



STRAUSS

1.

Starting the list of STRAUSS' high-tech drivers, the woofer is a massive 11-inch driver, featuring an air-dried paper cone reinforced by lengthwise carbon-fibres for ultimate rigidity. Together with the long-throw voice coil construction it is able to handle even the lowest bass at maximum dynamics. Supported by bass reflex loading tuned on Bessel parameters, the characteristics of this ULF specialist as it performs in the speaker system are remarkable speed and taut response. The woofer functions as an ultra low frequency (ULF) driver, operating below its crossover point of 70 Hz, leaving the midrange free of a crossover within that most critical band of frequencies, while allowing the speaker to be able to produce frequencies as low as 26 Hz with fully realized dynamic impact.

Massive die cast baskets, long-throw voice coil construction, and medium-loss rubber surrounds add further performance enhancing benefits needed to achieve the astonishing speed and solid bass foundation of STRAUSS.

All drivers used in STRAUSS are 100% magnetically shielded, thereby avoiding any restrictions in the listening room by allowing placement near any television or monitor.

2.

The two 7-inch midrange drivers also feature an air-dried paper cone reinforced by lengthwise carbon-fibres, but with a unique paper compound to increase inner damping. To further enhance their inherent inner damping characteristics, the drivers are heavily handcoated, with particular attention paid to the back surface. Very quick non-loss suspensions provide for the ultimate in impulse response, leaving the finest nuances intact. Borrowed from MAHLER's midrange frequency allocation system, the dual mid-range drivers are configured so that the upper driver handles the complete mid-band. The lower driver's upper frequency output is strategically tapered off as frequency increases. In this way, the larger combined surface area of the two drivers allow for superior bass performance, while the upper frequencies gain advantage by being produced with the reduced surface area of a single driver. By allocating the midrange output in this way, and with the easy hand off to the tweeter this affords, precise assignment of all vocal and instrumental locations within the immense soundstage are kept convincingly natural and lifelike.

3.

The hand coated silk dome tweeter incorporates a unique multiple magnet system. Stacked triple neodymium magnets are center drilled, allowing the internal sound waves to be guided into a damping chamber for complete suppression of internal pressure and elimination of compression effects. The resonance frequency of the driver is designed to be very low, so that the tweeter's contribution to the overall sound is optimized with the midrange's contribution. The secrets of meticulous hand coating play a huge role in achieving STRAUSS' musicality and natural resolution of the highest frequencies. To preserve the minute details produced by the tweeter, great care is taken in providing the best environment for this high-resolution driver. Just as with MAHLER, the tweeter is completely decoupled from the cabinet using an ingenious silicone and rubber mounting system, leaving the tweeter to its task: reproducing the most delicate high frequency details unaffected by cabinet resonance.

Using the smallest amount of a special, ultra-thin viscosity ferrofluid protects the tweeter and preserves the purity of its performance. Further, the ingenious design of the magnet structure of the tweeter results in 100% magnetic shielding with no compromise in performance, a feat virtually impossible to achieve using conventional techniques.

4.

The massively overbuilt cabinets, extensively braced based on finite element analysis, are raked back for optimum phase coherence.

By judiciously raking back the cabinet, perfect time alignment of the tweeter and midrange drivers is achieved.

5.

Sheathed in a stunning cabinet that belies the high technology within, the front and rear 1.5-inch thick baffles benefit from Vienna Acoustics' exclusive veneer wrapping process involving the use of sophisticated membrane presses to allow the veneer to form over the sharply curved edges and complex corners of the cabinet's surface.

Extensive bracing for the cabinet was developed using finite element analysis, further adding to the cabinet's outstanding rigidity.

STRAUSS is exquisitely finished, using Vienna Acoustics' proprietary veneer wrapping technique, providing the warmth and beauty of real wood for the most harmonious integration into any listening room. Three finishes are available: a dramatically grained handselected rosewood; a warm and rich handselected beech; and a special high gloss black, featuring an eleven-layer lacquer finish on the front and back baffles, combined with handselected black ash-veneer for the main body.

6.

The cabinet is terminated with an elegant integral base with spiking system, either three or four point, providing for a perfect combination of decoupling, stability, and weight allocation.

Listening tests were critical in creating the base's final shape and spike positions.

7.

Creating an organic whole of the high-tech drivers is the crossover's task. It is split into a bass section, located as close as possible to the ULF driver for superior current delivery, and a midrange/tweeter section, using Vienna Acoustics' well known silicone acrylic glass decoupling plate. Extensive listening tests determined the crossover's layout and component selection, contributing immeasurably to the musical harmony readily apparent when listening with STRAUSS.

8.

One department of the crossover is mounted on the rear side of the terminal block, the massive 8mm acrylic glass. At Vienna Acoustics, we have addressed the issue of transition resistance by designing proprietary terminal blocks that form a direct connection to the speaker terminals with no additional wiring. Our gold plated input terminals are designed to accept banana plugs, spade terminals or bare wire connection.

Two switches provide additional flexibility in tuning the STRAUSS to its surroundings. When in the neutral-position the switches are not in the signal path of the crossover. However, when needed, adjustments can be made to compensate for bright, over-reflective, or "cold" listening environments, thereby regaining that critical natural balance that exemplifies STRAUSS.

9.

The pressure within the cabinet is inconceivably high. Besides the massive thickness of the tubes, the only way solid enough is to screw the port tubes to the cabinet. Furthermore, the exact length of the ports determines the right and only frequency "fb" of the port-cabinet-driver system; this tuning is a matter of millimeters.

Frequency response 26 – 25.000 Hz

Sensitivity 90 dB

W x H x D 7,7 x 45,7 x 16,7"