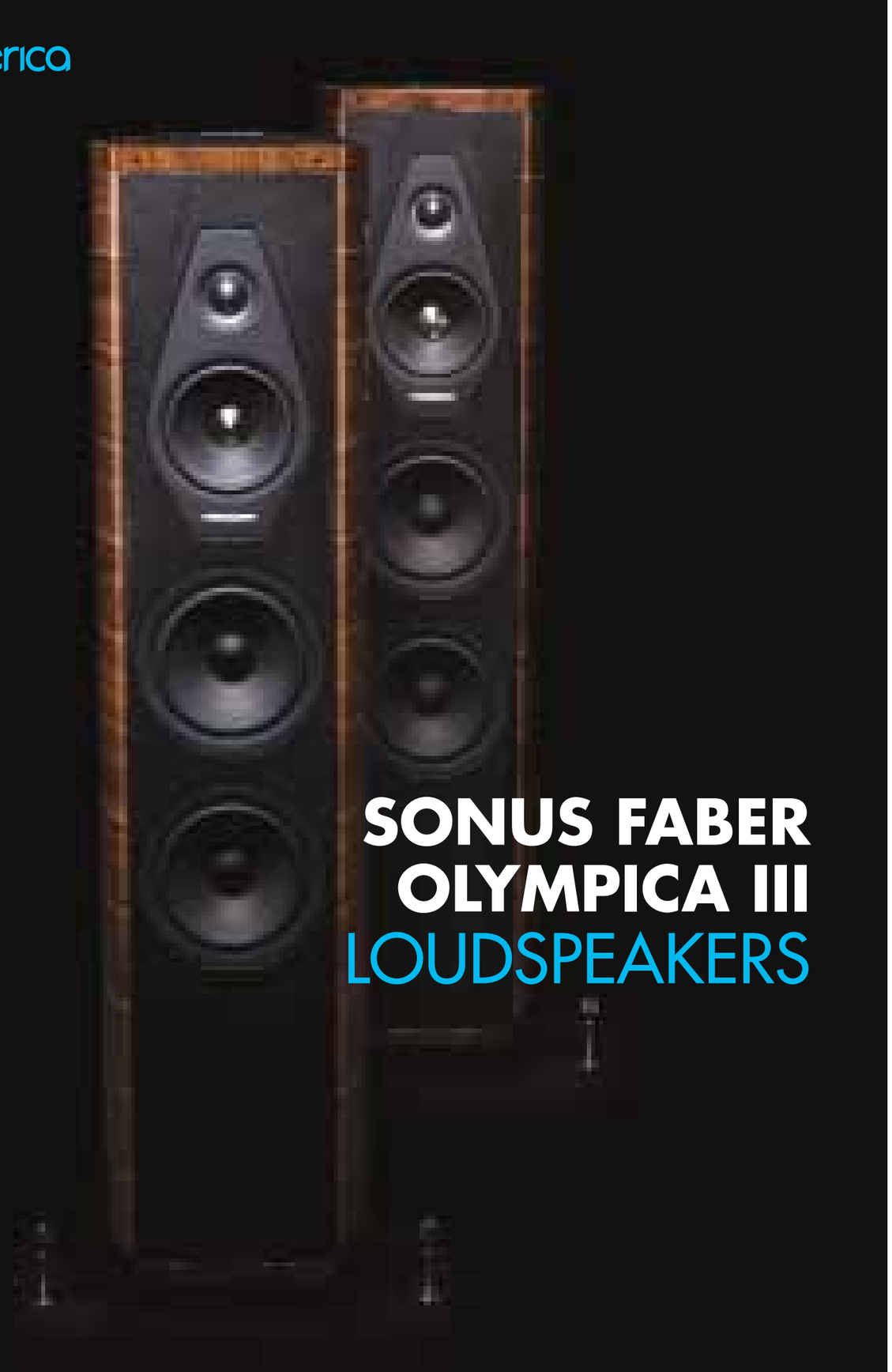


# SONUS FABER OLYMPICA III LOUDSPEAKERS



Some things are beautiful no matter whose eyes are doing the looking. Barring the odd contrarian, there's an inherent universality about a certain aesthetic or design that has a common appeal to all. Such a concept would easily apply to Italy's Sonus faber; I would state with some confidence that the company has not produced an ugly duckling in its entire substantial catalogue history. The recently-launched Olympica range only reinforces what's become the faber stereotype. This new line truly encapsulates the term 'drop-dead-gorgeous' (and indeed one could carry the term through to the company's entire current product range—and don't even get me started with the sculptural masterpiece that is the Lilium…). But in a space where looks *must* be tied-in with sonic performance, is the Olympica III under review here all beauty without substance? Is she a learned and cultured beauty or a superficial supermodel?

> *It's a sweetly refined transducer which reproduces extraordinary micro-detail…something quite special*

## BEHOLD OLYMPICA

The Olympica III tops-out the new mid-level line as the largest floor-stander in an expanding range of speaker products from Sonus faber. The tall slender enclosure houses Sonus faber's new 29mm DAD (Damped Apex Dome) soft dome tweeter with the 'Arrow Point' dispersion arrangement and a Sonus faber-designed 150mm-diameter natural fibre composite midrange driver. Lower frequencies are catered for by two 180mm-diameter bass drivers—direct descendants of the statement model Aida's own bass transducers—featuring massive magnet motors, 35mm-diameter voice coils and foam and cellulose sandwich diaphragms. The entire transducer array has been designed by Sonus faber specifically for the Olympica range and, across the board these are advanced, beautifully-engineered drivers.

The Olympica III's tear-shaped (or Lyre-shaped) enclosure is not only beautiful but it has been designed with specific goals in mind in terms of lowering colourations and the prevention of standing waves within the cabinet. Solid walnut top and bottom plates form the basis for the multiple horizontal panels that, stacked, shape the box into Sonus faber's signature Lyre shape while the internal profile will combat standing waves within it. The enclosure vents via a unique long and narrow vertical slot reflex 'port' which is accented via an adjacent perforated metal plate. This type of port will have near-zero chuffing artefacts while providing extra low end extension. The enclosure's quality of finish—it's available in either walnut or graphite-coloured veneers—is second to none and its beauty is enhanced by high-quality feature-stitched leather wrapping on the top and front panels. Other than on the high-quality binding posts panel, there are no visible fasteners, bolts or screws to deter from the extraordinary aesthetic—these are truly a work of exceptional industrial design and manufacturing craftsmanship.

Frequency response specifications reflect the Olympica III's stature as a powerful floor-stander and range-topper, with the span being from 35Hz to 30kHz (with crossover points at 250Hz and 2.5kHz) while the sensitivity has been quoted as 90dB (2.83V/1m) with a 4Ω impedance. The speaker stands 1114×403×508mm (HWD) and weighs in at a substantial 88kg.

## OLYMPIAN FEATS

In the hands of astute designers, the deeper insight into the minutiae of well-engineered bespoke drivers can present opportunities to maximise performance by the mutual complementing of driver, crossover and enclosure.

The Olympica III's tweeter, midrange and bass array are skilfully blended to produce a cohesive soundfield with all frequencies in propagated mutual balance. This carries through to the tonal signature which has equal uniformity from bass to midrange to treble. The high frequencies, in particular, are of outstanding quality—this tweeter is something quite special.

It's a sweetly refined transducer which reproduces extraordinary micro-detail while also effortlessly scaling the power band when required. Cymbals have brilliance and a pure bell-like decay that trails off most naturally.

The midrange's bold and dynamic presentation projects the soundstage a tad forward of the speaker plane which makes for a wide but marginally less deep soundstage. The aforesaid dynamism makes the Olympica III a great speaker for rock music—the entire frequency span is punchy and tight. These last two adjectives also apply to the speakers' low-end, which digs reasonably deep. Bass and kick drum are satisfyingly hard-hitting even if the same forcefulness is

### SONUS FABER OLYMPICA III LOUDSPEAKERS

**Brand**: Sonus faber
**Model**: Olympica III
**Category**: Floorstanding speakers
**RRP**: $15,995
**Warranty**: Five years
**Distributor**: Synergy Audio Visual
**Address**: 107 Northern Road
Heidelberg Heights, VIC 3081
**T**: (03) 9459 7474
**F**: (03) 9459 4343
**E**: info@synergyaudio.com
**W**: www.synergyaudio.com

Superbly musical sound with an excellent tweeter
Pure gorgeousness in styling
Peerless fit & finish

A somewhat forward midrange presentation

*LAB REPORT: Turn to page 47*
*Test results apply to review sample only.*

> *Extremely faithful renditions of vocals and instruments. Cello, in particular, sounded tremendously life-like*

somewhat tamed at the speakers' low-end limits (something that I find common to many bass reflex systems).

One of the outstanding qualities of the Olympica IIIs (and which may indeed apply to the whole range given the commonality in the drivers used) is the extensive tonal palette and the associated textural information. The stitched cohesiveness across the entire response range allows for extremely faithful renditions of vocals and instruments. Cello in particular sounded tremendously life-like, while acoustic guitars exhibited snappy transient attack and presence.

Multiple instrument pieces, such as large orchestral or densely-mixed pop/rock recordings sounded open with no sign of congestion even at high replay levels.

## CONCLUSION

Sonus faber, as part of the Fine Sounds Group of companies—which most notably also includes Audio Research, McIntosh and Wadia—continues its brand expansion. The design team headed by Livio Cucuzza (Head of Industrial Design) and Paolo Tezzon (Research & Development Manager) continues to impress with the quality of its output.

Sonus faber's line-up now consists of, at the one end the entry level (though it's anything *but* in terms of build and performance) Venere range, while at the opposite end of the scale lie the Aida and Lilium flagships which are augmented by several individual upmarket models on lower rungs. In fact, one or two of those models are somewhat long-ish in the tooth so I expect some exciting releases in the not-too-distant future at that level. But for now, with the Olympica range, the Italian stalwart has a mid-point beacon burning brightly with the triumph of superb bespoke drivers, solid engineering and extraordinary design. Fine sounds indeed. ***Edgar Kramer***





## LABORATORY TEST REPORT

*Newport Test Labs* measured the frequency response of the Sonus faber Olympica III as 38Hz to 27kHz ±3dB, which is an excellent result. It's very close to Sonus faber's own specification of 35Hz to 30kHz, though because Sonus faber does not state a dB variation for these frequency limits, it's not really a specification. As you can see, if we expand the dB limits by just 1dB, the Olympica III easily comes in at 35Hz to 33kHz ±4dB. Equally important, the Olympica III's response variations are distributed equally across the audio band—there's no skewing of the spectrum to favour either the bass or the treble, so the design is very balanced. Within the ±3dB variation there's a small section of the response between about 1.4kHz and 3kHz where response dips slightly, followed by a rise up to 4kHz then a gradual fall to 10kHz, but since this is all within ±3dB, I suspect it would have almost zero effect on tonal presentation, a suspicion that's confirmed by unsmoothed pink noise frequency response measurement shown in Graph 5, which more accurately represents how the human ear would perceive the Olympica III in terms of flatness. Although there's still a small response dip followed by a rise, it's greatly ameliorated, such that the measured response here is 45Hz to 20kHz ±1.5dB.

The superb high-frequency performance of the Sonus faber Olympica III is shown in greater detail in Graph 2. Very few tweeters are capable of delivering totally flat frequency responses between 10kHz and 20kHz, yet the Olympica III's tweeter manages it easily. The roll-off above 20kHz is smooth and controlled, without any high-frequency resonances whatsoever.

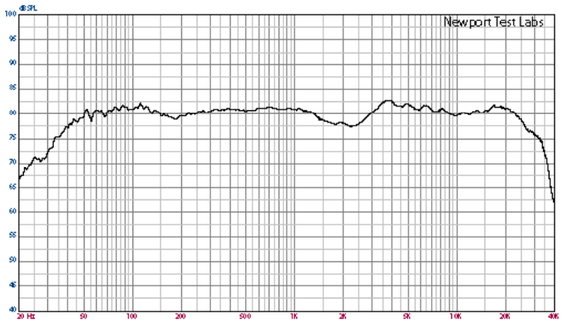
Graph 3 shows the low-frequency performance of the individual drivers in the Olympica III, measured by *Newport Test Labs* using a near-field technique that simulates the response that would be obtained in an anechoic chamber. You can see that although the two bass drivers have identical responses at low frequencies, the high-frequency response of the driver that's highest on the front baffle (the blue trace on the graph) is slightly more extended than the driver below it (whose output is shown as the black trace). This is excellent design, which ensures a better acoustic transition to the midrange driver (whose output is shown by the pink trace). As you can see, the acoustic crossover is at 250Hz, exactly as claimed by Sonus faber. The bass reflex port's output (red trace) is unusual because the frequency where it delivers maximum output is right up at 80Hz, considerably higher than where the bass drivers deliver their minimum in-band output (at 35Hz). However, the port still has useful output down to 35Hz so it's evidently helping out in the bass in spite of this.

The impedance modulus of the Olympica III shows that despite Sonus faber rating it with a nominal impedance of 4Ω, its nominal impedance is actually somewhat lower—at least if it were to be rated according to the European IEC standard (IEC 60268-5.16.1) for this specification—because the impedance drops below what is allowed (3.2Ω) for a 4Ω rating, with the Olympica's impedance dropping to just 2.7Ω at 90Hz and remaining below 3.2Ω from 70Hz to 150Hz: In fact, the only place the impedance rises above 8Ω is between 1.5kHz and 4kHz. The low impedance between 70Hz and 150Hz doesn't make the speaker as tough a load to drive as it might otherwise be because the phase angle

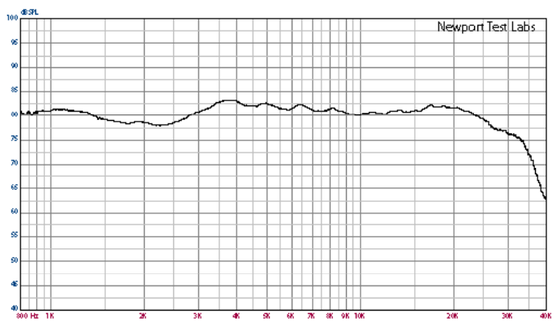
(the blue trace) swings only slightly (±14°) over this frequency range. However, it's clear that the Sonus faber Olympica III will present considerable demands on the driving amplifier, so both high power output and the ability to correctly drive low impedance loads would obviously be beneficial to these loudspeakers' performance. The curves show several unusual features, which are presumably a result of Sonus faber's unusual crossover topology, which is says is: '*a progressive slope design … using Paracross topology.*' *Newport Test Labs* measured the sensitivity of the Olympica III at 88dBSPL at one metre, using its standard test methodology. NTL's method is more stringent than those used by most manufacturers, and almost always results in 'lower' figures, and this proved to be the case here, with Sonus faber rating the Olympica III at 90dBSPL.

[Editor's Note: *For more information about loudspeaker sensitivity measurements, see the article on page 30 titled 'Loudspeaker Sensitivity: What's a watt anyway.'*] Despite the 2dB difference, the Olympica III delivers higher-than-average efficiency, even via *Newport Test Labs'* standards.

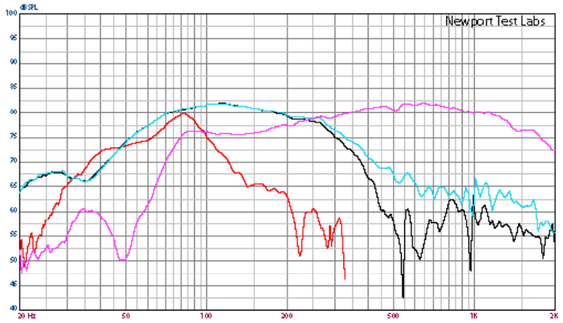
The measured performance of the Sonus faber Olympica III loudspeaker was outstandingly good. ***Steve Holding***



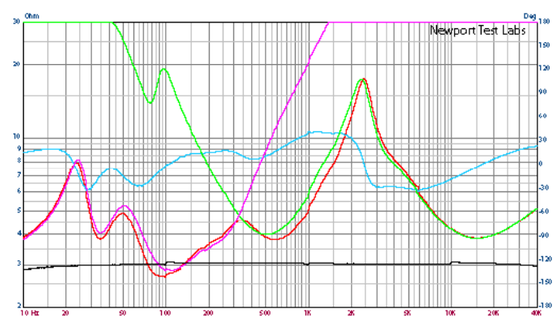

Graph 1. Frequency response. Trace below 1.1kHz is the averaged result of nine individual frequency sweeps measured at three metres, with the central grid point on-axis with the tweeter using pink noise test stimulus with capture unsmoothed. This has been manually spliced (at 1.1 kHz) to the gated high-frequency response, an expanded view of which is shown in Graph 2. [Sonus faber Olympica III Loudspeaker]



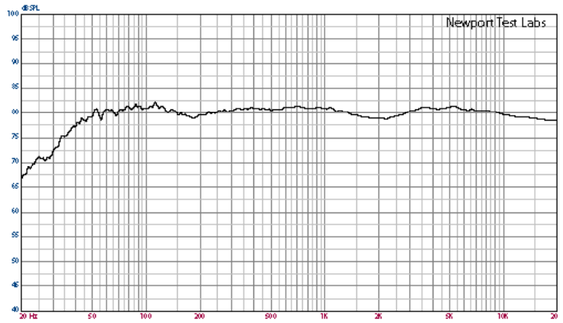

Graph 2. High-frequency response, expanded view. Test stimulus gated sine. Microphone placed at three metres on-axis with dome tweeter. Lower measurement limit 800Hz. [Sonus faber Olympica III Loudspeakers]



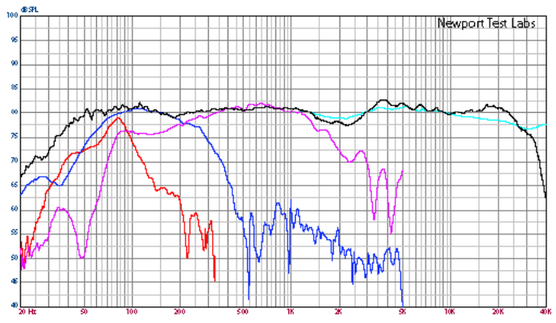

Graph 3. Low frequency response of front-firing bass reflex port (red trace), lower woofer (black trace), upper woofer (blue trace) and midrange driver (pink trace). Nearfield acquisition. Port/woofer levels not compensated for differences in radiating areas. [Sf OI III]




Graph 4. Impedance modulus (red trace) speakers plus phase (blue trace). High-pass x/o section (green trace) vs low pass x/o section (pink trace). Black trace under is reference 3-ohm precision calibration resistor. [Sonus faber Olympica III Loudspeakers]




Graph 5. Averaged frequency response using pink noise test stimulus with capture unsmoothed. Trace is the averaged result of nine individual frequency sweeps measured at three metres, with the central grid point on-axis with the tweeter. [Sonus faber Olympica III]




Graph 6. Composite response plot. Red trace is output of bass reflex port. Dark blue trace is anechoic response of lower bass driver. Pink trace is sine response of midrange driver. Black trace trace from Graph 1. Light blue trace shows pink noise response above 1.1kHz



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