

Revel Performa F208

The flagship in Revel's recently launched Performa 3 range packs a punch with its twin 200mm woofers
 Review: **John Bamford** Lab: **Keith Howard**

How much money does a music lover need to spend in order to own a pair of monitors that can rightly be deemed 'high-end'? I've been racking my brains these past few weeks attempting to determine precisely the qualities a loudspeaker must possess in order to qualify as such, while living with this handsome pair of Revel F208 floorstanders, which are the top model in the US company's recently-introduced Performa 3 range.

Since 2005, Performa series models have represented Revel's 'middle-market' speakers. At higher prices the company markets more luxurious designs called Ultima: the flagship Ultima Salon 2 is a four-way currently priced at £20,000 a pair. That's the sort of speaker an audiophile dreams of owning! (Revel also makes a more affordable range of less elaborately constructed models in the form of its Concerta series of on-wall 'lifestyle' speakers.)

The California-based R&D team has spent the past three years completely revamping its middle-range Performas. Now called Performa 3, they began shipping to the UK early this year. There are nine models in total if you include the two subwoofers which accompany the various bookshelf, centre and surround speakers for multichannel AV systems.

Two speakers in the Performa 3 range are floorstanders: the £3300 F206 slim tower [HFN April '14] and this F208. As you might expect to hear from any manufacturer's marketing department, we're told they've been designed not simply to offer a step up in performance from Revel's cheaper speakers but also to give more than a taste of the company's far more expensive models. Prices have been minimised by sub-contracting the manufacturing to Indonesia rather than building them locally.

Like the F206, the F208 is a three-way reflex design, its port venting on the front

baffle below the drivers. In its 71litre enclosure it employs the same 25mm aluminium dome tweeter and 130mm aluminium-coned midrange unit as the F206; however, its smaller sibling's two 165mm bass drivers are replaced by two larger 200mm woofers. Crossover points are at 270Hz and 2.2kHz.

FINE-TUNING OPTIONS

And where the F206 has just a single set of input terminals, the F208's crossover has been split to allow bi-wiring/amping. Furthermore, the terminal block at the rear sports controls for fine-tuning bass and treble levels. A five-position switch alters the tweeter's output by ± 0.5 and 1dB, with a 'flat' setting in its centre position.

A low frequency compensation switch, which can be set to 'normal' or 'boundary', reduces bass output should the speaker be positioned in close proximity (less than half a metre or so) to

a boundary wall. LF contouring can be further tweaked with supplied foam bungs to plug the ports.

Revel's drivers for its Performa 3s are all-new designs. The woofer and midrange units are founded on cast aluminium chassis, their motor units employing large diameter voice coils and proprietary copper ring caps which the company claims lessens distortion at the lower frequency range of their operating windows by reducing inductance and flux modulation. Additionally the woofer features a steel ring to minimise LF distortion. The drivers' diaphragms are formed of aluminium and ribbed with tangential dents designed to shift cone breakup well beyond the drivers' operational bands.

RIGHT: The F208's subtly curved enclosure houses two 200mm aluminium-coned woofers alongside the 130mm midrange and 25mm aluminium dome tweeter in a waveguide also employed in Revel's smaller Performa F206

'Hefty chunks of bass from the F208 thumped me in the solar plexus'





BUILDING A BRAND

In our appraisal of the Performa F206 [HFN Apr '14] we highlighted that Revel is an unusual American high-end marque, in that where most makers of esoteric components are small privately owned companies, Revel is owned by one of the most powerful organisations in the industry: Harman International which also owns JBL, AKG, Lexicon and Mark Levinson. The Harman group employs some 13,000 people across 30-plus locations worldwide, with net sales for fiscal year 2013 quoted at \$4.3 billion. Harman once owned Infinity as well, but founded Revel in 1996 to create a new premium speaker brand that could naturally partner Mark Levinson's luxurious electronics components. Kevin Voecks, former chief designer of Snell Acoustics' speakers, was brought in as Revel's manager of product development, with Mark Glazer (who'd been an Infinity engineer) appointed chief systems engineer.

Meanwhile the 25mm tweeter common across the entire Performa 3 range is an aluminium dome design with a high-compliance surround and a vented rear chamber, the unit boasting an uncommonly low mechanical resonance of around 800Hz. Revel has employed a new mathematical model in designing the tweeter's waveguide which aims to widen dispersion at high frequencies and is claimed to match the tweeter's dispersion to that of the midrange driver around the crossover point.

In its walnut finish (it also comes in high gloss piano black) – and due in no small part to those chunky 200mm woofers in an unfashionably wide baffle unlike today's myriad 'slim towers' – the F208 appears charmingly old-fashioned, I thought. But it is bound to dominate most average-sized listening rooms. The enclosure is footed with a slightly flared base plate to maintain good stability, below which are four threaded inserts for the supplied feet. These are double-ended, giving the choice of carpet-piercing spikes or rounded ends better suited to hard floors.

RICH AND VELVETY

The F208 really does sound like a big loudspeaker, with tremendous low frequency extension and bass weight. It has a rich and velvety tonality; the speaker's top end is lusciously smooth and 'relaxed' and notably free of undue sibilance on vocals. Shelby Lynne's close-miked voice in 'Anyone Who Had A Heart' and 'You Don't Have to Say You Love Me' from her 2008 album *Just A Little Lovin'* [Lost Highway 0602517448254], was finely-etched and sweet-toned. The speaker's fine clarity revealed delicious nuances in her vocal phrasing, while proving adequately transparent to reveal the recording's shortcomings as well. The drum kit and bass guitar were

wonderfully painted, the ringing of the cymbals fading beautifully to silence – although the compression in Lynne's vocal recording was all too obvious.

DYNAMIC EFFORTLESSNESS

As well as capable of serving up oodles of low-end grunt when the occasion demands, those twin woofers imbue a refreshing sense of dynamic effortlessness in the bass. Vigorously bowed basses and climactic wallops of timpani were handled easily by the F208 as I enjoyed tracks from Reference Recordings' *Exotic Dances From The Opera* at 96kHz/24-bit [RR71], with the Minnesota Orchestra under Eiji Oue captured in their Orchestra Hall. Rimsky-Korsakov's rollicking 'Dance of the Tumblers' from *The Snow Maiden* sounded absolutely epic, while Tchaikovsky's 'Hopak' from *Mazepa* was equally thrilling as the F208 pressurised my listening room, hefty chunks of bass thumping me in the solar plexus.

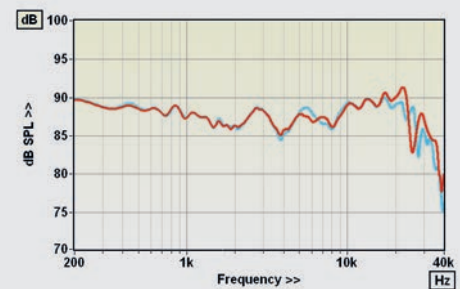
These 'widescreen' recordings of an orchestra at full throttle were handled with aplomb, allowing the speaker to demonstrate its ability to draw out a broad and deep soundstage with good image specificity and tangible placement of instruments. I thought the perceived depth of image exceptional, the sound never appearing spatially squashed thanks to the speaker's admirable dynamic performance from *pianissimo* to *forte*. This was especially so with orchestral music, where the speaker's ability to resolve low-level information at the back of the stage made all the difference between very good and really tremendous sound reproduction.

I found the F208 to be a speaker I could listen to for hours without ever feeling short-changed. I felt the same way when I lived with Dali's Epicon 8 a couple of years back [HFN Sep '12] – however, this Revel Performa is less than half ⇨

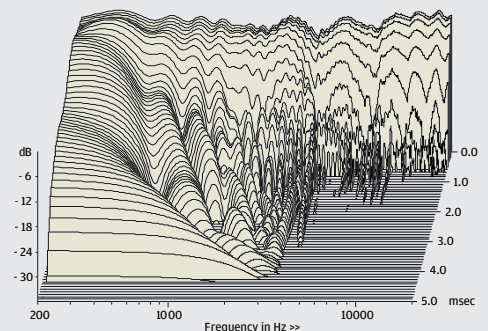
REVEL PERFORMA F208

Revel claims 88.5dB sensitivity for the Performa F208, which accords well with our pink noise figure of 88.2dB over the frequency range 200Hz-20kHz. We take issue with the nominal 8ohm impedance, though: a minimum modulus of 3.3ohm indicates that a 4ohm rating would be more appropriate. This low minimum modulus might have made the F208 quite a challenging load but the impedance phase angles are unusually well controlled, as a result of which the EPDR (equivalent peak dissipation resistance) drops to a minimum of 1.8ohm – typical of modern floorstanders, and probably less significant because it occurs at a high 2.5kHz. There is also a second dip to 2.0ohm at 63Hz, though.

The forward frequency responses [Graph 1, below] were measured on the axis of the midrange unit rather than the tweeter as this is nearer typical seated ear level. Although the frequency response errors are commendably small for a passive loudspeaker at ± 2.8 dB for the review pair, nonetheless the response has a clear concave trend with a suppressed presence band. This can be expected to soften the sound and also recess the stereo image. Pair matching error, also 200Hz-20kHz, was fine at ± 1.1 dB and bass extension – reflecting the size of cabinet – unusually good at 40Hz (-6dB re. 200Hz). The bass roll-off begins gently below 100Hz and doesn't become steeper until below 30Hz, which also bodes well for clean bass transient capability. The CSD waterfall [Graph 2, below] evinces fast initial energy decay across the spectrum and a treble largely clean of resonances. There are hints of modes at lower frequencies but these cannot be resolved reliably. KH



ABOVE: Pair matching is good but the forward response trend shows a recessed presence band



ABOVE: Cabinet resonances are very well controlled as are those associated with the mid and treble drivers

LEFT: Rear panel features LF compensation and tweeter level switches for fine-tuning the sound balance to taste. Bi-wire/amp terminals are provided with gold-plated links

Despite a lack of a degree of sharpness to leading edges, music still sounded vibrant and full of life. Aided by the realistic scale that such a large floorstander provides, there appeared an innate rightness that made it easy to listen for hours at a time, with the music flowing in an endearing manner whatever the genre. And the Performa F208s do still provide some semblance of analytical monitoring when challenged to impress.

FAST AND INTENSE

Demanding 'live take' recordings such as *James Newton Howard & Friends* [Sheffield Lab CD-23] can often appear brittle and too brightly-lit via many replay systems. The F208 delivered this with tremendous girth and vigour – and musical realism. The crashing cymbals of drummer Jeff Porcaro were handled with composure, while the snap of the snare and the thwacks of the over-damped kick-drum sounded dramatically fast and intense.

Returning to the burning issue of what a speaker has to be – or rather *sound* like – in order for it to rightly sport a 'high-end' badge: if you consider it should be engaging and reveal textures, timbres, tonal colours and dynamic swings, then Revel's F208 certainly passes muster. Rather than dissecting and deconstructing, it gets out of the way to let the music speak for itself. ⬇

HI-FI NEWS VERDICT

If you can accommodate a speaker as imposing as this and are looking for a floorstander that imbues music with keen energy while avoiding hyped aggression, the F208 should be right up your street. Revel's engineers have balanced it to sound creamy and easy-going, while maintaining fine transparency and plenty of detail at the top end – and its meaty bass delivery is mightily visceral when the music requires it.

Sound Quality: 86%



the price of that ribbon-tweeter'd Danish floorstander.

The F208's chocolate-y tonality is extremely inviting, and its silky treble minimises listener fatigue – although I considered its overall presentation of voices and instruments just a little *too* soft-hearted and beautiful to entirely suspend disbelief [see Lab Report]. If you like a top end with lots of sparkle and 'snap' you won't be entirely disappointed: the F208's treble is light-footed, detailed and extended, but a little more charming than real-life. An upside of the speaker's forgiving nature is that the sound never appears analytical or over-etched.

HI-FI NEWS SPECIFICATIONS

Sensitivity (SPL/1m/2.83Vrms – Mean/IEC/Music)	88.5dB/88.2dB/87.6dB
Impedance modulus min/max (20Hz–20kHz)	3.3ohm @ 2.9kHz 8.2ohm @ 20Hz
Impedance phase min/max (20Hz–20kHz)	-37° @ 53Hz 21° @ 216Hz
Pair matching (200Hz–20kHz)	± 1.1 dB
LF/HF extension (-6dB ref 200Hz/10kHz)	40Hz 35.5kHz/33.3kHz
THD 100Hz/1kHz/10kHz (for 90dB SPL/1m)	0.3% 0.1% <0.1%
Dimensions (HWD)	1182x300x375mm