

FOCAL SOPRA Nr1

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Kategorija proizvoda: Bookshelf Zvučnici
Proizvođač: Focal

Cena: **419.880,00** rsd

After having pushed back the limits in electromagnetic technology with the Grande Utopia EM and the Stella Utopia EM, our engineer discovered that the magnetic field varies regardless of its intensity. Indeed, it is not stable because it is modulated by three factors: the movement of the voice coil (Lenz's law), the current passing through it (Foucault current) and the frequency. Consequently, the voice coil, the moving part, is in the magnetic field which becomes too variable, and this leads to loss of precision.

The NIC technology lies in a Faraday ring whose dimensions, materials and positioning we were able to optimise to make the magnetic field be no longer affected by the position of the voice coil, by the amperage or the frequency of the current passing through it. This solution permits to control the magnetic field to decrease the effects of distortion and give the sound a very high-definition and anunprecedented dynamic.

TMD TUNED MASS DAMPER

THE OBSESSION WITH THE MIDRANGE

The midrange register is no doubt the most complicated to control in a sound system.

Thanks to the power of finite element analysis, our teams have revealed resonances which alter definition in the suspension which connects the cone to the basket

The solutions already known for increasing the damping properties of the suspension all result in an increase of the mass which consequently alters definition. The answer came from a technology used in earthquake-resistant skyscrapers and which is also used for the suspension on racing cars. This technology is called a "Tuned Mass Damper": an additional mass oscillates in opposition to the resonance frequency to control it.

Our Tuned Mass Damper consists in simply two tubular rings on the suspension to avoid deformation of the cone without afflicting the dynamics. It reduces drastically the distortion and increase the definition.

IHL INFINITE HORN LOADING

GETTING THE MOST OUT OF THE BERYLLIUM TWEETER

Our Beryllium tweeter features an incredibly light and extremely rigid dome, that deliver a transparent and dynamic sound. Its main limitation comes from the compression of air in the cavity behind it, that create interference with the incredible definition. To overcome this, the ideal would be to have a nearly infinite volume. But the requirement for Sopra to be compact meant that as much of the cabinet as possible had to be used for the bass. We had to explore other options for loading the tweeter, which led us to come up with the IHL system.

The rear of the Beryllium tweeter is loaded via a small cavity which is connected to the exterior of the

enclosure by a horn. whom inside is filled with a damping material. Sound waves from the rear of the tweeter are delicately and gradually absorbed. Its acoustic impedance approaches zero so that no resistance alters the movement of the dome. This reduces distortion by 30% and pushes definition to its maximum.

Design

BEYOND AESTHETICS AND SHAPE

The Sopra line is destined for the most passionate sound enthusiasts. Its design favours performance, whilst bringing together the qualities expected of an object which will be integrated into very elegant interiors and décors. Lacquered or bloodwood finishes are associated to noble materials to create an elegant line. Substantial efforts were made to give the front a tidy appearance, particularly around the speaker drivers, to iron out any aspects which could afflict the acoustics or the appearance.

Ideal for small rooms up to 270ft² (25m²), Sopra n°1 is also ideal for spaces up to 550ft² (50m²). Providing high sensitivity and excellent power handling, Sopra N°1 is a true little monitor for the home.

Sopra N°1 is supplied with a special stand which has been designed to expel interfering vibrations from the enclosure towards the floor to avoid any colouration. The steel frame inside the floorstander, coupled with the 03/4" (19mm) thick glass base using four adjustable stainless steel spikes, provides very high transmission speeds. This is what guarantees an extremely sharp reproduction.

Focal Sopra n°1 Standmount Speaker

Type 2-way bass-reflex bookshelf loudspeaker

Speaker drivers 6 1/2" (16.5cm) "W" bass midrange with "TMD"

suspension, "NIC" motor

1" (25mm) "IHL" Beryllium inverted dome tweeter

Frequency response (+/- 3dB) 45Hz - 40kHz

Low frequency point - 6dB 41Hz

Sensitivity (2.83V/1m) 89dB

Nominal impedance 8 Ohms

Minimum impedance 3.9 Ohms

Crossover frequency 2 200Hz

Recommended Amplifier Power 25 - 150W

Dimensions (HxWxD) 16 47/64" x 10 63/64" x 15 19/32"

(425x279x396mm)

Weight 41.89lbs (19kg)

(stand: 40.78lbs (18.5kg))