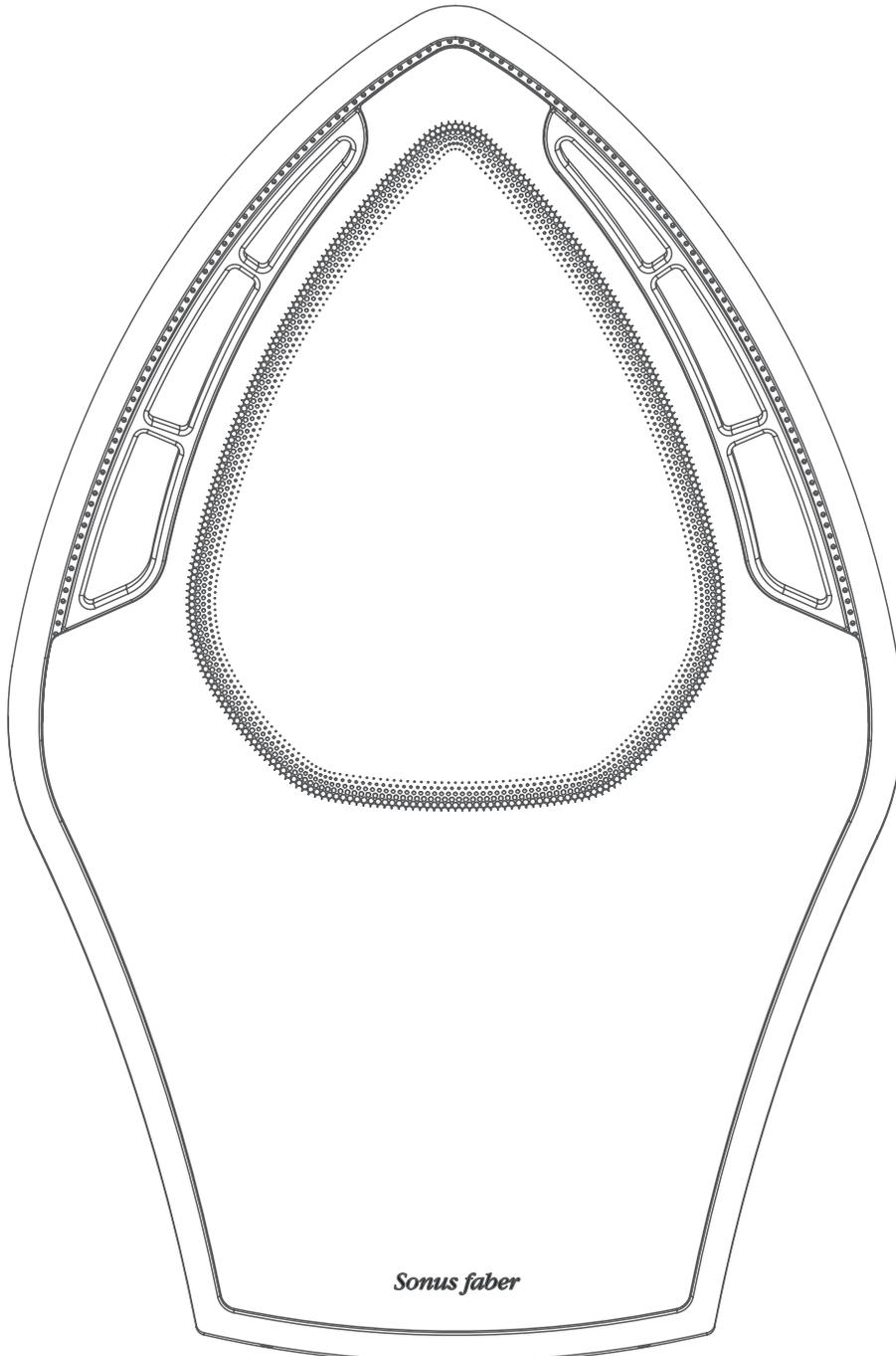


PRESS RELEASE

*Cilium*

*Sonus faber*

— FINE SOUNDS —  
GROUP





## PRESS RELEASE

### **Sonus faber gets back to Munich Hi End 2014 with a new and exciting project.**

The creation of Olympica collection, launched during the 2013 edition of the Munich Hi End Show, represented for Sonus faber a return to the deep roots of its traditions. In 2014 the Vicenza-based company gets back to the Bavarian International Fair with a new project for its audience.

Sonus faber returns, three years later, to design a new full frequency range Hi End floorstanding speaker, built around the knowledge gained through the creation of Aida: Lilium.

#### **THE DESIGN**

Power and grace. Dynamic and melody. Fullness and void. Kindness and impetuosity. Harmony and chaos. Seemingly opposite strong contrasts that co-exist in the music.

Lilium has been designed to shape those great contrasts expressed by music. It is the will of synthesis of two opposite elements: two separate identities that, although working independently one from each other, cooperate inside the same shape.

The creation of a shape that holds two distinct elements has been a big challenge from a technical point of view and from a design one as well. Everything was basically about the need find a new way to put together the large volume required to reproduce the very low frequencies, with the structure dedicated to the reproduction of the main portion of the audible spectrum.

The marked separation between these two elements is made visually clear by the use of different materials: finely wrought walnut wood for the front part and a definitely softer material – leather – for the rear enclosure.

We have decided to adopt the organic style of the natural shapes, which is the family the Lilium belongs to. Undoubtedly, this result marks a further step forward in the stylistic and acoustic research by Sonus faber.

#### **THE ELECTRO-ACOUSTIC PROJECT**

Lilium obviously has much of the DNA of Aida. At Sonus faber we were strongly challenged in transferring the main technological features of our flagship on a “smaller sister” having the ambition of being more easily usable.

The “Brain Tsunami” that we literally did, has led to surprising results, and in fact to a different and much more advanced speaker than expected; it is really reductive to simply define Lilium as a scaled down version of Aida!

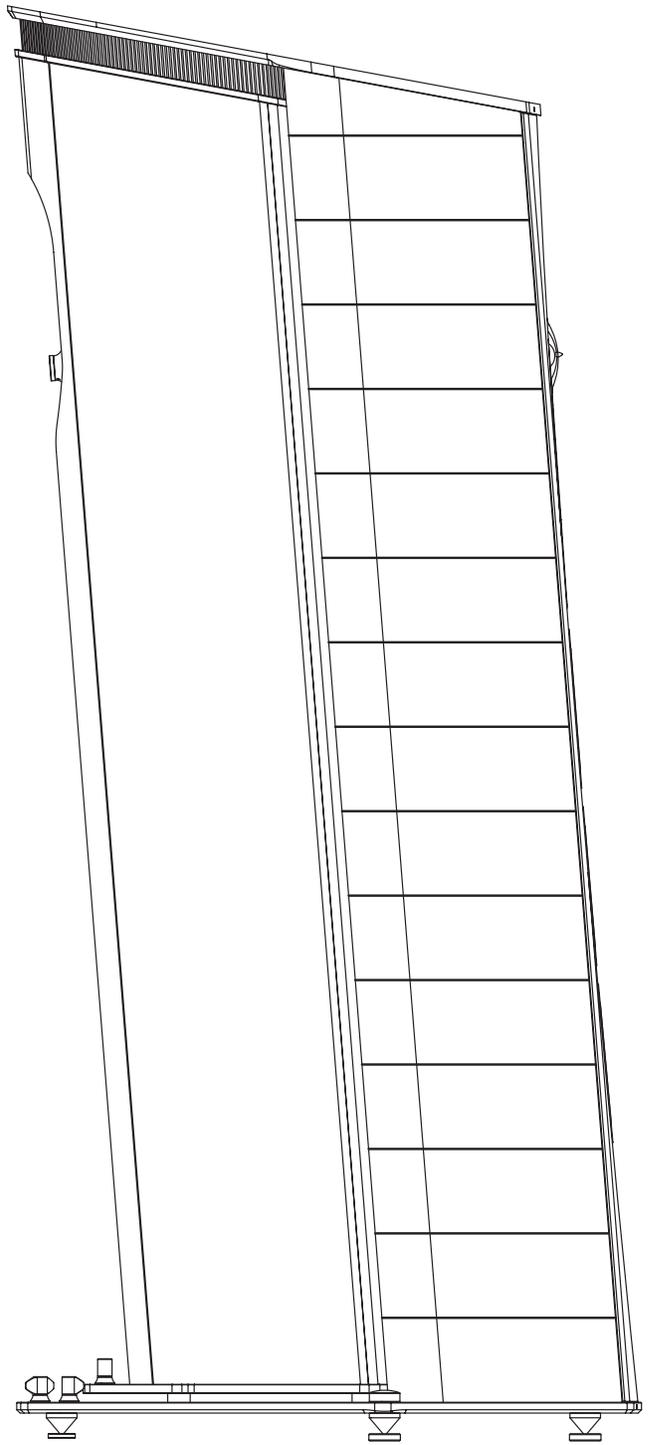
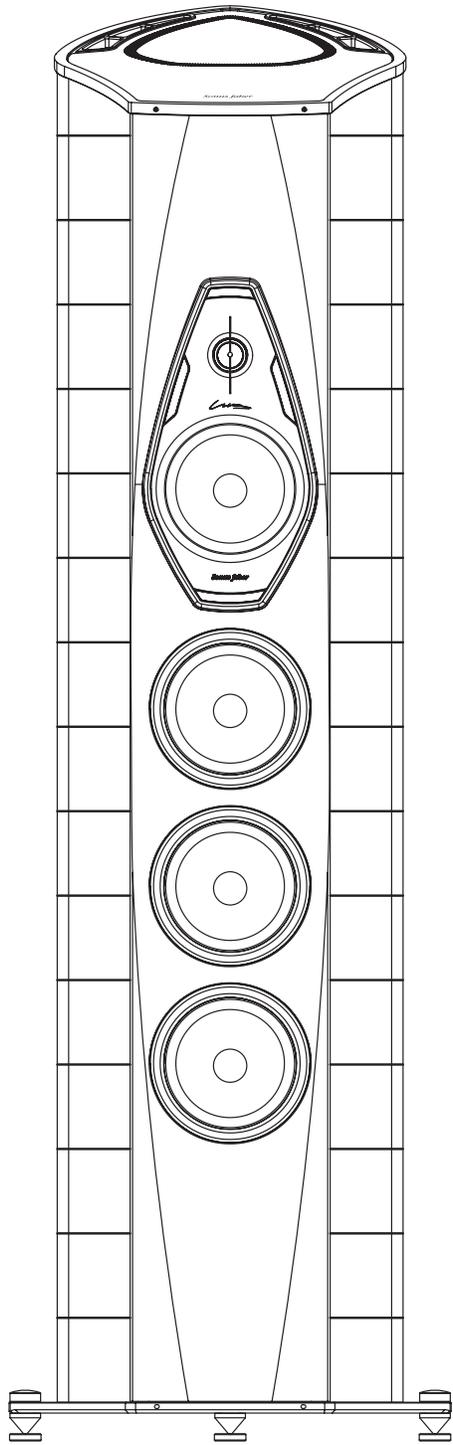
Necessarily Lilium benefits even from the powerful experience of Ex3ma; we can say that Lilium holds – less immediately visible – the DNA of the loudspeaker celebrating thirty years of Sonus faber’s history.

Lilium is the “next step” in our quest for vibration and spurious noise freedom. Here we have gone to extremes. In this project we adopted drastic solutions: one enclosure for the subwoofer, with a “no port noise” passive radiator (heritage of Ex3ma), decoupled from the enclosure of the main spectrum radiators and with the axis of subwoofer and ABR at 90° (orthogonal) to the main radiation axis of all other drivers, to avoid any direct/indirect modulation.

The driver units complement are a totally new project and a 100% Sonus faber design and development; of course they follow a musical attitude that is becoming every day more and more recognizable: a new high-speed 29mm soft dome DAD tweeter, a new midrange and new midwoofers, both having a size of 180 mm (same diameter and similar structure for the best “merging” of the relative spectra). Finally the 11” subwoofer and its companion ABR are also special, in the sense that they have been sonically optimized for these very low frequencies’ reproduction.

The crossover also pays a strong tribute to the Ex3ma, borrowing some of its key solutions.

*Crivium*





# TECHNICAL SPECIFICATION

## SYSTEM

3.5 way, orthogonal non interactive dual enclosure, para-aperiodic vented box "Stealth Reflex System" on the main enclosure, passive radiator tuned and "Zero Vibration Transmission" technology on the subwoofer enclosure, modulation-free 90° and decoupled from the main one, staggered low frequency floorstanding loudspeaker system.

## CABINET

"Lyra shape" design, progressive thickness triple curvature cabinet walls damped spread resonance spectrum system, Sub-structural ribs are strategically placed for total rejection of spurious vibrations and standing waves control. Two double "dampshelves" (from "The" experience), i.e. CNC anodized machined avional "vibration dampers" (on the top and on the bottom of each cabinet) "stiffen" the column structures reducing consistently structural micro-vibrations coming from the cabinets' walls and the transducers. The "Anima legata" system is used in an innovative way, encompassing the structural ribs of the subwoofer enclosure. A special steel rod, a high speed mechanical interface, concentrates the remaining micro-vibrations conveying them to the dual multiple "Tuned Mass Dampers", i.e. two differently tuned special custom devices optimized to erase micro-vibrations, by oscillating in anti-phase. The subwoofer enclosure has been decoupled from the main enclosure through a new implementation of the Zero Vibration Transmission technology, a suspension system, eliminating any acoustic feedback and any vibration propagation to the listening room. The radiation of the main enclosure and of the subwoofer one are orthogonal to avoid any intermodulation.

## TWEETER

Sonus faber "Arrow Point" DAD (Damped Apex Dome, synthesis of the classic dome and ring transducer) H28 XTR-04. A Sonus faber designed 28 mm moving coil driver, with Sonus faber's vibration optimized mechanical interface. The ultra dynamic linearity is given by the new Neodymium motor system. Implemented with a natural wood acoustic labyrinth rear chamber, a mechanical anti-resonator designed for this application.

## MIDRANGE

Sonus faber M18 XTR-04. A Sonus faber designed 180 mm neodymium magnet system ultra dynamic linearity midrange. CCAW wire is used on a composite former "eddy current free" voice coil. The dynamically linear magnetic field motor incorporates triple Kellogg/Goeller rings. A special custom diaphragm is made with a real time air dried non pressed blend of traditional cellulose pulp, kapok, kenaf and other natural fibers, developed according to the most natural sound. To further inhibit any residual cone coloration we are using a transparent viscous surface damping coating. The same way as the tweeter, the midrange is decoupled from the main baffle board and designed synergistically with its optimized "acoustic chamber". A special coaxial anti-compressor is used, designed to remove cavity resonances and distortions.

## WOOFERS

Sonus faber W18XTR-16. A triple of Sonus faber designed 180 mm lightweight "sandwich" cone structure (high-tech syntactic foam core and two external surface skins of cellulose pulp) woofers are integrated in an acoustically amorphous "stealth reflex" chamber. Designed to blend perfectly with the special midrange and, at the same time, to have absolute definition in their range: the sandwich structure with outer paper pulp skins has the same sonic character of the midrange cone. A powerful long stroke motor system with a 1,5" controlled "eddy current" voice coil is implemented for high speed, performance and linearity.

## INFRA WOOFER

Sonus faber SW26 XT-08. Sonus faber designed a 260 mm infra woofer, lightweight hard paper composite sandwich cone technology for a maximum rigidity and implemented it in an acoustically amorphous passive radiator tuned separated enclosure. The unit features a very powerful long throw motor with a 2.5" voice coil for ultra dynamic linearity. To perfectly match the low-end performance to different listening rooms it is possible to adapt the SPL of the infra woofer.



# TECHNICAL SPECIFICATION

## CROSS-OVER

Non-resonant design, optimized amplitude/phase response for optimal space/time performance. "Paracross topology". The impedance at low frequencies is controlled for a clear and friendly amplifier performance. Double staggered transfer function low frequency/room interface optimized filter. Highest quality is used in terms of the components: Mundorf "Supreme" Silver/Gold/Oil capacitors, Jantzen inductors. Cross-over: 80Hz - 250 Hz - 2500Hz.

## FREQUENCY RESPONSE

20 Hz - 35.000 Hz, Stealth reflex included.

## SENSITIVITY

92 db SPL (2.83V/1 m).

## NOMINAL IMPEDANCE

4 ohm.

## POWER HANDLING

100W - 800W, without clipping.

## DIMENSIONS

160mm x 491mm x 705mm (HxWxD).

## WEIGHT

103 Kg each - net weight

156 kg per pair - shipping weight

(The shipping weight may slightly change from time to time because different humidity values over the year might affect the wooden boxes' weight).