

Bach Grand

General



The aspect of Bach's mathematically precise compositions that demanded astoundingly inventive solutions to musical problems is fully evident in the Vienna Acoustics speaker that bears his name. Of note, the beautiful floor-standing cabinet features Twin Balanced Reflex (TBR) loading of the potent 7" X3P mid-bass driver. TBR combines a conventional rear port with a groundbreaking airflow control port on the front of the cabinet allowing for class-leading bass output and control. Further, the complex front port system provides an extraordinarily compact driver configuration by positioning the refined 1" triple stacked silk dome tweeter directly in front of the port, contributing to a sonic presentation of power and verve that belies the speakers' compact proportions. Achieving Mozart quality sound in a compact floor-standing enclosure, this diminutive two-way design joins an assembly for high fidelity that belies its size and price.

Handcrafted enclosures in beautiful wood finishes define the Vienna Acoustics aesthetic. The Grand Series features the following selections to complement any interior: Piano black, Maple, Cherry, and Rosewood.

Bach Grand

Features



Completely new for this model in the Grand Series is the development of its 7" mid/bass driver, which uses for the first time Vienna Acoustics' exclusive XPP cone material for a driver of this size. This was made possible through the material formulation of "X3P" which is a mixture of Vienna Acoustics' proprietary TPX, the unique thermoplastic used in all XPP cones, and three polypropylene based synthetics (hence X3P), resulting very high inner damping, while providing hugely increased stability and rigidity, which made the bigger cone dimension achievable. Combined with a new inverted rubber surround design that constitutes a breakthrough in no loss damping of cone edge resonances, this new cone material allows the driver to provide an extraordinarily wide bandwidth, while possessing a level of inner detail, quietness, and control that is truly remarkable.

The mid/bass driver benefits from a new inverted rubber surround design and formulation that constitutes a breakthrough in no loss damping of cone edge resonances.



The bass loading system for the 7" driver is also unique, a very innovative design named TBR (for Twin-Balanced-Reflex). This bass system, a combination of front-porting and rear-porting, provides a symmetric loading on the bass driver, thereby completely stabilizing cone movement at the frequency where the driver and porting interact. This allows for effortless airflow control in the full-scale cabinet for class-leading bass output and control.

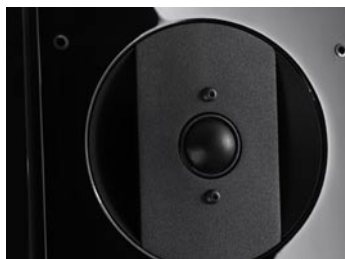


The front porting of the TBR system utilized in the Bach Grand was adopted from the ground-breaking bass reflex port airflow control wedge found on the Haydn Grand. Not only does this assembly allow for a front port configuration that increases placement flexibility, by virtually eliminating port noise, but it also provides an extraordinarily compact driver arrangement by positioning the tweeter on the front of the wedge. Both features contribute to an unrivaled level of performance in its class. The unique construction works by way of an inner reflex port that vents air towards a wedge positioned at the throat of the port. The cutting-line of the wedge divides the airflow into two streams, which then flow in a specially designed and extensively optimized flare. The relationship of the wedge and the flare is of critical importance, and are precisely determined to achieve a) maximum bass support for the system and b) the reduction of all standing waves in the port (or port noise) by -12dB.



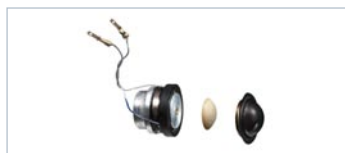
The wedge fulfills additional and very welcome functions in the design. As mentioned above, the large size of the wedge allows the tweeter to be mounted within the throat of the port, resulting in a very compact driver arrangement that improves phase coherency and overall performance by creating a near point-source configuration. In addition, the large internal volume allows for a chamber to vent the back-wave of the driver. To optimally use the chamber, a unique circular back wave pass through slot runs the entire circumference of the back of the driver, as opposed to a central hole. Because of this feature, the specially designed tweeter for this

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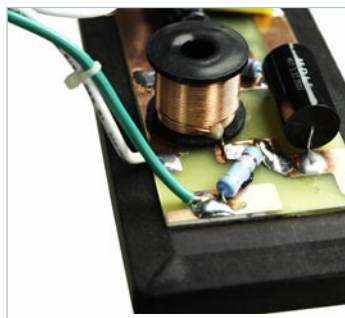


assembly profits from unconstrained air-decompression that approaches the theoretically ideal conditions of free-field construction. As a result, the tweeter dome operates unconstrained, even as it descends into the lower midrange.

The entire assembly is constructed of aluminum, produced by expensive high-pressure die-cast tools.



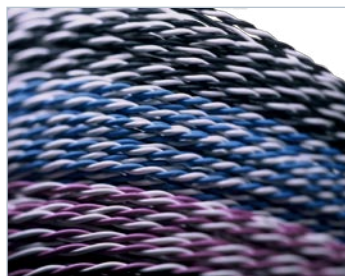
As with all Vienna Acoustics loudspeakers, a hand coated silk dome tweeter was specifically designed, featuring a specially developed ferrofluid damping system in combination with a super-light four ohm voice coil, for superior resolution of high frequency extremes while achieving perfect midrange warmth and clarity.



A completely new linear crossover layout, with the copper circuit paths arranged in the direction of electron flow, takes into account the potential for sympathetic and parasitic interactions among crossover components that may inject unwanted noise and distortions while allowing for more direct and efficient transfer of signal to the drivers which leads to a greater level of detail and purity.



New gold-and-silver alloy terminal for lowest transfer resistance and durability are directly connected to the crossover circuit board to ensure complete current delivery and no loss of clarity in the signal transfer from binding post to crossover.



New proprietary cabling, consisting of large scale solid copper conductors, with each cable pairing precisely twisted a prescribed number of turns for the particular length of each cable so that any noise injection through the wiring harness is avoided.

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Features



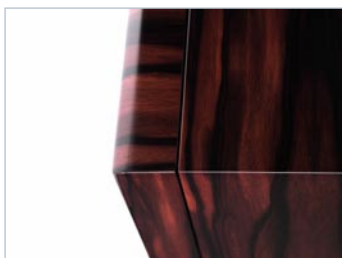
Innovative and unique grilles feature an aluminum frame that incorporates an integral V-shaped phase diffuser to control dispersion so that they can be left on for all but the most critical listening without an adverse influence on performance. In fact, it can be used as an additional tuning device for the audio enthusiast, benefiting soundstage presentation both in depth and stereo imaging. As an additional benefit, the V-shaped groove running the length of the middle of the grille results in a more elegant appearance for the speaker.



BACH Grand is 100% shielded.



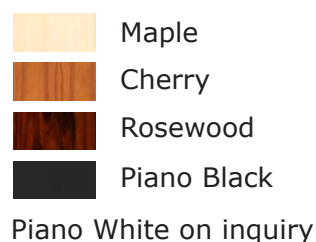
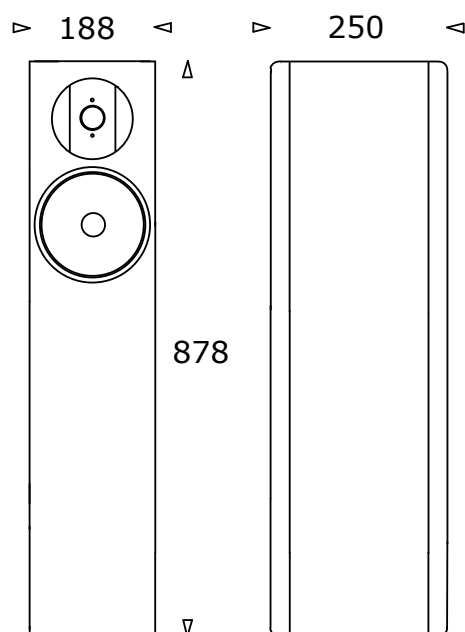
Special decoupling and stability optimization through the use of solid steel spikes (Bach Grand optionally features a high-pressure die cast aluminum spike assembly).



Cabinets boast massive baffles that are 1.6" thick, 45% thicker than previous models, for maximum rigidity and resonance control.

Maple and Cherry finishes join a revised Rosewood, applied to the highest of standards using the state-of-the-art veneer-wrapping technology for the front and rear baffles first pioneered on the Classic series. A true Piano Black lacquer is now available, the quality of which will permit inclusion into any living room as it mirrors its surroundings.

Specs



Impedance
Frequency Response
Sensitivity
Recommended Amplifiers Drive Units
7" Mid-Woofer
1" Dome-Tweeter
Bass System
Bass Function

Crossover Components

Crossover Function 2-way
Weight per Pair
Dimension (W x H x D) inches

Dimension (W x H x D) mm

4 Ohms
 35 - 20000 Hz
 90 dB
 50 - 300 Watts
 X3P Cone, Transparent
 Hand-coated VA Silk Dome
 TBR - system (Twin-Balanced-Reflex)
 Impulse Optimizing QB 3
 (Quasi-Butterworth)
 MKP Capacitors 1% Tolerance
 Coils 0,7% tol., Air Coils Only
 Metal Film Resistors, 1% tol., Inductance Free
 6 dB and 12 dB Bessel
 80 lbs
 7,4 x 34,6 x 9,8" (without spike assembly)
 9,5 x 36,5 x 11,8 (with spike assembly*)
 188 x 878 x 250 mm

*Optimized aluminium base-set available (surcharge).

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