

MAHLER™

Mahler is our finest work, a no-compromise loudspeaker, created for state-of-the-art music reproduction. After years of experience making the finest in affordable loudspeakers, attention turned to designing a product without limitations, using the finest components in a unique configuration. To say only that the design goals for such a speaker were high efficiency, outstanding dynamic range, excellent low bass extension, and ultra-wide bandwidth from a reasonably compact enclosure misses the larger point. The Mahler's overriding goal is to produce music on such a completely convincing scale that it will transform the listening room and transport the listener.

At the heart of the design are two large mid/bass drivers from Scan Speak, well known to be the most musical and refined sounding units available. Each driver features a ribbed, carbon fiber filled, air-dried paper cone and employs a sophisticated magnet system to control precisely the excursion of the diaphragm. In order to take full advantage of the driver's open and effortless character, and allow it to breathe life into the music without restraint or restriction, first-order filter slopes are used exclusively in an ingenious crossover design. One of the drivers is tasked with producing the frequency range of 70 Hz to 4,000 Hz, a span of virtually 6 octaves. In musical terms, this means the entire fundamental range of the female voice is reproduced as a single uniform whole. The second driver's bandwidth begins at 70 Hz as well. However, its upper frequency output is strategically tapered off as frequency increases. This driver progressively reinforces the lower midrange through middle bass ranges. In this way, the surface area of the dual drivers, operating in tandem, remains ideal for the frequency that is produced. For bass reproduction, the larger surface area of the two drivers allows for superior performance, while the upper frequencies gain advantage by being produced with the reduced surface area of a single driver. The resulting low frequency output is robust and unrestrained, yet delicacy and focus is maintained throughout the higher frequencies.

The benefits of such a system are complemented by the use of an unrivaled silk dome tweeter, also from Scan Speak, which is able to maintain the sonic characteristics of the midrange drivers as the speaker system produces the highest frequencies. To bring out its maximum performance, the tweeter is completely decoupled from the cabinet using a securing system composed of silicone. The elimination of screws or bolts to secure the tweeter, which would establish direct coupling to the cabinet, allows the tweeter to reveal the most ethereal qualities of music.

To complete the system, and provide the ultimate in precision and authority in the lowest frequencies, the Mahler used two Ultra Low Frequency (ULF) drivers. The woofers are sourced from Eton and use their justly famous honeycomb cone technology, yielding the most rigid diaphragm of any available driver. The rigidity of the cone is such that it can be stood on without deforming its shape. Compared to conventional

cone materials, rigidity is 70 times higher, while mass is reduced by roughly 30 percent. Because of this, the ULF drivers are able to operate as pure pistons, making them the perfect choice for the role they are asked to perform. Taking over at a very low 70 Hz and extending down to 22 Hz, the ULF drivers essentially function as a subwoofer. In keeping with the philosophy of the mid/bass configuration, by leaving the crucial midrange intact and using the ULF drivers to produce only the lowest bass, the clarity and transparency of a world-class monitor is combined with the dramatic scale and underpinnings of a truly huge speaker.

The crossover circuitry possesses both the elegant simplicity of pure first-order, 6 dB per octave, slopes and the essential complexity needed to weave dexterously the drivers' output into a cohesive system. All decisions concerning individual components and the layout of the circuitry were made through extensive listening tests. Specially selecting each component results in a harmonious musicality, while a sophisticated layout helps in clarifying instrumental timbres.

The cabinet is an example of the most advanced joinery technology available. Not apparent to the eye is the 1.6" thickness of the front and rear baffles, the artfully articulated bracing, and the separate enclosures for the individual drivers. What is apparent to the eye is the gentle raking back of the cabinet, providing a specific amount of time alignment – a shape that is at once crisp and efficient. The warmth of the handselected veneers and gently eased edges relieve the speaker from being a conspicuous presence in the home. Great engineering demands the angularity; great design achieves an artful form that confers quality and substance.

The sinuous fusion of art and technology allows the speaker to blend aesthetically and perform harmoniously in any living space. All of the features above combine to create the most exceptional characteristic of the Mahler: the ability to bring the emotion of music home.

Technical data

System type	3-way system, employing integrated subwoofers
Frequency response	22 - 25,000 Hz
Bass drivers	2 x 10" Eton honeycomb cone
Midrange drivers	2 x 7" Scan Speak carbon fiber filled, air-dried paper cone
Tweeter driver	1.2" Scan Speak silicone-layered silk dome, Vienna Acoustics version
Sensitivity	90 dB
Impedance	6 ohms average
Recommended power	amplifiers from 50 to 500 watts
Weight per speaker	150 lbs.
Dimensions (WxHxD)	8.6 x 51.2 x 18.3 inches 218 x 1300 x 465 mm