitches or stutters here. Adding that deep level of listener configuration and you get a hard to ignore solution here and one that very well

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worth exploring.

Is 432 Hz better? Honestly – while it's certainly different I am not sure I will ever decide but you should find out for yourself and I suspect it will be partly about the genres you listen to.

AT A GLANCE

Build Quality:

Very good overall. Superb power supply implementation and all in one solution. Management console and Roon control excellent and getting a human person provided to set it up and tour you are very nice touches. Smooth action slot loader. Flawless running in all aspects through the review period. Aesthetics lessened by the basic PC backplate – at this price point, I think that is worth a rethink, though we take onboard 432's comments about upgradeability etc.

Sound Quality:

While reliant to an extent on your in-situ DAC, the overall implementation and in particular the level of sound configuration means you get a very impressive and resolving sound and uniquely tweakable solution indeed. Getting this level of power separation and re-clocker is a real bonus sonically. One not to be missed for demo!

Value For Money:

£14k is not budget by any means and it's a busy market however very few if any offer this level of integration, power supply implementation, deep configuration, and none that proprietary tuning option – so a real USP there. Competing with offerings from Nova Fidelity and Innuos. The human setup and support is a major value add! It literally could be the last digital solution you need.

We Loved:

Flawless functionality with very strong sonic delivery

Dedicated Trilinear PSU, integration of ripper, Roon Core, and streamer, config and tuning

options as well as in person setup and support. (Note: in-person set up is for the Master model only)

We didn't Love So Much:

Limited digital outputs, I'd like to see more design thought on chassis and back panel at this price.

Config interface could benefit from some cosmetic improvements.

Price:

RRP £14,000 for both Ripper/Server/Core and Dedicated Power Supply Unit. Includes setup and 2 year support (the 1st year direct from Wholenote Distribution in the UK)

Elevator Pitch Review: A strong sonic performer that is tweakable as is and upgradeable as new developments and improvements become available. Price includes setup and support. This may be the last digital front-end you need purchase.





RASPBERRY Pi AND ROON ENDPOINT WITH ROIPEE

Stuart Smith is a recent and evangelical user of Roon, and couldn't imagine an audio life without it. However, I wanted to explore the possibility of getting Roon connectivity using the ridiculously cheap Raspberry Pi computer – a route I'd been very wary of in the past.



Stuart Smith

A few weeks ago I put an order in for a Raspberry Pi-based streamer on English EBay expecting to be wholly underwhelmed if indeed I got the thing working at all. These things scare me and I'd previously bought a second-hand Pi with a DAC HAT (HAT stands for Hardware Attached on Top) but never used because, quite frankly, the whole thing scared me as I'm a bit of a technophobe. It has sat in its box for the best part of two years and not once did I have the courage to get it out to see if I could fathom it.

WHAT IS A RASPBERRY Pi?

The Raspberry Pi is a small credit-card sized single board computer that was first introduced in 2012 with the intention of it being used to teach computer science in its most basic form. Since then it's gone through sever-

al upgrades and now there are various models available, though all remain incredibly cheap – very cheap. Since its launch it has become the best selling UK computer of all time and, interestingly I thought, 44% of Pis are sold to industry. There is a huge community around the Pi and many companies have set up making HATs for lots of different applications, which, importantly for us, includes a whole load of audio applications. However, the unit I bought is basically a Raspberry Pi with a bit of software installed called Roipeee and, whilst this free software is compatible with a number of HATs none is used here and the software outputs the zeros and ones to the DAC via USB directly. However, I'll talk a bit about HATs as they are pretty interesting in themselves and there are lots that are specifically made for the audio market.

REVIEW



WHAT'S A HAT?

HAT, as mentioned, stands for Hardware Attached on Top, and is basically a hardware module that plugs onto your Raspberry Pi without the need for any soldering. You can get HATs for loads of different audio applications and they range from DACs, DACs and ADCs, Digital amps, Digital I/Os, DSP, and streamers. All are made by third party companies and all are, in keeping with the ethos of Raspberry Pi, cheap.

SET UP AND USE

I'd sort of looked at the Pi at worst as a toy and at best a bit of a novelty for geeky types to play about with. I was wrong!

The Pi I ordered was a straight-up streamer that had been configured as a Roon endpoint using the free software Roipieee, though there was an option to have it set up as a Volumio music streamer/server. Ordering was through eBay in the UK and a seller called PaulWhittaker6 who was very helpful throughout the buying process – he also offers free advice on set up, though the process is so simple that his very brief notes on set-up were absolutely ample. I paid £124.99 for the unit but with postage to mainland Europe and the import duties (thanks Brexit) the total cost came to just over £172.

The unit is a small but chunky metal box around the size of a cigarette packet with several USB slots of different sizes, a power input, and some more USB slots. The branding of the box is FLIRC. It's tiny but kind of quite nice looking in its silver finish. It's so small I just popped it to the side of the preamp on the rack.

I discussed the purchase with Paul prior to pulling the trigger (I was still pretty nervous about the whole concept) and was informed that all I would need was a 5V/3Amp power supply – I had an iFi PSU and so didn't need one, though one did come in the package anyway, though I do not believe this is usual.

All the operating system and software you need is pre-installed and as such you are ready to rock and roll.

Obviously, I already have a Roon account and the Roon 'core' on a small NUC computer I built and that is permanently connected to the home network.

Here are the instructions in full, which will give an idea of how easy this whole process was;

Plug the Pi in via ethernet and if you are going to use it wired also connect a DAC (Note to add that the DAC I was going to be using was upstairs and not connectable and so I just connected it to the network box via an ethernet cable.)

2. Power on the Pi and wait for 15 mins for it to finish updating.

3. Check to see if it's done by typing roipieeexl.local in a browser of a device such as a phone (I used a computer).

4. Go to the network tab and input your Wi-Fi details. (On the online roipieeexl interface there is actually a 'button' to scan for your network.) Move it to the desired location via Wi-Fi or wired and open Roon. It will show under the audio tab if your core is running.

Once I'd taken it upstairs to the second reference system I connected it to the LAB12 DAC via a USB cable, turned Roon on the Roon app via my iPad, found the Pi and I had music. Really simple and really straight forward, much to my amazement and surprise.

SOUND

This is a quicky review and I don't intend to go into loads of detail about what I listened to and all the rest I'd go into with an amp, speakers etc. One of my concerns for this unit was talk of a noisy USB connection, but I have no complaints so far, though you can add a Jitterbug, iFi iDefender, or similar, and am likely to do this down the line, though more for my peace of mind than anything. I'll also add my iFi 5V power supply as this is supposed to offer slight improvements over the standard wallwarts that are available.

As far as I can tell, and with a good few days listening under my belt with the streamer, I can only suggest that it works very well indeed. I experienced zero dropouts and as far as I can tell, no extraneous noise.

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The Pi has played everything I have fed it via the Roon app with no grumbles at all. It has even played with the DSD files I have played.

All in all, it sounds very, very good.

CONCLUSION

If I lived in the UK and bought from this seller I'd have had a Roon endpoint streamer for £125, which is silly good value for money.

Given that the unit is ready built, the operating system and necessary software is pre-installed set up is very simple even for the most technophobe amongst us.

It has so far worked flawlessly and does what it says on the tin – plays music via Roon.

This is pretty hard to fault, though I'm in the early days of my relationship with it.

AT A GLANCE

Build Quality:

Nice and Saturday box that is easy to hide should you want

Sound Quality:

Hard to fault

Value For Money:

Very good value for money, though adding a better PSU and something to quieten the USB output will add to the cost by about £150

We Loved:

Cheap

Well put together and good looking

Easy to set up

Good support from this seller

Sounds great so far

We Didn't Love So Much:

Not totally plug and play

Extras are recommended by the seller

Not as sophisticated as commercial products

Pretty basic and with no on-box control

Price: £124.99 before import duties to mainland Europe

Elevator Pitch Review: For less than £125 you can have yourself a functioning streamer that allows you to use Roon and plug into your favourite DAC. On the downside it's not completely plug and play - though not far off.





MEZE EMPYREAN HEADPHONES

Meze Empyrean Headphones are clearly a high-end headphone with a price tag of £2699. Dan Worth takes a listen.



Dan Worth

Meze is best known for its 99 Classic dynamic headphones and their in-ear-monitors (IEMs). The Meze Empyrean headphones are the company's flagship planar magnetic design with an open back.

Meze uses a "Hybrid Isodynamic Array Driver" for the Empyreans. The driver comprises two separate areas. The "Switch-Back Coil" and the "Spiral Coil". The Switch-Back coil produces the low-end frequencies and the Spiral Coil serves the higher frequencies.

The sensitivity of the Empyrean's measures at 31.6Ohms and has an SPL of 100db/1mw, which means that they will run from anything, smartphone, television, an inbuilt headphone output directly from say a CD Player or Streamer, or of course a dedicated headphone amplifier, which is essentially

what they deserve to be powered by for high fidelity listening.

FIT, FINISH & FEATURES

Arriving double boxed with a custom aluminium flight case inside to protect what is a commitment in terms of outlay for a pair of headphones, the Meze Empyrean's are very beautifully presented!

BEAUTIFULLY CRAFTED

The Empyreans are also a beautifully crafted design. Available in Jet Black or, currently, a limited edition Copper. I have the Copper version here. Contrary to my initial speculations, believing that they would be quite blingy and thinking that the copper may be fairly bright, it actually isn't. They look even better in the flesh from what I had seen on the internet and the detailed



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CNC machined grills look incredibly intricate - the copper really shows off and enhances the design. The adorning copper accents too are more subtle than stock pictures may lead you to believe and are a lovely touch in balancing out the overall colour compliment.

The construction of these headphones is stunning. A premium non-padded head strap is ultra-comfortable and is a snug fit with the carbon fibre tension frame.

The driver cups spin a full 360° as they have their own individual cable point connections.

Two sets of earpads are included - one in leather and the other in Alcantara.

Cable-wise, there is an option for either Meze's standard copper TRS jacks or a 4 pin balanced cable. In addition, there is an upgraded silver cable in varying lengths.

Overall fit and finish are superb and they sit snugly on the head, with plenty of room inside for my ears, have a nice level of clamping, and weight distribution is also very pleasing.

RUNNING IN

The running-in of the Empyreans is a bit of a task. I'd suggest 250-300 hours are suitable to enable you to really begin to access their true character and performance. This isn't uncommon with headphones and really to be expected. As well as breaking-in the planar drivers I also needed to give some good time to run in the single-ended and balanced cables, which I have in the standard copper and silver iterations. I left them connected for 10 days or so to the Tron Antares Ultimate headphone amplifier, listening frequently in order to hear how they developed over this time period.

Most notably the Empyrean's extension increased and notes became more fleshed out after about 150 hours, with decays and inner detail becoming more open and prominent thereafter.

THE SOUND

After this run-in period, with the Empyreans

(running single-ended with the standard copper cable) now sounding more relaxed and effortless, there was a more coherent flow and ease of dynamics to the headphones. I particularly noticed how well they conveyed the delicacies within many pieces of music I enjoy listening to. They are a gracious sounding headphone, which due to their particular planar design have a beautiful way of overlaying treble with a strong and rounded bass response. If you're a fan of the Audeze, Oppo, or Hifiman range of planar headphones the Empyreans will suit you very well.

They don't have the crisp forward punch of some other headphones such as the Focals I have at home. They are more like a Fostex 900 in comparison in terms of refinement, with a typical planar sound, although be it an extremely accomplished variant of the topology. The Meze Empyreans are silkier and more rounded in their character than that of a high-end dynamic headphone, which will typically be more forward sounding. The Empyreans have a lovely openness, full of rich detail and sparkle, but it's a more refined rather than a glisteningly bright sparkle.

Undoubtedly, for hard-hitting beat-driven electronica and bass-heads alike, other options may be more favourable, but with their additional control and less forward treble, it's easy to crank them right up and still listen comfortably. I was pleasantly surprised listening to Boris Blank for instance - noting how open, controlled and stable the sound was, and the bassline unexpectedly drove things along admirably enough. With this, I felt any compromises made in selecting a headphone that would perhaps be far more suitable for timbre rich genres, vocals and euphoric sounds was still a very rewarding listen for those odd periods of something a bit more off-piste. Plus, the Empyrean's do deliver more bass than say the HD800 which sounds thinner overall in comparison - they don't have as much slap to a kick drum as some other high-end dynamic driver style sets, but, conversely, tackle many other attributes in reproduction far more naturally.

I listen to a lot of Pop music from the past five decades (excluding most of today's nonsense). Pop has great diversity and a vast range of

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characteristics due to its very nature (great for burning in headphones and speakers alike) and varied production styles. Mostly recorded for radio in the past, bit-rates can be lower with older music that hasn't been remastered and the music can be more condensed as a result, but through Tidal or Qobuz one has the ability to build their own playlists in higher resolutions.

I wouldn't say everything I listened to was perfect and at this level, it's natural to be more critical. For example, my AKG Bluetooth headphones cost around £150. I have used them for long walks, whilst on holiday and for other non-critical listening for years now and I just can't praise them enough. They always get me moving a little, toes tapping, and often singing along - to everybody else's woe. My point is, at that level, and although an engrossing listen, I just don't pick them to pieces and over criticise their performance.

The Empyreans are superior, of course, but at this price, there will be a keener ear lent to their strengths and weaknesses.

I've not had any disappointing moments with them, although I would favour them more with jazz, acoustic, vocals and Cafe del Mar type music, and my biggest regret at the moment is that I can't offer them a valve amplifier, which I believe will do wonderful things with them.

The Tron Antares Ultimate is a fantastic solid-state amp. It's nicely balanced and on the warmer side with its class A presentation, but with a valve-based amp I feel the Empyreans would step up a level, become more holographic and open up their soundstage further to give even more density of tone in their upper end and project their vocals in such a way that their already organic nature would thrive on.

GOING BALANCED

Going balanced with the Empyreans lifts the performance. How much this is down to the topology of the amplifier in question or the headphones themselves I couldn't comment. However, in my experience all headphones I've tried which have balanced options change slightly when being fed a balanced signal. In the case of the Empyreans, they seem to have

a lower noise floor and in turn more separation and are slightly more open sounding. Timing seems slightly better and there is a stricter tolerance on image placement. The sound is a little tighter and lower end details come through stronger, removing a fraction of roundness from the bass.

Using Meze's silver cable is an improvement in terms of a crisper approach to details and clarity of leading edges. It's actually silver-plated rather than pure silver and I did have a few doubts about it prior to connecting it, as I'm rarely a fan of silver-plated cables, although done correctly I have been made to eat my words, but that's rare.

I do like Meze's plaited cable here, it has a crisper and cleaner sound to it. There's unquestionably more emphasis on cleaner details and upper bass response has a bit more slap to it. In a balanced and silver configuration - inner details are able to come through better and the sound is livelier and more vibrant - its most likely the cable of choice for most people I'd imagine, as the characteristics of the silky smooth Empyrean's has room for these attributes and is a nice touch for those who like that additional sharper inner detail retrieval, crisper dynamics and sparkle. I'd also hazard a guess that with a good triode amp this would indeed be the cable of choice for most.

EARPAD CHOICES

Another tweak to factor in is the two sets of earpads included with the Empyreans. The leather type and Alcantara options.

Neither changes the sound in such a way that's going to offer two different sonic signatures as such, but, as with the cable changes, subtle differences are to be heard. My personal tastes had me enjoying the Alcantara pads best. They take a little layer of glare away from the top end when listening at higher volumes with the silver cable and flesh out the lower treble better. Bass response is a little more absorbed by the material, so more beat-driven music, or music with a heavier bassline, is a fraction lighter (and I do mean a fraction) but alongside the silver cable, I found there to be fantastic synergy and balance.





The leather earpads are a little crisper in nature in comparison with the Alcantaras and present a slightly thinner treble and with slightly less warm mid-band, especially when used with the silver cable as opposed to the copper version which helps flesh things out a little better. Arguably, they excel in bass performance. A slightly punchier upper midrange with a little more perceivable detail in the lowest regions. In contrast to the Alcantaras, I personally don't find the sound as well balanced unless using the copper cable - both sounds are equally dynamic, but I'd say the leather pads lend a slightly cleaner tone to the sound. You could liken it to a slightly sparser, harder sounding listening room with a speaker system, rather than the same room with an abundance of soft furnishings. The softer outer of the Alcantaras are just more absorbent as well as being more comfortable on the head for those long listening sessions, especially on warmer days.

CONCLUSION

Meze has produced a true high-end headphone in the Empyrean. The level of workmanship is exquisite. Comfort levels, weight on the head and level of clamping are spot-on for me. It's

only when you look in the mirror that you realise that you have something so substantial on your head!

Sound-wise they are wonderfully refined, rich in detail, have great bandwidth with a well balanced and dynamic sound. The soundstage could be deeper, but in contrast, their placement within the aural matrix never puts the top end or vocals forward and they will remain controlled like this at very high volumes, unlike many other headphones.

Earpad and cable combinations offer slightly different recipes to try. A copper cable/leather earpad combination sounds rich detailed and slightly more tamed in the top end and will change with the silver cable to become a little crisper and more vibrant. With a balanced option with the Alcantara earpads and silver as the cable choice, one has a combination of effects/options to try.

Most importantly to express, the Empyrean's are a sonic joy and these combinations alongside choices in associated electronics will always produce a high-end, joyful and impressive sound. It's down to the listener how they wish to



tailor what could be the last pair of headphones that you ever buy.

AT A GLANCE

Build Quality:

Nothing short of exquisite. Attention to detail, machining techniques and selection of materials give a very high- end feel and look.

Sound Quality:

Engaging, refined, dynamic and very well balanced. Nicely tweakable and very enjoyable.

Value For Money:

Not cheap and the upgraded silver cable is also arguably expensive. However, the price doesn't cause one to gasp any more than it does with the competition.

We Loved:

Exceptional build quality and material choice

The engaging, non-forward, dynamic sound

Refinement and subtlety of details

Incredibly comfortable fit

We Didn't Love So Much:

Soundstage could be deeper

Price: £2699, €2999, €2999

Elevator Pitch Review:

finished and presented. They deliver an engaging yet refined sound and have a good degree of tweakability to suit individual preferences.





EMPIRE BRAVADO II AND EMPIRE ODIN IN-EARS

Empire Bravado II and Odin In-Ear Monitors cost £799 and £3399 respectively. Stuart Smith plugs them in his lugs for a listen.



Stuart Smith

I'm not a huge fan of most in-ears, it has to be said. However, by the same token, it's wholly impractical to lug about our Audeze LCDs if I want music on the go. At a push, I reckon I could get away with the Oppo PM1s we have but they are pretty large too. As it is my go-to in-ear headphones have been the Audeze iSine 20s which can be bagged for around seven hundred English beer tokens, though they are wholly ridiculous looking and not the most comfortable of things to have on your head given their plastic ear-hangers. Sound-wise the Audeze, for me, are about as much as I need for on the go and they are comparable in price to the Empire Bravado IIs we have here, though the Odins take the price of admission to what I consider to be stratospheric levels. I do, however, fully understand that for some a superlative listening

experience is paramount wherever they may find themselves and there are certainly the portable players to match the Odins in cost.

I'll split this review into two distinct parts but for both my point of reference will remain the Audeze iSine 20s – this may seem a mismatch but it will give readers a good idea of how similarly priced in-ears from Empire compare and then what can be achieved, or otherwise, by inserting a pair of in-ears that cost the same as a good pair of loudspeakers...or a cheap second-hand car. I'll be using the same kit throughout the tests and that will be the laptop running media monkey through a Chord Mojo. The Mojo is ideal as it is the portable DAC I know well and it has two headphone outs for swift comparisons. I also did some listening with both sets through a Goog-

le 3XL.

EMPIRE BRAVADO II

The packaging is without a doubt very nice indeed. They come in a nice white box with a fold-out top that has the earphones and cable and then a pull-out drawer that contains a rather lovely metal screw open round carrying box, a set of Final Type E tips, and a cleaning brush – Empire suggests you clean the Bravados after each use.

The earphones themselves are a four-driver affair with these being: A W9 + Subwoofer that deals with the sub and bass frequencies, a balanced armature mid-driver, and 2 electrostatic drivers that deal with highs and super-highs. They have an onboard six-way synX crossover network to ensure the right frequencies go to the right driver and the cable is a copper Litz type that is made especially for Empire. The electrostatic drivers on these is controlled by an onboard doodad that Empire catchily calls EIVEC which has to be easier than saying Empire Intelligent Variable Electrostatic Control every time you want to trot it out. It's beyond the scope of this review to go into details about this but basically, it's there to stop the electrostatic element from taking over and dominating the other drivers because, as Empire put it, "Electrostatic drivers do not play nicely with other drivers". The earphones are not knocked out in some Far-Eastern country but are made in the USA. The outer faceplate of the earphones themselves has a glittery effect that Empire calls Deep Field and which is named after the Hubble Telescopes image of the Universe.

All in all the package is pretty cool and the earphones look a bit glitzy but they aren't over the top.

FEEL AND COMFORT

I was expecting the Bravados to be a lot weightier than they actually are but they are very light indeed. Popping them in the ear is simple, as is popping on your chosen eartips. The first thing you notice is the amount of background noise these cancel out. Shaking your head about doesn't dislodge them and I'd be happy to go out for a bit of exercise in these.

The cable is pretty short but I think that is a positive as I just don't want loads of cable getting in the way when I'm out and about.

The Comfort level is very good and I could easily see myself wearing these on long journeys without having to pop them out. Compared to the Audezes with their over-ear plastic doodad they are very comfortable.

One thing I did notice in use was that the cable jack, a right-angled affair of very good quality, got in the way somewhat, particularly with the Mojo/Poly in my jacket pocket, and I would have preferred a straightforward jack.

SOUND

I found myself having to turn the volume up a tad when switching from the Audeze to the Bravados but the immediate sonic improvements were clear. Listening to the analogue synth-driven Ssss by VCMG the detail in the recording just shone out with the Empires in place. Really, there is much more of a sense of the actual instruments' timbre and texture. I also noticed that background sounds and instruments were easier to distinguish without having to strain to hear them.

Bass weight is more realistic to my mind, and the way I would describe these is as being much more an audiophile sounding in-ear than the Audezes. By that I mean they may seem a little polite at first listen, and I think this is a criticism that is leveled at a lot of higher-end products – they aim to be true to the recording rather than impress with bells and whistles like overblown bass. Now that may sound as though I am saying that the Bravados only play nicely with stuff I would call Audiophile kind of music (jazz, classical and female vocals) but I'm not suggesting that at all. What I am saying is that if you want fireworks and an immediate hit, however ultimately inaccurate this may be, then these may not be for you. If you are looking for a more realistic portrayal of the music then these are better headphones than the Audeze by a bit of a margin in my opinion.

Listening to Eels' Novocaine For the Soul was a very nice experience with my only criticism

REVIEW



being that the bass felt a little one-dimensional, though again vocals and tops were superior to the Audezes.

Over to Buddy Rich's live recording of Mexicali Noise I was impressed with the sense of speed and accuracy of the Bravados. Dynamically they just work really well and convey the nuances of the drums in particular very nicely indeed. There was also a sense of excitement and immediacy to these in-ears, albeit within a smaller headspace than the Audezes.

Jeff Buckley's magnificent version of Hallelujah was conveyed beautifully here and the vocal came to the fore very well. There was a real sense of being able to see the artist move towards and away from the microphone. A very nuanced presentation and a bit of a goose-bumps moment.

There isn't the same out-of-head experience as with the Audezes and the soundstage feels narrower and more enclosed, but that extra isolation from external sound sources really does help you feel within the recording space.

CONCLUSION

There is no getting away from it, these are a very accomplished design and one that I would be happy to take away with me for the odd occasions that I find myself wanting to listen to music on the go.

They are secure enough in the ear for a bit of a brisk walk and are comfy enough to wear for long periods of time.

They don't do overblown or exaggerated dynamics and are even across the frequency range, but they are a dynamic earphone that responds quickly to the music they are presented with.

They are similar in price to the iSINE 20 from Audeze that I use, but in my opinion, they are a more even and more capable (read audiophile) headphone that will appeal very much to that market, though they won't suit those used to a more "enhanced" top and bottom sounding headphone.

Build Quality:

There's no getting away from it that the Bravados are a nicely packaged and nicely put-together set of in-ears. They look blingy enough to satisfy those that like that kind of thing but aren't over the top. The cable is good and just the right length, though the right-angled jack I found annoying.

Comfort:

I'm not great with in-ears at the best of times but found myself able to wear these for long periods without any discomfort. There are different eartips for different ear shapes and sizes.

Sound Quality:

Smooth even and yet dynamic are the take-aways from these headphones. They are silky smooth throughout the range and never become bright or overbearing. I did find the bass a little one-note at times. They offer a refined and audiophile presentation that will certainly appeal to that marketplace, though I feel younger folk more accustomed to in-ears that have been tuned to overly excite in the bass frequencies may feel they are lacking.

Value for Money:

Not cheap but nor is the competition.

Price: £799

We Loved:

Smooth and fatigue-free presentation

Silky smooth mid-range

Dynamic and speedy when needed

Even presentation

Great noise cancellation from external sources

Good build and design

Great packaging

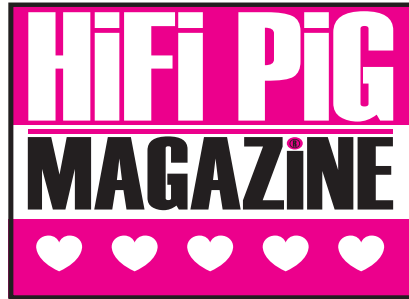
We Didn't Love So Much:

Bass can be a little "one note" at times

Need to have the volume turned up in comparison to the reference used

Not cheap

Elevator Pitch Review: A very nicely presented, built and designed in-ear headphone that has a high-end and audiophile sound. They will appeal to lovers of all genres of music that appreciate good accuracy of presentation at a fairly reasonable price. They don't overblow anything and could be mistaken as being a bit on the bland side for some.



EMPIRE ODIN

The packaging on the Odins is very similar to the Bravado II only it is a block box. You have the same top tray and slide-out drawer but with the Odins the box comes signed by the creators and with a thank you message written in hand. There's also a signed note from Dean Vang, founder and CTO of Empire and a golden card giving you the number of your pair out of the 200 pairs made – these were number 183, which is also printed tastefully on the side of the earphones' bodies. These particular Odins were the 'Founders Edition' - the first 200 pairs made were signed, but the 'normal' version is sonically identical.

Externally, and apart from a different sparkle effect (the Odin's have a multicoloured glittery outer) they look pretty much the same as the Bravados. Visible differences are the plug (a balanced jack) for which there is an adapter available and the cable which is cotton wrapped. The cable is in fact made by PWAudio and Pentaconn and called Stormbreaker. It's made up of USA sourced OCC Copper Litz in a "quad conductor, dual gauge design"

Inside is where the Odins are somewhat different and the online marketing claims a frequency response of 5Hz to 100kHz – frankly my first comment on this was to turn to Linette and say "What a load of b&*jocks", but more on that in a bit.

So I said they were different from the Bravados inside and here is how. There are a total of eleven (yes eleven) drivers in each of the earphones – 2 "Next Generation" W9 subs that cover, not surprisingly, the sub and bass frequencies, 5 balanced armature drivers, two of which deal with low-mids, two that deal with mids and one that takes care of mid-highs. The final set of drivers are 4 "premium" electrostatic drivers with two handling the highs and two sorting out the super-highs – a bit like a couple of super-tweeters I imagine. There's the EIVEC control tech' for the electrostatics and the synX crossover as in the Bravados and then A.R.C (Resonance Mitigation Technology) that is an anti Resonance Compound that is applied to the drivers, crossover and sound tube to dampen and absorb unwanted resonances.

There's not much else to add to what they look like and Feel and Comfort are pretty much identical to the Bravado, with the exception of their being a silver emblem on the cable and a silver doodad to shorten the cable hang where it splits. Overall, I have to say I was pretty unimpressed with the Odins when compared to the Bravados and from a purely "there's not much different going on here and where's that extra money coming from?" perspective.

SOUND

Reading my intro to the Odins you will be forgiven for thinking that I wasn't expecting very much at all given that from the outside they look like a VERY similar product to the Bravado though much more expensive. MUCH more!

So I plugged them in and found the first tune that grabbed my attention and it was the Tiesto Kaleidoscope record – not really my usual listening fodder as this is very much "Big Room Trance". Anyway, much as I turned to Linette with regards to the frequency response there was a similar reaction within about two bars



which went something along the lines of “....ing hell these are a bit good”. This album I seriously bassy but it’s that pumping side-chained bass that some audiophile folk moan about ad-nauseam - often rightly so. It’s absolutely epic on these headphones and there is the effect of actually feeling the bass notes. This is as close as I’ve ever got with ANY headphones to a realistic portrayal of proper bass that you might get with a pair of loudspeakers. No, you don’t really feel it in your body as you get with proper full-range speakers (that kick to the chest) but it’s there and it’s palpable. 5Hz, I dunno (I’ll leave listening to test tones to others), but they go low and it’s absolutely controlled and wonderful. In fact, you do sort of feel the bass in your body – down the bottom of your spine – it’s an odd sensation and one you should try! Is it overblown in the bass? Not at all, it’s beautifully controlled and speedy.

I’ve been listening to a lot of Gesaffelstein’s Aleph record of late and it’s actually a record I do listen to a bit whilst traveling. There’s no other word to describe the way that this album is presented on the Odins than epic! Again that bass is low, but then everything else is so linearly presented and layered that it’s hard to not

be drawn into the music.

Hardfloor’s remix of New Order’s Blue Monday is fantastic on these. The hollowness of that kick at the start of the track is brilliantly done and I suppose it’s little details like being able to clearly hear every effect and every nuance of the mix that really sets these earphones apart from the Odins and any other in-ears I’ve has the pleasure of listening to. The out-of-time hi-hats in the left channel are easy to pull out of the mix, but that’s not to say it sounds wrong or pulled apart – it’s not. Everything just seems to slot into place, but with that ability to focus in on a sound or instrument and isolate it.

I listened to a lot of dub and techno on these and they are brilliant at getting across that full frequency feel that you really need to get this music in its full effect. There’s a saying that goes something like “With great power comes great responsibility” and whilst it would be dead easy to listen to these and be marveled by that bass and detail, they are actually a remarkably well-balanced listen with vocals sounding clear, unforced and natural.

Eels’ Beautiful Freak and specifically Spunky is



stripped down and you can almost see E stood at the microphone whilst almost speaking the vocal. You can really see him tip his head or move towards the microphone such is the detail these in-ears give you. Bass guitar at the start of Your Lucky Day In Hell is simple to follow and the effects on E's vocal likewise easy to hear. The balance and detail these earphones have is nothing short of spectacular.

Whatever I listened to on the Odins sounded like listening with a fresh pair of ears, and, speaking as one who is not a huge fan of in-ears, I found them somewhat revelatory. Whether simple acoustic music or full-on techno the take-away from these is a huge depth of sound and scale and across the frequency range. There is also an eerie kind of air to the upper registers that super-tweeters seem to bring to the party.

CONCLUSION

These are good in-ears. They are VERY good in-ears, but that comes at a considerable price.

The Odins are the best sounding in-ears I have ever heard - and that is by quite some margin. They have a sound that is so well-rounded and so lifelike it is almost uncanny. The amount of detail present is truly incredible but that is not an artificial detail that can be had by boosting the audible upper frequencies a bit. The bass is also lifelike and with heft, but again it's not in

any way artificial sounding.

They are an even and very balanced in-ear (read audiophile) headphone that will appeal very much to that market, though they have a certain party feel about them too - a party for one, though.

They sound at their best with good sources and DACs but I got very good results out of the line out of headphone out of my computer too. That said, I would expect anyone who is going to spend this kind of money to have the best of DAPs too!

They are outrageously expensive in my opinion, but by the same token, they are the best in-ears I have ever heard and come close to being the best headphone I've heard, period! With that in mind, and with a watering side-eye to the cost, the Odins have to get our top award.

AT A GLANCE

Build Quality:

As per the Bravados pretty much, though with a better cable and snazzy metal bits on the cable. The jack is also straight, which was a good thing

Comfort:



As per the Bravados – very comfortable and with different eartips to suit different lugs

Sound Quality:

Exceptionally good sounding. Detailed throughout the frequency range. Bass that has real weight and texture. A wonderfully sweet mid-band, particularly on vocals. An airiness to the upper frequencies. Did I mention detail?

Value For Money:

They are the price of a secondhand runabout car. They sound absolutely brilliant but the perceived value is difficult to evaluate in terms of them being just a pair of in-ears, albeit made in limited numbers. If I say they represent good value for money I'd be lying to you and myself – they just don't represent good value for money, but then there are lots of things out there that I would love to own that don't represent good value in absolute terms. However, if you are looking for the best in-ear experience and you have the dosh to throw at these then all I can say is go for it – I would if I could!

Price: £3399

We Loved:

The naturalness of everything

Detail, detail, and more detail without you ever

feeling that you were being overloaded

Balanced and very refined sounding
Nice build quality and pride of ownership

That bass is uncanny!

We Didn't Love So Much:

They cost more than I could justify for myself

They are a bit blingy on the outsides of the in-ears' casing

Elevator Pitch Review: A luxury pair of in-ear headphones made in limited numbers with a sound that will shock – in a very good way. Bass performance is outstandingly accomplished, but then so is everything else across the frequency spectrum. The best in-ears I've ever heard, though that comes at a very considerable price!





ONEODIO A70 HEADPHONES

It's not often that we review a product that costs less than a hundred quid here at Hifi Pig and even rarer for us to consider something less than fifty notes, but that's just what we have here. The OneOdio A70 headphones have onboard Bluetooth but do wired connection too and cost just €37.95. Any good? Stuart Smith finds out.



Stuart Smith

It seems that if you have shown a passing interest in headphones then the OneOdio brand is impossible to miss as their adverts come up on social media constantly – well they do for me. The company do lots of different headphones that are clearly aimed at the lower end of the market but which seem to offer a lot of features for the asking price. In this review I'll be looking at their A70 full-sized headphones which are both wired and Bluetooth capable, have a mic for phone use and have on-body controls. They are priced at €42.95 but currently available through OneOdio's own website at €37.95.

IN THE BOX

You have the headphones themselves which are silver-coloured plastic for the most part with brown coloured headband and ear cushions -I

am not a fan of this combo at all! There's a USB charging cable and a very long and partly coiled jack to jack cable. This latter cable is pretty cool as it has a minijack at one end and a quarter-inch jack at the other. You can insert the minijack into the headphones and then lock it by twisting it (a good feature for DJs and musicians perhaps) whilst the quarter-inch jack goes to the mixer (or whatever), or you can insert the (non-locking) quarter-inch jack into the headphone and the mini-jack into your phone or player. Also included is a minijack to minijack cable that allows you to connect two pairs of the headphones and share whatever is being sent via Bluetooth to one of the pair – seems a good idea but fairly limited in its scope (for me anyway) as you need two people with the same cans.



There's also a carrying pouch and a basic instruction manual.

The headphones feel cheap and are very light-weight but that's not unexpected given their features and their asking price. On the right-hand pod of the headphones you have three buttons for power and volume up and down. The on/off button also doubles up for controlling play via Bluetooth and for answering or hanging up on phonecalls. The volume buttons also work to go to previous or next track. You get your head around where everything is pretty quickly and having just three buttons is a bonus.

Quoted battery life for Bluetooth is a very impressive 50 hours.

COMFORT

The ONEODIO are light as you like and clamp fairly firmly to your head, though they are in no way uncomfortable. The headband adjuster is quite tight and you do need to take them off to adjust them properly which is a bit of a pain.

The earpads fit nicely over my ears and cut out

pretty much all external sound, though they do get warm pretty quickly.

Overall they are pretty comfortable and they aren't going to fall off your head anytime soon once on there – and likely light enough to go running about with.

IN USE

Bluetooth pairing is instant and hassle-free on Android. The buttons for moving tracks forward or back work well but feel plasticky though not terribly bad.

Wired set-up is easy as you like and I can actually see that locking mini-jack being quite useful for those outlined above - DJs etc. I also liked that the length of the cable was decent and the coiled middle length will find favour with many, I reckon.

When you have done with them they do fold up to a very compact size and their carry bag is nice enough.

They allow for phonecalls too but that feature is

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not something I tried out as we live in the sticks with no reception!

SOUND

I was expecting awfulness on an epic scale but I didn't actually think these were at all awful for a set of headphones costing this kind of money. Of course, they aren't the last word in fidelity and they present a fairly muddled sound if we are being really picky, but the people that buy these are going to want to enjoy their tunes without wanting to pick apart a mix to the nth degree - or very much of a degree to be honest. Do they allow this – yep they certainly do.

On the Yoshiesque Volume 2 album and the Chemical Brother's mix of Spritualized's I Think I'm in Love there is a decent enough representation of what is going on from a spatial perspective with regards the effects and spacey intro noises. There is a muffledness overall to the sound with bass seeming to overpower everything else that is going on, and the beats when they come are lacking in dynamic hit in comparison to other cans we have to hand - but let's not forget these are a forty quid set of headphones with Bluetooth capability. With all that said about the bass, it is easy enough to follow the line on the Jori Hulkonen track that follows, though there is that muddiness still.

Johnny Cash's version of I Hung My Head doesn't sound at all horrible. There's enough there to hear the fragility of Cash's vocal and in it his age. Actually, it's very enjoyable listening to this tune. There's still not a great deal of fidelity on offer but there is music and it's not terrible sounding. You can still hear the guitar and to an extent the separate parts of the track but overall there is a homogenisation to the sound.

Body Count's Bowels of the Devil has the lead guitar sounding very much back in the mix and a bit lost but the vocal comes through fine and the relentless drum track is (overall) easy enough to follow – though I can't pick out the bass kick at all from the mix.

Nick Drake's Northern Sky is a favourite track of mine despite folk thinking all I listen to is bass-laden techno. I can hear most of the guitar

and I can hear the distinctive vocal style and I'm happy enough. Again it's all a bit muffled.

CONCLUSION

The brown and silver colour combination is nothing short of horrible in my opinion - but they are available in black, black with a red headband and black with a gold headband. In fact, I'd go as far as to say that the colour we were sent is the worst looking of the bunch by far. If appearance were to be the be-all and end-all thing we looked at then I would dismiss these headphones out of hand, but they ain't actually that bad at all. Of course, they are limited in their fidelity and they do have a muffled presentation, but I'd be happy to have had them when I was a kid and I reckon I would have loved them too. No, they don't have the kudos of a pair of Beats but (in black) who is going to know.

The A70s got hot very quickly and I'd struggle to wear them for long periods because of this.

With all that said these are a forty quid set of headphones with Bluetooth and they should be seen in that context. They should be seen as a decent introduction and means to enjoy your music, albeit in a limited way. If you are looking for better fidelity then I'm afraid you are going to have to move up the food chain a bit and dole out some extra cash - that's just the nature of the beast.

Back in the days of me Djing, I'd have been happy to use these for monitoring in clubs as they offer great isolation from external noise and can go loud.

I can't give these headphones a higher score than I am doing given that they just don't really deliver on sound but read beyond just the score and they may well fit the bill for you or a younger family member.

AT A GLANCE

Build and Comfort:

Plasticky build

Get hot after a bit

REVIEW



Look terrible in brown but they do them in black, or black and red, or black and gold

Sound Quality:

Not great but quite listenable

Muffled and muddy overall

Value For Money:

Good value I'd say if you take them as what they are

We Loved:

You can enjoy your music with these despite the overall lack of fidelity

Bluetooth functionality

Good cable – very good and innovative in fact

Easy setup and use

Good value overall

Good exclusion of external sounds

They fold up and have a bag

We Didn't Love So Much:

The sound quality isn't great

Cheap and plastic-looking, though the black ones do look better

Feel pretty flimsy

Elevator Pitch Review: A good value head-phone aimed at the lower end of the market where it should do very well given the performance to price ratio. They look like a value set of headphones but come with decent and innovative cabling and there is Bluetooth too. Sound isn't going to set the world on fire but for less than forty quid what is?

Price: €37.95





AUSOUNDS AU-FLEX ANC WIRELESS EARPHONES

The AuSounds AU-Flex ANC earphones cost £199 (available widely at £150) and feature an innovative and interesting neckband that houses all the controls. Stuart Smith sticks them in and takes a listen.



Stuart Smith

Made in China, though the company is based in Los Angeles, the AUSOUNDS AU-flex earphones are the company's flagship model aimed at audiophiles on the go. They feature AUSOOUND's own planar magnetic drivers that have an 8mm membrane and a more traditional 10mm dynamic driver for low frequencies. The crossover is such that the dynamic driver only handles bass frequencies.

The Au -Flex' have onboard active noise cancelation (ANC) that has been specifically designed not to impact the sound playback.

Connection to your source, in this case a Google Pixel 3 XL, is via Bluetooth but here the AUSOUND's use Sony's LDAC technology that allows transmission rates of up to 990kbps as opposed to the more normal

328kbps and works without down-converting any high-resolution files, with the maximum resolution being 96/24. There is no option for a wired connection which I would have perhaps liked to have seen.

The earphones themselves are attached to a flexible collar type thing that you hang around your neck. Charging (via USBC) is made by connecting the charger to a port on the bottom of the collar and all the function buttons are located on the end of the right-hand side of the collar. The earphones are fully charged after an hour and a half but you should get a useful 2 -3 hours use after a fifteen-minute charge - they stop depleting charge when the two capsules are put together - nifty. The buttons are pretty easy to navigate once you get your head around them and control everything you would expect

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including playing and pausing music, volume of music, skipping tracks, answering or declining calls, activating Siri (or whatever voice assistant you use), and turning on or off the ANC. ANC is automatically switched off when you turn the earphones on and you need to press the ANC on the collar to activate it.

The AU-Flex is said to be waterproof to IPX5 standard and the instructions suggest you can spray them down with a gentle water spray to clean them off. This could well be a useful feature for those looking to use the AU-Flex' for their daily run/walk/trip to the gym.

The earpieces click together magnetically and when closed together the music stops immediately and earphones switch off after five minutes – good if battery life is going to be an issue.

Overall the headphones feel well put together and substantial enough to last.

IN THE BOX

Pretty standard fare really. You get the head-

phones and their collar (the two are permanently attached), three different sized eartips made of silicon, a USB to USB C charging cable, a little bag for carrying them around, a quick start guide, and a slightly more in-depth pamphlet outlining the various functions. Instructions are on the whole OK, if not brilliant but the section on the “Hall magnetic switch” takes a few read-throughs to actually get the gist of what is being said.

COMFORT

I'd expected to really hate the collar but it's actually pretty comfortable and I think I preferred that feeling of having something there rather than just a pair of earbuds. Whether you like this is going to be down to personal taste and it is certainly bulkier than a standard pair of buds - having lost a couple of pairs of buds on journeys (my carelessness) I actually prefer this slightly bulkier arrangement. However, wearing a coat or anything with a high neck is going to get in the way of the neck band/collar.

One of my main bugbears with in-ears with wires is that the cables tend to make a bit of a

racket when you move about but these just don't and that is very much in their favour.

The earphones themselves are the kind that hang over your ears and whilst I've found this type a tad annoying in the past, the soft (but firm enough) plastic that hangs around your lugs on the AU-Flex is pretty comfortable and irritation free – they are also easy to master putting on (again something I've struggled with a little in the past). The earphones capsules are very lightweight and most of that weight is supported by the hook over your ears and I found them to be very comfortable to wear. They also don't fall out when you shake your head about which will please gym-bunnies the world over.

IN USE

Bluetooth pairing is a doddle and the instructions for this well written and easy to follow. The volume up and down buttons are used to (obviously) turn the volume up and down but also to skip forward and backwards depending on how you press the buttons.

Turning the ANC on is likewise just a case of pressing the ANC button and cycling through the on and off modes – a voice tells you when on or off. In honesty, I found only a slight difference in having the ANC on or off as when the earphones are shoved in your ears there is very little outside noise anyway. Certainly, when a car went past the house I was able to hear whether the ANC was on or off, though perhaps a tad more muted when ANC is activated. Monitor mode does help you hear more of your surroundings but not to the point of massive intrusion and could be useful when you want your music on but also need to be aware of what's going on around you. I did notice a very slight amount of electronic hash in the background between tracks when ANC was turned on – unapparent when the music was playing.

I'm usually useless with getting to know this kind of device quickly but the buttons on these are logically placed and they are very speedy to get used to – no one was more surprised than I.

SOUND

I wasn't expecting much, it has to be said. However, these sound pretty damned good. They are balanced across the frequency range and a smooth and easy listen with no nasties at either of the frequency extremes.

There is good openness to the sound that whilst not feeling particularly outside the head does have space and to an extent stage to it. These are not as dynamic or refined as the Empire in-ears I reviewed recently, but then they are a fraction of the cost.

Listening to Madonna's American Life shows a little emphasis on the bass-end of things but this is not a bad thing given the likely market. There is a pleasing quality to the bass and this helps with electronic music. With that said, the vocal is clear and cuts through the mix very well.

Bad Brains' I against I has enough grit and detail to it without sounding overly harsh – indeed, these are a pretty rounded sounding in-ear and that may well be a good thing. Personally, I tend to listen to in-ears for long periods in one go when traveling, and having a headphone that is harsh or brash would likely become irritating after an hour or two – perhaps why I tend to take them out and not listen most of the time when traveling.

Bluetooth often seems like the poorer relation given its limited usability with higher resolution files but the ability to stream at a higher rate with the AuSound earphones will be useful for many.

These are a pleasing listen that is neither wow nor fail to deliver with respect to the amount of detail they give up. They give you a very good sense of the recording without feeling they are over-analytical in their delivery, something I really enjoyed, actually. They aren't the last word in audiophile sound quality and there are better in-ears out there, but they do offer a very acceptable sound allied to a great feature set.

CONCLUSION

These are a nice sounding headphone that is comfortable to wear and comfortable to listen to for long periods. They aren't going to set the

REVIEW

world alight with their sound quality, but by the same token they aren't going to offend anyone either. In fact, I really enjoyed listening to them and would be happy to take them away when we can next travel.

The headband could be seen as being a bit gimmicky but I like it. Its practicality may come into question when wearing a big coat or collar, though. Having all the buttons in one place and on a "pod" is a very useful feature and I got to know my way around them very quickly.

Sound quality is definitely a step up from standard in-ear offerings at not a massive leap in price. Add to this the phone and Siri (etc) functionality and they start to make financial sense even more.

These are not ever going to become a replacement for proper headphones in the home but out and about I'd certainly be happy using them.

AT A GLANCE

Build and Comfort:

Well put together and well thought out feature set

Sound Quality:

Good, well-balanced, and smooth. Slight emphasis on the bass is pretty much what the market for these would expect I think. The ability to playback higher resolution files via Bluetooth is a bonus many will appreciate. There is little noise from the cables which is a good thing. Noise-canceling of external sounds is good but I found it difficult to tell when ANC was on or off in this respect

Value For Money:

I did a quick search and these can be had on the internet for £150 and so I think they offer reasonable value for money given their feature set and balanced sound quality

We Loved:

Smooth yet balanced and unfatiguing sound

Easy to set up and to learn their functions

Water-resistant and so good for the British summer

The neckband does make sense in many situations

Good if not spectacular image presentation

Good battery life

Ability to play higher resolution tracks

Not stupidly expensive

We Didn't Love So Much:

Not much difference when the ANC was activated or not

The neckband may get in the way in some situations

Not the last word in fidelity in absolute terms

Some very slight hash between tracks with ANC on

Price: £199 but available widely at £150

Elevator Pitch Review: A good-sounding and well put together in-ear that stands out from the crowd because of its neckband. Easy to get on with sonically and with regards to the controls and learning them. Noise reduction is apparent but isolation is good anyway. Comfortable to listen to and to wear. Nothing really offensive at all!





SENDY AUDIO AIVA HEADPHONES

Sendy Audio AIVA headphones are made in China but using traditional, labour-intensive construction methods. They cost £545/€639/\$599 and promise a luxurious experience. Stuart Smith takes a listen.



Stuart Smith

Sendy Audio are a Chinese company, but, rather than the mass-produced, production-line kind of manufacture, it seems, if the company's website is anything to go by, that they are a little different and a little more artisan in their methods, with the opening gambit of the site claiming "Each unique Sendy Audio headphone is made by hand with traditional crafts, using high-quality solid wood materials...". Sendy is, however, a part of Sivga Electronic Technology Co and my immediate thought was "Ah, I get this – big, faceless Chinese electronics manufacturer creates a sub-brand to look more artisanal and in turn gain more audiophile credibility points." Actually, it doesn't seem like that's the case, and Sivga makes just a relatively small range of what look like nicely put together headphones and in-ears. All in all the backsto-

ry looks a credible one and the theme is very much along the lines of pushing a product that is carefully crafted and thoughtfully put together. As I'm trying to picture the Sendy factory in my mind's-eye, I see a small group of craftspeople in a quiet and bijou workplace where each worker is head-down over their bench putting together jewel-like products for a discerning clientele. There is a lot on the website to back this up and to push the idea that this is a small team of dedicated people, where tradition and technology merge to create a brand with traditional values. I can see this appealing to many consumers.

BUILD QUALITY AND COMFORT

The packaging the AIVA headphones arrive in certainly seems to echo a feeling of understated quality. A plain brown

REVIEW





box with just a black image of the headphones and their name on the front opens to reveal a large, hard, zippered carrying case. This is of good quality and certainly feels substantial enough to offer protection to the headphones should you want to carry them about. However, it's also pretty big and so I'm not sure you would really call the AIVA a portable model, though the case will fit inside a decent sized backpack.

As well as the case you get a small cotton drawstring bag in which a set of cables resides. It's 6N single crystal copper in a clear jacket with wooden accoutrements. Two solid minijack plugs go into the headphones left and right cups and the termination end is a 4.4mm plug, though an adapter is included to make this a more common 3.5mm plug. The cable is a useful, but not too long, 1.6m and feels of good quality, though you will need an adapter if your headphone amp uses a quarter-inch jack – one of these should have been included in the package in my opinion.

The most obvious thing about the headphones themselves is their wooden casings which we are told takes a lot of time and effort to put

together with the process being "butting, CNC carving, polishing, repeat painting and air drying. The actual housing for the drivers is made up of zebra wood along with CNC'd metal parts.

The drivers themselves are planar-magnetic in an open back design and they are 32Ohm impedance.

There is a fair bit of weight to the headphones but it's not stupid heavy at 420g. The headband is easy to adjust and they are pretty comfortable over long periods of time, though you certainly know you are wearing them and I'd not really want to do anything but sit at home with them on.

All in all the build feels solid, they look good and they are reasonably comfortable, but how do they sound?

SOUND QUALITY

For the duration of this review, I used an Audio Research DAC/Headphone amp connected to a Windows-based laptop running Media Monkey.

REVIEW

First up was Neil Young's *Comes A Time* and the first thing that grabbed me was the very clear separation of the instruments in the mix and the amount of detail afforded by the headphones. This detail is evident particularly on tracks where you can hear movement on the fretboard or body of Young's guitar. The character of Young's laidback vocal and the backing harmonies of Nicolette Larson are very easy to pick out from one another. There is also a good feeling of the recording space, particularly on the track *Look Out For My Love* where you can clearly hear Young move towards and away from the microphone. The tone on the electric guitar on *Motorcycle Mama* is also very simple to pick out. Overall here the sound is what I would describe as being lush – easygoing and full-bodied. I actually quite like this presentation as it's untaxing, unfatiguing, and just easy to listen to. Others may feel that the presentation is a bit uninvolved and maybe a bit boring – horses for courses.

Switching the tempo a little to the late Avicci's *True* album bass proves to be deep and controlled with vocals on *Hope There's Someone* (for example) being clean and uncoloured. However, I can't help but feel there is something a little too polite for my tastes. *Hardfloor's* *Acperience* just feels like it's lacking a bit of excitement and feels a little pedestrian when compared to our *Oppo PM1s* or *Audeze LCDs*. Now don't get me wrong, the tone of the 303 is all there and it sounds like a 303 but I can't help thinking that there is something a little too rounded on this kind of material. There is a feeling that these headphones are aiming to be a little bit polite and inoffensive in their presentation with *4 Hero* and *Jill Scott's Gotta Get Up* sounding "nice" but a bit lacking in excitement – a sort of laidback Sunday morning feeling to the sound.

With *Bush's Everything Zen* everything is there, but again I feel that I'm not getting the dynamic excitement that I'm really craving from this record. Even turning up the volume to high levels (don't do this at home, kids) leaves me feeling I want something a little more exhilarating.

CONCLUSION

These are good headphones, but they do have

their limitations and will appeal to some and less to others, sonically speaking. Sadly, and for my tastes, I fall into the latter category. For me, they are a little too polite and laid back, though I am well aware that some will thrill to this presentation. On more simple music this presentation is a bit of a bonus and the AIVAs are lovely when listening to less complex tunes, especially late at night. I think they are just not dynamic enough for my own tastes.

They are nice headphones to listen to at the end of the day as they are a pleasant sound to wind down to – I hope that makes sense. They are a chilled out, non-taxing listen – sort of the antithesis of a pair of Grado cans.

Comfort is good, though you do know you are wearing them after long listening sessions.

The overall package and finish are very good.

If I was judging these purely from a personal perspective and taking into account my own tastes with regards to presentation the I'd give these a Three Hearts award, however, I am aware that they will appeal to some listeners and their preferred presentation and so overall they will get a Four Hearts award.

AT A GLANCE

Sound Quality:

Detailed throughout the frequency range

Good bass

Warm and a little lacking in dynamics

Build and Comfort:

Good package

Interesting backstory

Good accessories

Reasonably easy to drive

Comfortable

Value For Money:



If you like their laidback presentation (I sort of did and didn't) then these are a good value package

We Loved:

The feeling that you are getting a luxury product at a reasonable price, allied to a sound that is easy going and non-taxing.

We Didn't Love So Much:

A bit uninvolved and lacking in excitement.

Price: £545/€639/\$599

Elevator Pitch Review: If you are looking for a luxe-feeling headphone for home at just over five hundred quid and prefer a more laidback, warm presentation then these could be just the

ticket. They do a lot right and on more simple music they are lovely. However, on rock and techno they are a little lacking in lustre and excitement. Definitely a "Listen before you buy product".





TELLURIUM Q BLACK II INTERCONNECTS

Launched in May of this year Tellurium Q's Black II aims to be an improvement of the original Black range of cables. Does it achieve this? Janine Elliot finds out.



Janine Elliot

Having reviewed 'new' versions of existing Tellurium Q cables over the past few years I have always come away amazed at just how much extra information and a cleaner portrayal of the music is possible at the same price bracket at every update. CEO Geoff Merrigan decided to tempt me again with a replacement to the Black interconnect, a new and improved Black II, in this case a balanced XLR version. Rather than a completely new name, Geoff wants to keep to his "Matrix System" of entry-level Blue, Black, and then top of the range Silver. Within each "colour" bracket there are several choices; the basic, Ultra and Diamond (this applies to speaker and mains cables as well as interconnects reviewed here) meaning that in terms of increasing level of performance, Blue Diamond, for example, is higher than

Silver, though Silver Diamond is tops, just above Black Diamond. Slightly confusing, perhaps, unless you actually see the chart on the website, but as someone listening to Tellurium Q over the years I totally understand and agree with this protocol. I won't confuse issues further by mentioning the very, very top Statement series of cables.

As for the colours, they represent different types of sound strategies for the budding audiophile; Blue family has a slight warmth that just takes the harsh top edge out of a system; Black family: a natural/transparent range that allows greater life-like reproduction to simply unlock what the HiFi system can do; Silver family is the top of the range cables which sound much clearer, detailed and revealing, and as Geoff says "can best be described as silver but without



the fatigue and harshness that can go along with that material". Of course, while this "system" is great for the purchaser, it is a bit of a nightmare for Tellurium Q to maintain development of their cables; Black II maintains the same position as the original Black, so other models in the matrix must also maintain their same position meaning they might also need to be bettered in due course. The new Black II maintains the same price as the original, coming in at £285/m for the RCA and £370 for the balanced XLR.

BUILD AND FEATURES

As many will know, Geoff isn't very open in telling reviewers exactly what is inside his cables, rather allowing the reviewer, me, to simply listen to the original Mk1 cable and then the new one to make my own decisions on the differences – and hopefully improvements – attained in the newer model. Whilst not knowing what is inside (without taking them apart, which of course I wouldn't do), all Geoff is happy to divulge is the important knowledge that in order to make a good cable one needs to look at the sum of all the parts rather than point to just one element. For example, silver has better conductivity than copper but might not necessarily sound better, and indeed many find silver-plated cables sound better than solid silver. In tests in the past Geoff has tried solid silver up against plated silver in various base metal mixes and various thicknesses of plating, which all sounded different. So, in Tellurium Q it is the sum of the parts that will create the best cable, including material and geometry of conductor and dielectric, plus the material and finish of the connectors and even choice of solder. The finish of the MkII is much better than the original, looking much more up-market whilst using the same Neutrik XLRs. The cable is a little thinner and much more pliable than the original, suggesting changes to the dielectric. Of course, the geometry, shielding and conductors were also revised.

PHASE RELATIONSHIPS

What is vital in all of Geoff's cables is ultimately removing phase distortion; something that will become clearer (sic) later in the review. Indeed, from the very first cable when Tellurium Q was

set up the focus has been primarily on the idea of phase distortion and minimising this problem that is inherent in all cabling, something tackled in different ways by different manufacturers. As Geoff explained, all materials (and not just cables) in the path of a signal will act as an electronic filter, whether you want it to or not. According to research made in 1930 by Bell Labs on the impact on speech from distortion it was noted that the distorted speech was accompanied by certain audible effects "which appear to be extraneous to the speech and transient in character". Rather than accepting that the HiFi system will be acting as a multiple electronic filter altering the sound Geoff decided to do something about it and create as clear a path for the signal as possible, concentrating on phase reduction. By focussing on the "relative phase transient distortion" Geoff could deal with the all-important transients; the leading and trailing edges of the sounds. The Tellurium Q motto is "Phase Relationships in a system is our focus"; indeed, as I found the reduction of phase distortion is to create better focus of the music.

Geoff's great knowledge of materials comes back to his background as an ex-industrial chemistry student who trained in material science, turning to starting Tellurium Q in 2009. His cables have won numerous awards around the world over the years, including the Queen's Award for Enterprise in 2018 and again this year. His ability to understand the material science gives him an advantage over many at visualising cable configurations when creating a new product, though of course the ultimate test is listening, and a new cable will only make its way into the Matrix if it does actually sound good.

SOUND

Firstly, I listened to the original cable noting characteristics and then swapping over each track of music with the new cable, all after some running them in properly. Initially the source was the XLR output from the excellent Krell KPS20i CD player, and then replacing the cables between MFA Baby Reference preamp and Synthesis Roma 98DC powers, using vinyl, FLAC and reel sources. I chose initially to use the Wilson Benesch Arc/Torus speaker duo as

REVIEW



they are very fast and with the emphasis on fast transients due to the lack of phase distortion, I wanted to be able to hear them clearly.

The first track was Kate Bush's 2005 double-album 'Aerial' carefully missing out Rolf Harris's vocals. This album is very well engineered with a variety of instrumentation and recorded effects of pigeons sounding actually very musical, unlike the ones sitting on my own house roof. The original Black had clear bird melodies and rhythms, but the new cable had better timing on notes and the child's vocals in the "Prelude" of 'A Sky of Honey' were much more musical and concise. The next track "Prologue" resulted in the elder Black having a slightly more veiled sound than on the Black II. At 4'40" the low frequency "bangs" on the tom-toms were much better controlled and faster in the newer cable. My conclusion was that the overall sound was clearer and tighter, the effects of phase relationships focussing the music.

In the "Battle" from the Gladiator film soundtrack (The Lyndhurst Orchestra) the original Black had excellent bass-end and warm mids, but slightly confused phasing (from 1'05", for example) which the Black II ironed out making things much clearer and actually 'less phased'. Annie Lennox's "Wonderful" was much more controlled and less "busy" in the new cable making for much more understanding and hence enjoyment of the music. The sound was less confused; even the cymbals were clearer. "Fields of Gold" from Eva Cassidy has lots of atmosphere and great guitars, performed more ably in the newer cable with better top end. Indeed, the elder cable could often sound over-strong and less controlled particularly in the bass end – just as I had noticed in the Kate Bush – and with top end less clear than the new version. Even the original hiss in the recording was very slightly easier to hear in the new cable as the soundstage was much more organised and musical. Turning to the excellent "Legends", Sacred Spirits, the bass end was actually good in the elder Black, but just seemed slightly more confused in the low/mid frequencies; In the Black II the bass end was clearer; more coherent.

Moving to classics and "Spring" from Vivaldi's 'The Four Seasons' (Classical Kids "The Best of

Vivaldi") it was not quite so easy to see differences between the cables, though the Black II had better positioning of the instruments, again likely due to the phase magic going on; The intertwining of bird singing from the strings was more engaging. Indeed, all stringed instruments were better with the Black II.

What seemed so obvious to me in my listening was the improvement in clarity; not just of different instruments but also where they were positioned in the soundstage. Somehow the elder cable sounded "louder" as it was slightly more blurred in presentation. Listening to "Temptation" from Diana Krall the sound was clearer in the bass guitar solos and everything was more refined and faster in the Black II. The work to create faster and clearer transients through reducing phase distortion working well. The organ and drums were similarly more succinct and having their own space.

I admit I do use the TQ Ultra Black II between CD and pre and pre and power amp in my listening room, so changing this down to the Black II was going to be interesting, and consequently I could hear the differences in my system. I must add that the Ultra Black II is almost £200 and three places higher in the Matrix, so there were bound to be differences in ultimate performance. However, those differences weren't as great as I expected they would be. 'Seventh Tree' (Goldfrapp) is a very relaxed and mindful album, not the easiest to digest, and it was apparent the music was slower and less detailed than with the Ultra, though still excellent. In "Eat Yourself" it sounded like she was eating her words as they were not as clear as the Ultra Black II, but in comparison with the elder Black the difference was quite noticeable. ATF are my favourite band of all time; a '70's mix of punk, electronica (admittedly Hammond C3, Mini Moog and Crumar Multiman) and biblical tones. Their album 'Signs of Change' pushes cables through their paces with tight transients, a good soundstage and plenty of frequency extremes. Listening via my top-heavy and very-detailed Wilson Benesch Arcs with their Scan-Speak tweeter plus Townshend Supertweeter the cymbals were precise, and bass through my Torus sub was delightful. This was a very good performance, offering both speed and precision. Listening via my Graham

REVIEW

Audio LS5/9s gave a more lucid performance with soundstage more forward, and with increased musicality that the Black II shone with poise.

CONCLUSION

I had hoped at last to be able to find faults in a TQ cable, but that was never going to be the case here. This was an excellent all-rounder with excellent speed and precision. Working at all frequencies and all types of music excellently it opened up the music in a way that many other companies can only dream of, that focus on phase relationships doing its thing. This worked so well with different systems and I would heartily recommend having a listen, however expensive your system is. This cable is that good. I have no idea how Geoff has done it, nor will I.

AT A GLANCE

Build Quality:

Excellent build and better looking for the same price, and using Neutrik connectors.

Sound Quality:

Improved detail and speed and fewer phasing issues making music easier to listen to and understand.

Value for Money:

For the sound quality heading north towards the higher Ultra Black, this is excellent value and well worth auditioning. This is a great all-round cable well worth the price.

We Loved:

Transparency and “opening up” of the music

Good detail and transient response of the music

Tight but full bass

Wider soundstage

Instrumental lucidity

Improved vocals and top frequencies

We didn't Love so much:

Not a lot at this price

Elevator Pitch Review: A clear upgrade from the interconnect cable it replaces, the Black II allows the music to open up more and offers the listener a more detailed and coherent listening experience across the frequency range and all at the same price.

Price: £370/m XLR; £285/m RCA





TCI TEMPLE CONSTRICTOR AND COBRA II

True Colour Industries are based in Northern Ireland and makes a range of audio cables and power distribution products. Here Ian Ringstead takes a listen to their Temple Constrictor SE 6-way Powerblock and TCI Cobra II interconnect.



IAN RINGSTEAD

T rue Colour Industries (TCI) are a Northern Irish company that has been making products for 20 years. TCI claim the use of Aerospace technology in their cables in order to get the best performance out of them with their goal being to design the best cables they can at each price point and also include long-term reliability. TCI design all their cables along with the plugs for terminating the signal cables and mains products. TCI has a common theme with their products all being named after snakes. Unlike the scene in Indiana Jones “ Raiders of the Lost Ark” when Indie and his girlfriend are trapped inside the tomb with deadly snakes writhing over the floor coming to attack them, TCI products are much friendlier and don’t bite.

This is a joint review of TCI’s top mains block and a mid-

range interconnect.

CONSTRICTOR SE

The Temple Constrictor SE 6-way Power block is a very well-made extension block with a power switch to isolate it. Some purists would argue that adding a power switch is defeating the object of a high-quality unit but TCI uses high-quality components and will probably feel that safety overrules purism. I have used many mains blocks over the years and the majority have all served me well with the more expensive units certainly having the upper hand sonically. Along with a good mains block and power leads, having a good clean dedicated mains spur is vital. I installed one many years ago when I moved to my current home and fortunately the distribution unit under the stairs is next to my listening room making life



easier and cheaper when installing the heavy-duty spur and separate mains isolation switch. I also put an earthing rod outside the listening room window into the soil which made a big difference. A good friend of mine scorned me for doing this feeling it was somewhat over the top, but believe me, it was worth the hassle. Internally I have a silver-plated double mains socket that has an earthing post on it to connect the dedicated outside earth too. The TCI constrictor SE, therefore, had the best chance to shine or not as the case may be.

The TCI Temple Constrictor 6-way Power block features 16 cores of PTFE insulated silver-plated copper and one 2.5mm PVC insulated copper earth wire. It has a thicker cross-sectional area and a larger amount of silver to help ensure it has a lower noise floor.

SOUND QUALITY

A good mains block should just provide a solid foundation to plug your components' mains leads into without interfering with the incoming mains. Certainly, the TCI did this and just got on with the job in hand. No nasties or any interference were detected throughout the review period and just as the mains block sat behind my equipment rack out of sight my listening sessions carried on unimpeded. Bass was good and tight and flowed well, a must with the jazz I listen to much of the time. This bass and fluidity are what I want from any system, and I know from experience that good earthing, quality wiring, and components are vital to achieving this outcome. Mid-range and vocals had clarity and imaging flowed forth into the room with good front-to-back depth. Hannah Reid's beautiful voice on the London Grammar albums shone through with no haziness or sibilance. Top-end wasn't strident or overbearing and I never tired or got listening fatigue, which was a good sign. Compared to my resident Missing Link mains block, results were very similar and I reckon you would have to spend a lot more to improve on either for a worthwhile gain. The law of diminishing returns rears its ugly head again, and, unless you have deep pockets and a very revealing reference system, the extra spend may not be worth it. Personally, I have seen and heard very expensive mains leads and power conditioners and filters at shows and the outlay

for me is too great for the perceived sonic improvements. Balance is key here to my mind. That is my personal opinion and you the reader should make your own mind up on this subject – it is after all your money you are spending.

With the TCI block in place is found my system to be more resolving, with much more detail and tighter bass information. In addition, it provided a larger and more precise sound stage. Offering the ability to upgrade the sound quality of 6 pieces of HiFi equipment in one fell swoop I think it represents very good value for money.

COBRA II

TCI Cobra II's aim is to achieve a reference-grade interconnect and is second only to the reference Cobra II SE in TCI's line-up of interconnects. It is very well made and quite stiff with attractive gold braided outer sheathing and good quality RCA plugs. My only criticism of the plugs was that the channel identification of left and right was not obvious to the eye. I like good clear indication and so red and black markings would have been useful. The RCA's outer casing unscrews so you can insert the plug into the socket and then you tighten the outer back up to lock the plug firmly into place. I thought this was a nice feature that doesn't rely on accurate machining of the plug alone. It's a fully balanced design that utilises top-quality aerospace-grade materials

SOUND QUALITY

Just as the Constrictor SE mains block got on with the job in hand so too did the Cobra II. Dynamic range was free to flow unhindered from the quietest levels to the loudest crescendos and a track I often use to test this out is King Crimson's live recorded Fracture form "Starless and Bible Black." It is a track that builds up to a tremendous ending and if you haven't heard it before can make you jump out of your seat. Released in 1974 it still stands the test of time for me and exploits your amp and speakers' capabilities to the max. The pounding bass, frantic guitar work, and drumming are quite enthralling. The Cobra II responded very well having the range and clout the musicians expressed and intended when this track was recorded. Timing and rhythm effectively moved



the music along and I had no issues following the music and found myself tapping my feet. Detailing and soundstage width and depth were very good. A characteristic that held throughout my time with the Cobra II though was a bright sheen/edge to the sound which wasn't piercing but was a trait that remained, even when I changed from my Jern W12S's to Kudos C20 floor standers. I am sure many listeners will like this characteristic but for me, I prefer a smoother balance with my silver cables from Way. Again, this is my preference and you the listener must make your own mind up. Detailing was excellent and the Cobra II was never dull or boring and would suit any system or components that need a bit of life injecting into them like a good tonic.

CONCLUSION

TCI manufactures an excellent range of cables and mains products that don't cost the earth. They are not cheap by everyday standards but the inherent value for money is still very high and the cables will provide a very reliable, no-nonsense service for many years.

The power block did have a noticeable effect on timing having the effect of endowing the music with a pleasing flow and without any harshness

in the upper registers making for a very easy and non-fatiguing listening experience.

The Cobra II, like the Constrictor power block, was well made and had good detail, timing, and soundstage presentation with a bright and detailed top-end that may please some and be a little much for some systems.

AT A GLANCE

Build Quality:

Excellent using quality components that will last for years

Sound Quality:

Overall, very good and will work with many systems without a hitch. The mains block gets on with its job and acts as a solid foundation for clean power delivery without added complications. The Cobra II is very detailed and rhythmic and shines a light on the music.

Value for Money:

Compared to the competition, both items are excellent value and affordable for anyone serious enough to make an upgrade from basic kit



to be a long-term acquisition

We Loved:

Excellent design

Solid Build Quality

Lively and detailed performance

Good soundstage with accurate instrumental placement and depth.

Strong, deep, detailed bass

Good timing and rhythm

Detail was well portrayed

We Didn't Love So Much:

Some may find the sound of the Cobra II a bit too lively as I did for my taste if not carefully matched to your system. The key here is listening before you buy. All dealers should allow sale or return.

No issues with the mains block at all!

Elevator Pitch Review: TCI has built a reputa-

tion for excellent quality and value for money items that the buyer can enjoy for a long time and without emptying their bank account. Performance is very good for the money and, as such, they are well worth seeking out and auditioning. Both the power block and cable offer a no-nonsense delivery with very good timing and fluidity. The cable does have some top-end emphasis.

Prices: Temple Constrictor SE 6-way block £340. Cobra II 1 metre length £400.





LATERAL AUDIO LAS-CC ISOLATORS

Ken Stokes gets isolated with British brand Lateral Audio Stands.



Ken Stokes

Like many in the audio world I have experimented with various approaches to isolating speakers and my HiFi units from each other; with or without room treatments and at different budgets, from cutting tennis balls in half to custom cut rock slabs and the ubiquitous Sorbothane in numerous guises! I have wanted to try some of the current more 'technical' isolation solutions on offer in the audio world for a while. I have long believed, approaching in a holistic way, that isolation; room to stands and platforms, to each individual unit matters and can make a significant difference to final perceived sound quality.

I was eager to try these from Lateral Audio Stands. The units I am sent for review are for placement under HiFi source and amplification units and can also be combined with the

stands from Lateral Audio Stands, their stands are not part of my review, but as an aside, the platforms and stands look very nice indeed.

However, back to my review. These isolator units do not have to be used purely in conjunction with the platform systems made by Lateral Audio, these can be used in most systems and I was sent two sets of three LAS-CC units to try, a set was placed both under my amplifier and CD spinner.

These units come in packs of three and four to cope with components with weights up to 60kg or 80kg respectively, and floor isolators that can take weights to 85kg that are fitted with M8 studs. Also worth noting Lateral Audio also make isolator platforms as an alternative to these 'puck' style isolators.

DESIGN AND CONSTRUCTION

First, maybe I should offer some basic information in terms of how these isolators are constructed. By way of a simple description, these isolators come in three parts, a machined stainless steel and brass base unit, a small sphere, which is a precisely machined ceramic ball, that sits in a machined hollow within the base unit (the sphere is coated with a light silicon-based lubricating fluid) and a machined stainless steel top section that also has a machined, hollow, brass section so it rests on top. The top and bottom are essentially separated by the sphere that fits, and sits, perfectly between them. The ceramic spheres arrive 'pre-lubed' in a packet, a useful addition might be a small bottle of the lubricating fluid in case they need a top-up over time.

In terms of appearance, these units are very well made and clearly machined to some tight tolerances, made from stainless steel with the brass insert in each stainless steel part. There is a dimple in the top, which I presume is for use with spikes and in conjunction with Lateral Audio's other products. These units 'fit together' very easily and are simply placed under components in either a three isolator configuration or four. Even from opening the packaging I had a good impression, the packaging is stylish and befitting a quality product. I thought well presented and very much fit for purpose. These units feel substantial in the hand, solid and they certainly have a look that would appeal to any passing style-conscious magpies! Getting to the point, I was impressed, they are well packaged, well made, easy to put together and easy to place under both my CD spinner and power amp. They looked the part and cosmetically are a huge improvement on my previous belt 'n braces sorbo' pods with cork toppers!

The official construction description from Lateral Audio Stands is as follows: "The LAS-CC design uses a ceramic ball bearing but allows for 'micro pure motion' inside the brass cup in which sits. The upper cap decouples from the base and is allowed to 'perfectly alignment' to the player, but only the centre brass is in contact with the underside of the player. Every detail and material and geometry choice is to control any resonance to an absolute low level,

reducing any energy transmission through to the player. The 'O' ring which you see does not play a role, and only keeps the top cap vertical. The ball is delicately covered in silicone grease and this is also an important part of the detail of the LAS-CC and the extent to which it has been developed for its sound.

If I am to be critical with regard to construction, my only concern was about sitting metal to metal with no soft washer or cushioning between, either to the top or bottom of these isolators, meaning that my amp and cd player having metal bases, were sat metal to metal on the isolators and in my case, my wooden shelf HiFi unit under. If placed on a shelf or platform made of glass or other hard surfaces I might be concerned about scratches and some might be concerned about scratches to the underside of their expensive box components. I don't feel this is a major issue though and this can easily be solved with perhaps a thin flat washer of some sort? I do wonder if such could be supplied with these isolator units.

Also, perhaps worth noting, in my case my CD spinner has, internally placed, a large and fairly heavy transformer, this did mean much of the weight is to one side of the unit and I think would have sat better on four, rather than three isolators as it had a tendency to tip (solved by moving the rear isolator toward the heavier side).

SOUND QUALITY

So, to the main course! How did these isolators affect the sound quality of my system? I installed these isolators, as suggested, under my CD player (I use the transport only to an off-board DAC/pre amp) and the other set of three under my power amp. Initially, at least I just wanted to spend some time playing music, not critical listening, rather just playing music as usual and reserve judgement. However, to be blunt, right from the outset I felt there was a difference.

I often wait to do a 'reverse' test, removing or reverting back to my rig as was without the review kit in situ, to really get to grips with what the effects are. I spent well over a week just enjoying my music as normal, that week



stretched to two weeks due to other commitments. No one was pushing me to rush my review so I just enjoyed my music and tried to play as many albums, different genres and styles of recording as to befit my mood. As above though, I knew pretty much from the off and confirmed after a few days that I was hearing differences; more micro-detail, the soundstage felt bigger and everything felt to have more vibrancy. This was not at the loss of anything in terms of the overall balance of my rig, bass was still kicking and the top end still there. A simplistic way to express perhaps, but it didn't feel as if my all-digital source set-up was gaining detail or presence at the loss of anything. In some ways, this is a subtle difference, but as with much of what we do by way of peripheral kit changes, once heard it's hard not to hear!

Now I know in most reviews that there are usually lots of descriptions, hints of fingernail on guitar string and the puff of air as the singer got a teeny bit close to the microphone, vocals not heard before in the background. That is not usually my style and those who have read my reviews before will be familiar with my approach. I played and have a broad taste in music, Gregorian chants to Miles Davis to thrash metal to Porcupine Tree to John Martyn and even the occasional orchestral piece. However, no point bragging about a large music collection given present company, I guess many of us can do that! The essence is really that nothing suffered adversely and everything I played had a lift - a bit more space and depth, a bit more detail. In short, a bit more realism and attack.

CONCLUSION

All my feelings about these isolators and the effect in situ were confirmed when I did my reverse tests. My wife is often requested at some point, much to her chagrin, to offer an opinion when I change kit or components. So you get two reviewers for the price of one with me! Now my wife loves music and has good ears, she hates discussions about HiFi or trying to dissect music so she is a reluctant participant, but as I say, she has good ears so sometimes I feel needs must. I know if she offers a similar view to me without prompting, that I can't

be far off the mark.

The reverse test was of course pretty simple, all I needed to do was remove the isolators and let my units sit on the standard unit feet. After warming up my rig and getting settled we played a few tracks that from past experience offer good opportunities to assess various musical elements, John Martyn and Church with One Bell and The Sky is Crying for sub-bass, various Pink Floyd tracks and a few of my wife's favourites, Kate Melua for vocals for instance. We settled on Pink Floyd for the final 'reverse' test, the track Time offers good range and soundstage testing.

With no prompting from me, my wife's first comment on removing these isolators from under the CD spinner was that 'everything has gone flat'. What she meant, in parlance we might use in the audio world, was that the sound stage had shrunk. To be honest, I was a little shocked just how much of a sense of loss I felt, it was as if the sound stage had been pushed right back toward the speakers and was narrower. We further explored playing more tracks. We also put the isolators back. My wife, who is not prone to encourage me to spend on HiFi (laughs out loud to self!) announced that she preferred these Lateral Audio isolators in, rather than out. My wife also added that with these units in place, "everything just sounds more". In my view praise indeed, but I'd have to say, confirmed exactly how I felt.

AT A GLANCE

Build Quality:

Superb, clearly made to high tolerances, fit together well, solid and look good. These units should fit well cosmetically with most kit. My only minor criticism being, as mentioned earlier, maybe a need for some 'soft' pads/washers of some sort top and bottom to prevent potential delicate surfaces being scratched.

Sound Quality:

A definite improvement with my system, more detail, bigger soundstage and a greater sense of dynamics and realism. Add your own style of expletives, if you prefer blacker blacks or great-



er space between instruments feel free to think in those terms. To be fair getting poetic is all well and good, but if you have a system that is revealing and looking for some sort of unit isolation, these might just fit for you.

Value For Money:

In my opinion, this can be a moot point, we all have kit that resides in various price brackets, in my terms these isolators are not cheap, but I can vouch that they work and are robust, well-made products. If they fit within your budget they have to be worth consideration.

We Loved:

The simplicity of assembly

The looks and the clear improvement to SQ

We Didn't Love So Much:

The tendency for kit to slide on them requiring

care when inserting CD's and controls or the possibility of scratching either the underside of units or shelf/platform surfaces

Elevator Pitch Review: A simple tweak that provides definite improvements in sound. They make 'everything sound more'. You will miss them when they are gone.

Price: £450 inc VAT





FERRUM HYPSES POWER SUPPLY

Ferrum is a Polish manufacturer with just two products under their belt, the OOR headphone amplifier and the product we have in for review here, the HYPSES power supply costing €995/\$995. The HYPSES is suitable for a wide range of products but in this review Dave Robson checks the product out with his Mytek Brooklyn DAC+.



David Robson

After a conversation with Marcin Hamerla from HEM about the displays on the Brooklyn DAC+ in my "Mytek Digital Users Group" on Facebook, our conversation steered into a private chat about power supplies. I have used upgraded power supplies on other equipment and have found that DAC's especially improve with Linear Power Supplies (LPS) over the supplied Switch Mode Power Supplies (SMPS) or "Wall Warts" as some call them. My earlier experience with a Chromecast Audio and upgrading that to an ifi 5v LPS brought a big improvement to my system. When I bought my Mytek Brooklyn DAC+ I was advised by one of the knowledgeable reviewers at HiFi Pig magazine to try an upgraded power supply, which I did, this again brought improvements, the music benefited from a bigger and expanded sound

stage, a fuller-bodied experience without getting overblown a cleaner delivery with greater clarity and depth.

So I was very happy to be asked by Marcin to evaluate this new power supply by "Ferrum" the HYPSES. The Mytek Brooklyn DAC+ is a fantastic DAC / Pre and I also use mine as a Preamp pushing signals towards my Nord NC500se mk2 D Class Power Amplifier, as well as being the heart of my digital system. I had a pre-production model of the HYPSES to have a play with, and a few weeks ago received the full-blown finished article.

CONSTRUCTION

The HYPSES is a hybrid power system and combines the best features of both linear and switching power supplies. It delivers exactly what the



equipment requires, when it requires it, and how it requires it. Which sounds like an excellent plan to me.

So on unpacking this model, I had the unit itself, which is quite weighty and well finished. It's a little larger than the DAC, (W217,50 mm x L206,50 mm x H50 mm, Net weight: 2,89 kg) but similar in aesthetics. The finish is flat matt/dark grey (similar to the 80's Technics colour), with a simple central OLED display with a control knob located on the right-hand side. To the left, an area finished off in what looks like suede and is deep rust brown finish, and within that, a central logo "Fe" which lights up white. On the rear, you have a DC output, an IEC standard power input, with an ON/OFF rocker switch. Also supplied are a 12v trigger socket and a Micro USB input (for firmware updates).

A power cable was supplied, as were two DC output cables of 2.5 and 2.1mm diameter for different applications. A spare fuse is also supplied and located in the same holder unit as the main fuse at the rear of the power supply.

So that's the basics, a nice simple and stylish design. Now for switch on and set up.

The options after the welcome screen are quite simple - the selection knob moves left and right and it's a simple push to select. There are lots of pre-set options for many products and a custom setting - find your product, select it, you get a little countdown for the setting to take place, and then you're good to go. You can manually set the power supply up too - you need to find your polarity of Centre Positive or Negative and your voltage. So, for instance, my Mytek Brooklyn DAC+ is positive polarity and rated at 12v, but with the Fe HYP-SOS you can tweak this and there seems to be a recommendation for the voltage to be set at 13.2V - this is a safe level and ok'd by Mytek. This is my preferred setting, so the HYP-SOS makes this possible and makes it easy to do. It really is so easy. The regulated output voltage level can be set to a 5-30V range with current up to 6A and power up to 80W, making this is a very versatile power supply.

SOUND QUALITY

Unusually, this review isn't like any other I've done. It's not like a specific piece of equipment, cable, or a defined change, but rather how this power supply enhances what I already have. Playing a few of my regular review albums, the changes the HYP-SOS brought to the party was immediately noticeable. The initial difference was that the sound had somewhat spread out, the sound stage had effortlessly eased itself into every nook in my listening space. It had also shifted a little lower, so the main bulk of the sound sits just above the speaker height. This for me gives a more realistic position and a structured setting in my smaller listening environment. It's still "above" and "around" but just more focused. The audible vista experienced had an extra depth and texture to it. I'd always liked my Mytek DAC for its verve and energy, but the addition of the power supply added a hint of Champagne to a Prosecco fuelled party. Still a crisp delivery of detail and timbre, but with a slightly raised level of sheen and polish, not a softening but an awareness of quality and a more expensive delivery, if that makes sense? A fully connective and more expressive expanse of sound, but not in an overblown, coloured or bloated way.

I switched to XLR cables some time ago and immediately experienced a "blacker" separation between all vocals and instruments from my previous RCA setup, and this same effect was yet again apparent by adding the Ferrum HYP-SOS. I'd never have thought this possible to improve on where I was, to add more "nothingness" but here it is, an extra deeper void of open silence. This perceived improvement in "nothingness" gave me the ability to pinpoint a single instrument, vocal, or sound effect in the mix of music. Now, this isn't exactly what music is about, I grant you, it's about listening to the whole ensemble and the music as a whole. However, for me, this separation allows complex music like "Rock" to come into its own, and rather than be more a wall of noise I now have more structure and involvement with the band and their music.

The biggest impact for me, without doubt, is in the delivery of the bass and lower end of the frequency scale. This isn't about bigger bass, it's not even about pushing the equipment to give a lower frequency response, it's about how

REVIEW

the Ferrum HYPsOS manages to deliver its power so the equipment can grip the bass and make it as tuneful and purposeful as I can imagine it can be.

Now, this could be an effect of the HYPsOS on the Preamp section of the Mytek, but whatever it is affecting, the resulting sound you can feel in what seems to be the waves or pulses of bass energy. It “feels” so controlled without being constrained or dry, it’s juicy and full but without fuzziness or flab. It just makes the whole experience a more enjoyable fulfilling and musical place to be.

CONCLUSION

I have to keep reminding myself this isn’t a new piece of equipment, but an addition or add on to the original set-up I have.

The Ferrum HYPsOS is like the final piece in a jigsaw, or the seasoning to a wonderful meal - it just seems to keep on giving sweet rewards. Albums that I could listen to and skip through now command listening to intently, my attention fully grabbed and pulled towards the recording - or should I say I’m further into the performance due to the expanded airiness and control of what the HYPsOS brings to the listener. It’s accurate, informative and musical to boot. Once you hear the benefits, you’ll never want to go back.

AT A GLANCE

A great addition to your HiFi and musical experience. It’s also very adaptable and the HYPsOS isn’t just for a single make or marque and this makes it a bit of a Swiss Army Knife of a power supply. I only had one piece of equipment to power, but I’d really hope that it will bring the same benefits to all the HiFi it can connect to. The list of available DACs it can power is growing and the firmware is up-datable and expanding - ensure you check out if your product is covered before buying.

Build Quality:

Looks, fit and finish, feel and operation are great

Sound Quality:

If you want to glean the last bit of performance from what you have you may well benefit from a Ferrum HYPsOS in your life. This is the “icing on the cake” with regards to my already excellent Mytek product

Value For Money:

At nearly 1k Euro, this isn’t a cheap addition, as it’s nearly half the price of the DAC being used. However, this really does take you to another level - I’ve heard DACs at the price point of both units combined and it’s a close call. The fact that this can be used with other equipment choices at a later date is a superb added bonus and one which future proofs your purchase.

We Loved: It drags every bit of performance out of the equipment. It has multiple uses and is very versatile for the enthusiast. Continued support and development from Ferrum.

We Didn’t Love So Much: Nothing of note other than it isn’t cheap.

Price: 995 Euro / USD.

Elevator Pitch Review: A sophisticated and adaptable add-on power supply that has the ability to drag the last ounce of performance from relevant products.





ENGLISH ELECTRIC 16SWITCH SWITCH

The English Electric 16Switch is a network switch aimed squarely at the audiophile and audio-video market. Chris Baillie checks it out for Hifi Pig.



Chris Baillie

Things have been moving fast in the world of networked audio. Just a few years ago, when I made the jump myself, the sonic effect of network switches was something talked about in some quarters, but certainly wasn't considered essential by the dealers who helped me set up my system.

In the last year or two, we've seen a flood of audio-specific designs enter the market, from the £399 Silent Angel N8, through the quite costly Melco S100, right up to some very exotic designs from the likes of Anzus. The very existence of such devices seems to divide opinion amongst the audiophile community, often causing much furore from the type of audiophile, exclaiming that "It's all about 1's and '0's!", so they must be 'Snake Oil'! So let's look into why our networked audio systems might benefit

from a network switch, that's been specifically designed for audio.

Firstly, let's remember that digital information is sent as an analogue waveform. Those '1' and '0's' are represented as electrical signals. Introduce extra noise into the equation and that noise could result in, for example, a 'one' being read as a 'zero' and vice-versa. Let's also consider that when, for example, you're transferring data in real-time, rather than copying a file for backup purposes, there's no time for the data to be re-submitted if an error is detected, so the data is potentially fed to your DAC with changes to the original data. Therefore, the data containing your music benefits from having as little extra noise as possible. On top of this, jitter can be introduced if your network can't send the data as fast as your DAC needs to



see it. So the job of the switch is to accurately move huge chunks of data, on time and with, ideally, no added noise. One potential cause of noise of course is the PSU, so this needs to be as electrically quiet as possible. Indeed many audiophiles have been using Linear PSU's with network switches, and even routers, for some time now.

ABOUT THE SWITCH

The Chord Company introduced the English Electric 8Switch last year and it caused quite a stir, being readily available via their extensive dealer network, at a price that, whilst not cheap at £450, potentially represented great value for what it was able to bring to the right system. With the 8Switch having 8 output ports, it's fairly self-explanatory that the 16Switch has 8 more! The party trick though is the 16 ports are split into 2 banks, and each bank can be fed an independent Ethernet input. The thinking here is that you could feed, for example, a high-end AV system and keep the Audio and Video signals separate.

At a much higher price of £999, you'd hope for more than that though, otherwise you would just buy two 8Switches at £900! Thankfully we do get much more. The first thing to impress is a proper 3 pin mains lead, as opposed to the 'wall wart' supplied with the 8Switch. Even the best 'wall warts' are still compromised by the thin cable, from the box to the PSU socket. This feeds the two separate banks of 8 ports. Considering how much some audiophiles spend on upgrading the PSU's on their Network Switches, this seems, to me, like a great step forward, and presents the option to experiment with different mains input cables, should you desire. At first, I had assumed this to be a Linear PSU, but turns out it's a specially designed, low noise switch mode type. I'm told Chord experimented and found this PSU was able to not only handle the required speeds but also resulted in a more musical sound.

DESIGN AND BUILD

I'll get straight to the point, this could swing the purchasing decision either way for many buyers. It's not really what I'd call living room friendly. Although it's the right size to fit on a shelf in

your equipment rack, along with your main system, unfortunately, both the input and output cables connect via the front panel, meaning hiding the cables from sight requires some thought. Of course many will love to show off their high-end Ethernet cables and this will be a plus point if so, but do consider this before ordering.

Having got that bit out of the way I'll describe the component itself. You get a well put together box, in a light 'mild steel' case. The unit comes with brackets to enable it to be rack-mounted, which perhaps helps explain why the Ethernet ports are mounted on the front. Unfortunately, I wasn't able to use it this way, so, instead, I placed it on a table with some RDC cones between the switch and the table. At the rear, there is the mains input with a nice solid rocker power switch next to it. At the front, there are the Ethernet ports, with an LED light to show when which ports are active.

SETTING UP

I have been using the Silent Angel Bonn N8 for the last 10 months and so that gave me a very good baseline with which to compare the English Electric 16Switch. My router is in the office, which is immediately next door to my system in my living room. Supra Cat 8 Ethernet cable is used from the router, via a junction box, which connects directly to the Network Switch. Again Supra Cat 8 cable then runs from the Switch to my system.

The system used for the review was Melco N1A/2 server, Moon 280D Streaming DAC, Moon 600i amp and Totem Forest Signature speakers. Analogue cables are all Tellurium Q Ultrablack 2, with an Audioquest Vodka cable between Melco & Streaming DAC. I was also able to connect a Chord Electronics Hugo2/2Go portable streamer/DAC directly to the EE16, for which I used the Chord C-Stream Ethernet Cable, supplied with the EE16. Unfortunately, the Chord Ethernet cable supplied was too short for me to use in my main set up. I listened to music both direct from my Melco Server and via Qobuz.

SOUND QUALITY

It goes without saying that what I note here



applies to my setup, in comparison to my previous reference. As a baseline, I'll say that when I initially upgraded to the Silent Angel, from a basic TP-link switch, the improvements were akin to changing a component, every sonic element was improved! Soundstage, rhythm and timing excelled and everything sounded more detailed, more vivid and yet, at the same time, I enjoyed a major reduction in perceived harshness.

For this review I initially played a few albums in my current set-up, including Paul Weller's 'Stanley Road', then swapped over to the 16Switch and listened again. The Weller album was a 16/44 CD rip .wav file, with the Melco as the source. Logically many would think playing a locally stored file was a pointless exercise in a review of a Network Switch. After installing the Silent Angel last year I was surprised at just how beneficial the addition of a quality switch could be to locally stored files. I am told it's because although the source isn't coming over the network, the performance is still affected by noise from the network.

Whatever the reason, I was greeted by a noticeably more 3D presentation, better front to back layering, improved bass definition and better sense of acoustic space around the instruments. I used the tracks 'You Do Something To Me' and 'Broken Stones'. The first thing to strike me was the organ on the first track. The guitar, slightly to the right of the sound stage was noticeably more prominent, being projected forward in its own acoustic space and the Hammond organ seeming to float at the front of the soundstage. The bass on the second track seemed to bounce along better, with more of a sense of being 'plucked', rather than just being there. The Hammond organ, this time slightly right centre, was given so much more space. I was indeed taken aback at how much more I was enjoying the music over what I consider to be the very good 8Switch, that I swapped them back around just to check. Sure enough, the noted changes were there.

Next up was some Qobuz Streaming which, logically, one would expect to benefit even more than local files, and this proved very much to be the case. First up was 'Rejoice', from Tony Allen and Hugh Masekela – 24/96. From the first bars, as well as noting similar benefits to those

heard via the local files, there was an improved sense of timing to the drums and better phrasing of the trumpet. This gave me a far better perception of interplay between the various musicians in the band. Cymbals seemed crisper, yet with more sense of being 'struck', rather than what I hadn't realised was a slightly mushy presentation with my previous switch in place.

Sticking with modern Jazz, next up was 'Black to the Future' from Sons of Kemet – 24/96. Here I noted much greater tonal colour to the brass section via the 16Switch, again with a better sense of phrasing. This is something I noted with most of the music I listened to via the 16 Switch, especially when I played a DSD version of Dave Brubeck's 'Take 5' via the Melco. I have never experienced this track sounding so real, the sax jumping out of the speakers, the drums and cymbals sounding so clean and lifelike.

Unfortunately, due to only having a single Ethernet feed into my living room via the office, I wasn't able to fully exploit the potential benefits of feeding my BT box via a separate feed from the router to the 16Switch. I have little doubt that users of high-end AV systems would also enjoy the benefits of the 16Switch, as clearly it's lowering the noise floor of my system. Naturally, one should always try any product at home, in your own system before committing to buy.

All previous observations were made using my main system. I then spent some time comparing the 16Switch against my reference unit using the Chord Hugo2/2Go. Surprisingly, I noted similar improvements. Agnes Obel's 'Citizen of Glass' – 24/44.1 feed via Qobuz, highlighting more impact from the xylophone strikes and more detail and precision to the plucked strings. Here the sense of recorded acoustic was more obvious than with my reference switch. Going back to the Paul Weller album, streamed from the Melco, improvements were similar to those noted in the main system, but again with a clearer sense of acoustic. By now a Russ Andrews RANS-1 switch had arrived for review. Without giving too much away, this highlighted the strengths of the EE16Switch. I feel it's certainly majoring on speed and precision, perhaps at the expense of some harmonic richness compared to the RANS-1. I wouldn't go as far as to say it tipped towards an overly

REVIEW

forward balance in either my main or portable system, but I could see how the RA Switch may work better in a system that already errs in that direction, whereas one may prefer the EE in a system that errs more in the laid back direction.

CONCLUSION

As you have read, the EE 16Switch certainly made a positive sonic impact in my system. I find it very interesting that The Chord Company chose a high quality, low noise switched mode PSU based on it being more 'musical'. I'd certainly agree it has more of an upbeat character than either of the other audio-specific switches I've tried in my system recently.

The sound of my system was notably improved during the EE 16Switch's time in my system and, providing you're able to accommodate within a rack or indeed hide it from view in your living room, I'd certainly recommend it. As mentioned previously, the front panel Ethernet input and outputs will, unfortunately, rule it out for some. When you factor in what it can do within a high-quality AV system, I can certainly see how it may be incorporated into a system with a video file server.

AT A GLANCE

Build Quality:

Solid and purposeful. 'Mild Steel' case said to help reject EMI and RFI

Sound Quality:

Big step up from my reference switch, in terms of lower noise, more upbeat and dynamic presentation, better defined 3D soundstage and generally a better sense of dynamics and liveliness

Value for Money:

The market for dedicated audio network switch's is fairly new. However, in terms of the sonic benefits, I'd say the pricing is about right. Add in what it could do within a high-end AV set up and the value increases. If I was better able to accommodate it, it's certainly something I'd consider buying

We Loved:

Lively and dynamic presentation

Increased sense of detail and recorded ambience, where it's on the recording of course

Lower noise

Improved sense of front to back imaging

3 pin mains lead, giving the option to experiment with cabling and avoids RFI from 'wall wart' power supply, fitted to many similar devices

We Didn't Love So Much

For me, the front connecting Ethernet inputs and outputs deny it from a place in my room, but I appreciate this would be less of an issue in a computer rack or even a cupboard

Price: £999

Elevator Pitch Review: An interesting addition to the market, which those with high-end AV set-ups will love. I really enjoyed with it did for the sound of my system and it certainly opened my eyes as to how manufacturers can tune the sonic balance of such a product! Good value for money, especially in a combined HiFi and AV system, where it could save purchasing two separate switches. With the proviso of the front connecting ports not fitting into your set-up visually, I would recommend an audition.





GABI RYNVELD

INTERVIEW

Gabi Rynveld is a professional concert pianist, born in Budapest, Hungary, she has performed in famous concert halls worldwide since she was nine years old. Later in life, while raising five children, she led sales and marketing for International Audio Holding, the company behind Siltech and Crystal Cable. She also founded Crystal Cable in 2004. Gabi is happily married to IAH's CEO Edwin Rynveld, sharing the love and passion for making and listening to music.

HiFi Pig caught up with Gabi this summer and asked her a few questions about her life in the HiFi Industry, music, working with her family and much more...



HP: What has been your biggest challenge during your HiFi career?

Gabi Rynveld (GR): My mission, and my biggest challenge at the same time, is to get the HiFi industry closer to live music. This sounds like the biggest cliché, but the mission still is not accomplished...

From the early 2000s I started to join my husband Edwin, visiting HiFi shows and events, distributors and stores. One thing has struck me was that at most of those events, the equipment was what people cared about. "How is the stereo image? Are the speakers not too close to the wall? What is better, SACD or LP?" I missed music. Nobody talked about music, how all that equipment could reproduce the magic I used to be part of in a concert hall, jazz bar or festival. In the past 20 years, things have changed a bit, for the better, but my mission is still there – and I am here again to continue.

HP: How has your training as a classical musician affected how you work in the HiFi Industry?

GR: I don't think that many HiFi brands have a professional musician on board. Just as I have been busy with studying, performing, teaching and recording music throughout my entire life, that is the way how I now work in our compa-

ny. Listening tests, helping the engineers and designers to improve the sound of our products constantly, and talking about music to customers, press and visitors is my work. It feels like a second skin, and it is never "done" ...

HP: How hard is it to take that step back and take a sabbatical from a company that you have built?

GR: It was a hard decision to take, but it worked out very well. Suddenly I had time for playing piano every day, to be there for our children when needed, work on my health, and cope with the challenges Covid brought us...

HP: What is the product that you have been involved with that you are most proud of?

GR: Crystal Cable Arabesque Glass Master (glass floorstanding loudspeakers) and the Piccolo Series cables.

HP: What HiFi product, designed and made by somebody else, do you wish you had been involved with?

GR: Meze headphones. Beautifully designed, musical sounding and innovative technology.

HP: What do you see as the future of the HiFi Industry?

GR: Real quality, real engineering and real high end materials will always be appreciated, as those values bring HiFi to almost live-like music reproduction.

HP: How did you come to take up piano as a professional musician? Was this a choice, did you try many instruments before choosing the piano, or did it choose you?

GR: More or less both.

Let me explain – I was born in Hungary, where after the monarchy, in the 20th century it was natural that in families with a daughter, you had a piano in house. So in the time of WW2, my mom was a little girl, her parents were not really wealthy, but they had a grand piano at home. When I was born, that piano was there in the living room, and at the age of three I started to explore what you could do with those beautiful ivory keys. That's how it started, obviously I had talent and an enormous drive to discover and make music. So, at that point, the piano found me.

But I also love classical ballet – started at the age of three as well. I danced in the opera in Budapest as a little swan in Tchaikovsky's Swan Lake but gave the very first concert at the age of nine as well – so at a certain time a choice had to be made.

I still remember the dilemma – I loved both playing the piano and dancing ... I figured that as a dancer, your career is shorter than of the big pianists I knew and adored: Horowitz or Rubinstein for example. So I made a surprisingly wise decision and went on with the piano – but I still love ballet and every time we are enjoying a performance I hardly can keep my legs and body quiet...

HP: Who has been your biggest influence throughout your career? (This could be one person or different people at different times)

GR: I can name a few, like Annie Fischer, Antal Dorati, Sir Gyorgy Solti, Zoltan Kocsis from the musical scene – and my husband, Edwin Rynveld, if we are talking about HiFi.

HP: How do you deal with the “cables are just snake oil” opinion that some people have?

GR: I look at other manufacturers as colleagues, not as competitors. This might come from my past as a musician – you are not competing but make music together... this way, I don't need to spend time to discuss with people believing in the snake oil theories – everybody has the right to think and argue differently. I do regret the name “snake oil” getting a negative taste – if you read Jim Austin's article published in Stereophile a couple of years ago, you understand the contradiction...

HP: What are the highs and lows of working with your family?

GR: The question is set quite right – it has highs and lows. If you work with your partner, it's a matter of taking care of having things you DON'T do together. This part went pretty well, as having five children gives every couple a lot of practical and physical things you need to separate. Being in the same industry helps to understand each other, you only need the first word of a sentence to know the rest. Having two of our sons in the company is a different piece of cake – you need to take another role than being a parent. The biggest “high” is trust – you know that all faces are in the same direction. Young professionals are the corner stone of the future growth of a company. Our knowledge, experience and drive flows together with professional management, business administration and potential future plans. The “low” is experiencing errors, unexpectedly different visions from your own kids – which are easier to discuss and solve though...

HP: What is your approach to HiFi, are you ‘all about the measurements’ or do you trust your ears...or a mixture of the two?

GR: My maxim: the difference our products make in a high-end system is measurable, audible and explainable. Obviously, I came into the HiFi industry as a musician, so started with the ears for sure. Learning the technological side, metallurgy, construction, acoustics and all other aspects of high-end audio, the measurements became more and more important and cumulated in a third component: when you can hear and measure significant differences, you can also substantially explain them. In this way, we can take away the myth of snake-oil stories and prove the results of real engineering and use of precious materials.

INTERVIEW





HP: Everyone has had to find new ways to cope with stress throughout the Covid19 pandemic, what have you found most helpful?

GR: To see the positives. Of course, it took some time to get there – the first and obvious effects were, and are, devastating, unpractical and made life difficult. After a while, we started to see more and more positives: appreciating things usually were “normal” – like being allowed to see family and friends. Being thankful for small improvements coming along – like going to a restaurant, even socially distanced. Discovering new creative ways to make music together – from balconies or via Zoom. And last but not least, having more time to make music, spend precious time with our semi-grown-up children at home, which would not happen when life would have been “normal”. Even when we are heading to a “new normal” now, we cherish these surprising additions, and keep them in our life.

HP: Do you see the HiFi Industry as a place where men and women can be equal? Tell us some of your experiences as a woman working in the industry, have things changed over the years?

GR: I certainly believe that men and women can be equal working with HiFi and with music. We have plenty of examples of amazing women in the industry – proving that music is

for everybody. Most people know that women have a better, more refined hearing than men, being able to hear more high frequencies and more details. This comes from nature, a biological fact. We have some brilliant female engineers among us, but also women responsible for design, making equipment fitting all kind of tastes and preferences. This changed a lot in the past twenty years – I vividly remember the years I started to work actively in our industry... When answering the phone, people often asked the question “can I speak to your boss please” or challenged my technical knowledge to be surprised when I happened to explain things correctly.

I think I was the first active woman attending shows and events with a baby in the stroller - during the last couple of years we see more and more families with kids coming to events, taking part of discussions and being the one who makes the choice when it comes to buying HiFi equipment. I think, as the world changes and get more and more divers and equal, our industry must and will follow.

HP: What is the most enjoyable thing about working in the HiFi Industry?

GR: I feel really blessed to call “work” what I like to do most: play music, listen to music and get people connected to music through our products.



DAVID ROBSON - AUDIOPHILES UK. HI-FI AND MUSIC

HiFi Pig chats with Dave Robson, the founding member of the Audiophiles UK. Hi-Fi and Music. group on Facebook.

INTERVIEW

HP: When did you set up the [Audiophiles UK. Hi-Fi and Music.](#) group and why?

DR: I started the group about 6 years ago, I'd had a bit of a hiatus from the Hi-fi for about 15 years or more due to personal circumstances, but with the advent of HD TV, and a Sky TV concert by Corinne Bailey Rae I saw on the Sky Arts, something just clicked, I knew I was missing something from my life, my music and Hi-fi! So I grabbed an off the shelf magazine and ran ran blindly to my local HiFi shop and bought a Sony STR-ES1200 AV amp and a pair of Q Acoustic 2010 speakers (new on the market back then). All I can say that those first purchases led to a house extension and a converted garage / music room!!!

My old HiFi from the loft came out of storage, and this was set up in the garage conversion. I had spent quite a few

years out the loop and in the dark about what was in vogue, there was new technology like streaming and other advances in digital technology and many new brands out there to catch up on. I'd used Facebook for a few years, and went looking for this "New" social media phenomenon to help me along with my new quest. So I joined a few groups and internet forums as you do, I went and asked a few questions, unfortunately what I was greeted with several times was just a tirade of abuse!

As we know several "themes" can come in for a rough ride, "cables" and "fuses" for instance, but this didn't help me with getting the information I needed. So I thought, you know what? I can provide something better than this, I'll start my own! So I set up Audiophiles UK and went head hunting people who I thought

where on the same wavelength as myself and asked them to join, and so it was the beginning of Audiophiles UK. HiFi and Music.

HP: What is the ethos of the group?

DR: For me, what I'd experienced previously I know I didn't want for my group, I should add the "My" should read "Our" group, and that the group is very much a team effort with all the moderators and regular contributors in the background all putting in time and effort to make it tick, and that I also wanted our members to feel that the group is "theirs" and share ownership and help steer and form it. I wanted it to be a place where you could chat about any aspect of our hobby without having world war 3 erupt or the "usual" knee jerk, parrot fashion mindless comments and baiting from the keyboard warriors to the more contentious threads, this helps nobody who is there to learn or share their experiences. Once people see those things happening and not addressed then I think many just switch off. Those who think of it like some type of "sport" are not for us. It's nice to be nice.

Apart from sharing their favourite music, bands and artists we wanted to encourage our members to share their knowledge and experience, experiment, be open minded and try new things. So advising on tips and tweaks, and try to help "myth bust" some misconceptions that have slipped into our hobby. For instance "isolating and coupling", explaining the differences and getting people to experiment cheaply, and then hopefully continue with more professional products if they find the sonic benefits. Helping people to understand how your room interacts with what your hear and finding simple remedies to problems. Putting in good foundations and understanding early on, to then get the very best out of your equipment and listening environment as your journey continues.

So if I had to put up a list that's our ethics then respectful, inclusive, educational and friendly with a bit of a family vibe would be top of the lists.

HP: You are pretty strict on allowing new members in, why is that?

DR: When I was in the other mixed nationality groups, I found there could be comments or things that could get "lost in translation" and

this then leading to misunderstandings, mostly due to humorous or sarcastic comments being taken wrongly, and thus dissent could erupt. So I decided to keep the group mostly UK based, although we have many great members from around the world who've been recommended to us, which is brilliant for us all. So it's no disrespect meant to any country or nationality, or any perceived elitism, but it is just easier to manage on our part.

HP: How many members do you have? Do you think some groups have just got too big?

DR: We have about 2000 members now. (and to think we were going to limit this to 250 at one point) We tend to get 25 - 50 applications a week, so we try to allow as many in as possible, we do have some questions to answer on joining, those who don't bother don't get in, and unfortunately we do have to try and balance the "newbies" with "experienced" but we do try to accept as many as we can. We have a cull every year, we go back to those who have never commented for 3 years or more or those who haven't added anything to the group, some have been added by others or dead profiles, some have come just to get a single answer and then put the group down, which is fine, we are here to help.

Group size? One thing I have learned is that groups ebb and flow, the vibe can change, it's not something you have massive control of, we have had members leave because "it's gotten too big", although our numbers of threads and comments are quite consistent, we know we can't please all the members all the time, but we stick to our ethics, and this seems to attract new membership. Once a group gets to a certain size, then there will be those in the industry who will see it as an advertising opportunity, once this starts then this has it's own downside, it's more work for the team, it's boring for the members and then it can become competitive, again it's more work for us. We have a few members "in the business" and our stance is that if you're a contributing member, and you are adding something regular to the group, advice, experience etc, then we see no harm in a little bit of exposure, what we don't want is advertising, spamming or shilling on the threads, it clutters up the group feed and becomes monotonous to

referee. Some groups are designed to do just this, the group owners have their own businesses and alternate agendas, that's fine for them, it serves a purpose, although this never usually bodes well in my opinion for a social group as they can't be ran without bias, and honesty and in my opinion openness and trustworthiness goes a long way and is what people want.

HP: You have a very strict code of practice. Why is this and how does it contribute to the well-being of the group as a whole?

DR: Our code of practice goes hand in hand with the ethics and group rules, I think its good manners to let people know what they can expect and what we are about if they are going to put their time and effort into being a contributing member of the group and support us. One thing we really wanted to do is create an "all inclusive" group, so we set this out in our rules, obviously there are certain times when members say or use words that may be outdated, "her indoors" or "the old ball and chain" it's never meant to be offensive, but it's something we want to discourage. Now the last thing we want to do is run around with the "ban hammer" and everybody scared to comment, so we like to think we can message people and ask for edits, be open and honest with our approach and spend time explaining why. Our group won't suit everyone, but there is a reason why it "hopefully" has the atmosphere and membership it does.

HP: Do you find yourself stuck in the middle of any "political" situations ever?

DR: Having only ever worked "for the man" in-house business and industry politics is something I'm quite naive to, HiFi and music isn't my lively-hood, so I don't have that pressure. What I do know is that rumour and Chinese whispers can be destructive. It's one reason I like to think our door is always open with regards to our group members, we have a saying within the group, "The only stupid question is the one we don't ask". Unfortunately I've witnessed some underhanded and wicked things transpire within the industry and can only hope karma catches up with these people.

HP: Do you have any group meet ups?

DR: Yes!!! one of the great pleasures of the group is being able to meet the people behind

the Facebook profile pictures!! We have our yearly group meeting at The North West Audio Show at the De-Vere Cranage Hall Hotel, Holmes Chapel, just outside Manchester. (Covid allowing) This is my yearly highlight! It's a fantastic show and superb venue, with many of us bringing the family and staying over the weekend! The show is free and held over two days and this gives everyone time to not only experience the show but to also meet and mingle and relax with other likeminded enthusiasts and some industry "Legends"!! It is in my opinion the best show in the UK by far, the hotel is also a Spa venue so great for all.

HP: How do you keep members feeling they are part of something stronger than the run of the mill Facebook group for audiophiles?

DR: I wouldn't say we were stronger than others, as there are a few great specialist groups out there with a slightly different "flavours" to ours. As a "all round" type of group I think we wanted to be a bit different and a bit of a Hi-fi oasis for those looking for a change. A daily, automatic "Hi-fi and music" stop off point and a first port of call for the members a bit like your local shop or pub.

We like the members to come up with suggestions and ideas for new threads. We love our "Members Choice" Sunday slot, one member a week gets to give us a little biography, Hi-fi history and their top tens of everything music. It's the first thing I do on Sunday morning with a cup of tea in hand. I think having a "community and family feel" of like-minded individuals, all kicking from the same side helps keep us in doing what we do and members coming back for more. To keep things streamlined and focused on music and Hi-fi we also set up a few sister groups, Vintage (for those only interested in that side of HiFi), a Second hand Hi-fi selling and a music media selling group (Vinyl, CD and Tape). This keeps the main group free of the stuff that can clutter up the main threads and again we have several mods to thank for keeping those running smoothly.

HP: You recently ran a photo competition for members that make up the images to this interview. What was that about and who were the winners.

DR: This was our second "Big" photo compe-

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Alan McIntosh



Paul Knipe



Foxx (Artizan) Delaney

tition. We asked the members to send us their favourite Photograph of something HiFi related, from the many entries we received we had a professional photographer choose the best 15 in his opinion, we then let the rest of the group choose their favourite via a poll. The top 6 all received Audiophiles UK T-shirts, and HiFi Pig goodies, the top 3 also had a little interview with myself published and the top 15 all had their pictures displayed as the group banner. It was great fun, our top 3 winners were Alan McIntosh, Paul Knipe and Foxx (Artizan) Delaney. All the entries were brilliant in my opinion and very much appreciated.

HP: What do you see as the groups achievements so far, and what is in store for the future of Audiophiles UK?

DR: Firstly I think being able to facilitate and bring likeminded people together is a great honour, especially when this leads to friendships and connections that would possibly never have happened without the group. Secondly, when the group offers advice and ideas that others take up and the results are sonically positive and pleasing, being able to share the gathered knowledge and experiences hopefully to fast track you to a higher level and possibly stop the expensive mistakes we have all made in the past. It's quite satisfying seeing one of your

members who joined as a complete novice to the hobby who, after a year or so confidently pass on the information and experience they have gained to the next generation just starting out. Last but not least sharing our favourite music, I think some of us get stuck in a bit of a musical rut, I know I did for many years, having a few thousand members share their musical journeys and differing tastes is a breath of fresh air to many. My music collection has swelled by quite a large amount over the last 6 years, and I'm very grateful for those who've contributed and shared.

As for our future, we will keep on doing what we do as I think it's a good formula. We will always encourage the members to give us their ideas and thoughts on how to improve the group and keep it fresh and interesting, if they themselves want to run a regular thread we will try to give them the ability to do that, we have thought of maybe having some sort of regular blog or video "how to" sessions, but for now they are just ideas. I'd like to take this opportunity to thank all our members past and present for making Audiophiles UK what it is today, and thank our Moderators in all the groups for the time and effort that they put into keeping things running smoothly. Oh and that HiFi Pig lot for the regular News and Reviews, the magazine is a great trustworthy resource for all things HiFi!!



DAN GEORGE

HiFi Pig chats with Dan George of Dan George Communications, one of the UK's leading specialist Audio public relations specialists, about twenty years in the HiFi game and more.

INTERVIEW

HP: You started off working in video post-production in the mid-nineties in SoHo. That must have been an interesting environment, time and place to work. Do you have any interesting stories you are able to share from back then.

DG: Firstly, thank you, HiFi Pig, for the great honour of being the first PR to be interviewed in the magazine, I am flattered. Most of the Soho stories are not fit for print! I'd moved from sleepy Sussex to an all-hours job in Soho. Suffice to say, they was a degree of contrast!

Our building was opposite the Groucho Club, the famous media and publishing hangout, which was a fab location. The firm edited videos: predominantly TV commercials and music videos, which were still big business at the time. We had musicians, bands and media personalities in all the

time and I was fortunate to meet the late George Michael, Siouxsie Sioux and Jarvis Cocker to name (drop) but a few. In 1995, we were working on the video for Pulp's Common People. I don't know how well readers will remember it, but the layered, looped scenes on the dancefloor were an editing nightmare. Jarvis was the first man I'd met who carried a handbag.

HP: From there you went to work for MTV during the Britpop era. Again, that must have been a hugely interesting and "lively" time. Tell us more.

DG: It was a great privilege to work at MTV and musically, it was an amazing time to be there: bang in the middle of Britpop. MTV was a massive, global media entity back then, highly influential and achingly cool; did you know it turned 40 this year?

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Britpop aside, there was a real mix of genres getting what was known as 'heavy rotation', anything from hip-hop (think Fugees, Snoop and the late Notorious BIG) to the global launch of The Spice Girls; we all crowded around to watch 'Wannabee' drop for the first time.

Musically, it seemed like so much happened in such a short space of time and working at MTV, watching songs, and in some cases artists or bands 'break' for the first time, made you feel like a (small) part of music history.

Many of the stories are unprintable. It was the mid-'90s and the average staff age was 25! This paragraph was originally much longer, but I've gone back and cut all the risqué stuff out. It was wild. I was incredibly fortunate to see musicians and bands on an almost daily basis. We had studios for live performances and concerts. We received complaints from residents when AC/DC rocked the whole of Camden one evening, and famously, the entire staff had to go to the front of the building to wave for Mariah Carey's 'arrival'.

Arguably, my favourite visitor (as I sat down with him and his son Jack for lunch) was Ozzy Osbourne, although I did come to work once and said hello to 'Mad' Frankie Fraser in reception, which let's face it, would have always been my preferred way of encountering him.

Back then, quite a few '80s pop stars had presenting jobs on sister channel VH1. So, most days, I would see the same people I used to watch religiously on Top of the Pops, sitting at a desk just like mine. It's a cliché, but had someone told TOTP-watching me aged seven that one day I'd be chatting to Altered Images' Claire Grogan in the canteen lunch queue, I wouldn't have believed them.

HP: And from there you went to work for CNN. What took you in that direction? What was your most memorable journalistic assignment?

DG: MTV was one of the first broadcasters to move from magnetic tape to hard drives for transmission. These days, hard drive storage is both ubiquitous and cheap, but in 1999, it was a truly seismic (and horrendously expensive) move. The mechanisation of a previously la-

bour-intensive process was the writing on the wall for some of us, and we looked for other broadcasting opportunities.

I was fortunate to be offered a job at Turner Broadcasting. Billionaire owner Ted Turner's company was behind Cartoon Network, TCM and CNN and had merged with Time Warner three years before I started.

The office was on Great Marlborough Street (opposite London's Carnaby Street), so north Soho and yet another fun place to be, although the work was more serious. I suppose the most memorable assignment was being filmed skateboarding for TV. I was an obsessed skater in the late '80s and early '90s, but a bit rusty by the end of the decade, plus a bad motorcycle accident had stopped me walking for six months 'back in the summer of '99'!

They supplied the crappiest deck from the nearest sports shop and I had to active the old muscle memory and try and flip this hideous piece of pure landfill. Thankfully, they were content with more rudimentary tricks, and as the footage would have been seen by millions, I remained pleased it was waist-down footage only. The Bones Brigade never called.

HP: You then went on to work for Hi-Fi Choice for ten years and eventually became editor. What was your background in HiFi that led to this?

DG: I was into HiFi from a young age and was fortunate to be gifted a hi-fi system 1989 from my brother-in-law, who was an African prince. True story. So, I was an enthusiast and an avid reader of the hi-fi press, although I focussed on What Hi-Fi? and Hi-Fi Choice at the time.

I saw a job ad in Hi-Fi Choice and went along for the interview. Although only in my 20s and living in a rented flat, I owned a pair of Bowers and Wilkins Matrix 801 S2s (priorities, eh?) and I think it helped bolster my HiFi credentials.

HP: Working for Choice you must have "broke" some interesting products to the UK's audiophile population. Pick your favourite story you covered and tell us why it was so memorable.

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DG: Back then, ten years was a long time in audio. Things were changing. Especially at the source end as MP3s and iPods were accepted by the masses and streaming was, if you pardon the pun, coming online.

One that really stood out was the cover-line (by yours truly): 'The end for CD' in issue 350. In essence, it was the revelation that a laptop and USB DAC-equipped preamp sounded better with a lossless file than the CD. This was extremely bold and very contrarian at the time (2011). In fact, without mentioning the brand, the owner famously quoted: "I'd rather have a phone and this preamp than any CD player at any price". Our front cover described the preamp as 'ground-breaking', stating it would 'change how we think about HiFi'.

Now, of course, digital music both streamed and stored has come of age, bolstered further by advances in DAC technology. Recently, there has been much talk about the death of CD, too. We were prophesising it a decade ago.

HP: When did you launch Dan George Communications and what gave you that push to strike out on your own?

DG: Coincidentally, it wasn't long after the 'The end for CD' issue, but that had nothing to do with it! I'd had the pleasure of working with some amazing audio brands large and small for more than a decade, but it was the smaller ones, the ones with great products but small teams and nobody shouting about them, that really interested me.

Over the years, I'd always approached them for products, rather than the other way around – that's how small they were. Publishing back then, gave editors the freedom to fully pursue the brands and products that really shone and expose the unsung heroes. After a decade in hi-fi journalism, I was ready for the next challenge and wanted to work with some of the brands I'd come to admire and respect over the period.

HP: What clients do you currently work with? Would it be rude to ask a favourite and why?

DG: I am very lucky to work with some wonderful hi-fi companies including, alphabetically, Chord Company, Chord Electronics, ECLIPSE,

Leema Acoustics, McIntosh, Melco and Sonus faber.

I should be diplomatic and say they are like my children and I love them all equally, but I'm sure if you cut me in half like a stick of seaside rock, it would say Chord Electronics somewhere. They were my first and they are also from my native Kent, which means a lot. For seven years, I lived just four miles from the factory.

HP: Do you come from a musical household? What shaped your musical taste and what are your current tastes in music?

DG: I consider myself fortunate to have had such a musical home growing up, with so many genres, often competing with each other. I have my parents to thank for jazz, 1950's rock and roll, 1960's pop and everything that the '70s brought, both good and bad. My sister added gospel to the mix and my brother was heavily into reggae and lovers rock. School injected rock, metal and hip-hop, and everything was set against a backdrop of (glorious) 1980's pop.

Today, there's little I don't like, but I gravitate towards the singer-songwriters of the LA canyons (late '60s to '70s) with a sprinkling of absolutely anything along the way. I also have a lot of time for Nick Cave, Ryan Adams and Mark Kozelek/Sun Kil Moon, just to bring things up to date a little.

HP: Recommend one new act that readers may not be familiar with that you love.

DG: I'm the last person anyone should ask about new music. With such a musical background (and a couple of instruments under my belt) I all too often hear the influences, unoriginality or downright plagiarism playing out over and over again in 'new' music, so little moves me. That said, in a rare moment of optimism, I was rather struck by Yola (Carter) recently, who pulled off that rare feat of leaving an impression on the first listen.

HP: What was your most memorable early gig and why?

DG: That's easy! My first gig was March 1990, Public Enemy at The Brighton Centre. I was a schoolboy and it was electric. The atmosphere was one of anticipation, tension and eventually, elation. This was the Nation of Millions tour and

again, it felt like you were a part of something historically significant; it has since become their biggest-selling record.

If I may indulge, I mentioned I was a school-boy at the time: I went with my pal Steve pretty much straight after school. We were searched on the way in and on Steve, security found a packet of industrial smoke bombs and a large adjustable spanner. This wasn't ideal. Steve went all innocent 15-year-old and sheepishly mumbled his father was a British Gas engineer and tested chimneys with the smoke bombs. When asked why he had a large adjustable spanner, Steve replied, "Cycle maintenance." We got in.

HP: You met Flava Flav, how do that happen? Tell us more...

DG: I was lucky to be in Las Vegas for the Consumer Electronics Show (CES) one year, having a quick pre-dinner drink in a bar with a group of colleagues. One of our group dropped a pen and a man said: "Excuse me, you dropped this." Can you imagine how I imploded when I realised it was Flavor Flav? When I eventually pulled myself together, I told him Public Enemy was my first-ever concert and he seemed genuinely touched and promptly issued a (quite unexpected) man-hug, chatted for a while and posed for photos. I haven't washed since.

HP: What's your current HiFi set up?

DG: One of the benefits of my job is I get to try out lots of wonderful components, especially new ones, before they are released. So, it evolves all the time, however, I have a quite brilliant Melco digital music library into the multi-award-winning Chord Electronics Hugo 2 and 2go and rotate amps between Chord Electronics and Rega. Speakers are by ECLIPSE: I'm fortunate to have the TD712zMKII flagship (pictured), but for a top tip, there are few loudspeakers that do more things better than a TD510ZMKII; do get a demo if you haven't heard them outside of a HiFi show and read HiFi Pig's 'Recommended badge' review by the 'grand master' of loudspeaker reviewing, Paul Messenger. All cabling is by Chord Company, naturally.

HP: HiFi Pig are trying to help out bricks and mortar HiFi retailers with our Support

Your Dealer campaign, how important do you think having a dealer you can trust is for music lovers?

DG: Internet shopping is all too easy and we're all guilty of buying without trying, even with larger purchases. Great dealers, and it's vitally important to invest your time in finding one you're happy with up front, are worth their weight in gold.

A recent experience of mine really drummed home their importance when I was agonising over two similar products having done hours of research and read every review and piece of analysis I could find. Just from a five minute phone call and with a couple of questions, the dealer knew which product was right for me and had it ready and set up when I arrived. He was spot-on, too.

HP: What are your thoughts about the move towards mail-order/online shopping for HiFi given these are often big ticket items?

DG: This is a tricky one. As mentioned, we've all done it and consumer patterns are changing, accelerated by COVID. Small things I can understand more easily, especially with the access we now have to a range of reviews, but I think it's a mistake to risk a bigger-ticket item without experiencing it first and interacting with an actual human. It'll take longer and cost more in the long run.

HP: How important do you think reviews are in helping consumers narrow down their future HiFi purchases?

DG: Reviews are vitally important, but you have to discern. At the worst end of the scale, there is the very real problem of fake reviews online. Even with hi-fi, it can be hard for newcomers to separate the credible from crank, and last year, many of us in the industry experienced first-hand, how self-appointed bedroom bloggers can masquerade as knowledgeable HiFireviewers and cause significant damage for companies and consumers along the way.

Having seen how much work can go into a review first hand (and we [Hi-Fi Choice] were the only magazine carrying out 'blind' product group tests), it pains me that anyone can put a review up these days. It is especially concerning online, with the really large retailers (not hi-fi), or



sellers on sales platforms, paying for positive reviews.

So, do your homework: invest your time in finding a credible, trustworthy hi-fi site like HiFi Pig or a solid time-proven print/online magazine and learn what it is the individual writers like, dislike and value, and find one that aligns with your tastes in audio. Credible reviews are there to make the job of creating an audition shortlist easier.

HP: How do we engage younger people in quality audio production in the home, or are we moving ever closer to the vast majority being content with what I call “lowest common denominator” reproduction?

DG: Some of the brands I work with understand that everyone is young once and quality audio is rarely a priority. As we get older, however, we tend to be more demanding and want better things and experiences, so I think there's an element of patience (and hope!) as long as consumers have a clear pathway to discovering better. That, I think, is the challenge: engaging music-lovers and presenting something better (HiFi) in a way they can understand, access and transition to.

HP: There seems to be an ever increasing rush in HiFi to the seriously expensive “high-end” where individual products can cost tens if not hundreds of thousands of pounds, do you think this is counterproductive at all?

DG: I am firm believer in the law of diminishing returns and based on experience, bear in mind I've had around 50 products a month come through the doors of the magazine 13 times a year for a decade (!), appreciate that there's a sweet spot for price/performance and that's where I want to be as a consumer. However, I've also been blown away by some of the high-end systems I've heard, I just can't afford them! If someone has earned the money and they can afford it, good luck to them. I would just suggest they stick to established, time-proven brands with solid distribution and sound financial fundamentals.

HP: You are clearly into music and the kit involved, which to you is most important and why?

DG: I've witnessed the various arguments over

the years, such as source-first or speakers-first etc. and from personal experience (both reviewing and moving house a lot), speakers are undoubtedly the most important link in the chain. The second is positioning them correctly in the room. Worry about the rest after you have the first two right.

HP: Those involved in the industry are seeing first hand that smaller companies are being swallowed up by bigger businesses, what are your thoughts on this?

DG: As much as I like to see brands continue, they are never the same once they are 'owned' by banks or venture capital, especially when the corporate mentality kicks in and the financiers quickly want to see a return on their investment. Production shifting to Asia is always deeply off-putting, especially when you're led to believe you are buying a premium 'British' brand.

Having witnessed once classic British brands all rolling of the same production line in a grubby factory in China, part of my love of hi-fi died. At that same moment, an appreciation of wholly owned, truly British brands, designing, engineering and manufacturing right here in the UK, was re-kindled and I'm privileged to work with many, including Chord Company, Leema Acoustics and Chord Electronics, to name but a few. The international brands I work with, McIntosh, Melco, ECLIPSE and Sonus faber, share the same values but in their respective countries.

HP: Personally speaking, do you fall into the digital or analogue camp?

DG: I bought my last LP as a teenager, so there's your answer! A lot of people like the sound of distortion, they just don't know that they do.

HP: Some digital products such as switches and cables clearly make an audible difference, but when we publish a review and state these we are inundated with emails and comments on social media along the lines of “it's all zeros and ones and specific digital standards and so you are hearing things”. What's your response to these nay-sayers?

DG: I respect people's subjective opinion, but unfortunately, opinion and fact easily get blurred online. I think we've dispelled the ones and ze-



ros argument already and there are advanced audio analysers out there that can measure differences in digital devices, including digital cables.

If you've seen this kind of data, as I have, then despite the forum noise, if you pardon the pun, then you simply know that digital devices make a difference and can switch off, another pun, the vocal minority. However, I feel for Pig (and others) when the brave keyboard warriors vent in response to a review. Good journalists do have a responsibility, though, even though it can be tough sometimes.

HP: Where do you see the industry in another 20 years?

DG: Hopefully, from a beach in California, but seriously, I'd like to think that natural selection will continue to sort the wheat from the chaff, but savvy digital marketers can all too easily sell inferior products these days. So, I hope people will continue to use their own ears and value auditions, hands-on experience and human interaction before spending their money.

HP: Moving away from HiFi and music, what else occupies your time?

DG: Having a tired 1950s house, a young-ish child, a manic spaniel (whose father was a field trials champion) and a sporty wife, seems to be the perfect time-sponge, however, I try and squeeze 100 k of running and cycling in per week, when the weather isn't too British. If I didn't do that, I have to stop going to my beloved pie and mash shops and eating Curly Wurlys. I also drink a lot of loose-leaf tea, so there's all that brewing time.

HP: The house is burning but you, your family, pets and key personal things are perfectly safe. What record are you saving and why?

DG: I like that kind of house fire, but that's an almost impossible question. Metallica And Justice for All? Joni Mitchell's Hejira? Stevie's Songs in the Key of Life? I'd risk burns to have a bit of diversity, oh and I'd play them over drinks to any brave soul who has read this far.



DAVE CLARK

Dave Clark, along with wife Carol are the publishers over at Positive Feedback, the US audiophile magazine. Here we talk to Dave about his art and what motivates it.

INTERVIEW

HP: Where did you study art and what motivated you to take that route?

DC: This is a tough question as I never really studied art in school other than in 7th grade where I had an art class. That class pretty much covered the whole realm of art; from painting to sculpting to clay to whatever. Did well but kind of felt that if you are talented in art do you need to take art classes? Plus, I was a bit shy and lacked confidence in my abilities even though I received an A for the year. Later on in High School I decided to pursue Architecture, and after two years in that felt like it would be my pathway. Sadly, I was not all that great in Physics nor Math, so after trying to get through those courses in my early college years, switched to Psychology and Sociology. Way easier.

But I had been painting vari-

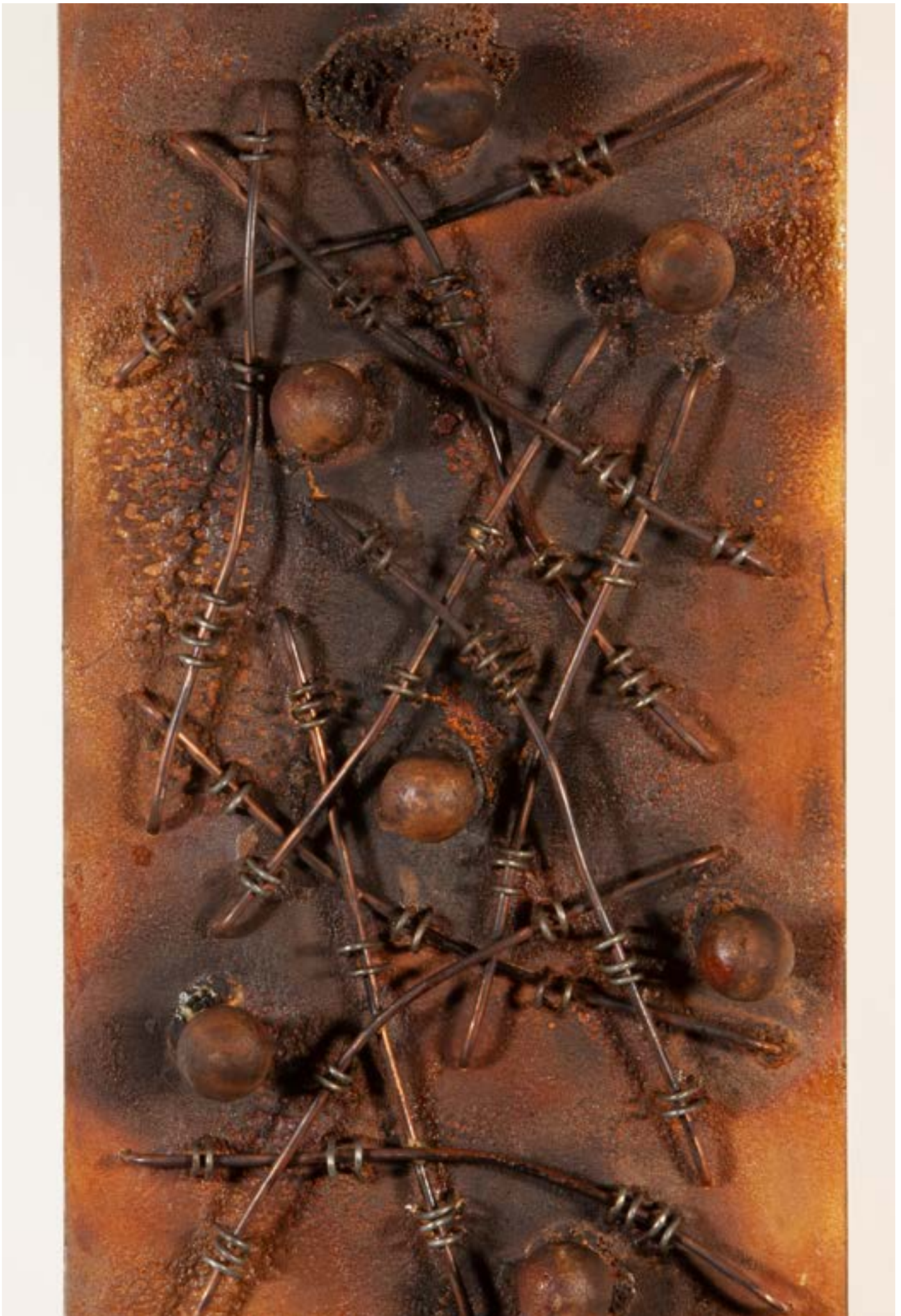
ous “things” as well as making posters of bands I liked when I was in my early teens – 13-15 or so. People liked what I was drawing and painting, but adolescence kicked in and off to sports and girls.

While I was in college my circle of friends grew and I found many were artists either in their studies (BFA/MFA), or were simply active in the local arts community. A few became very good friends, and once I realized that they ran a co-operative art gallery near the campus, the spark to explore art was lit.

At the time I was working at the University and had access to the various shops, so a lot of my work took on an “industrial” feel based on the materials I was using – metals, wire, Plexiglas, bolts, nuts, etc. A good chunk of work was very “structured” in that it reflected

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machinery in some way.

I also worked in painted wood and coloured tape to create geometric patterns or repeating lines.

I liked to play with colours and materials though and much of my “industrial” pieces were rather stark in being nothing more than wood and metal constructions. Had a number of shows at various galleries and so things were good.

Moved away from the University to another city, and realizing that without access to the various shops, my art would need to change. That led me to make tables that were reminiscent of the Memphis movement that was happening at the time, out of Italy. Memphis was a group of architects who came together to make very colourful, but organized furniture using various materials – primarily wood covered with Formica. I made a few pieces and found a design place (to the trade) that sold them to various designers here in SoCal and in Florida. They were expecting me to be more of a factory turning these out whereas, I was more interested in making 1 or 2 of each. Plus, we had bought a house, were planning a family, and my career as an Educator took up my time.

So, life got in the way of my art, as did audio, and it took a “vacation” for the next 29 years till I retired.

We both retired from teaching a few years ago and I picked up my art again. So here we are today.

HP: Who are your favourite artists and why?

DC: I dunno, not sure I have one. Or two or three. There are a number of artists I respect here in Long Beach and obviously a good number I appreciate that are well-known, but none that I see as “favourites.” I like certain types of art and if we see something we like and can afford it, we buy it. We currently own some 80 pieces by various artists that are either local or from years back – it is a very diverse collection, but as to “favourite artists,” can’t say.

HP: Would you say that one artist had a bigger influence on your work than others? If so who and how?

DC: Not really. I can’t talk art, and when people talk about art and artists it just goes over my head. Like I said above, there are artists I appreciate, actually it is more about the style, colours, materials, how it is put together or assembled that speaks to me. My cousin had a big influence on me as she encouraged me when I was young. Truth is, friends are a bigger influence than anything else.

HP: What does your art represent and how would you describe it to someone who had never seen it before?

DC: Well, this is another issue I have; does my art represent something or is there a story being told. I like to say that “I construct ‘sculptural things’ that might tell a story, cause one to think of a story, serve some practical purpose, or maybe none of these.” So, I like to play with materials and whatnot that do just that. They might cause you to think of something on your own, I might have done something to start the story with the person looking at it continuing one... or neither. It is what it is.

I also work with 2D art where I use dyes on papers. These are somewhat “experimental” as it changes so much as the dyes dry over time. Impossible to recreate these, they are what they are – one offs.

People sometimes see things in these pieces, people, animals, faces, etc, and all I can say is, That’s nice.”

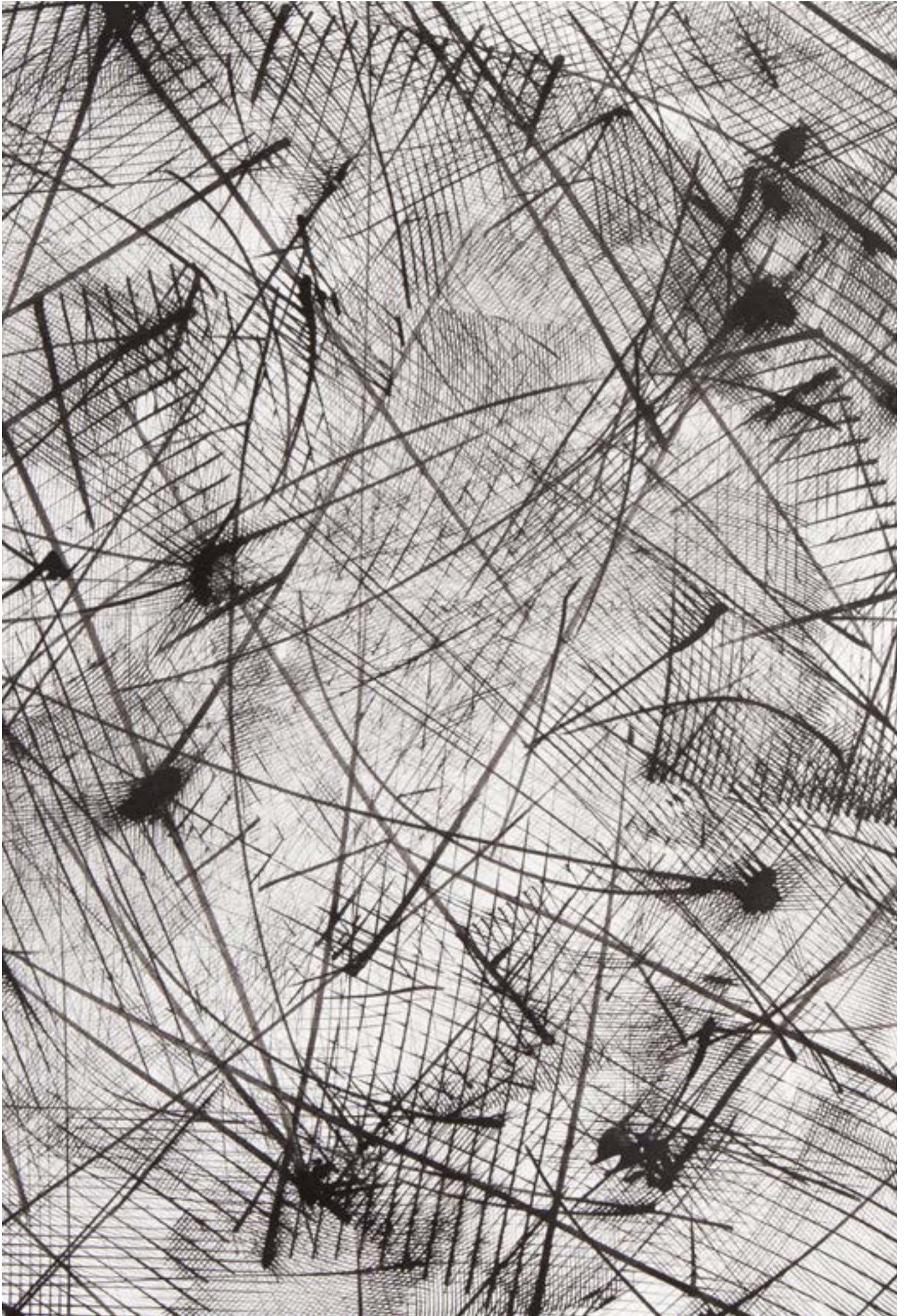
On my website I have written, “I tend to make things, whether they be 2D or 3D, that more or less might tell a story, cause one to think of a story, serve some practical purpose, or maybe none of these.

“My 2D is about color, shapes, patterns, application, and perhaps figures or symbols to make people think or see more than there is. I don’t really have a message or statement – the pieces are what they are. But they are fun to do, and by using dyes on paper, the end is always a surprise as the various dyes “settle” in with each other. And I am clearly not a painter since I see myself as more of just a “moving this over that with this tool or thing and let’s see how that turns out when it dries” sort of artist.

INTERVIEW



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“My 3D pieces range from being more ‘functional,’ as seen in my tables, to those that are simply more ‘sculptural.’ In various pieces there is clearly some whimsy or ‘story’ happening, of which a friend claims to have had images of these pieces in his dreams. None are meant to make a statement about the world, though a number are created with some sort of ‘imagined’ meaning or representation - as in being an artifact of some lost culture. Either one that was lost in the past or in the future. The 3D pieces use various materials that are chosen for how they can be manipulated (burning is always good as is aging), have a texture or ‘presence,’ or simply because they work together in other some way. Or perhaps because they don’t work at all together.

“Perhaps I am more of a ‘maker’ than anything else.”

HP: What pieces are you working on at the moment and what inspired you to create then?

DC: I am pretty active in that I make several pieces a week if not in a day. Depends on the materials and whether it is a 3D or 2D piece. A lot of what I do is either recycling materials, so that generates ideas in terms of what I can do with what.

But yeah, I am still playing with the dyes but in the form of 11-inch x 16-inch pieces. And I have also recently framed some of my work in steel angle iron as well as it worked so well with the colours and all.

As to the 3D pieces, those continue to go from free-standing to hanging on a wall. These are more reflective of the pandemic and a “post-apocalyptic world” in that they are aged by burning and manipulating the materials. Certainly, constructions in a way, but also pieces that are made to cause a reaction in whomever is looking at them.

HP: You can have a one-hour conversation with one artist (living or dead); who would it be, why and what would you talk about?

DC: Gaudi comes to mind, as does Jackson Pollock. Struggles, purpose, expectations...

HP: Music is obviously a big part of your

life, has music shaped your art in any way?

DC: Not that I am aware of. I mean, I do listen to music and have a system in my studio, but it is more about “filling the spaces” than anything else. I do like to hear drone noise artists like Miser, Field Lines Cartographer, and so on. Ambient stuff is nice, though on occasion if something that rocks hard comes on... yeah, I might dance a bit. Though that only happens when the art is working in a positive way.

HP: Favourite bands and what they mean to you?

DC: Hmmm.... New Order, Joy Division, early Cure, Gang of Four, Mogwai, early Low (not their last two releases though), Lambchop, Massive Attack, Eno, Swans... I mean I like a lot of stuff and so it depends on the mood. Not into jazz, female vocals, classical... anything that passes for “audiophile” music.

HP: You need to get everything out of your house in a hurry. Everything is safe but you can only take one of your pieces out and the rest must be lost. Which piece are you taking and why?

The one above the stereo. Gave it to Carol in 1981 as a surprise before we were married. Was in a show at a gallery and she loved it from the day it was a few pieces of wood. I said it was already spoken for and she was a bit sad til I said that I already decided that it would be hers when I was hanging the show.

www.daverclarkdesigns.com



MARTIN DUNHOFF

Martin Dunhoff is the Sales Director of Danish loudspeaker manufacturer Audiovector, a bit of a favourite with HiFi Pig as we use their R6 Arreté in one of our reference systems.

INTERVIEW

HP: Give readers a little background of what you have done work-wise before joining Audiovector.

MD: So, my work background is in sales, where I started around 20 years ago. Prior to entering the HiFi industry I was working as sales manager for a large printing company in Sweden. At some point in your life, you just feel ready to do something else, but first you have to reach that conclusion yourself. After that, new opportunities can often present themselves: In my case I had a contact that led me to a job at Primare, a well-known Swedish audio electronics brand, so this was the way into the HiFi world for me.

HP: What attracted you to the Audiovector brand?

MD: The funny thing is that in my twenties (which is actually more than twenty years ago

now) I was dreaming about a pair of Audiovector speakers, this was when the model M3 was hot stuff. Later on in life I got to know Mads and Ole, first we became friends and later on this led to a work opportunity.

HP: What do you think sets Audiovector apart from other loudspeaker brands?

MD: All products are developed with a lot of passion for music, and of course attention to detail - there is never any rush to put new models on the market until they are 100% ready. I can assure you that there is a lot of effort and especially hours of testing and listening to products on different systems just to ensure our customers will get the experience they expect. We trust our ears and listening experience - not just measurement.

HP: Audiovector custom-

INTERVIEW









ers seem to be a loyal bunch, they buy the brand and stay with it, why do you think this is?

MD: Yes, it's very clear that we have a very loyal customer base. First and foremost, I believe it's the sound quality and the way our speakers present the music, another reason might be our unique individual upgrade program that allows customers to upgrade their old speakers to current models and specification. Also, the fact we don't rush to get new models to market makes the customers safe in the knowledge that they can live with their speakers for a longer time. At all times we do our best to guide and help our customers by answering questions and being open for dialog.

HP: Tell readers which electronics you think work particularly well with Audiovector loudspeakers.

MD: We always aim to build speakers that are easy to match with all available amplifier technologies, we do a lot of testing in-house with many different brands to make sure this is true. I would say that an Audiovector customer will absolutely be able to hear how the electronics he has invested in sounds, and therefore it's easier for the customer to build a system that meets their full taste and demands.

HP: What system do you play at home and what music moves you?

MD: So, I have had the opportunity to build my system over a long period of time and been

able to test a lot of different combinations. I have also been able to experience them on trade shows around the world, this way I been able to pick my absolute favourites in all different genres. The first time I heard the Japanese brand Airtight I fell in love!! Everything just sounded so right, so from that day I have been totally into tubes. Today I have a system containing of a one-of-a-kind pair of R 6 Arreté in a special RAW surface. They are driven by Airtight ATM-211 tube monaural power amplifiers connected to an Airtight ATC-5 tube pre-amplifier, as a digital source I use a dCS Bartok for streaming, and on the analog side there is another of my absolute favourite products - the Brinkmann Balance turntable with a 12.1-inch Brinkmann tonearm with a Ortofon MC Anna diamond cartridge and Airtight ATH-3s step-up transformer. Everything is wired with cables from our Danish friends at Ansuz and placed on racks from Solid Steel.

HP: What's your dream system?

MD: My current system, but maybe with a pair of our R 8 Arreté speakers, I will try them in my room in the near future to make sure it works.

HP: What's on the horizon with regards to new products from Audiovector?

MD: Without revealing too much, I can say we have some very interesting new projects that we already are listening to, along with some that are still on the drawing board.



TIM MELLOW

HiFi Pig has a chat with Tim Mellow, the creator of the distinctive and innovative Mellow Acoustics FrontRo Loudspeakers.

INTERVIEW

HP: When did you first find and interest in electronics and what were your first steps?

TM: My interest in electronics began at the age of ten when I built a crystal radio, quickly followed by a two-transistor radio that could power a small loudspeaker. When you have built something yourself, it seems much more magical to hear voices coming from a studio far away into your own room via a handful of electronic components.

HP: And your first steps in HiFi?

TM: At the age of fourteen, I built an EL84 12 W valve amplifier using a circuit from my father's old Collins Radio Diary, which looked good on paper (push-pull throughout and mainly direct coupled) but turned out not to be such a great design. I wouldn't find out why until I had obtained

a degree in electrical engineering and electronics several years later. Although my friends could afford the latest Japanese solid-state amplifiers for listening to their Led Zepelin, Pink Floyd and Genesis albums, I could only afford an old Armstrong 221 integrated valve amplifier, which I bought for £5. With barely 10 W per channel and rather small output transformers, it lacked the sheer grunt needed for contemporary prog rock music, but on classical strings and woodwind it was quite magical, lacking the harsh treble grain of the modern amps. This didn't make sense considering that its distortion specification (<0.5% at 8W at 1kHz) was much worse than the current norm. This sparked my interest in audio as it seemed there was so much that we still didn't understand. I saved up for my first set of proper speakers which was a pair of Minimax

2-way bookshelf units from Videoton. Despite the colouration from the paper cone woofers and tweeters, together with the Armstrong, they made everything sound lush and sweet, especially voices. On the advice of a hi-fi magazine article, I tried replacing the cone tweeters with soft dome ones from Richard Allen, but these sounded harsh and sibilant, so I went back to the originals. This taught me that some colourations are less intrusive than others and that some may even enhance the sound. Hence, audio design is much an art as a science. You can only go so far with engineering analysis, but the ear must be the final arbiter in the tuning if the listening experience is to be enjoyable.

HP: Where did you study, what and what did you do upon graduating?

TM: I obtained a first degree in electrical engineering and electronics from Dundee University in 1985. After graduating, I worked in a mixture of analogue and digital electronics for Marconi and Thorn EMI but quickly got bored because there was little opportunity for proper circuit design, which was my main interest. It really was design by numbers: Choose a chip for the job, read the application notes, connect it up and then get a load of trouble with EMC and ESD! Unless you were a chip designer, there was little opportunity for proper design. It was Leo Beranek's 1954 book ACOUSTICS that sparked my interest in loudspeakers, microphones and earphones because it used electrical circuit analogies to describe mechanical and acoustic elements like diaphragms, suspensions, cavities and sound holes etc., so I thought "hey, this is my language" and my career switched from electronics to acoustics. However, at that time, I didn't have the physics background to understand how to work out things like radiation impedances and directivity patterns.

HP: You worked for Nokia, what was your role there, who were your mentors, and how has this experience impacted on your designs?

TM: I joined Nokia at the turn of the century and worked there for 12 years. My role was essentially to make speech through the microphones and receivers as clear as possible and ring tones as loud and annoying as possible so they could be heard in a busy street in Singapore, which was the benchmark. It was during

my time at Nokia that I met another Leo, Leo Kärkkäinen, in Helsinki, who had a solid physics background and became my mentor in wave theory. We ended up publishing a series of papers together in JASA on sound from different sources including electrostatic speakers. I do suffer from a poor memory, so I always need to write everything down so that I can refer back to it.

One day, when Leo saw all my documentation, he said "This would make a nice book. Have you thought of publishing it?" I thought "maybe", but to do it properly, I would have to go back over the fundamentals, and I didn't think I could do it better than Leo Beranek already had done in his book. On the other hand, I didn't want to plagiarise anything. That was when I had the idea of working with him to create and updated version of his ACOUSTICS. The thing that had most frustrated me over the years was that the information I needed was scattered over many books and papers by authors using different terminologies and mathematical methods. Studying one paper and understanding it didn't necessarily help with the next. It was quite satisfying to bring everything together into one book with a unified approach throughout. We were able to combine Leo's original work with that of later authors who were inspired by it such as Edgar Villchur, inventor of the Acoustic Research "acoustic suspension" principle, and the famous Neville Thiele and Richard Small, after whom the elementary loudspeaker parameters are named. As I wrote new material, I found myself answering many of my own questions by deriving things from first principles. Ironically, despite Leo Beranek having been so influential in the hi-fi revolution, when I asked him what sound system he had at home (thinking it would be something special), he replied "I have nothing against recorded music. In Boston, we have a great orchestra and a great concert hall so I, and my wife, do our listening there... five speakers in one living room sounds deadly." I'm just grateful that he lived long enough to see the publication of our book and the glowing reviews.

Meanwhile, I kept my interest in circuit design alive by designing a simple OTL (output transformer-less) valve amplifier with symmetry throughout and natural load protection, which was published in audioXpress in February



2010.

HP: And after Nokia, what happened?

TM: Following redundancy from Nokia when the Farnborough site closed in 2012, I started to do consultancy work, which was very slow to pick up for the first few years. More recently, I have become extremely busy in a number of areas ranging from headphones, microphone arrays and Bluetooth speakers to ultrasonic devices. One of the most rewarding tasks has been designing the output transformers for the English Acoustics Stereo 21c amplifier, which is based on the Leak Stereo 20 valve amplifier. To fill my time in the early years, I set out to design my dream loudspeaker which eventually became the FrontRo.

HP: What has influenced your current loudspeaker design the most and what other loudspeakers do you rate highly?

TM: Strangely, a loudspeaker that had made a lasting impression on me was the stand-mount Pentachord and Pentacolumn floor-standing sub designed by Dr Oliver Brooke, who was the

technical editor of Cardiovascular Research. I heard these at The Hi-Fi Show in the Ramada Hotel, Heathrow, in the early '90s. I was starting to get a headache after hearing lots of identikit CD based systems with solid state amplifiers and multi-way speakers with hard dome tweeters. When I entered the room, I thought it was a joke because there were these two speakers with just a pair of 2-inch aluminium cone drivers in each and a separate sub-woofer. I immediately thought the 2-inch units would be too small for the lower midrange and too large for the high treble. However, they really filled the room with spacious sound and gave pinpoint imaging like nothing else in the show. With a tube amp and classical vinyl, it was quite an oasis, and my headache was soon gone. It turned out that the 2-inch drivers were Bandor units designed by Doreen Jordan. Although the high treble lacked a little sparkle, that hardly detracted from the enjoyment.

The other loudspeaker that made an even greater impression was the Quad ESL63 which I heard some twenty years ago in the demo

room of The Cartridge Man, aka Len Gregory, when I went to audition his Music Maker cartridge. With his rebuilt BBC amplifiers, equipped with EL34 tubes, this was the most transparent setup I had ever heard, especially with the complex sound of a violin. However, it lacked the spacious room-filling effect of the Pentachord. I concluded that this was due to the ESL63 having a narrower radiation pattern at higher frequencies.

HP: Describe, if you can, the perfect loudspeaker's characteristics.

TM: These experiences made wonder if the ultimate loudspeaker might be one with the electrostatic transparency of the ESL63 combined with the wide pattern of the Pentachord. This observation was reinforced by the fact that whenever my daughter picked up her flute and started to play, the sound seemed to float through the air creating a wonderful sense of air and spaciousness that I didn't hear from many loudspeakers. Real musical instruments don't just squirt the sound straight at you at certain frequencies. Most disperse the sound in all directions, so it bounces off the walls, floor and ceiling and immerses you in reflected sound.

Have you noticed how you can usually tell whether music is live or not before you even enter a room? What you hear coming out of the door is a combination of the sound produced by the speaker in all directions, not just on-axis, reflected towards the entrance.

The ESL63 is designed to imitate a point source behind the diaphragm using a series of concentric ring electrodes fed from a delay line, which would only really work if the diaphragm were infinitely large. Because of the finite size, the cone angle of dispersion is limited to around plus or minus 40 degrees and, as the Quad founder Peter Walker correctly pointed out, the delay line must be deliberately attenuated with losses to prevent an uneven response. At the highest frequencies, the rings and centre disk are much wider than the wavelength, which limits the angle further.

HP: What sets the FrontRo loudspeakers apart from the competition?

TM: The eureka moment came when I thought of imitating an oscillating sphere instead of a

point source. Imagine a sphere oscillating back and forth. It is the perfect dipole sound source because it radiates sound in a constant figure-of-eight pattern at all frequencies.

Like the Quad ESL63, this is implemented in the FrontRo using concentric ring electrodes fed from a delay line but, without the deliberate attenuation, it is more efficient and can therefore be made smaller. This makes the rings narrower than the wavelength up to the highest frequencies.

The funny thing is that, although I was concentrating on creating a live sound, the last thing I expected was a more holographic stereo image. I thought all that extra reflected sound would confuse the brain and make the image more blurred. To my amazement though, when I got the first prototype working four years ago, I was able to close my eyes and hear exactly where each musician was located. This didn't make any sense until I discussed it with John Watkinson, an Audio Engineering Society Fellow who has written many books and articles on audio. He wasn't at all surprised and explained that, due to the precedence effect, if the ear recognises a reflected sound as correlating with the direct sound, it combines them into a single sound which is then identified as coming from the direction of the original. Hence, the stereo image is reinforced but this only works if the off-axis sound has the same tonal balance as the on-axis sound. Otherwise, the reflected sound will just become a distracting noise blurring the image, which is what happens with most multiway speakers which have an off-axis response that looks like a saw tooth, starting with a broad pattern at low frequencies, becoming narrower with increasing frequency until crossing over to a smaller driver with a broad pattern again and repeating.

If you will forgive me for the plug, a few years ago, I was asked to write a 2nd edition of our book. Leo expressed surprised that I hadn't included anything about electrostatic speakers in the 2012 edition, so I included a whole new chapter 15 on the subject in the new version, including a description of the delay line and concentric ring electrodes. I hope that through this new edition of Acoustics Leo's legacy continues to be relevant into the 21st century and that it



inspires others to develop their ideas in what Leo described as “a most fascinating subject.”

HP: The FrontRo loudspeakers certainly look different. What has led to their aesthetic and does form follow function?

TM: Since my late teens, I have been quite a design geek. Although I can’t do industrial design, I admire good design when I see it and enjoy working with creative people. I had the good fortune to be put in touch with the talented young industrial designer Josh Ford by his mother who worked at Nokia when I was there. We talked a lot about acoustics as well as classic 1920s and 30s furniture designs by Mart Stam, Alvar Aalto and Marcel Breuer because I wanted the FrontRo to look more like a piece of furniture than the techy look of conventional speakers. I was blown away by his final design, which not only looked beautiful, but also ticked all the boxes acoustically, with the circular electrostatic virtually suspended in free space away from the reflecting surfaces of the woofer box, which itself is pyramid shaped to minimize internal standing waves. It would really make my day to see it in a design museum credited to Josh Ford.

HP: Do you have plans to make more speakers or other bits of HiFi

TM: The product I personally would most like to

design would be a 21st c. version of my Armstrong 221 amplifier with 30 W of power and much deeper bass, but an all-valve signal path. I would really like the simplicity of a compact integrated valve amplifier with modern facilities such as a remote control, digital inputs for CD, a streaming device and a wireless adapter as well as an analogue input for vinyl, but people keep telling me there would be no demand for this as everyone wants to see their valves out on show now.

Although our existing customers appreciate how nicely the compact design of the FrontRo integrates into the domestic environment, I appreciate that others would like something that is more of an audiophile statement. Hence, a future design would be a larger version.

Of course, we are always exploring new ideas and investigating new materials and technologies to push the boundaries of performance. Since the introduction of stereo vinyl over sixty years ago, there is a wonderful, recorded legacy, much of which is from artists who are no longer with us, and I believe there will always be people who will want to hear this presented in the most faithful way possible.

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DEREK GILLIGAN

HiFi Pig catches up with Derek Gilligan of loudspeaker manufacturer Kudos.

INTERVIEW

HP: You come from a background in pro-PA systems; how has this, if at all, shaped how you approach the design of domestic loudspeakers.

DG: It's fair to say that this work played a very instrumental role in how I look at designing domestic loudspeakers today. It allowed me to explore what has always been a childhood fascination with sound and the effects it can have. Not only in sound reproduction but mechanical ways like pipe resonance and its importance to 2 stroke engine tuning... but that's another story and hobby altogether.

HP: What characteristics do you feel a domestic loudspeaker needs to bring to the party and why? How do those requirements differ from the needs of the concert hall?

DG: In live sound, there are

many parameters to look at, but for me and one of our primary roles was connecting the artists with the audience, and this can be easy or difficult depending on the artist themselves. Sometimes they know what they want to convey but don't necessarily have the know-how. So our job was to help make that connection; this involved walking the room and the usual desk work, checking the sound all around the event and the reactions to it and, of course, the response to the musical intent involved.

I see domestic sound reproduction in the same way, only this time it is connecting a recorded message with a much more intimate audience in a variety of domestic venues and in such a way as to as much as possible re-create that feeling of being there.

HP: The pro-PA circuit must

have had some interesting moments, are there any “incidents” you can tell us about?

DG: Haha... many a tale, but most are unrepeatable; a couple of things come to mind, like watching one of the road crew asleep on a flight case and waking up abruptly facing the front row when the band started. And on the first UK INXS tour, having a fire extinguisher let off and rolled under the toilet cubical I was erm ... occupying at the time. You get the idea!

HP: Measurements are clearly an important factor in the design process but do you think measurements are the be-all and end-all of loudspeaker design? Can you explain your response to readers?

DG: measurements can undoubtedly play an important role when solving a particular problem like a cone edge resonance causing a current draw, for instance. However, the years spent and experience have confirmed for me time and time again that there is so much more to sound and how the human body and mind reacts to it. Measuring only gives a very narrow 2-dimensional window into what is going on when we engage with music. We listen with our entire bodies, and our brain is constantly adjusting to our surroundings without us even being conscious of it. Measuring can also hold designing back for fear of trying something that shouldn't work but may well in practice, giving me a freedom often overlooked.

HP: Which product that you have had a hand in are you most proud of and why?

DG: Ooh! That's tricky. In all honesty, I'm proud of almost everything I have done for a variety of reasons, and that includes products before I began as Kudos. But on a very personal level, a couple find a way to my heart every time I play them. They are the X2, C10 and the Titan 505. As starting points in the ranges, they capture the very essence of what is important to Kudos and me; everything else just builds from there.

HP: What one characteristic do you think defines Kudos loudspeakers and why/how?

DG: The character I think that defines Kudos and is the most appreciated is the overall balance of virtues. Plenty of designs concentrate on specific aspects like absolute bass power/ pinpoint image / stereo depth or width / super refined treble / or making everything sound

huge and ethereal. All interesting elements that can be made to sound impressive but without balance can be very distracting from the musical point of the artist and ultimately unrewarding.

HP: What new products do you have in the pipeline? Anything you can share with HiFi Pig readers?

DG: Nothing to share as yet... but things are always afoot.

HP: Synergy between products is something that is talked about a lot in HiFi circles. Obviously, it's ridiculous to partner a flea power amp with insensitive speakers, but how important do you think the synergy between products is? If you feel synergy is important, which products do you think work well with Kudos and why?

DG: Now, this is an interesting topic; synergies between manufacturers usually occur when the individual designers share some common ground in what they think is important. However, I also believe that while I have my personal preferences, every electronics manufacturer has a valid viewpoint. At Kudos, we design using multiple systems not to be too affected by this. I like to think that Kudos loudspeakers will let the abilities and intention of the electronics show through as intended. On the subject of sensitivity/power, this can be very misleading. A loudspeaker can be insensitive but easy to drive. It just may not go as loud as a more sensitive speaker on the same amplifier. The question then is, does it go loud enough?

HP: What music do you use when you are listening to your speakers analytically? What are your test tracks, and why?

DG: Anything and everything from Sinatra to dubstep, from Elvis to Rage against the Machine to Orchestral.

HP: And for pure pleasure?

DG: Pretty much the same as above, with a particular interest in early Bowie, early Pink Floyd, Metallica and Thomas Dolby, to name a few.

HP: What system do you use at home, and do you place yourself in the digital or analogue camp...or somewhere in the middle

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and embracing both?

DG: I am very much in both camps, although I have to confess that streaming is very convenient when working.

The system at home, at the moment, due to house renovations, is a simple Naim Uniti Mk1 and a pair of prototypes.

HP: What do you do when away from the office?

DG: If I'm not having a historical political debate with my 20-year-old son, I'm either rebuilding or riding one of our motorcycles.

HP: What is your biggest guilty pleasure?

DG: My motorcycles and wine.



RONALD WANDERS

A chance meeting with Ronald Wanders from the Netherlands led to an interesting conversation about his somewhat obsessive (in a good way) DIY system.

INTERVIEW

HP: What inspired you to build your own speakers?

RW: During a listening session at Totaldac I met the owner and designer of Soulsonic, Miro Krajnc (<http://www.soulsonic-speakers.com/products.html>) who was there with his top model. I never heard anything like it. So extremely fast, open with a sound stage beyond comprehension. I decided right then and there that I wanted those too. I had specific demands so I had to build them myself, including the machining, the welding and what not...

HP: Tell us more about the loudspeaker system in detail, please?

RW: It is an totally open baffle system with a second-order Linkwitz–Riley crossover at 538Hz, being a 4th of the distance between the centres of the ribbon and the woofers. It is hardly impossible to

determine where the sound is coming from. The size of the woofer enclosure is exactly enough to prevent an air pressure loop. The ribbon is 5 micron (0,005mm) aluminium. To keep phase error minimal both sound sources are positioned in one line.

HP: Your system goes very low and has a very flat frequency response, how did you achieve this?

RW: After all it's all pretty simple. The 5 12 inch woofers are very high quality, hand made by John of Acoustic Elegance. They have a fairly high Q and low Fs and are designed for open baffle. The way I "locked them up" in the enclosure is different than just a couple of screws, which eliminates resonance. The ribbon was capable of producing sound down to roughly 400Hz before it started to move between the magnets. To stay on the

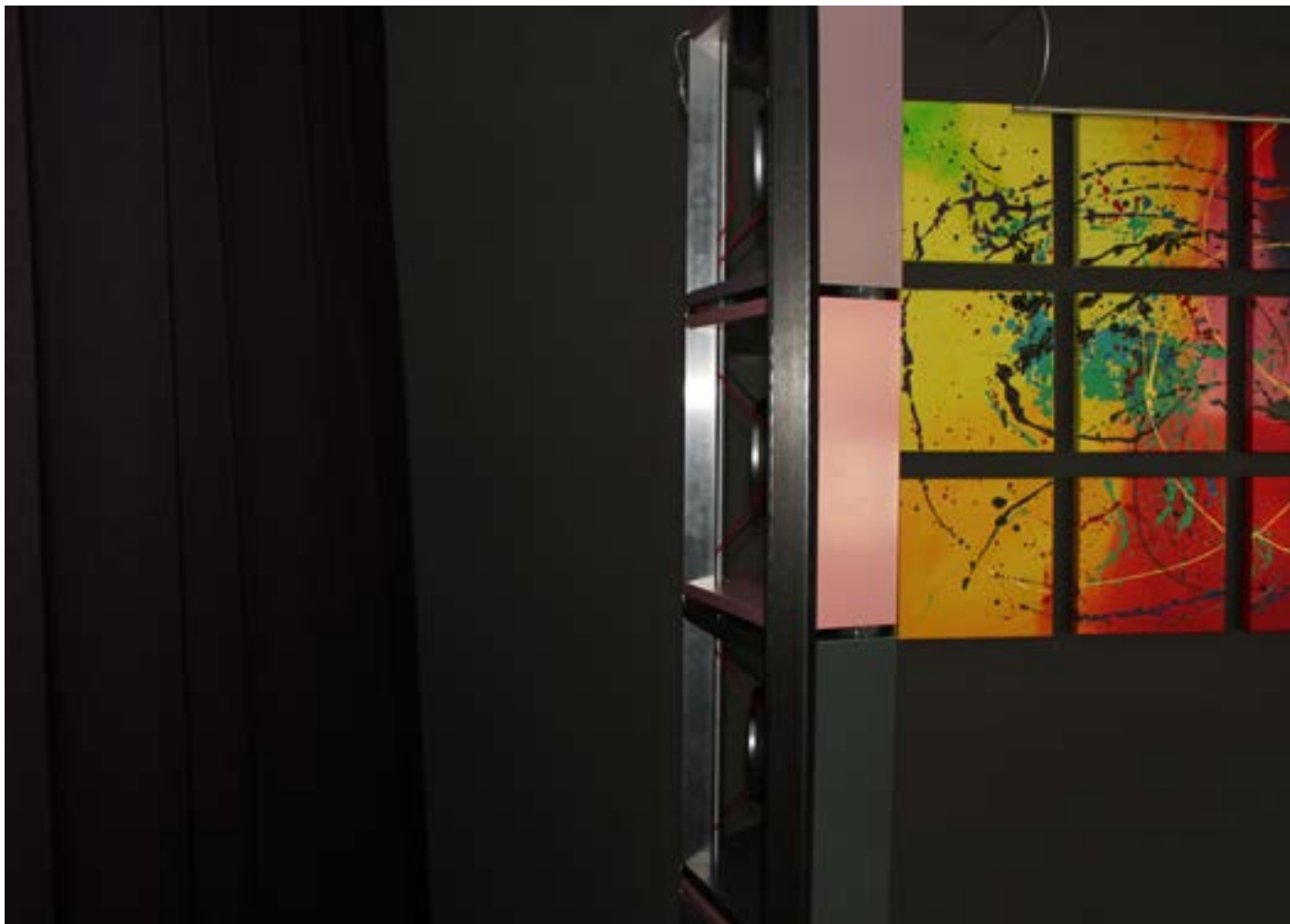
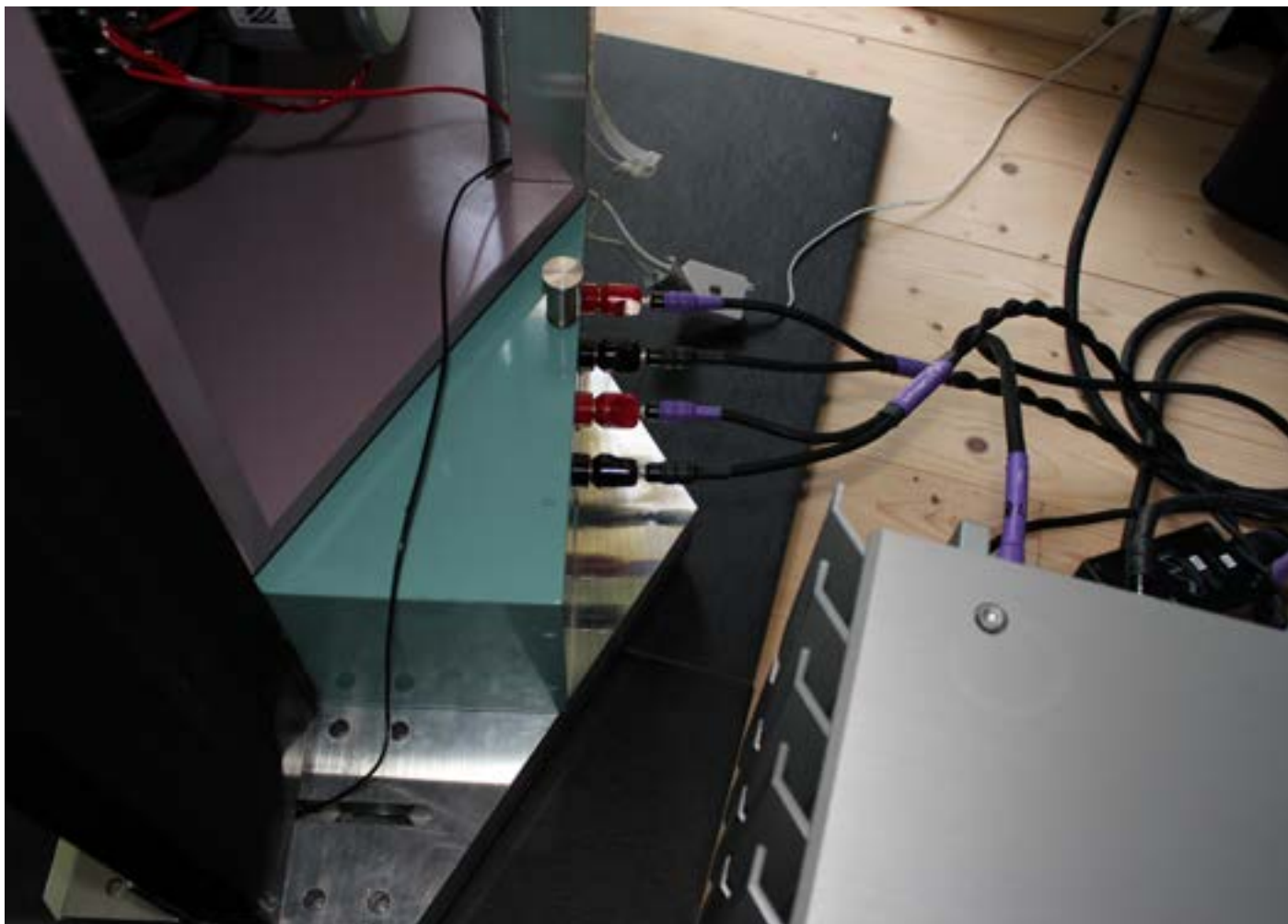
INTERVIEW



INTERVIEW



INTERVIEW



safe side I kept the bottom frequency at 500Hz and after calculating it became 538Hz exactly. Even while playing at pain level the ribbon will not move at all. Due to the crazy ludicrous amount of neodymium magnets the sensitivity is extremely high, around 102dB. Per Lundahl designed a special transformer to enable me to connect the ribbon, being a short circuit, to my amplifier. The filter is a straight forward second order LR2 where the ribbon has reversed connections compared to the woofers. The 5 times 2 x 16 ohm woofers are all in parallel resulting in roughly 6 ohm total. The sound level balance between the ribbon and the woofers was close to perfect, which I contribute to pure luck...!

HP: How long did it take to complete? Is it exactly as you would like it?

RW: The thinking and drawing took a month or two. I wanted ZERO phase error for sure...! Final design with AutoCad took three months. Ordering parts took three months. The woodwork machining a week, the assembly and finishing took a month. Spray painting was done by a car paint shop and took a week. The steel handling, welding and assembling took two months. The placing of the magnets took two months and a tendon sheath inflammation. The ribbons took a month total. The mechanics that adjust the tension of the ribbons (like clockwork) took a month. Total assembly took a week. Fine tuning and filter design took 6 months. Did somebody count...? They weigh around 300lbs each. The filter has a Mundorf "Zero Ohm" coil and a Du-lund Silver/Copper capacitor in the signal path.

HP: What makes up the rest of your system?

RW: First of all: Everything in here is FULLY BALANCED ALL THE WAY...! Digitally it starts with Totaldac. I ended up with a derivative of the d12, being 4 boxes with separate DAC's for left and right and a reclocker. My turntable is a Acoustic Signature Analog One Mk III with a 12" Jelco SA-750D and a My Sonic Lab Ultra Eminent EX cartridge pre amplified by a BMC MCCI. All of the above goes into a Ayre KX-R pre amp. The ribbons and woofers are separately fed (bi amped) by four DIY AMB Beta24 30 watt class A biased power amps. I had to make those myself since the 4 Burmesters I had were too noisy for the highly sensitive ribbons. Cables are all by Audioquest. All is fed by PS Audio Power Plant 20 and a Power Plant 12.

HP: What are your favourite kinds of music?

RW: Almost everything, as long as it sounds good. If still want to hear names: Jon Batiste, Joe Satriani, Red Hot Chili Peppers, Prince, Angels & Airwaves, John Mayer, Emil Brandqvist... I have a Qobuz subscription so I can choose pretty much everything in high res.

HP: Away from DIY, what are your favourite brands and why?

RW: Totaldac because it is honest, open, accessible, durable with a lifetime product backup. Ayre because of the precision in the X-R product line. I can appreciate Pass Labs for the rebel way of thinking in amplification. I used Pass amps for tuning my speakers. I am still drooling over Studer A810 tape decks. I refurbished 5 scrapped ones into two working ones.

HP: How accepting of your system is your partner?

RW: I am married for close to 40 years to not only the hottest chick in town (still)... She also is the sweetest in appreciating (read: don't give a shit) in what I do... Hahaha...! I love her for ever to the moon and back...!

HP: Would you recommend others going the DIY route or do you need a very special set of skills?

RW: Honestly...? No, but yes if you are patient, have a shitload of money ready. You are going to need software, soldering equipment, tools, measuring equipment, permanent working space and time, a hell of a lot of time...!!! I am a mechanical engineer with a good deal of knowledge of electronics that ended up just selling his IT company to enter retirement. But I study every day, every night... Google, Youtube, books and asking people. You can do whatever you want...!

HP: Do you have other hobbies besides audio?

RW: Flying airplanes, mostly in West Texas for Angel Flight... That is actually my real passion... :-) More than twenty years ago I got my Commercial certificate, with multi engine and instrument additions to it. Strictly US so flying in Europe is difficult unfortunately. Last time I was there was 2019. Since Covid and me being a Schengen inhabitant traveling to the USA is prohibited.



MUSICAL JOURNEYS WITH RICHARD BATES

Richard Bates is the man behind the Auralic brand in the UK, Scandinavia and Europe. We chat with him about the music that moves him and how he developed his taste in tunes.

INTERVIEW

HP: Was music a big part of your early life? Was there music in the home? If so, what kind of music were you exposed to in your pre-teen years?

RB: From as far back as I can remember, there has always been music in my life. My earliest recollection was spending many an hour leaning over the family radiogram. It's odd how you remember these things, but it was an ancient mono Regentone behemoth with valves. The combined stimulus of hot valves warming a wooden cabinet, soft glow of a tuning dial labelled with the likes of Hilversum and Luxembourg and a record deck on which I'd play all sorts of music was quite something at the time. I'd play anything which was in the record box. Quite of bit of light classical like Rossini, Wagner, Holst, lots of easy listening and pop records. My dad's friend over the road who had an

amazing car (a gold Cortina 2.0 GXL with faux leather roof) had a proper stereo set up as I recall, with big Goodmans speakers almost a tall as me on each side of the room (I'd be about 9yrs old, I guess) I can clearly remember hearing the original Decca 'Journey in to Sound' LP and I think that was the time when I got bitten by the bug of sound, music and just how exciting it all was - I had my Phillips mono cassette recorder hand-me down from my sister which I then tried to make sound better by adding an old big Rola Celestion speaker to connected to the half watt speaker output. I guess it wasn't that good but the seed was planted.

HP: When did you start to develop a deep interest in music and why?

RB: Just listening to music from an early age on mono radiogram was exciting in the



grey days of black & white TV. I was about twelve years old when dad bought a Dynatron stereo receiver with a Goldring GL75 turntable & two floor standing speakers, swiftly followed by a pair of headphones as I was becoming an annoyance. It sounds cliché but it was my sisters 'Dark Side of the Moon' album on headphones that moved things on. John Peel in FM stereo was the real eye opener to great new music - I'm sure it used to go out late at night around 10pm on the FM stereo band usually occupied by Radio 2 but I may be wrong. My first album purchase was Black Sabbath's 'Masters of Reality'.

When I was fifteen I started a mobile disco, cobbling together a couple of Garrard SP25Mk4's, a 100w mono mixer amplifier and a pair of 2 x 12" Goodmans Axiom loudspeakers. I quickly got in to dance music and I can clearly remember one of those 'lightbulb' moments buying my first 45 rpm twelve inch single, T Connections' 'Do What You Wanna Do'. The sound was just so good - 7'15" cut on one side at 45rpm. This set me on a path of upgrades through my teens. I think it was 1981 - I had a three way active electronic cross over with a couple of Quad 405's driving four fifteen inch JBL bass cabinets, one more handling mid range duties through four twelve inch mids and another 405 powering two RCF flared horns and JBL bullets. I clearly recall playing Donna Summers 'I Feel Love' for the first time in the summer of 1977 and thinking.... yep... this is what I want to do. Those experiences chartered me on the course I've been on all my life, starting with an electronics apprenticeship and then career in consumer and professional audio which I feel very fortunate to be involved in. Anything that's involved great sound, great music, having fun, enjoying the company of others and doing good

business.

HP: How would you describe your musical taste and what has shaped it?

RB: Eclectic, to say the least but some music dislike with a passion. Country music leaves me stone cold.... apart from Glen Campbell :) . The Jimmy Webb penned 'Wichita Lineman' I think is one of the best songs ever. I find the sort of music generally played at audio shows so dull, so always try to bring something different to the party if I'm on playlist duty. But otherwise, I pretty much like everything... seriously. My tastes have been shaped by growing up in the era of Pink Floyd, Led Zeppelin through the golden era of disco in the late 70's, electronic and DJ'ing. Getting out playing all sorts of music at gatherings, parties and big events, seeing the reaction, making a great sound, absorbing the atmosphere with a group of people who like music is a good feeling. It could be between fifty and two thousand people - it's just the same if you make the connection. Classical has also always been there - it's totally different, so many different styles, and as an actual live experience, for me takes some beating.

HP: Before the current "situation" with Covid-19, did you go to gigs/concerts and how important is live music to you?

RB: Not very often, and for no particular reason. I don't feel compelled enough to regularly go as it's pretty busy much of the time with work and at home bringing up two daughters. I'm very fortunate to have a decent audio system I enjoy immensely. When I do go to a live concert, I'm drawn more to classical music - the whole experience and sound of the concert hall can be completely enthralling.

HP: Best gig/concert ever and why?

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RB: Its not a contemporary choice although ELO at Wembley Stadium a couple of years ago comes a close second - polished performance and the roller coaster of hit after hit was fantastic - best quality live audio I've ever experienced in a big space courtesy of a monstrous L'Acoustics V-Dosc system.

Best concert to date for me has to be Mahler 8 'Symphony of a Thousand' with the CBSO Birmingham Symphony Hall. Seen the performance twice, one with Simon Rattle and recently just before the lockdown in January 2020 with Mirga Gražinytė-Tyla. I took my fifteen year old daughter, Sophie. Just her expression on her face during the final movement witnessing four hundred choristers and the orchestra in full cry was memorable. The performance and sound in the hall was spectacular. I'm not afraid to admit it moved me to tears. The 'other' best sound I ever heard was four Rolls Royce Merlin's throttling back in a Lancaster at an altitude of about 500 feet, but that's for another day

HP: Have you ever walked out of a gig/concert? If so, which one?

RB: Van Morrison in Birmingham late nineties. Talented, but was clearly disinterested. An hour passed, probably four or five songs in that time dragged out with every one of the band playing extended solos. What annoyed most was the fact he kept wandering off back stage and clearly didn't want to be there.

Oh, and Deep Purple at the NEC. Jesus, it really was the case of a legendary band utterly let down by the sound engineer and hideously loud sound bouncing off the walls.

HP: List your top five albums and a little about why you chose them.

RB: Where to start. How can there be just five?

Anyway, in no particular order:

'Second Toughest in the Infants' Underworld - 1996 was a good time in life working at Meridian at the time. This was a new, 'second chapter' for electronic music. Impressive, well recorded good tunes.

'Songs in the Key of Life' Stevie Wonder - everything about that record was so 'right' at the time.

'Dark Side of the Moon' Pink Floyd - cliché maybe, but the best album of its genre ever - period. First album that triggered my appreciation for sound quality and a record that seemed to have meaning. While we're here, 'Wish you were here', 'The Final Cut' and 'The Wall' tracked my teenage years. Brilliant records.

'Sinatra at the Sands' Frank Sinatra - Very few artists could talk a tune and command a lyric like Sinatra. Right place and the right time for him and his peers Nat Cole, Tony Bennett, Matt Monroe, Dean Martin. And those orchestrations by Nelson Riddle and Quincy Jones. Tunes that will live forever.

'Random Access Memories' Daft Punk - For me, probably my favourite listen of the past ten years. A record that has it all for me and superbly engineered.

There are many, many more, but you said 'Five' albums.... Hang on, I missed Bert Kaempfers 'Swinging' Safari'. If ever you need a quick 'pick me up', pop that on your playlist. The master of easy listening and instrumental in putting The Beatles on the map in 1961.

HP: Let's narrow it down to individual tune;

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list your top five tunes, not necessarily from your top five albums and why you chose them.

RB: Come on, this isn't fair, I could easily list a couple of hundred of songs I like in equal measure. You said five...So here's a dozen:

'Wichita Lineman' Glen Campbell. I don't know anyone who doesn't like this record. It has it all - the melody and that Jimmy Webb lyric. That one line 'and I need you more than want you, and I want you for all time' Very special.

'Lucky Man' The Verve Reminds me of summer holidays cruising down to the French Alps when the kids were much younger. The songs title says it all.

'I Feel Love 12" Donna Summer - Remember taking a punt on this when it was relatively unknown in 1977. 50p for the 7" which I still have. I still remember the scruffy shop and its smell, Greens Records in Birmingham. The first real electronic dance record. 'Supernature' by Cerone is another classic.

"Stardust' Nat King Cole - my father passed away when I was 22. He liked Nat King Cole's albums. This song still resonates with me.

Anything by Frank Sinatra. I couldn't pick one 'Insomnia' Faithless - This did for dance music in the 90's what "I Feel Love" did in 1977. There's an intelligent remix of this, just released on [Beatport by Maceo Plex](#). The melody is out of sync with the main track but oddly it works.

'Moments of Pleasure' Kate Bush - She's such a talent, dare I say unique? Beautiful tune.

'Life on Mars' David Bowie - Call me a philistine but I can't say I was a real fan of David Bowie. Totally respect his work but I've never found myself reaching for a Bowie album. I do like this track.

'Adagio uin poco mosso' Beethoven Piano Concerto No.5 Brendel / Rattle - An oasis of calm at any time of day.

'First time ever I saw your face' Robert Flack - Haunting melody and peerless performance.

'Anarchy in the UK' Sex Pistols - A real 'jolt' that came along late 70's. I play 'Never Mind'

in the car quite a bit if I'm on my own. Not sure why. Its probably nostalgia from teenage years. Boring trivia - As a teenager, I remember having a the single on the EMI label at the time which I swopped with a mate for an air rifle...seemed like a good idea at the time.

'Giorgio by Moroder' Daft Punk - you can't really classify what it is but its a stroke of genius. The concept of Giorgio Moroder just telling a story of how he started over whats best described as an electronic symphony is inspired. Musicians at the top of their game - the quality of the drum recording, and the drumming by Omar Hakim & bass break at seven minutes in is just incredible. And it's so eccentric. Random fact - Daft Punk recorded the story of Giorgio's start in the business with three microphones, one of each manufactured in the sixties, seventies and state of the art today, and then using the mic feed on the recording which was relevant to the point in time he was talking about. Bonkers, but I like that.

'The Message' Grand Master Flash & The Furious Five - A big record that transcends time. It's always been there as a one of the greatest, pioneering hip-hop tracks ever. It's simple, and yet that's the magic. Always popular on the dance floor...if you're an old fart.

HP: Choose one "feel good" record that gets you on a dancefloor.

RB: 'Signed, sealed, delivered', I'm yours' Stevie Wonder. The man's a genius (If you've got the gist of this by now, I would list at least a hundred... but you'll be relieved to know that I won't)

HP: Which band or artist is your all-time favourite and why?

RB: Frank Sinatra. Any time, anywhere, his command of a lyric and brilliant orchestral arrangements make me come back to his records regularly. Close second & third, Pink Floyd & Led Zeppelin.

HP: What music did you have played to get married to: first dance?

RB: 'I've got you under my skin' Frank Sinatra accompanied by fireworks in the last 1'30". That was pretty memorable.

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HP: What do you think of the current popular music scene?

RB: For sheer choice and accessibility its incredible. A wealth of music available at your fingertips in great quality is something which is easily taken for granted. Lossless streaming services such as Qobuz & HRA are leading the way with high quality, high resolution sound becoming the 'norm'. It's heartening that Apple Music, Spotify and Amazon HD are also heading this way, bringing more of an awareness of good quality sound, almost by default, to a wider audience. With the advent of very high quality music streamers coupled with well thought out control apps which suggest alternatives and curate playlists, the discovery of new and different music quite incredible. The big problem I run up against when perusing a new release is with so much stuff available, it can be so difficult to simply have enough time to take it all in - I'm sure I'm not on my own in thinking that. Not that long ago you'd visit a record shop, look through the CD's and buy a disc or two which were familiar or recommended by a friend or magazine. Then you would play those albums front to back a few times and either keep revisiting or just pop the disc on a rack. Now, its a beautifully presented piece of artwork and album cover on a tablet - press play, its sounds great and then quite often, you start skipping through tracks and then onward through a whole raft of new releases. More recently, I think the re-emergence of the LP record has been good in many respects in setting the scene for actually listening to whole side of an album. I've been doing this a little more recently as I've upgraded my

turntable. I know some will think what I'm about to say is a bit odd, but it gets me a little closer to what really good digital audio sounds like in the studio - low noise, accurate bass and clear sound.... with a pristine LP of course! Rega's P10 doesn't sound like a typical record player.

HP: What do you see as being the future of recorded music? Do you think we are heading to everything being online over physical media? How do you see bands prospering from their music? Three questions but all connected, I think.

RB: That's a tricky question. I don't, for one, see the CD just disappearing. It's a massively rich format, good sound quality in a robust and convenient form factor if you want something tangible, and you're of a certain age. So many discs can be bought for just two or three pounds now so its not dead just yet. The LP's resurgence has surprised me. I think the novelty for younger listeners may wane over time, but I might be wrong. Folks who are in to HiFi, and audiophiles, will likely remain thoroughly enjoying and collecting records, new and old, love playing them and pottering around with pick-ups and ancillaries which I think is brilliant. There's a certain connection with an artist and their music which the record brings. There's no doubt the music and video streaming business models will dominate and take over in time and that's just progress - like the horse & cart, then the internal combustion engine and now electric or hydrogen driven vehicles. Something has to give in the way artists earn a living from their



music, but I'm not sure how smaller bands and artists may prosper in the current climate. I feel confident that artists will eventually earn a more realistic reward for their efforts in the next few years as the streaming space becomes more competitive.

HP: There was a time when we'd see the likes of Motorhead in the charts and on Top Of The Pops, why do you think that has changed and all we seem to be exposed to on the telly is what I would describe as generic pop?

RB Generic, formulaic pop has to fit a TV schedule and appeal to a wide enough audience to be viable for advertisers, and to play safe. There just wouldn't be a wide enough audience for anything else with today's live TV audience. 'Catch up' & 'On demand' is more important than live TV for most people. Those interested in a wider gamut of music can easily find it elsewhere on Bandcamp, YouTube, Soundcloud et al, and arguably it's preferable this way - you can watch and hear what ever you want, whenever you want to.

HP: Vinyl, CD, or streaming and why?

RB: Right here, right now? (there's a song in there somewhere). Well, it's a mix of streaming, vinyl, and CD. I have a Nakamichi cassette ma-

chine and Sony mini disc machine in the cabinet for the occasional nostalgic trip down memory lane. I think if I saw a tidy Studer Revox I could easily be tempted, but I know it would just sit there looking cool and hardly be used. There's something very special about the sound of quarter inch tape when correctly set up. I'll play a CD two or three times a month. I like playing records. I have about two cubic metres of LP's and 12" singles which I really must get round to sorting out at some point, but I know that only a small percentage will be of similar quality to what I can now stream or have on my hard drive. Records are a bit of a faff but a clean, nicely mastered LP can be very good. Streaming from lossless music providers and digital music library is my preferred choice.

HP: Choose three tunes to have played at your funeral?

RB: How jolly, cheery and upbeat you can be, Stuart. Pegging it and shuffling off to meet my maker isn't an option. I've a bit of living to do yet, and haven't thought about it. But now that I do there are simply too many great pieces of music for me to narrow it down. If my time comes prematurely, I'm sure there are enough people I've stumbled across over the years who'll work it out for me.



STEVE HACKETT

INTERVIEW

You would think that on the day he releases a new album and kicks off an extensive tour, former Genesis guitarist Steve Hackett might have better things to do than to chat with John Scott for HiFi Pig. Thankfully though, it appears not.

HiFi Pig: Hi Steve, how are you? This is a big day for you with your new album **Surrender Of Silence** released today and the **Seconds Out Revisited** tour kicking off in Leicester tonight.

SH: Yes, I'm good thanks. I'm looking forward to getting on stage and getting the first gig under our belts.

HP: Apart from anything else, it must be good to be providing employment for the crew again after the last year of having no shows.

SH: Yes, exactly. I haven't been able to do lots to raise dosh for them but I have written out some personalised lyrics that I've sold and there have been some tee shirts for sale but it's not the same as them earning a regular living. I've given them a cash injection from time to time but, yes of course, they are all looking

forward to earning again.

HP: How many people, apart from the band, do you take out on the road with you?

SH: Oh my goodness, you know it gets bigger every day. We just found out last night that we are going to have to take on some extra people because of extra equipment and that means extra trucks and by the time we are all out there that's going to be somewhere between 15 to 20 people.

HP: I wanted to ask you something that's been bothering me for about twenty years or so and it's to do with **Seconds Out** so it's probably quite timely: In the fading seconds of **Los Endos** you quote the riff from **Steppin' Out** from John Mayall's **Bluesbreakers** album. Was that an off-the-cuff ad-lib or a coded state-

ment of intent?

SH: Oh, that's a long time ago now. I think it was just a clue that I used to throw in there for those that were remotely interested in guitar playing. It was a very different mindset that I had then compared to today so I can't tell you exactly why I intended to do that but I think that I was occasionally throwing in things that, you know, I might get objections to from some of the guys in the band. In a way, it was just kind of tweaking their noses a little. [Laughs]. And, I think the audience as well; I thought it's better just going for that than just a long held note. We're going to be doing it again now and reinterpreting it and I doubt that I'll be playing that on the final chord but I'll be thinking of you tonight since you asked that question.

HP: My first, and in fact only, live Genesis experience was in January 1977 on the Wind And Wuthering tour in Edinburgh. At that time you played four shows over two nights. It's unthinkable that a major band would do that now. Was that the norm back then?

SH: it's probably a case that there may not have been so many larger venues to play at that time so, you know, lots of shows in smaller venues would have been the thinking. For instance, when we are in London, my band, we are going to be doing three nights at the Palladium. You could say you should have done one night at the O2 then, but at the end of the day, I think small venues are better. It's not really personal playing in large arenas. I went through all of that, playing arenas with Genesis and often on stage sound used to feel like an aircraft taking off in a hanger, you know? The sound that used to come back would be roaring off the walls and be nothing really discernible remotely as music so I don't actually enjoy the sound of arenas, I like the sound of theatres.

HP: I've always thought that about Seconds Out – there's a bit too much of the sound of the hall in the album.

SH: Yeah, well that's entirely possible. That was a big gig – the Palais De Sports in Paris, which is a gig we played lots of times back then and it would have had a ring to it as all those large venues do because they are not actually designed for music, they are designed for sport

and it's designed to cram as many people in as possible to see people leaping around throwing balls about so the sound suffers accordingly.

Hifi Pig: How do you pace yourself through big tours these days?

SH: My lifestyle is very different now. Back in those days, I would be having a few drinks after the end of the show and before you know it you've polished off at least half a bottle of white wine. In those days, as a young guy, I would be smoking cigarettes, I'd be drinking whatever I fancied and I had the constitution of a guy in his twenties. This is now several decades on and we are talking about the grown-up. I mean, today I was looking at myself in the mirror thinking I look very much like my Dad at times, I see my father's face looking back at me except that I am still lucky enough to have lots of hair. I hope I'm as sensible as he was. At that time everyone used to have a few drinks in the evening but I know that my insides wouldn't be able to take it so, yeah, self-preservation helps to elongate the music. I've got a vested interest in staying healthy so I fight all that off! I'm probably healthier now than the young man waking up with a hangover every morning, punishing myself and doing it all over again so I'm a very different character to the one you would have found back then.

HP: The tour you are just starting was, of course, supposed to happen last year. Instead of doing that, you produced two new albums. Do you think that in retrospect lockdown was a bit of a blessing in disguise creatively?

SH: Yeah, there were so many things that I was used to doing that I couldn't do. I was used to meeting crowds. Before every show I would be absolutely run off my feet: From the moment I arrived, I'd be doing a soundcheck then I would have a ten minute window to eat and if the food didn't arrive exactly on my table in ten minutes, I knew that I was going have to go off and meet people and sign things and then there would be a backstage version of that for meeting friends or family or dignitaries and then I would get a short window before I was on stage, so at the moment because we are existing in a tour bubble we are not allowed to meet people; we have to prioritise keeping people safe. If any-

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one catches anything in our team we would have to stop for ten days and that would be a terrible disaster. Our American tour was halved because of the pandemic so as soon as I got back I was doing lockdown videos just to keep people's spirits up. I finished off a live album; Roger King did the stereo mix with me and then we sent it to Steven Wilson who did a surround mix. I finished off an autobiography, then we were doing the acoustic album *Under A Mediterranean Sky*, then almost immediately we got into *Surrender Of Silence*. It's been a rather extraordinary workload. I'm sorry to say that we haven't been able to do all the stuff as personally as possible but look at this – the increased output, the increased commitment. And having fun doing it.

HP: I was very kindly provided with a promo copy of *Surrender Of Silence* but I was under strict instructions only to listen to the three singles before today. I'm looking forward to hearing it later. What do I have in store?

SH: Well, there are four new videos coming out to accompany things today. There is one for *Scorched Earth*, there is one for *Wingbeats*. There is one for *Natalia* which is an interesting cartoon, virtual kind of thing. It's a very full-on album. It's not romantic, I would say it's more metal macabre. In terms of romantic material the acoustic album, *Under A Mediterranean Sky* addressed all those escapist, romantic leanings but I think both albums are cinematic in terms of the sound textures. There's lots of orchestral stuff going on, there's lots of rock stuff, there's some world music; regional instruments of course. There are things that are maybe not recognisable instruments that people will be hearing. All I can say is it's a hugely detailed album, it's very full-on. Some people have been saying that it's more heavy metal than I've done before. There are lots of stories in it but you know, it's hard to describe music. You need to have the personal experience with the album to get to know what it is like.

HP: I asked some friends if they had questions that they would like to ask you so I'd like to ask a few of those if that's okay?

SH: Sure, yeah.

HP: Jim asks: Can Steve illuminate what actually happened with the weird edit on 'A Tower Struck Down' (Steve Tobin is credited with "parrot and cough")?

SH: Steve Tobin is a pal of mine who directed commercials. Before he became a successful commercials director, he made a number of films that sometimes I would appear in just because he would rope in his mates when it was at the level of amateur dramatics on film. At one point he painted me silver and had me wear a silver suit and I thought this was normal. And then he didn't use it in the end. One time, he did a series of fast edits with the film and also the sound and I thought that was interesting. At the time that kind of predated what you were going to get much later with *Owner Of A Lonely Heart* and that kind of *Close To The Edit* philosophy, and so I like to think that it had an influence that went beyond the merely musical. It was a philosophy: what sort of things do feel that you can put together at sharp, contrasting angles to each other as opposed to the idea of music that flows. It was like music interruptus, deliberately so. I was often putting things that were very jagged next to one another for sharp contrast. Cutting into things; splicing into moments. And that, in a way, was a style that became very popular later. That same album, *Voyage Of The Acolyte*, had an unaccompanied tapping sequence which guitar gunners started to tend to use; it became part of the language of heavy metal and shredders. It was a signpost and it pointed the way forward. I don't find myself listening to that album very much these days but I was hugely interested the last time I heard it which was a surround mix – actually a faux surround mix – at the push of a button by Steven Wilson. It created a surround mix which threw up some interesting things, it creates lots and lots of surprises and certain things start to appear in the rear. At the beginning of *Hands Of The Priestess*, you get a bell tree that shoots from back to forward. It was a real whirlwind of an experience.

HP: It's interesting that you mentioned tapping as Garry wanted to know if you were the first person to do tapping on a record and where did you pick it up from?

SH: As far as I know I am the first person to have done it on an electric guitar and that was in 1971 when I first started working with Gen-

esis. I came up with the idea purely by chance as I was trying to play a phrase that sounded remotely like something that Bach could do, a triplet figure, and I figured out that I could do lots of things with it and it became a major calling card of people like Eddie Van Halen. I believe there was somebody - I'm sorry I can't remember his name - who was doing it on a nylon guitar, in 1968 there is apparently a clip of someone using that technique but all I can say is that that's not something I had seen in 1971. Historians try to trace the roots of tapping and say that this guy was doing it first, so I cannot claim to be the first but I do believe I was the first to do it on an electric guitar.

HP: We know that you advertised in Melody Maker for other musicians to work with and that is how you came to join Genesis. We're there any other bands that we might have heard of that you auditioned with?

SH: I don't know if there were other bands. The way it worked with Melody Maker at that time was that you advertised yourself and so I did lots of jamming with potential collaborators, most of which came to very little at all other than I worked with a band that was signed to Pye, who had a subsidiary label, Dawn. I seem to remember that John McLaughlin was signed to Dawn - this was 1970, so a year before I met Genesis. I worked with a band called Quiet World; we did an album together. I may have met Quiet World in '69 but we recorded the album, which was called The Road, in 1970. There is some stuff with pals recorded in living rooms; there is stuff with Canterbury Glass which apparently has me on it. I've listened to it and I can't tell if it's me or somebody else.

HP: Andy wonders if there is anyone who you haven't worked with yet that you would really like to?

SH: Well, it's a funny thing. Guitarists do have a habit of getting together and playing but what tends to happen is that if you stick two guitarists in a room together, very quickly it seems to deteriorate into a contest where one tries to play much faster than the other so it reduces it to the level of sport because one guy wants to appear to be more proficient than the other guy. If you can get guitarists to serve the best interests of the music and realise that they are playing as part of an ensemble then I think you can come

up with music that's memorable, as The Beatles and The Stones did where guitar parts are serving each other. Where you hear John Williams and Julian Bream playing together, it's complimentary, but otherwise it can be competitive.

HP: Richard asks, did you spend any time in lockdown practising claw hammer or any other techniques that you don't usually use?

SH: Well claw hammer, as I understand it, means that you use a plectrum but have another couple of fingers free to pick out extra notes but because I no longer use a pick, basically I use all the nails on the right hand it means that not only would that technique be explored but much more, as classical and flamenco players demonstrate. Employing the right hand seems to be the way to have complete lift off with your tapping or where you are using your nails. The plectrum has its limitations and there are other ways!

HP: Mike would like to know, did you exchange Christmas cards with Tony Banks?

SH: I believe we did, yes.

HP: That's good to hear. I kind of get the impression though that if you went round to Tony's house at Christmas, you would only see the cards that he had written himself.

SH: [Much laughter] Good lord! No actually, the last person from Genesis that I heard from was Tony who was wishing me well for something and so it's not what people think, you know. I've actually got a lot of time for the guys. I mean, they are unbelievably competitive but that doesn't mean that you don't have respect for what they have done individually and collectively. There is a wealth of talent there that has gone under the Genesis banner.

HP: I'm really glad to hear that. You are doing so much to uphold the legacy of the band as it was during your time in it and it doesn't seem that you get credit for that from the other guys; at least it doesn't come over that way.

SH: Well, that's the competitive streak. I do get complimented privately, it's part of the style, you see. Privately complimented, publicly denounced.

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HP: It's that public school thing I think, isn't it?

SH: It is a public school thing, yes. Absolutely. You're beaten into submission into a position where you can uphold the Empire at all costs.

HP: I remember seeing a DVD clip where Tony referred to you and Phil as junior members of the band, despite this being over thirty years since you had joined.

SH: [Laughs] Yes, once a junior member, always a junior member!

HP: As this is a Hifi magazine, I wondered if you had any interest in Hifi? Are you keen to get a sound at home that is as close as possible to what you hear in the studio?

SH: Do you know, this might sound crazy but I very rarely ever remember the makes of anything that I am using because stuff comes in and goes out all the time. I can't even remember off the top of my head which speakers we are using. I can tell you about guitars [laughs]. Yeah, I've got a HiFi that sounds alright. At some point, I'm going to be building a new professional studio when I move house and so I'll tell you what I've got then.

HP: It's been great chatting to you, Steve and I know you have a busy day ahead. I look forward to seeing you in Edinburgh in a couple of weeks.

SH: Thanks, me too. It's been a pleasure speaking to you. All the best.

Steve Hackett portrait photos by Tina Korhonen, all rights reserved

UK TOUR DATES

- 01 October 2021 - St George's Hall, Bradford, UK
- 02 October 2021 - Royal Concert Hall, Nottingham, UK
- 04 October 2021 - Fairfield Halls, Croydon, UK
- 05 October 2021 - G Live, Guildford, UK
- 07 October 2021 - Dome, Brighton, UK
- 08 October 2021 - Lighthouse, Poole, UK
- 09 October 2021 - De La Warr Pavilion, Bexhill, UK
- 11 October 2021 - Mayflower, Southampton, UK

12 October 2021 - Pavilions, Plymouth, UK

14 October 2021 - The Sands Centre, Carlisle, UK

15 October 2021 - Stockton Globe, Stockton, UK

16 October 2021 - O2 City Hall, Newcastle, UK

18 October 2021 - Waterside, Aylesbury, UK

19 October 2021 - New Theatre, Oxford, UK

21 October 2021 - Cresset, Peterborough, UK

22 October 2021 - Royal Hall, Harrogate, UK

EUROPE

11 November 2021 - Pakkahuone, Tampere, FINLAND

12 November 2021 - House of Culture, Helsinki, FINLAND

14 November 2021 - Nalen, Stockholm, SWEDEN

16 November 2021 - Sentrum Scene, Oslo, NORWAY

18 November 2021 - Pustervik, Gothenburg, SWEDEN

19 November 2021 - Kulturbolaget, Malmö, SWEDEN

20 November 2021 - Amager Bio, Copenhagen, DENMARK

30 November 2021 - La Salle Pleyel, Paris, FRANCE

[More information and tour dates can be found by visiting Hackett Songs](#)



LIVE MUSIC

LIVE MUSIC

STEVE HACKETT LIVE AT
THE PLAYHOUSE
EDINBURGH
BY JOHN SCOTT

LIVE MUSIC

I had more than one reason to look forward to tonight's gig; not only was it my first time at a live show since March 2020 but it was my first time seeing Steve Hackett on this stage since the Genesis Wind and Wuthering tour in 1977. That tour spawned the band's *Seconds Out* double live album; recorded, no doubt, to prove if proof were needed, that Genesis had transcended the departure of lead singer Peter Gabriel and were a successful band in their own right. By the time of the album's release though, it would serve a completely different purpose. Guitarist Steve Hackett, frustrated that his creative efforts were not being given equal consideration with those of his band-mates, chose the mixing sessions for the album to make his departure. *Seconds Out* stands, therefore, not as a statement of purpose but as a memento of the end of yet another era in the band's history.

Alongside a lengthy and successful solo career, Hackett has in recent years re-embraced the music made during his Genesis tenure, with this current tour seeing Steve and his band revisiting the *Seconds Out* album from start to finish; an alluring prospect for any fans of the band's output before they went on to be unlikely Eight-

ies pop superstars.

Tonight's show opens with a short set showcasing Hackett's solo career. Familiar songs: *Clocks* – *The Angel Of Mons*, *Every Day*, *Shadow Of The Hierophant*, combine seamlessly with *Held In The Shadows* and *The Devil's Cathedral* from his latest release *Surrender Of Silence*. Steve and the band are clearly loving being back in front of an audience, exchanging smiles and nods of appreciation. The audience is also relishing the return of live music and every song is enthusiastically received. This section of the show is over far too quickly but it is really just an appetiser for what is to come.

I'd be surprised if there is anyone here tonight who is unfamiliar with the *Seconds Out* album and as the lights dim for the second set there is a strong sense of anticipation in the room. As the introduction to *Squonk* rings out with chiming guitar and rumbling bass, I'm transported back to 1977 where I will remain for much of the evening. There is probably no one here tonight who doesn't know these songs inside and out but there is no chance of familiarity breeding contempt. Hackett's band bring their own touch to the material. In particular, Rob Townsend's



LIVE MUSIC





sax adds a different texture; his jazzy solo on I Know What I Like (In Your Wardrobe) is a highlight.

In what amounts to a greatest hits collection of the Genesis prog era, a lovely Afterglow with melodic bass lines from Jonas Reingold, spectacular synth playing by Roger King on Firth Of Fifth and Cinema Show and powerful, intricate drumming from Craig Blundell throughout ensure that the thrills just keep on coming. Singer Nad Sylvain, while evidently influenced by both Peter Gabriel and Phil Collins brings his own individuality to the songs and is an engaging presence.

Steve stands front and centre, as he should; his band, his show. He is however the most benevolent of bandleaders, taking evident pleasure in his bandmates performances. Restrained and tasteful, he switches between arpeggiated chords and intricate fills. Even when he stretches out a little on the solos that are at the heart of many of the songs he seeks to serve the song rather than to showboat.

In a set where every song is a highlight, it is almost impossible to pick out favourites but the sequence from The Musical Box through the

epic Supper's Ready into The Cinema Show is unbeatable. After a well-deserved ovation from the crowd, encores Dance on A Volcano and Los Endos, the latter a showcase for drummer Blundell, send the crowd away happy. As a return to live music, I really couldn't have asked for more.

Setlist:

Clocks – The Angel of Mons
Held in the Shadows
Every Day
The Devil's Cathedral
Shadow of the Hierophant (instrumental section)
Squonk
The Carpet Crawlers
Robbery, Assault & Battery
Afterglow
Firth of Fifth
I Know What I Like (In Your Wardrobe)
The Lamb Lies Down on Broadway
The Musical Box (closing section)
Supper's Ready
The Cinema Show
Aisle of Plenty
Dance on a Volcano
Los Endos



PHIL HANSEN

HiFi Pig catches up with Phil Hansen, the drummer for “loud powerhouse” band Darklight Horizon.

INTERVIEW

HP: You are the drummer for Darklight Horizon but what do you for your day job?

PH: I run Red Sheep Communications, a PR company working in the hi-fi, custom install and pro audio sectors and I am also co-director of Connected Distribution, a business which imports custom installation and hi-fi equipment into the UK and sells it to installers and retailers.

HP: How would you describe the music of Darklight Horizon?

PH: It's rock! But as that's a very wide genre, a better description would be 'New Classic Rock - that goes from light to heavy.' Even that doesn't really do it justice as there's all sorts in there that makes up the music. It's a real case of the whole being greater than the sum of the parts – throw all our influences and our skills as musicians into a pot, stir it up

and out pops Darklight Horizon's music. Listen carefully and you'll be able to decipher the influences and will still think this is something uniquely different.

HP: What are the influences for the band?

PH: There are four people in the band – me, Kurt (guitar), Zach (bass) and Valentine (vocals) and we've all got different influences and also some common ground – they include Black Sabbath, Led Zeppelin, Iron Maiden, Rush, Paul Simon, Etta James, Bon Jovi, Aerosmith and take in Latin and Pop along the way. That kind of explains the sum of the parts comment above – our melting pot is full of all sorts of genres of music and that's why it's also hard to really categorise or pigeonhole us.

HP: And you personally as a drummer - who are your

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heroes and influences?

PH: I started playing drums when I was three years old – the usual whacking the pots and pans with wooden spoons thing, until my grandma bought me a Chad Valley kid's drum set which I was absolutely hooked on. I'd like to think she'd had some kind of premonition about future greatness, but that's probably just wishful thinking on my part! My playing got serious when I got my first 'proper' kit for my 18th birthday – that was some present from my mum and dad and I shudder to think now how the neighbours must have felt about it. At that time I was a major Iron Maiden fan (still am) and an equally huge Van Halen fan (still am!) and so my earliest influences were Nicko McBrain and Alex Van Halen. I was privileged when working for KEF to get to meet Nicko (we did some promo work with the band) and stand behind his kit during the band's Earls Court gig – watching him at work was incredible for me. Sadly I didn't get to meet Alex, but did see the band live a few times and got to witness his amazing, almost swing style, playing.

My musical tastes are very wide ranging and there are so many outstanding drummers out there that I've been lucky to see live – Abe Laboriel Jr. who plays for Paul McCartney, Steve Gadd (James Taylor, Paul Simon etc.), Taylor Hawkins (Foo Fighters), Mark Brzezicki (Big Country), Phil Collins, Vinny Coliauta, Omar Hakim, Manu Katche, (Sting), Stewart Copeland (The Police). The list is huge.

Other major influences include the godfather of progressive rock drumming – Neil Peart, who was taken from us far too soon, but whose drumming is to me about the finest there is – by far and away the best drum solo I've ever seen live. I also really rate Ian Mosley from Marillion – totally understated, but fiendishly complicated and very clever and a real example of someone who 'plays for the song'. I could go on – Craig Blundell, Gavin Harrison...

HP: Describe your drumming style in no more than three words.

PH: Loud Powerhouse Prog.

HP: You've obviously not been able to play live in the last 18 months or so. How has this affected the band and how have you

coped as a unit?

PH: Working bands were allowed to continue to rehearse during lockdown and so we took advantage of that by retreating to our rehearsal studio, auditioning new drummers (me!) and singers (and appointing Valentine who brought a whole new perspective to what we do), writing new songs and working hard at perfecting them in advance of gigs starting up again.

It's been a great opportunity to really get to know each other, not just as musicians, but as people. We've spent almost as much time talking and sharing stories as we have playing and I think that's a really healthy thing for a band to do. There are so many bands in which the members don't really get on with each other that well, but work together superbly – and I'm not saying that's a bad thing as you don't have to be best buddies with the people at work – but I think it's a shame. We're really lucky in that the four very different personalities in our band get along with each other really well. It makes working on ideas and critiquing each other a much easier thing to do if we feel we can say what we feel without risk of an explosion.

HP: Have you been in the studio and if so what are the results?

PH: Prior to Valentine and my joining, the band went to a studio to lay down two tracks. The brief to the engineer (who has worked with the likes of Jimmy Page) was "this has to sound like a 'proper' recording, not a local band who went to a studio." The results are excellent and definitely fulfilled the brief. We've now got an album worth of material that we've been demoing and will be heading back into the studio either late 2021 or early 2022. We're hoping to get a big-name producer involved in the project – I'm lucky to know a good number of people in pro audio and have sounded someone out who has expressed an interest. Watch this space – if it comes off, we'll be shouting it from the hilltops!

HP: Where can readers find out more about the band?

PH: The website tells you more and you can listen to the two studio tracks on there – "The Fallen" and "Oxide" (also available on Spotify, Amazon, Apple Music, Deezer and Bandcamp). Our socials also have all the latest info. www.darklighthorizon.com



PIDE AYUDA

HiFi Pig chats with The Sir and The Lady, the members of Pide Ayuda who have released their first single on Wondercap Records.

INTERVIEW

HP: How would you describe your sound – it's pretty "out there"

The Sir: To me, it's just electronic music, not in the dance sense, but in the classic '70s German experimentalism that broke down boundaries. We began when I asked The Lady if she'd like to record noise with me. I was expecting more of a harsh noise thing, but she has an innate sense of melodicism. Typically, she brings the melody and I bring the noise, though I play a few catchy keyboard lines here and there.

The Lady: Some hybrid of noise and ambient.

HP: What synths are you using?

The Lady: For our earlier stuff, I used an Alesis QS6.1. Then when we expanded, I used a Moog Werkstatt 01 and three Volcas: Bass, Beats and Sample. Most recently I've been using a Moog Grandmother,

two Mother 32s, a Subharmonicon, a DFAM and a Make Noise Strega. The Grandmother is the one I use most frequently and is what I used on the 7".

The Sir: We started out with two synths my dad gave me. A Korg Prophecy, which he suggested I take after being heartbroken that he'd literally destroyed his Moog Liberation (he said it kept going out of tune), and the Alesis. Later we got into the Volcas because they're inexpensive, but powerful machines. I fully stand by the Keys, FM and Modular and I used them for many recordings. Finally, I bought the one I'd been eyeing for quite some time: the Korg MS-20 mini (this was before they reissued the full size). Now, I'm building a rack with Behringer (GASP!) synths. A lot of idiots, I mean "people," say horrible things about Behringer (and the Vol-

INTERVIEW

cas) because they have some elitist perception of what being into synths is, but I love those synths and I have a lot of fun with them. Hell, people sneered at the Ramones for their cheap gear, but nobody moaned about Suicide's! On the 7", I used the MS-20 mini and Volca Modular.

HP: Who or what has influenced your sound?

The Lady: Who? Gary Numan. Seeing him play live inspired me to play synthesizers. What? Definitely soundtracks. There have been some great ones that manage to keep you completely entranced in the story while also very noticeably setting the mood. Trent Reznor has done a few, Tangerine Dream even more.

The Sir: My dad was always playing stuff like Tangerine Dream, Klaus Schulze, Kraftwerk and Richard Pinhas/Heldon when I was a kid, so I got into it at an early age. In my teens, I discovered punk and it changed my life, especially American hardcore and UK anarcho punk. It's funny, a lot of punks dismiss Penny Rimbaud's avant-garde leanings, but I always thought that was what made Crass great. I even wrote a letter to them and received a response from G.Sus! As I was coming out of high school, I was hanging out with people who turned me on to jungle and that rekindled my interest in electronic music. I basically became an avid record collector, historian and later, a critic (which I still kind of do). I'd have to say everything I've ever heard, whether Pinhas, The Stooges, The Jesus Lizard, Black Flag or the King of the Jungle compilations, Adrian Sherwood (especially Dub Syndicate) or Alec Empire (saw ATR live) have all led me down this path. For a while, I was following a UK band called Cosines. Loved them. Now people know Alice Hubble and she's great. Seeing Gary Numan several times was amazing, but seeing I Speak Machine open for him with a film probably steered us even more.

HP : Have you had other music published and if so where?

The Lady: I sang in a few punk bands that never went anywhere, may have played a little guitar in a couple of others, but personally never had any other music published.

The Sir: I've been in several bands, but I've also

been recording various types of music since I was 17. I started out doing my own misguided version of punk, then got heavily into noise, spacerock, free jazz, black metal, italo disco... all 4-track home recordings. I have an old Soundcloud page as Undiscovered Bum that has italo, moombaton and dubstep influence. Throughout my life, I've always just given copies to friends. I never cared to send out demo tapes to labels. I do this because I HAVE to. If I don't, I will literally go insane. It's my therapy and I love every single second of it.

HP: You write horror scripts, tell us more.

The Sir: Another thing I do to stay sane. I grew up listening to electronic music with my dad while he showed me horror movies. He actually was a horror host on TV in Los Angeles before I was born. Grimsley. He made it impossible for me to watch anything else. I also learned a lot about music from these films as I found the soundtracks by John Carpenter and Goblin from the Dario Argento films to be as good as the films themselves. Anyway, I became friends with a young auteur and he put me in his movies, then we shared an apartment and recorded music together (that's an entirely different story – Pope Goat VII). Later, we made some short films together (The Summoners, Watch Your Back) and edited books about horror movies together (the My Favorite Horror Movie trilogy). We have a feature going into production as I write this. I also write horror scripts for a YouTube channel, but I can't talk about that for some reason.

HP: At a residency with Film Noir Cinema in Greenpoint, New York you had people walk out during your Witchcraft collage. What is the collage and why do people find it offensive?

The Lady: It was a film collage containing clips of our favorite films that had to do with witchcraft and Satanism. Some of the best films on the subject, in our opinion, happen to contain sex and nudity: Don't Deliver Us from Evil, Alucarda, The Devils (my personal favorite), etc. So, when you're live playing synths over the original cut-out Rape of Christ scene, some people may find it offensive if they were thinking they were going to see clips from movies like The Craft.

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The Sir: I don't know why it offended people. At one point these drunk girls came in and sat right behind us and kept getting up and kicking our chairs. From all accounts, they looked like they didn't belong there. Our guess was that they saw the witchcraft poster and thought they would get Harry Potter, and instead got heaps of nudity, sacrilegious acts and violence. One of my friends flat out told me that the movies were too gory for him. It never bothered me, so I don't get it. Maybe they just hated our music!

HP: Do you intend to shock from the outset?

The Lady: No, but what a treat! An added bonus in my opinion.

The Sir: No. This is just our personalities, who we are. We love this stuff. Maybe other people find it shocking, but I find it comforting. It also takes a lot to shock me, and I don't always get that what's normal for me is normal for everyone else. Fortunately, I can watch a movie like Portraits of Andrea Palmer with The Lady and she'll be fine with it. I have male friends who would get squeamish. I'm still trying to get her into Lucifer Valentine's films...

HP: Who is Wondercap Records and how did you get connected with them?

The Sir: Wondercap is Chris Ashford, the guy who basically single-handedly started the DIY punk scene in Los Angeles when he released the first Germs single, "Forming." He went on to document great bands in LA like The Dils, The Eyes, The Skulls and The Controllers with his label What Records? Later, he started Iloki records where he focused on surf music while also releasing an excellent live album by Hawkwind. In the early 2000s, he formed Wondercap as a vehicle for his old punk friends to release their jazz albums and he put out CDs by DJ Bonebrake from X, Sam Phipps of Oingo Boingo and psychedelic drummer David Winogrand. Since then, he's worked closely with The Gears and now us. I've known Chris all my life. He's an old friend of my dad's and he literally watched me grow up, so he's basically family. When he offered to do it, we couldn't resist. Plus, it's pretty amazing to be part of a roster that broke ground over 40 years ago.

HP: What's next for Pide Ayuda?

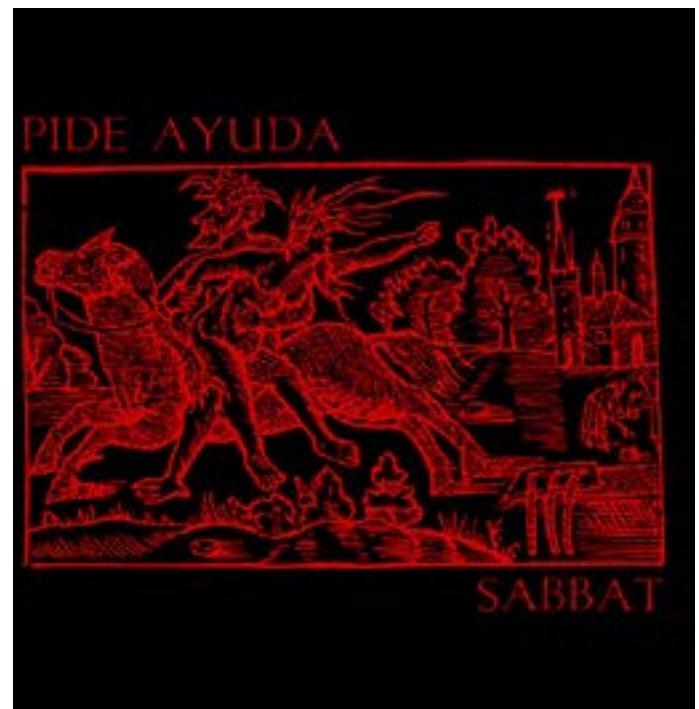
The Lady: Playing, recording, perhaps more

film collages. Here in NY there's still an uncertainty in the air due to the pandemic. I can't wait for things to clear up and play live shows again.

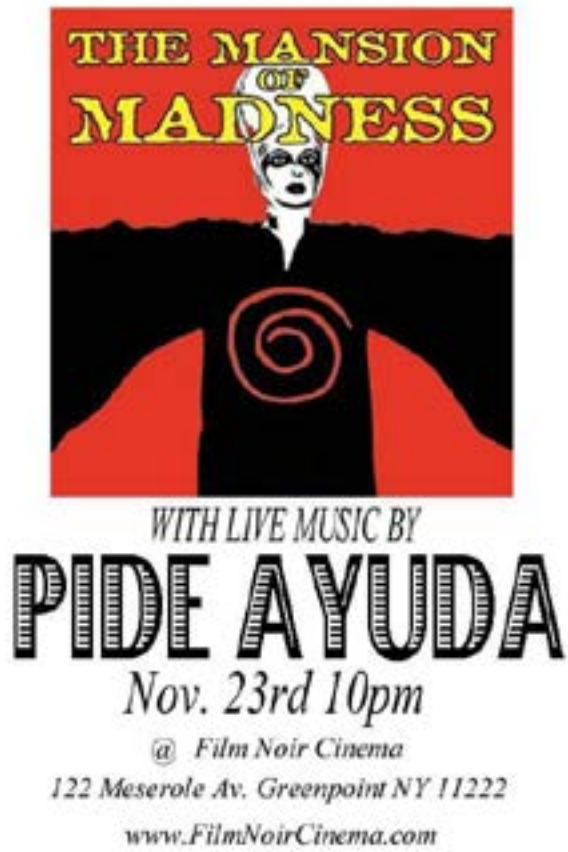
The Sir: Well, we just released a full-length called Sabbat, which is available across all streaming services like the "Anubis"/"Bastet" 7". It was recorded during COVID and we have three other albums recorded during the same period that are ready to go. There are old recordings on our Bandcamp page that we'll eventually make available for streaming as well. We record at least a track or two a week, so there's plenty to pull from. We also have numerous solo albums that we're going to release at some point, too. I even recorded one this past Sunday! I can't wait for all the Behringer-bashing cunts to hear it. I'll happily bask in the hate, especially since it's a lot more Vatican Shadow than whatever generic crap those idiots are listening to. By the way, has anyone released their music? Has anyone even heard their music?

[Wondercap Records](#)

[Pide Ayuda](#)



INTERVIEW





THE NEIL YOUNG ARCHIVE – EVERYBODY KNOWS THIS IS NOWHERE

Stu's interest in the Neil Young Archive is piqued by David Solomon of Qobuz and Phil Baker, CEO of the Neil Young Archives.

STU'S VIEWS

Last Thursday night I was watching David Solomon of Qobuz interview Phil Baker, CEO of The Neil Young Archives, and a very interesting and entertaining broadcast it was too. As well as his current position, Phil Baker was also the person that helped bring Neil Young's Pono player to market. I took a few things from the interview and it also piqued my interest enough to pop off and take a fresh look at Neil Young's Archive. So, this week's Stu's views is going to be a two-pronged affair where I look at a couple of the issues raised in the interview and also a bit of a look at the Neil Young Archive again, but this time with fresh ears and eyes.

Before I start this piece, which is likely to be part review, part appraisal, and a part stream of consciousness (nothing new on that latter part then, Stu), let

me say that I am a huge Neil Young fan. I got into him at a time when my friends in the early to mid-eighties were getting into heavy rock and the 'New Wave Of British Heavy Metal' and my first purchase was, if I remember correctly, After The Goldrush – now celebrating its 50th anniversary and available this coming Friday (19/3/2021) as a boxed edition. Most of my friends didn't get his music and saw it as throwback hippy crap – I was undeterred and consumed Mr Young's output voraciously. Look, I even think Trans is a fantastic record and well before its time – try listening to Daft Punk's Random Access Memories and then Trans and not see at least some similarities, despite over thirty years separating the two records.

A few years ago I was lucky enough to see Neil Young with



Crazy Horse (my favourite Young incarnation) at the Vieilles Charrues festival on July 21st 2013 – the eve of my birthday – with the festival being literally a ten-minute drive from our home. I was very excited about seeing Neil Young and wasn't disappointed – it was an absolutely blistering performance that had me captivated throughout. At one point, and the reason I'm bringing this up is that it is perhaps the most magical musical experience I have ever witnessed: the band and Neil left the stage, feedback was played from the backstage area, and newspapers were blown across the stage to give a desolate cityscape feel. Then over the PA came the famous "No Rain. No Rain" chant from Woodstock and I turned to Linette and said "That's mad, they are spraying water from the stage on us to coincide with that chant." Only they weren't. At that very moment the "No Rain" thing came of the speakers it began to rain. I will remember it forever and have goosebumps recounting the story even now – and I do tell that story almost as much as my Gil Scott-Heron, LSD, and Pinball story (no doubt you'll get to hear it if you read Stu's Views regularly)

ARCHIVES II

The reason this interview on Facebook was so timely is that The Neil Young Archive Vol II is

now available to stream on Qobuz – Volume 1 that spans (1963 to 1972) is also available. Volume II is a mammoth collection of music and performances from the time of the "Ditch Trilogy" of albums (1972-1976) *On the Beach*, *Tonight's The Night*, and *Zuma* – incidentally three of my favourite records from Neil Young and all are presented in High-Resolution. The Archives contains three previously released albums (the 2020 release *Homegrown*, plus the live albums *Tuscaloosa*, and *Roxy: Tonight's the Night*), and also another seven albums worth of material. That's a shed-load of music by anyone's standards, but within the Archive II's 139 tracks you have 49 that were previously unreleased, and 12 that are tracks that had previously never been heard before – so roughly half of Archives II is 'new' (but old, if you get my drift). Whether or not this will appeal only to die-hard Neil Young fans or a wider audience is debatable – even to enter into listening to this collection requires a modicum of commitment to the task in hand, and it's certainly no 'one-sitting' endeavour.

Young is clearly committed to high-resolution playback, and from the off on the Archives II it is clear that the sound quality is a step up in, for want of a better word, reality. I suppose given present company we ought to refer to this as an increase in fidelity. It's clearly better than CD on

the likes of Cortez the Killer where you can do a direct A/B test, but then “Better” is, of course, somewhat subjective, but listen on a decent system and there is an obvious jump in the things you look for when listening closely and analytically. There’s more separation, more detail and a more lifelike feel to the music you are listening to.

To buy the files it’s €199 but you can have the CD (RedBook obviously) for a good deal less. In this last regard I’m somewhat divided in my opinion – I want to have and to hold physical media as it feels like I actually ‘own’ something, but the hi-resolution files do sound better. This is obviously something that is not unique to Young or other artists’ material and is beyond the scope of this piece but that whole physical media/digitally stored/streamed media discussion is one I’ll look at in the near future. Now €199 is a chunk of money and so it depends on your level of wanting to own simply everything that an artist has done. In honesty, I’m much more likely to stick with the Qobuz files and perhaps the CDs sometime down the line.

NEIL YOUNG ARCHIVE

I first took a look at the Archive the very day it was launched. If I recall correctly the Archive was free for a year back then and then you could either choose to continue, or otherwise – I didn’t.

As I mentioned, I am a huge fan of Mr Young and was very excited at the prospect of being able to access and stream content hitherto unavailable to the masses, as well as more information about the recordings, access to information about past gig and much more. The NYA could perhaps be seen as a very in-depth Roon-like environment but only for one artist and with a far wider scope – there is content on there that is about politics etc (which I, incidentally, really like)

Sadly, I was disappointed with what I found the first time around. The interface confused the life out of me – it’s idiosyncratic to say the least and it was wholly incomplete, to the point where I would find something I thought would be interesting only to find nothing there. However, that was a good few years ago and the archive has

grown. I suppose the way to look at the Archive is not as a standalone entity that is plonked on a server and left to fester. Rather, it is a living and evolving entity that has content added almost constantly. It also gives you access to the man himself and his thoughts – Young abandoned Facebook some time ago and so one way to look at The Neil Young Archive is perhaps a kinda Facebook page (with a Roon-like experience) that has been on performance-enhancing drugs.

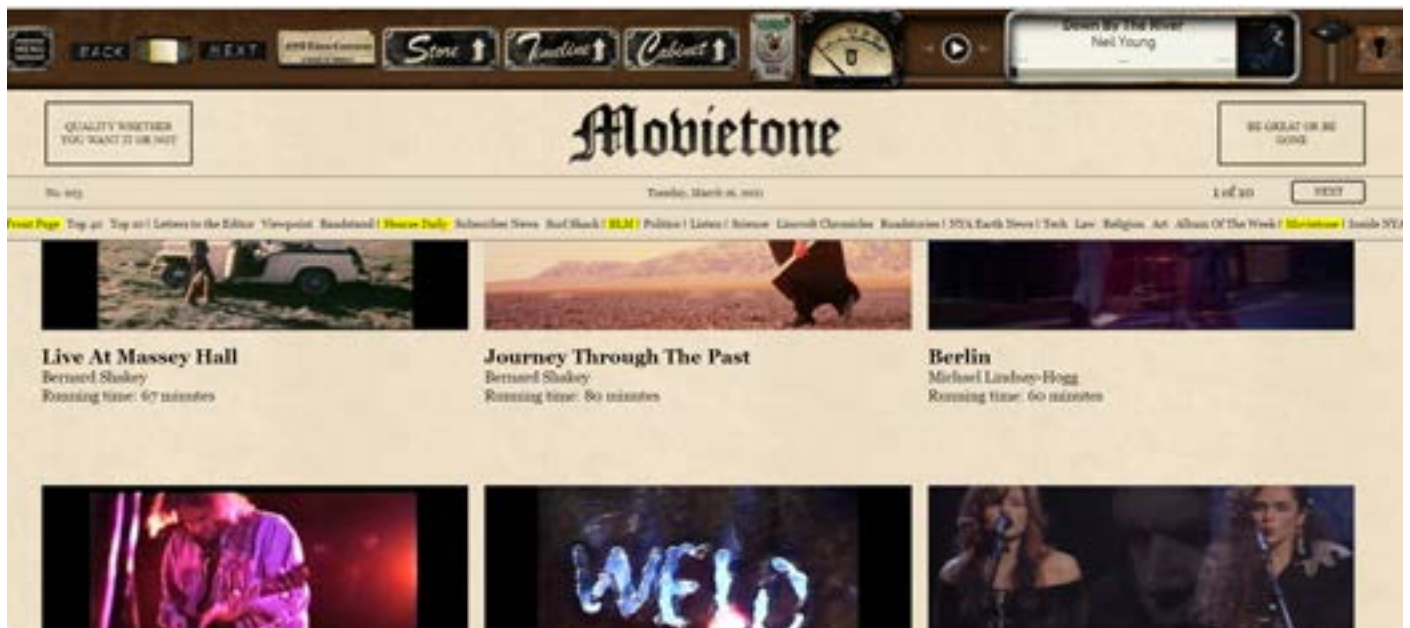
Cynics may well look at the archives and scream “Money Grab!”, and if I’m absolutely honest that thought has been a pretty persistent one in the back of my mind from the off with the archive, but Baker maintained in the David Solomon interview that Young’s intentions were honourable and that his main motivation behind this project was to bring quality streamable content to fans that is available nowhere else. The question must be asked what problem there is with artists making a living, anyway!

RUSTY

This has led me to sign up for an account and to revisit the archive. I signed up for the Rust account at \$39.99 a year and this gives me access to all the albums, infocards, timeline events, Hearse Theater screenings, and playlists that the Classic subscription (\$19.99/year) gives you plus On Demand videos, performance timeline and the ability to request your favourite live shows. There is another level at \$99.99 but I’m not entirely sure what the extra benefits are on that one if I’m absolutely honest.

First impressions are that the site hasn’t changed much and it is still a bit of a beast to get around. I get the whole wanting to make it feel a little (read a LOT) different, but I just feel that the layout is all a bit contrived and difficult to use – though with that said you do get used to it pretty quickly and I suppose it represents a different user experience that takes you away from that usual run-of-the-mill online UI design.

The main navigation is the MENU over on the left-hand side of the top-bar (for want of a better word) and it’s here you will find most of what you are looking for. There’s a search function, the home page, the file-cabinet, the time-line,



and the playlist. These represent the areas I reckon you are likely to access the NYA the most, but then you have links for the NYA Times-Contrarian, The Movietone Theater, and Hearse Theater. There are also links to where you can get info about how to get the best from the experience by way of optimising your audio set up on your computer – there is also an Android and iOS app that is available for free.

The NYA Times Contrarian is essentially an online newspaper (it looks like a newspaper) and this I think is a pretty interesting concept from Neil Young and co. Yes, there is a fair bit of stuff about Young but there are also articles about politics, environmental news, law, religion, art, and much more. It's an interesting read, actually, though I would suggest that this will depend on your political stance and whether you agree with the angle. There's also Letters To the Editor (self-explanatory), Viewpoint (op-ed pieces), and Bandstand (music-related articles).

The File Cabinet is a pretty cool place and has everything Young has done filed away in a UI that looks like a filing cabinet. It's a bit clunky to use but fascinating to rummage through. Click on a file, it opens and you can watch/listen to whatever it is you are interested in and then buy it (there is a cool feature to find your local record store or you can buy it online through Neil Young's Greedy Hand Store), read the lyrics if it's a song, or have a look at other documents that relate to the file you are looking at.

Linked to the File Cabinet is the Time-Line which is everything Young has done set out on a chronological time-line...

If you do subscribe you can also put together playlists of tunes which is pretty cool but so far in my life I have created exactly one playlist... ever!

SOUND QUALITY

It's very good if you are able to stream at full resolution, but for those that aren't you have a 320Kbs option available at the flick of a virtual switch. Our internet is pretty pants and I found I had to listen at this lower resolution a fair bit of the time. One thing that did bug me was that I wasn't able to stream content to our main system without having the computer connected, though I believe that integration is possible with BlueSound OS. You can get around this issue if you have Bluetooth on your DAC (I do) and you can then stream whatever album or tune to your main system, though not in high-resolution, which sort of defeats the object a bit. I also have an Auralic G1 streamer and using the app on the iPad I was able to play what I wanted very easily via Airplay and in my opinion in better quality, and by a good margin, than via Bluetooth.

The app is pretty good actually and you get all the albums in a grid format, the Timeline, The NYA Times Contrarian, Hearse Theater, and the Greedy Hand Store. Actually, I found it easier to navigate around what I fancied listening to via



the app, particularly on the iPad.

SUMMING UP

The Neil Young Archive is very interesting to explore and it's very cool to listen to very different versions of tunes you know well. It's a bit clunky on the computer, and a bit weird to use at first, but you can find yourself getting lost for hours in the sheer amount of content. Sound quality is very good when our connection allows for hi-resolution playback and Young should be applauded for taking this step of bringing hi-resolution music to the masses – even if that is a select mass.

I would have liked to have more access to the video content other than what is showing in the Movietone Theater or the Hearse Theatre, but then that is also part of what I rail against in the “on-demand” world too – having things show for limited periods is kind of old school, but kind of cool too.

There are a lot of BUY links on everything and I can't help but think that to a large extent the Archives are in no small way a tool for selling Young's output. Nothing wrong with that, of course.

Will I continue my subscription beyond this year – I don't know the answer to that, though the rolling annual charge may mean that I forget to cancel the subscription this time next year

anyway.

I am a fan of Neil Young, I just find that the scope of this Archive is very far-reaching (it's pretty daunting, really) and demands you focus on just the Young for days on end, though of course, you are able to pop in and out. With that said, I can see myself spending hours and hours exploring the NYA, as I can see many other fans too. Actually, the more I use it the more I start to love it...

I sort of love it and at times dislike it intensely. Others will feel the same, I'm sure.

Much like Neil Young himself then!

Not really a review but it gets my Editor's Choice Award simply because it's awesome... and annoying...but awesome too!

