

EDITOR'S CHOICE
HI-FI CHOICE
magazine
★



An opera star

Innovative Italian standmount flaunts impressive technology

PRODUCT Opera Callas

TYPE Standmount loudspeaker

PRICE £2,195 per pair

KEY FEATURES Size (WxHxD) 23x37.5x34cm

⊖ Weight 12.5kg ⊖ Front drivers: 2x 25mm tweeters

(neodymium) ⊖ 130mm mid/bass unit (magnesium)

⊖ Rear drivers: 3x 25mm tweeters (neodymium)

⊖ Sensitivity: 86dB ⊖ Impedance 4 ohms (nominal)

⊖ Available in cherry or mahogany finishes

CONTACT ☎ 01753 652669 🌐 www.ukd.co.uk

We first heard the Callas loudspeaker about a year ago at Opera's own factory near Venice. At the time it was a work in progress, but even then we were suitably impressed by its balance and overall coherence.

All drivers are manufactured by SEAS of Norway and customised for the role. And, whereas the original Callas was a more or less a conventional two-way design, this model boasts two coated Sonotex, fabric dome, front-facing tweeters with neodymium magnets. This reduces the overall diameter enough for all the drivers to be tightly packed together. They flank the sophisticated 125mm magnesium cone bass/mid driver, which also features a solid copper heat-dissipating phase plug, copper rings each side of the T-shaped pole piece, a 38mm low-inductance aluminium voice coil and a wide linear excursion (14mm peak). The design is also optimised for low distortion and compression. In addition, there are also three rear-facing tweeters, identical to the ones on the front, except that they are protected by mesh finguerguards. This feature is not unprecedented. Something similar was used, for example, with Opera's Tebaldi and Caruso, but it has been re-engineered for the Callas to fit the more restricted baffle area. The rear-facing triplet shares the rear panel with two small reflex ports and a single pair of high-quality 4mm terminals.

Although all five tweeters are physically similar, they're not all utilised in the same way. Using a three-section crossover with two independent sections for the front-facing tweeters, one is progressively rolled out of circuit as the frequency rises. The crossover includes an impedance-matching network on the front tweeters and the system has a

impedance of 3.2 ohms (minimum) and a nominal 4 ohms overall impedance.

Sensitivity is rated at 86dB/watt/meter, which is moderately impressive for such a compact speaker design.

If the two front tweeters are lumped together, it can be treated as a third order (18dB/octave) high-pass network, with an impressively low crossover frequency of

“It isn't strictly necessary to throw exotic hardware at the Opera in order to bribe it into singing like a thoroughbred...”

1.5kHz, the bass unit rolling in at 12dB/octave. The additional tweeter(s) serve to improve power handling ability as well as improving dispersion. Below about 2kHz, the two front tweeters produce the same SPL. The rear-facing tweeters are crossed over at 2kHz, which is calculated to produce an even overall response on the main listening axis. The crossover coils have ferrite cores and low permeability cores, while the capacitors are high-tolerance, high-voltage MKT devices.

The build and finish quality is superb, with the baffle dressed in leather (also a common practice with Sonus Faber). The enclosure itself is more sturdily built than most and is finished in a choice of cherry or mahogany, with a translucent lacquer finish. It's manufactured from a combination of MDF, plywood and solid wood, with a classic teardrop cross section. The baffle and back panels are made from 30mm-thick MDF at the front and 60mm at the back (shaped to mitigate cabinet-edge diffraction) and the sides are made from 30mm multi-layer plywood, the stiffness of which is partly determined by the multiple layers of wood and glue, as well as its curved shape. The top, base and sides are made from 40mm-thick solid wood, while the veneered areas are made from butt-jointed sections. The cabinet looks initially as though it is constructed from staves, but the finish is nothing less than exceptional and fully justifies the price tag.

SOUND QUALITY

The wait for the new generation Callas has been worthwhile. It sounded good a year ago as a prototype and it is clearly good now, both at the factory and when listening on a system with a range of ancillary equipment from Krell, Goldmund and others (read more about these in *HFC's The Collection 2008*, on sale 18 September). It isn't, however, strictly necessary

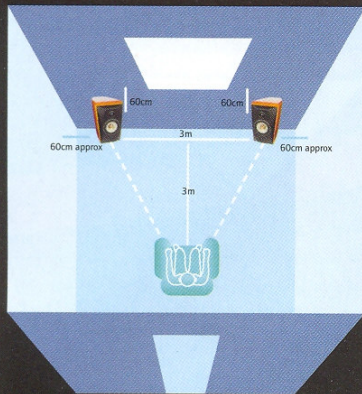
to throw exotic hardware at the Opera in order to bribe it into singing like a thoroughbred, but there is more than enough substance to make the effort and expenditure worthwhile.

Given its diminutive stature, the Callas is a surprisingly grown-up loudspeaker, which is capable of making a more than decent stab at larger scale orchestral works without any danger that it will end up sounding emasculated. The bass is acceptably deep and pure and it has more authority than you would expect from such a compact design. It is certainly tuneful and the result is that the speaker performs with great conviction.

As the technical description implies, the Callas needs extra reinforcement from the back firing tweeter triplet. With the appropriate acoustic reflecting conditions in place, the sound becomes bolder and sharper and more homogenous. However, from a vantage point near either loudspeaker the image tends to fall into the local loudspeaker, which is to be expected. From anywhere near a central axis, or even moderately off-axis, the Callas tends to generate an image that is perceptibly taller than you would expect from a speaker this size (on the stands used) and this seems to improve the sense of an open, involving acoustic with most recordings. The Callas is also more tolerant than most and works well from a low or a high vantage point, which gives it a useful flexibility.

Beyond this, the Callas is a speaker of considerable stature. The use of multiple

SET-UP



POSITIONING

Care needs to be taken with set up and positioning. We used a 19-inch-high pair of very heavy, acoustically dead pedestal stands from Atacama and positioned them about 60cm from the back wall, experimenting with various positions from the side walls finally settling with around 60-70cms. or so

Further experiment showed that this choice, which looks visually appropriate, is also acoustically sound and makes a big difference to the musical presentation of the system. Place it too far out (say a metre and a half forward of the back wall), or fire its rear output into a soft, absorbent curtain, and the sound becomes a little weak and disembodied. The bass also loses some of its tautness and integration with the rest of the speaker's output. Using the speaker too close to a room corner also detracts from the overall effect, adding a false bloom to proceedings. Opera recommends toeing the speakers in so that their axes cross just forward of the listening plane, but this tends to give a rather tight unexpansive sound. A more moderate angle gives an open, better projected soundstage and greater image width, without any perceptible trade-off.

This is a speaker that needs a significant amount of running-in before it sounds completely at ease. Perhaps this is because so many overlapping drive units are involved, and the necessarily complex crossover which use different slopes for most of the tweeters. But there is no absolute right and wrong here: setting up is largely a matter of personal taste and may vary with the acoustics and furnishings of the room.

DETAIL



▣ tweeters is probably responsible for the unusual solidity of the sound and its much better than class-average homogeneity. At the factory we used a number of recordings, including CDs of large-scale orchestral material and was surprised at the level of grip and conviction that the diminutive Callas was able to bring to the party. It didn't sound offensive with other non-classical, smaller-scale material and this positive impression was reinforced by subsequent listening using the production pair that was shipped for review.

This approach of using additional tweeters to broaden out the stereo soundstage is far from unprecedented: Mirage has done

something similar for a long time and with similar results. The sound is broader and more tactile and more detached from the box and room interactions become in some respects more obvious.

By any standards this is an exceptional loudspeaker, which retains the neutral tonality and transparency of other good compacts and builds in the areas of solidity, stability and image height (the latter partly, it seems, a function of the unusual crossover design and the use of twin front-facing tweeters). It also boasts good power handling capacity and bass extension – the equal to, though probably not better than, others of its size. Imagery is particularly impressive: a carefully positioned Callas pair has an unusual stability and image scale, without detracting from such areas as subtlety and fluidity. **HFC**

Alvin Gold



VERDICT

SOUND



▣ **PRO**
Architecturally solid, refined sound quality, good imagery, even when not sitting in the obvious hotseat

EASE OF DRIVE



▣ **CON**
Some modest deterioration in sound at high volume levels and positioning is of utmost importance. Too far from the wall and sound can be weak. Too close and the sound over compensates

BUILD



VALUE



CONCLUSION

Another name to add to the roster of high-class compacts, the new Callas is technically sophisticated, so positioning is important. But, above all, meticulous voicing has contributed to its musical integrity.

HI-FI CHOICE OVERALL SCORE



URL www.techradar.com/429144