

Quad Revela 2

Bigger brother to the standmount two-way Revela 1, the three-way '2 lifts Quad's engineering into a floorstander
 Review: **Ken Kessler Lab: Paul Miller**

Quad's Revela 1 [HFN Mar '24] is a classic two-way standmount offered at £1799 per pair minus supports, or £2498 if bought as a set. The floorstanding Revela 2 tested here sells for another £1k at £3499, complete with fitted, spiked plinth. The basic technology defines both speakers, but for the Revela 2 it has been doubled up and more. The test, then, is to discover how much extra that £1000 delivers...

To recap, the Revela 1 combines a 27x60mm 'True Ribbon' tweeter and a 165mm Reveal advanced fibre composite cone unit crossing over at 2.9kHz, all in a cabinet occupying 395x246x280mm (hwd). For the Revela 2, the same drivers are fitted, plus a second 165mm woofer and a 150mm midrange. The latter is also a Reveal cone, but crossing over at 650Hz and 3.8kHz [see PM's boxout, p69]. Of course, as someone who dreams of Quad's original corner ribbon and has always loved Kelly (Decca) ribbon tweeters, I would have liked to see the manufacturer produce a midrange ribbon to supplement the tweeter here! Another difference? The Revela 1 has one rear-firing port, while the Revela 2 has, yes, two, so proximity to the rear wall is inadvisable. I found them to 'breathe' freely with at least 1m free space on all sides, more being better.

FLOOR SHOW

The speaker's 965x246x280mm cabinet (hwd) has the aforementioned plinth pre-fitted, and a massive stainless steel adjustable spike in each corner. The carbon steel plinth increases the footprint to 350x325mm (wd), and the spikes are easy to adjust for levelling the speaker, then tightened from above. A polished metal finish contrasts nicely with the black stands – a tasteful touch of hi-fi 'bling'.

Generously, Quad includes metal discs, called 'spike seats', to place under the spikes (which aren't all that lacerating to begin with) should the speakers be sited

on wooden, tiled or other hard floors. Although I used the Revela 2s on carpets, I imagine that, like Wilson Audio's not dissimilar Sliders, the spike seats would make moving the speakers around on hard floors a doddle – but check first that they don't scar the floor should you slide them.

AMPS AND WATTS

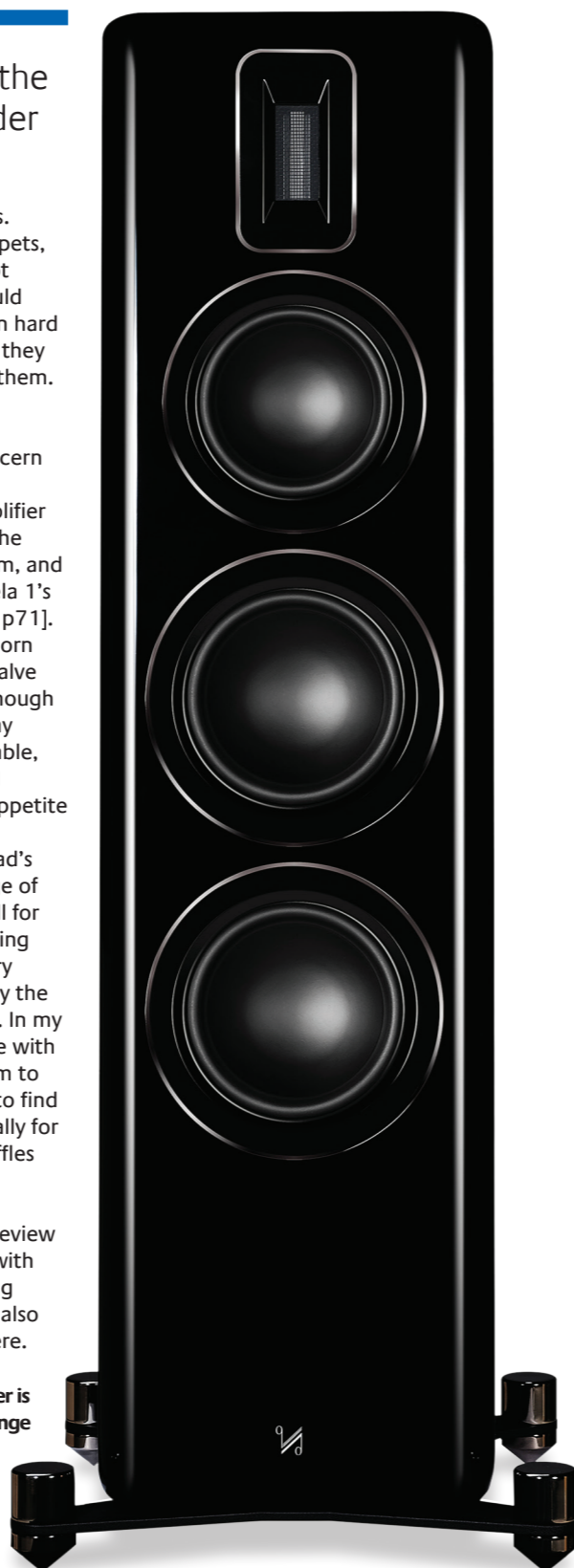
Positioning is the only real setup concern as the Revela 2s are single-wired via superb multi-way binding posts. Amplifier matching is not that demanding as the claimed impedance is an easy 4-6ohm, and sensitivity 3dB greater than the Revela 1's 86dB, at 89dB [see PM's Lab Report, p71]. I know that doesn't impress fans of horn speakers, but I ran these with 15W valve

amps and this was enough to blast out levels way beyond the comfortable, whereas the Revela 1 readily revealed an appetite for greater wattage.

A floor plan in Quad's manual shows a range of toe-in that works well for both the standmount and floorstanding Revelas, although the degree will vary according to room size and especially the listener's distance from the speakers. In my case it was a near-equilateral triangle with 2.2m between the cabinets and 2.5m to the hot seat, and it didn't take long to find they performed of their best, especially for soundstage recreation, when the baffles faced the seat without exposing any glimpses of either of the sides.

This was easy to detect with the review samples, which came in gloss black with a wraparound real wood veneer filling the side and back panels. All-black is also available, but that might be too severe.

RIGHT: Quad's 27x60mm ribbon tweeter is married to a new 150mm 'Reveal' midrange driver, with damped pulp/aramid fibre cone, in addition to two, larger 165mm 'Reveal' drivers here taking on bass duties [see boxout, p69]. A metal baseplate/outtrigger improves stability



Then again, the Revela 2s' supplied magnetic charcoal grey grilles provide some visual relief, should you use them. As they do have a mildly audible effect, I suspect most audiophiles won't.

Because of the precision of these speakers' image placement and the way the treble is affected by toe-in, I cannot stress enough how important positioning is for a serious solo listener. Off-axis behaviour in truth is *never* an issue in the context of listening casually, or for groups, eg, parties, so I would optimise the toe-in

TWO- OR THREE-WAY?

Given that Quad's custom 165mm bass/mid unit has already proven its mettle in a two-way configuration with the brand's ribbon tweeter [HFN Mar '24], the stretch to a floorstander could have gone one of two ways. The simplest route would involve adding one or two additional 165mm units into a three- or four-driver two-and-a-half way solution. All three drivers would support the bass, leaving the upper cone to work through the midrange before crossing over to the ribbon at ~2.9kHz. However, designer Peter Comeau has elected for a true three-way in his vision for the Revela 2, introducing an entirely new 150mm variant of the 'advanced fibre composite cone' to handle the critical 650Hz-3.8kHz midrange.

'The reasons for a three-way are twofold', Peter explains. 'A two-and-a-half way design would leave all the bass units in a common enclosure where the unit handling the midrange would still remain subject to large (bass) excursions. By contrast, our three-way enables the midrange unit (in its own sub-enclosure) to handle all the musical detail from 650Hz through the upper midrange and lower treble and, as its excursion is so small, it is capable of revealing this detail more accurately. That leaves the two bass units to provide the extra sensitivity and improve bass extension.' Moreover, as illustrated by the Revela 1, a smooth Directivity Index (DI) ensures reflections from the side walls offer a similar character to the direct sound – key in realising a low coloration performance. Says Peter, 'We found that reducing the bass/mid cone diameter from 165mm to 150mm gave a superior DI, better suited to a pure midrange unit'. PM

for the primary seat. If this jars your beliefs, ask yourself this: have you ever heard any system which sounds as good off-axis? Set them up, then, for your own listening pleasure.

READY, AIM, FIRE

Like any true high-end speaker, once positioned everything falls into place, like icons snapping to a grid on a smartphone screen. So able to be focused is the Revela 2 that it demands, despite being a speaker in a single cabinet with its drivers in a vertical array, setting up with the same attention to detail used for full-range planar systems (eg, Magneplanars) or multi-enclosure speakers from the likes of Focal and Wilson Audio. The most minimalist of recordings, with but two or three instruments or voices, benefitted as much from the Revela 2's three-dimensional prowess as did more cluttered tracks which require an open spread if you wish to isolate the sounds.

Finding a mint first-pressing LP of Dusty Springfield's *Dusty... Definitely* [Philips SBL7864], I fed it into the Revela 2s even knowing that sonically it was only so-so, certainly no match for *Dusty In Memphis*. Despite this, the Revela 2 instantly reminded me of the Revela 1, only it was grander, more imposing, more impressive. It was as if Quad's two-way sibling was a scale model (half-scale, that is) of the more

bountiful Revela 2, which yielded deeper bass, an easily discernible expansion of the soundstage by more than a few inches and no loss of absolute control down below.

What impressed the most, given my predilection for vocals, was the way every breathy note that issued from Dusty's throat had such presence that she seemed to hover above the cabinets, possibly at what was her actual height. I don't think Quad will mind me saying this, but I was reminded of ESL-57 electrostatics [HFN Nov '57 & May '10] when it came to openness and the ability of the speaker to disappear and the musicians to have lifelike forms. The differences, however, were bass extension and realistic levels no ESL-57 could ever hope to achieve.

IN THE LIMELIGHT

Without resorting to audiophile pressings, I followed Dusty Springfield with a cluster of mainly unplugged US folk albums of the hootenanny era, even though the genre consisted of sanitised music compared to Bob Dylan, Joan Baez, Phil Ochs, *et al*. Because these groups were shifting records by the millions, their albums were exceptionally well-recorded, as evinced by the Revela 2s filling the room with the amazing sessions on the Limelites' eponymous debut [Elektra ETC-1509 open-reel tape] of 1960.

In addition to perfectly woody-sounding acoustic guitars, the trio added odd sound effects à la Spike Jones which seemed to appear out of nowhere and really startle. ↻



LEFT: Quad's three-way Linkwitz-Riley crossover network is not split and so a single pair of 4mm cable binding posts are fitted below the two rear-facing reflex ports. Quad is not alone in this approach, precluding bi-wiring/amping

present one of my guitar-playing friends to see if they could tell which make was being played.

If Quad's goal with the Revela 2 wasn't just to revive the brand's ribbon of 70-plus years ago but to create a box-type speaker that sounds like a dipole or panel, two later studio creations deemed it a success. Both Dr. John's *In The Right Place* [Analogue Productions CAPA 006 SA SACD] and Bonnie Raitt's *The Glow* [Warner Bros 8 122-78383-2 CD] – two albums recorded during the 1970s and therefore probably all-solid-state – are great for evaluating attack, bass power and, again, distinctive vocals.

HEALTH KICK

Dr. John's classic track, 'Such A Night', was so punchy, so vivid, and with that nasal drawl so swampy that I put it on repeat for a good half-hour. The piano was reproduced with such realism that I went into

our lounge to bang out a few chords on my wife's Chappell & Co upright. As for Bonnie Raitt, her slide guitar, the rhythm section, especially the percussion – all were conveyed with impact, mass and depth, so that I was driven to add

(mentally) another star to an all-time favourite. The Revela 2 revelled and revealed. Even if you're not in the market, you need to hear these. 🎧

Bells and foghorns and such enjoyed realism that would enhance a home cinema session. Gimmicks aside, these speakers were so open and revealing that each of the Limeliter's three vocalists had his own space, and the listener could either wallow in the blend of their harmonies or concentrate with admirable ease on the individual voices.

RIBBON REVIVAL

The Revela 2's performance was similarly superb with The Mitchell Trio's set *Violets Of Dawn* [Mercury STX 61067], recorded in 1965 (post-Chad) and featuring a young John Denver, whose instantly recognisable voice made aural dissection even simpler. Again, the unplugged instruments had body and the right resonances, my only regret being that I didn't have

HI-FI NEWS VERDICT

Following the dazzling Revela 1, the Revela 2 enhances every sonic parameter you could address. More to the point, given that it occupies a nearly identical footprint to the Revela 1 on its dedicated stands, there's only one reason to buy the latter over the Revela 2, and that's budget. Upon comparing this to a £10k reference, the Law of Diminishing Returns slapped me in the face – this speaker is incredible!

Sound Quality: 90%

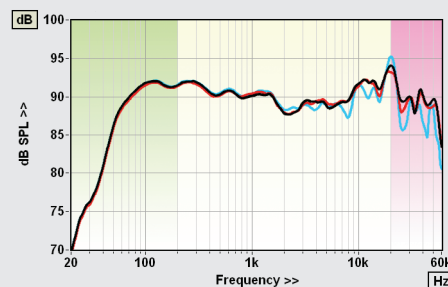


LAB REPORT

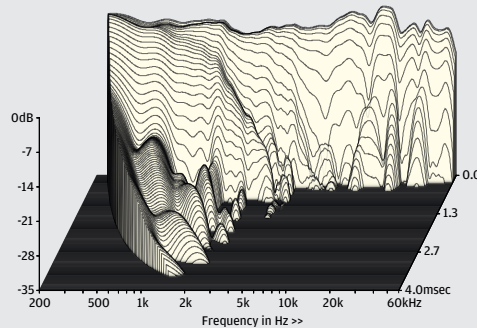
QUAD REVELA 2

Employing the same ribbon tweeter and two of the 165mm bass/mid units featured in the Revela 1 [HFN Mar '24], it's the 650Hz/3.8kHz crossover frequencies (vs. 2.9kHz in the Revela 1) that fundamentally shift each driver's workload. For example, the woofers are shorn of two upper octaves, and with their high 55Hz port tuning (x2) also have a steeper roll-off, delivering a diffraction-corrected extension of 49Hz (-6dB re. 200Hz) – far deeper bass tuning will be realised with near (rear) wall siting. At the top-end, the ribbon tweeter still sails out to 60kHz [-6dB re. 10kHz, pink shaded area, Graph 1] after a gradual rise to 20kHz, offsetting the falling power response of the ribbon due to its reduced vertical dispersion. The latter, and dip in the middle of the 'filler' 150mm mid unit's bandpass, largely accounts for the response errors of ±3.2dB and ±2.8dB, respectively. Meanwhile, the 0.65dB pair matching (all re. 200Hz-20kHz) is very tight.

Sensitivity is higher than Quad's rated 89dB at 90.3dB/1kHz (or 89.5dB from 500Hz-8kHz), and while distortion is good to within ~0.3% from 200Hz-20kHz (re. 90dB/1m), the relatively benign-looking CSD waterfall [Graph 2, below] also indicates few breakup modes in either the cabinet or drivers. Like the Revela 1, the '2 is only marginally tougher to drive than Quad's '6ohm nominal/3.9ohm minimum' might suggest – the minimum being closer to 3.2ohm (at 178Hz) while the sub-100Hz phase angles of +42°/-56° contribute to a 1.4ohm/120Hz EPDR (equivalent peak dissipation resistance). Above the 650Hz crossover the load never drops below 6.0ohm (EPDR is >2.9ohm) so the Revela 2 will never be especially taxing with high strings or brass... PM



ABOVE: Response inc. nearfield summed drivers/ports [green], freefield corrected to 1m at 2.83V [yellow], ultrasonic [pink]. Left, black; right, red; grille, blue



ABOVE: Cabinet looks well braced and while there are some mild modes at 500Hz-2kHz, the ribbon is 'clean'

HI-FI NEWS SPECIFICATIONS

Sensitivity (SPL/1m/2.83V - 1kHz/Mean/IEC)	90.3dB / 89.5dB / 88.5dB
Impedance modulus: minimum & maximum (20Hz-20kHz)	3.24ohm @ 178Hz 16.3ohm @ 26.5Hz
Impedance phase: minimum & maximum (20Hz-20kHz)	-56° @ 88Hz +42° @ 18Hz (41° @ 20Hz)
Pair matching/Resp. error (200Hz-20kHz)	0.65dB / ±3.2dB/±2.8dB
LF/HF extension (-6dB ref 200Hz/10kHz)	49Hz / 59.7kHz/56.5kHz
THD 100Hz/1kHz/10kHz (for 90dB SPL/1m)	0.55% / 0.15% / 0.25%
Dimensions (HWD with plinth) / Weight	962x350x320mm / 23kg

