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HIFICRITIC

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AUDIOVECTOR S1 AVANTGARDE
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BOWERS & WILKINS 800 DIAMOND
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HIFICRITIC
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My reviewing activities have mainly specialised in loudspeakers over the past thirty years, a situation that has its pluses and its minuses. The positives are that speakers are inherently very interesting and varied, and there are always plenty of new models to keep me busy.

The down side is that in several important respects at least, the loudspeaker is only as good as the signal with which it is fed. That in turn presents several paradoxes and poses a number of dilemmas.

In general and in principle I believe one should attempt to feed any review speaker with as good a signal as possible. But does it really make any sort of sense to review a pair of speakers costing a few hundred pounds on the end of a system costing tens of thousands? Or even (as high-end prices continue to escalate) hundreds of thousands of pounds?

There's no easy answer to this dilemma. The inexpensive speaker will almost certainly end up being fed from a relatively modest system. And since all such systems are bound to have significant performance compromises, these flaws will inevitably be transferred to the speakers. But they're going to vary from one system (and indeed location) to another, and they're not going to be the fault of the speaker.

It's therefore simply not possible to set up a 'representative' low cost system in order to review low cost speakers, because the only outcome will be that the low cost speaker gets blamed for the limitations of whatever system is used to drive it. For admittedly understandable reasons, the review will simply be 'wrong', at least in absolute terms.

One might argue that one shouldn't even try to review individual components, especially loudspeakers, and focus instead on complete systems. But that's nonsense, since the hi-fi business grew up on separate components; they're what manufacturers make, distributors market, and customers buy and want to read about. The complete system has its place, but that's mainly in the dealer's and customer's listening rooms.

There aren't any easy answers to the reviewer's dilemma, and I wouldn't have the arrogance to assume that I always get it right. Like most of my peers, I try to do my best, and am only as good as my last review. But there's no denying that the experience of the costly speaker cable I write about in *Subjective Sounds* provided a salutary warning, with rather worrying implications.

When I first tried the Bowers & Wilkins *800 Diamond*s, I was conscious that they did sound a bit bright and could sound a little 'edgy' with the wrong material. Once I'd substituted the *HiRez Moncayo* speaker cable for the 'cooking' *Moncayo* I normally use, not only had the 'edginess' gone away, but also the stereo focus had much improved.

While I don't regard price per se as a particularly accurate guide to sound quality, and reckon I can normally get decent performance at less-than-stratospheric prices by applying nous and knowhow, I'm starting to believe that the escalating cost of high-end equipment in recent years does pose potentially serious problems for the industry as a whole.

Paul Messenger
Editor

Sophia the Third

MARTIN COLLOMS ASSESSES THIS THIRD GENERATION VERSION OF WILSON AUDIO'S SINGLE-BOX FLOORSTANDER

MARTIN COLLOMS

Not too big; not too small: this classy looking iteration on Wilson Audio's well-established *Sophia* series looks rather promising. The first *Sophia* was introduced in 2001; *Sophia 2* arrived in 2003 (*HIFICRITIC Vol2 No5*), and now we have the *Sophia 3*. David Wilson relates the philosophy, design evolution and the personal involvement of staff members, reinforcing the all-US craftsman-built story at < http://www.wilsonaudio.com/product_html/sophia_movie.html>

This one-piece, three-way design, loosely based in size and shape on the enduring *Watt/Puppy* series, has proved very successful at bridging the gap between US open plan environments and generally smaller European acoustic spaces. Its sound balance tends to be more forgiving of room and room placement than, for example, the *Watt/Puppy* series.

While the original *Sophia* was pretty good, if a touch reticent on midrange dynamics for my taste, I found *Sophia 2* offered a significant overall improvement, indicating a leader of the pack and snapping at the heels of the more costly *Watt/Puppy Systems 7* and *8* alternatives.

The changes wrought in the latest version mean that the *Sophia 2* cannot be upgraded to the new specification, though a supportive trade-in policy is available. Furthermore, the new is currently listed at the same price as the old.

A broad technical background to the *Sophia* series is detailed in our *Sophia 2* review (Vol2 No5, and now available at HIFICRITIC.com). It's conceptually a single-box exposition of the classic *Watt/Puppy* two-box format. The distinctive pyramidal mid- treble sub-enclosure is slanted backwards to time-align the mid and treble drivers, and is integrated with a larger and more rectangular reflex-loaded bass enclosure.

It uses a solitary input terminal pair, and the whole assembly is firmly floor-coupled *via* adjustable heavy duty pointed steel cones. The loudspeaker is made from high grade composite materials, and comes painted in a wide choice of piano gloss finishes. Our review samples came in 'Desert Sand' – a warm tinted metallic silver – and custom colours are also available.

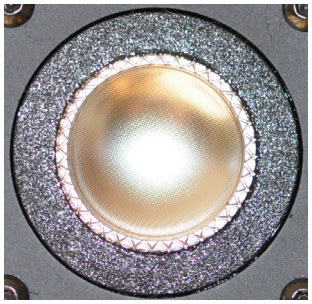
The 7in frame midrange unit with its 5.5in bonded cellulose fibre cone originally appeared in the flagship *Alexandria* model, and has gradually worked its way down the hierarchy to this *Sophia 3*. It operates over four octaves of broad midrange, 150Hz to 3kHz, and is therefore a dominant element in the overall sound. The carefully specified doped paper cone is matched to a half-roll surround selected for good energy termination. It has a thermally stable, high power voice coil and is built on a rigid non-reflective die-cast six point fixing chassis. This unit is perhaps the greatest change brought to the new design.

Bass is supplied by a high power, 10in (250mm) SEAS based driver fitted with a pure piston, curvilinear, layer-reinforced aluminium cone. Although I had found *Sophia 2*'s bass impressive for its natural balance and fine extension, the new model claims to improve on this by doubling the magnet size to provide a greater force factor. A subtle re-tune has improved bass extension, and improved subjective attack and power handling is said to match the superior dynamics of the new midrange unit better.

Focal's high sensitivity titanium foil tweeter, common to many Wilson designs, has a 25mm inverted dome assembly with a pleated edge, and is driven near its nodal circle by a low mass 19mm voice coil. It's back-loaded using a damped acoustic line to allow operation to lower frequencies and suppress the natural moving mass resonance. Run at relatively low power for its intrinsically high 94dB/W sensitivity, this tweeter has inherently low distortion and in my view consistently provides superior dynamic resolution.

Particular focus is placed on crossover and wiring factors which affect dynamics. The network is polymer potted to minimise microphony and damp vibration in components. Internal cabling is from Transparent. *Sophia 3*'s mid-to-treble crossover has been moved to the inside rear panel, facilitating access to the fusible protection/attenuation resistors. Few speakers have such protection, and it could be argued that it might be better to design without them, but after you have blown up a few speakers [*I can't recall blowing up a single speaker in more than thirty years!- Ed*], the ability to repair these Wilsons quickly takes on its full significance. The thermal stability of the protection resistors is now enhanced by bolting them to local heat sinks.

All this effort would be pointless if the supporting enclosure was not as inert and as massy as possible. Self-quieting, or resonance control and self-damping is the key to low cabinet noise, and this enclosure is made from 'high' and 'very high' density resin-based *X* and *S* materials with cellulose fibre reinforcement. Massive interlocking internal braces add control.



High tensile driver mountings are considered important and the highest density *S* panels, 20mm thick, are used for the driver mounting panels and the base.

Subtle revisions to geometry and slant angle have been introduced to align the design axis more closely to the listening seat, and improve the off-axis response. Deep felted anti-reflection/-diffraction treatment has been applied around the mid and treble drivers.

As before, the bass section is reflex loaded by a 75mm diameter by 210mm long machined-from-solid aluminium alloy port, 12mm thick, offset on the rear panel. The mid enclosure is also ported, to trim its lower roll-off, improve dynamic range, and equalise low frequency pressures.

Connection is made via heavy duty binding posts, ideal for spades. The claimed sensitivity is a moderate 87dB per '8ohm' watt, but the loading has a 3.1 ohm minimum (91Hz), so it should be a reasonable '4ohm' load. Though still rather low, its bigger *Sasha W/P* brother gives a far lower reading (though the latter does have 4dB higher sensitivity and is ultimately capable of higher sound levels).

A 20Hz - 22.5kHz +/-3dB frequency response is specified (large room average, third octave weighted, presumably optimally located). With the reflex port tuned to below 30Hz, this impressive lower frequency limit is not implausible. I would rate the system at up to 250W/channel for unclipped program power, and maximum in room sound levels for a pair on music will reach a substantial 106dBA, suitable for medium and larger rooms of up to 90 cubic metres. The speaker stands 1.1m high on its spiked feet, is 35cm wide by 48 cm deep, and weighs a substantial 75kg (165lb).

Sound Quality

Sophia 3's innate tonal balance and overall response is similar to *Sophia 2*, especially in respect of room placement. Lengthy experiments ended up placing it just a few inches from the previous model's location.

From first hearing one is aware that this speaker has not been designed for a theoretically based, artificially flattering on-axis frequency response. Rather, one hears a smooth highly natural acoustic voiced to allow timbre, perspective and a lively sense of air to permeate the listening area. The room acoustic seems to sing along with the speaker, rather than lag behind with a dulled and coloured facsimile of the direct sound.

While *Sophia 2* showed notably improved transparency over the original, the new model's quite remarkable clarity and transparency has again leapt ahead. First impressions, even with the rubber transit wheels in place, were of a dryer, crisper and faster bass. I really liked *Sophia 2*'s tuneful bass, even though it could sound a touch languorous in some rooms. That quality has been supplanted by a muscular weight, power and a harder edged quality that is still more truthful and very rewarding, especially with complex bass percussion.

While fine speakers should play any material well, Wilsons are founded on an appreciation of classical, real world instruments. Grand piano remains one of the most difficult to reproduce well, as it's hugely complex, saturated with highly tuned, voiced, and consonant harmonics associated with the power, richness, and astonishing dynamics of this instrument. Enclosure panel coloration and unwanted resonance ringing in bass and midrange cones can quickly destroy the naturalness of piano reproduction. The *Sophia 3* proved outstanding here, conveying the power, the dynamic expression and the rich triad timbres very well.

However, it lacked some subjective weight while on its wheels, and I looked forward to keying it properly to the floor. It was then that I discovered that the innate, natural timbre of this speaker hits the spot to a critical degree, and can readily be heard to go out of alignment with height variations. Initially, for convenience, I tried my 'inverted'

Avalon stainless steel spikes, and while these 'tripod' mounts were reasonably effective mechanically, they were 1.7in too short, whereas the wheels were 1.5in too high. In fact Wilson's 'diode' conical spike assemblies are correct, with about two thread widths exposed from the lock nut location.

The speaker sounded surprisingly spacious and articulate on its wheels, but sounded too thick and rich when dumped straight on to the floor. Using those conical feet, the sound was quite obviously just right. Finely layered detail fully emerged, while the noise floor was substantially lowered, revealing deep transparency and cleaner crisper transient edges. It was now about as neutral and accurate as you could wish, monitor class in the true sense of the word, with low colouration and great consistency on all kinds of music and sources.

And even the room sounded better too. How is this done? It seems that because the speaker has such good off-axis responses, the sound balance and timbre is nicely maintained in respect of both room reflections and the overall acoustic. In addition, the subjective timbre varies surprisingly little with height and seat position.

Like the still impressive Avalon *Diamond*, those warped sounding stereo images which off-axis listeners initially hear are somehow assimilated to a degree that impressions of quite good stereo focus and depth then reappear in the listener's mind, regardless of exact listener position.

When central, a listener hears exceptional focus, with height correctly presented, and clearly layered depth information. Here the *Sophia 3* was clearly better than the *Sophia 2*, and familiar recordings replayed with significantly more detail and air than before.

Piano remained slightly lightweight in tone, more Steinway than Bechstein, and with a hint of midrange colour. But it didn't ring on or 'bloom' significantly, so complex note trains remained very well differentiated, and one easily acclimatises to the residual mild colours, allowing the music to flow freely. The exceptional level of detail, done without exaggerating any part of the audio spectrum, makes this speaker musically fleet footed, driving along in an entertaining and beguiling manner.

Awkward tracks like that whining sax solo, the doubled rhythm pedal drum beat, the massed strings, or complex choral forces, are rendered without fuss, and without tripping up. It just sounds beautifully even tempered and consistent. High levels of detail were present throughout the audible frequency range, and while the speaker's bass, mid and treble could be specifically commended, it knits all three regions together seamlessly.

Higher frequencies reveal an almost shimmering delicacy and differentiation of cymbals: how they are struck and even the make of cymbal used. This sweet clear treble can makes some rivals sound as if they have grain in their coils and jitter in their mountings. You are minded to play disc after disc of CD or vinyl, marvelling at the highly resolved, layered imaging, and nuances of detail and harmony not usually heard in this class of speaker. A mark of greatness is its ability to play quietly and leave little wanting, yet deliver high levels without hardness or fatigue.

As we subsequently discovered, subjective errors were invariably traced back to the system components and the recordings, and the speakers effortlessly differentiated between the non-*e* and the brand new *e* versions of the two Krell *402*s reviewed in *Vol4 No2*.

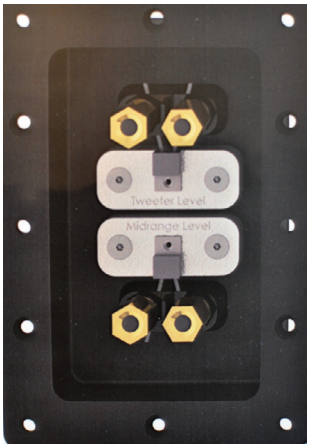
The full measure of its exceptional dynamic expression, image depth and micro detail is achieved by detaching the admittedly very well designed (and easily installed) grilles. On a top flight system the musical qualities which matter are now fully described. While not a superfast rocker – when compared with the fully active, group delay compensated Meridian *DSP 7200*, for example, the *Sophia 3* is audibly slower on its feet – but it still remains very good in its class, and delivers upbeat pace of sufficiently high quality that one quickly adjusts.

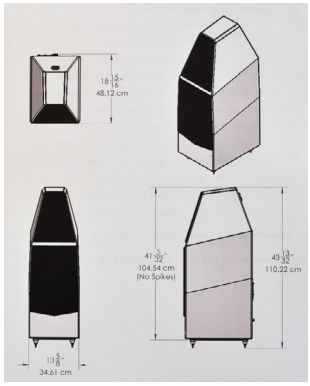
When the system is properly set up, the final stage of levelling and locking the feet has a remarkable effect, somehow pinning it all together. Dynamics and focus are maximised, while the bass gains edge definition, tunefulness and speed. It is at this point that you begin to realise just how good this loudspeaker really is: that it's quite capable of measuring the £50,000 system which is driving it, even when that system is made up from some of the finest audio components available in their sectors today.

On massive cathedral organ material it sounded rather like Wilson's much larger and more costly *MAXX3*, almost as extended in the low bass but understandably operating on a smaller scale, working a few dB down the volume range. Rewarding and near silent bass pressure tones right down to 25Hz were apparent, loud enough to be heard and very welcome on appropriate material. The impedance loading seemed about average and even 80W/ch integrated amplifiers showed promise, this speaker tending to sound a little louder than the 87dB/W specification suggests. I suspect that some more powerful valve power amplifiers would drive it too.

The System

Krell Evolution *402e* power amp driven from XTC *Pre II*, Audio Research *Reference 5*, Audio Note *M9 Phono* and Naim *Superline/SUPERCAP* pre-amps. Cartridges included a Koetsu *Urushi Vermillion* and an Audio Note *Io Gold*, in Naim *ARO* tone arms mounted on a Linn *LP12 Radikal/Keel* player on Finite Elemente *Pagode* stands. CD replay used a recently overhauled Naim *CDS3*, which sounded nicely freshened up. Cables were from Yter, Cardas and Transparent.





Lab Results

Wilson Audio speakers have given increasingly consistent sound and measurement results over the years, with particular emphasis on the seamless gluing together of the driver outputs, and the output from bass ports. In particular, the panoply of off axis responses are now carefully tailored so that the side wall, ceiling and floor reflections have a timbre which is largely consonant with the main listener directed response axis. The tapered upper section and the backward tilt are important ingredients in the design story.

This could be Wilson Audio's best so far, at least as far as measurements in my listening room are concerned. The room averaged response is astonishingly consistent, +1/-1.5dB (third octave averaged) from 50Hz to 4kHz and +/-4dB, 20Hz to 8kHz, with the usual expected roll-off towards higher frequencies due to the finite treble driver diameter. The overall response is extremely even and well balanced, in my view backing my contention that when room matched this design is of monitor accuracy – that is it may be used to judge absolute program quality.

I found the sensitivity a little better than specified, reading 87.5dB/W, probably due to the differential spacing of the slanted front panel, which pushes the drivers farther from the measuring locus for near measurement. The unweighted listening axis response measured a fine +/-3dB 31Hz to 16kHz, with that characteristic Focal moderate Q treble peak to +7db at 19.3kHz, at the edge of audibility. (A number of listeners did not find this on-axis feature significant, and in practice it merges well into the set of off-axis responses and the overall power response.) The tweeter extends nominally to 22kHz and then falls away rapidly to -20dB by 30kHz. (Many alternative metal tweeters have high Q responses, *eg* peaking up to +15dB at 25kHz.)

The crossover works very well, as confirmed by the consistency of the above- and below-axis responses, while in the important lateral plane the speaker is impressively uniform in response at 30, 45, and even at 60 degrees off axis it is still essentially flat to 9kHz. This is the foundation for that great uniformity of sound quality we heard on audition.

The crossover frequencies at 250Hz and 1.5kHz had very well tailored 12dB/octave slopes, nicely extended over several octaves, and at low frequencies the room-loaded practical 23Hz limit is well extended by any standards. No stray upper frequency resonant modes were present in the port output.

The waterfall graphic analysis for energy decay with frequency reveals an impressive performance. A near linear phase, time delay adjusted response was seen, with good time coherence and with clean transients indicated by fine early energy clearing. Some later residual is visible in the lower treble, probably emanating from the upper range of the mid driver, and that moderate 19kHz treble peak is clearly shown ringing on somewhat. I also carried out the waterfall response with the grilles in place, and while it was still a good result, careful comparison showed greater complexity and slower transient clearing with the grilles on, in my view matching the listening experience.

This speaker has twice the minimum impedance of the *Sasha W/P*, implying, within its power rating, less than half the peak current demand, which is good news for speaker cables, terminals and amplifiers. The lowest value is 3.1ohms, but at around 7ohms over most of audio range it's an average load overall, and an 'official' 4ohm rating. The port tuning can be seen at a low 24Hz, while the variation at low frequencies is moderate, and no odd glitches can be seen which would reveal stray resonances from either enclosure or driver. Phase angles are low, helping make the upper frequency range sound particularly consistent for different amplification.

With the grilles on there is a very small measured difference, and less than 0.25dB average treble attenuation, though physically they add additional suspended masses to the assembly. The very hard and rigid enclosure itself has a very low vibration readout, and is a notably low coloration example of the art.

Distortion is very low indeed. The spot figures shown in the table are nicely representative, and may be seen to be more akin to an amplifier than a loudspeaker, particularly in that timbre-influencing third harmonic. Is this low distortion responsible for the sweet silky sound that follows in the footsteps of Quad's *ESL63* electrostatic? The third harmonic results are simply outstanding, averaging 0.04% overall, while second harmonic is also consistently low, averaging 0.1% from 100Hz upwards at medium powers. Sure, distortion will rise to more

DISTORTION HARMONICS WITH LEVEL AND FREQUENCY

Frequency Hz	Sound level: 1m	2rd harmonic %	3rd harmonic %	Other harmonics %
25	90	1.5	0.6	0.3
25	105	15.5	11	N/A
40	105	11	9	N/A
40	90	0.35	0.13	0.3 , 4th
100	90	0.1	0.1	0.05
250	90	0.08	0.013	0.02
250	96	0.54	0.06	<<0.04
1k	86	0.12	0.03	<0.02
1k	90	0.23	0.08	<0.03
3k	90	0.09	0.02	<0.02
6k	90	0.08	0.03	<0.02
12k	80	0.03	0.01	<0.015
12k	90	0.31	0.02	<0.04

normal figures when belted at low frequencies, but even here it is very well behaved, and could take 100W sinewaves down to 24Hz without significant limiting or knocking.

I tried out the 'micro-tuning' installation adjustments available *via* the crossover patch bay terminals, and found it possible to make subtle but useful changes, for example up to 1.5dB over the broad midrange, 200Hz - 2kHz. In my room I preferred about 0.62dB of midrange lift, noting that I generally operated with the grilles detached. This may be obtained by substituting a nominal 4.7ohm resistor for the standard 5.9ohm. Dropping the treble resistor from 6ohm to 3.9ohm gets 1dB more output and *pro rata*.

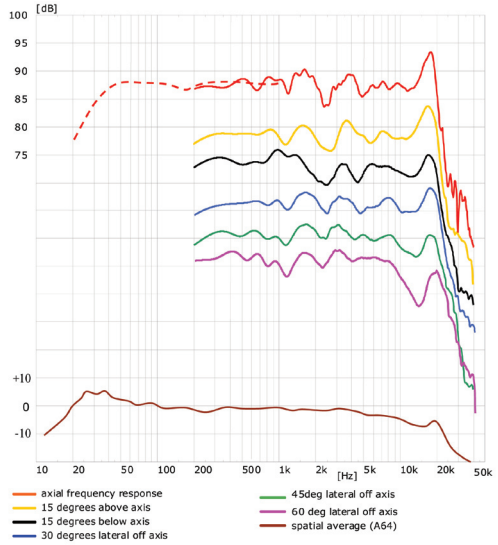
Conclusions

Sophia 3's sound quality is very like the *2*, yet subtly and beneficially enhanced in almost every respect. Nevertheless, it's perhaps debatable whether an existing *Sophia 2* owner should go through the costly upgrade process. For a new purchaser there is no debate: for its class, *Sophia 3* significantly improves on the previous standard of excellence. And anyone contemplating a *Sasha W/P*, but for anyone not requiring the greater power and dynamic headroom, or operating in a modest size environment, the *Sophia 3* may well be the better bet.

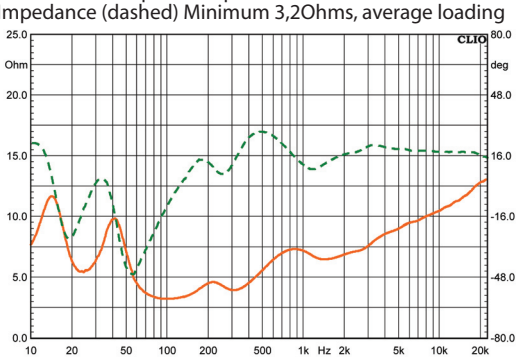
An important aspect of its achievement is the degree of subtlety, of smoothness, of uniformity and consistent timbre, all rendered with very good dynamics plus truly exceptional image depth and transparency. Add in the very wide in-room frequency response, the genuinely deep bass, and the more than acceptable amplifier loading with average sensitivity; include the very low distortion and consequent low listener fatigue, together with high power handling and substantial maximum sound levels, and you clearly have a winner.

The fine appearance, superb finish and build, the factory specified home installation and the micro-tuned frequency response option all add to the value of the package. This speaker makes good friends of its listeners. It competes very well with many great loudspeaker systems from £15,000 to £30,000, and is therefore highly recommended.

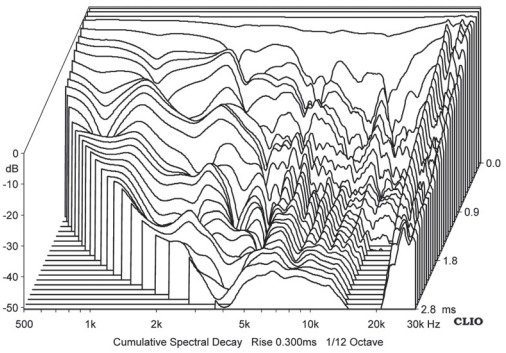
Wilson Audio Sophia 3 Frequency Response



Wilson Audio Sophia 3 Impedance and Phase of Impedance (dashed) Minimum 3,2Ohms, average loading



Wilson Audio Sophia 3 Waterfall Display for Energy Decay with Time and Frequency



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HIFICRITIC LOUDSPEAKER RESULTS

Make	Wilson Audio
Model	Sophia 3
Finishes	Wilson Gloss piano grade lacquer in Dark Titanium, Diamond Black, Mercedes Silver, Desert Silver, Sebring Blue, Grigio Titanio, or Coral Green. Others to order.
Type	Three driver, three-way, reflex loaded bass
Sensitivity for 2.83V	87.5dB measured
Amplifier loading	5ohms typical, 3.1ohm min: Average load factor
Frequency response, axial	28Hz to 21kHz +/-3.5dB, (listener axis): 'Very Good'
Frequency Response, off-axis	Excellent power response, see graphs and room response
Bass extension	26Hz for -6dB; 23Hz in-room: 'Very Good'
Max Loudness, in room	109dBA for a stereo pair, 80m3 room
Power rating, (max, min)	30 to 200W music program
Placement, floor standing, adjustment	Spike coupled, near free space location, note mid and treble fine tune option.
Size (WxHxD)	35 x 110 x 48cm
Weight	75kg (165lb)
Price	£16,990 (inc. installation)

Subjective Sounds

PAUL MESSENGER

Even though I still feel occasional twinges of guilt over my role in publishing the first English language article on the sound of connecting cables (by Jean Hiraga, *Hi-Fi News*, late 1970s), I've never really done much switching and swapping of cables myself.

That's partly because the Naim components I mostly use have unconventional connection socketry and protocols that don't easily lend themselves to alternatives. But it's also down to a certain cynicism and scepticism on my part. Although I've tried a number of different speaker cables over the years, some of them with very extravagant pricetags, all too often they've proved disappointing, and sometimes downright misleading. Furthermore, I generally try to avoid changing my system, as that's liable to interfere with my judgements on loudspeakers.

To the best of my increasingly fragile memory, I've only regularly used three loudspeaker cables over more than 20 years. Naim's own *NACA5* is a solid performer, and exceptional value for money. Put a zero onto the end of *NACA5*'s pricetag and you'll find both the current incumbents. The Chord Company's *Signature* has a similarly muscular character but a sweeter delivery, while Vertex AQ's *Moncayo* with its special damping blocks seems to enhance dynamic range and is the current favourite.

Or it was until Vertex AQ sent me its latest top-of-the-line *HiRez Moncayo* speaker cable. I'd reckoned that £1,500 was quite enough to spend on a 5m stereo speaker cable pair, having remained unimpressed when trying several much more costly examples. However, it only took a few seconds to realise that this new cable offered such a dramatic improvement in sound quality over the standard *Moncayo* that I was somehow going to have to get hold of a set.

I therefore struggled to suppress a shudder when told that a 2x5m terminated run of the new cable cost £10,800. Plenty of cables cost much more than that, of course. But I've not heard most of them, and have no reason to believe they're any better than this new Vertex AQ cable, which certainly does the business, and has a rather more convincing rationale than most I've encountered.

Compared to the regular copper *Moncayo*, voices sounded much sweeter, more coherent and natural. Stereo imaging is substantially improved in every respect, with less impression of boxiness, much tighter central focus, and much more convincing depth perspectives. Most important of all, the 'hash floor' seemed to have dropped quite dramatically, giving a much wider 'real world' dynamic range. Tonally it sounds a little bright, but not uncomfortably so, while time coherence – and hence the freedom from 'time-smear' – is also significantly improved.

The game-breaker came with the new B&W *800 Diamond* (reviewed elsewhere in this issue). I have enormous respect for this speaker, but its exceptionally revealing nature can become a little uncomfortable at times. Rather it could become uncomfortable until I replaced the regular *Moncayo* cables with the *HiRez* versions, whereupon the improved coherence, imaging and dynamic range of both speakers and cables were very clearly revealed. Furthermore, it became much easier to hear differences between source and amplification components.

The reasons for the superior performance are several. Each *HiRez* cable uses six silver Teflon-insulated solid core conductors and two *HiRez* acoustic absorption labyrinths per channel, but perhaps the most important innovations are the multiple (and largely unrevealed) techniques that the cable uses to suppress electromagnetic and radio frequency interference (EMI and RFI).

However the trick is done, it's remarkably effective, so I'm going to have to start saving up. I'm sure I'll get a good discount from Vertex AQ, but journalists are suffering financially in this internet dominated world. I just hope I won't have to ask my son to postpone his wedding plans…