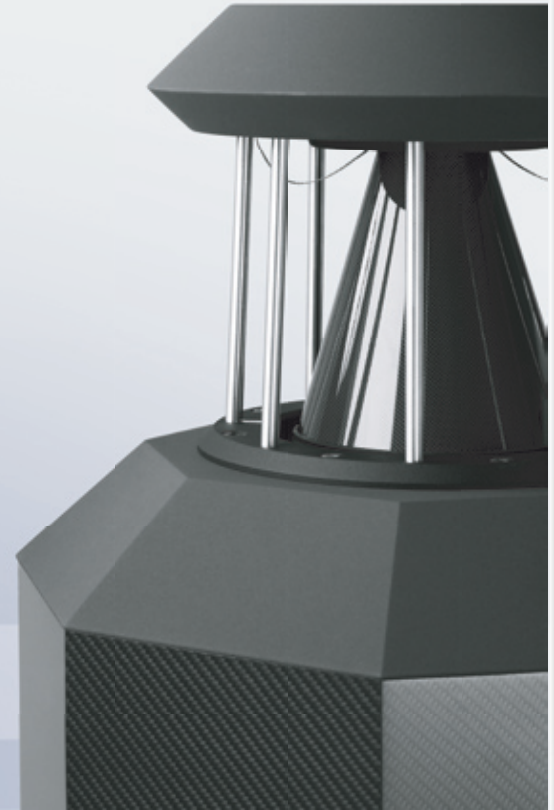


A MONUMENT TO MUSICALITY

---



GERMAN  
THE CARBON MK IV  
PHYSIKS



# THE CARBON MK IV



The German Physiks Carbon was originally introduced in 1997 and like the Borderland, is another long running German Physiks success story. The Carbon Mk IV uses a carbon cone DDD driver with an updated crossover and a new carbon fibre reinforced cabinet and achieves a level of resolution and dynamics unrivalled in a system of this size. This together with its hallmark musicality and three dimensional stereo imaging should ensure that the Carbon Mk IV continues to set the standard in its class.

## Stunning Resolution and Dynamics

The use of the carbon fibre cone DDD driver enables the frequency response to be extended to 24,000Hz. The low moving mass of the carbon fibre cone provides an improvement in transient response giving increased resolution across the dynamic range. This is especially noticeable on complex high level passages, where individual instruments remain easy to follow. The DDD driver covers almost the entire audio band, only crossing over to the woofer at 190Hz. This enables the critical mid range, where our hearing is most sensitive, to be kept free from the level and phasing problems that would occur with designs using multiple conventional drivers. Consequently the Carbon Mk IV produces well focussed and detailed stereo images that are both wide and deep. Instruments are precisely placed within the image and their tonal characteristics are reproduced without colouration.

The DDD driver is omni directional, allowing the excellent stereo imaging to be enjoyed from a wider range of listening positions than is generally possible with conventional designs. The DDD driver's omni directionality also makes the Carbon Mk IV less sensitive to room position than conventional designs. This and the loudspeaker's small foot print, make it relatively easy to position in the listening room.

## Advanced Carbon Fibre Reinforced Cabinet

Due to the cabinet's octagonal construction, the individual panels are smaller and therefore stiffer than they would be if a conventional rectangular construction was used. These panels are reinforced with multiple layers of bi-directional, resin impregnated carbon fibre, applied using techniques developed for the aircraft industry. This produces panels that are extremely rigid and strong, as well as being practically free from resonances within the audio band. The increased stiffness greatly reduces cabinet talk, the radiation of sound through the cabinet panels. This would otherwise degrade the loudspeaker's ability to resolve fine detail and so reduce its ability to produce a sense of realism. Any residual cabinet talk is minimised by applying Hawaphon damping material to the inside of each panel. Hawaphon was originally developed as an anti-surveillance measure for use in military buildings and achieves a broadband attenuation of structure-borne sound of over 50dB.

## Extended Bass with Low Distortion

The Carbon Mk IV uses a single 12 inch woofer of the same type used in our prestige Loreley model. This is coupled with a Helmholtz resonator and provides clean and fast bass down to 28Hz.

#### High Performance from Modest Size

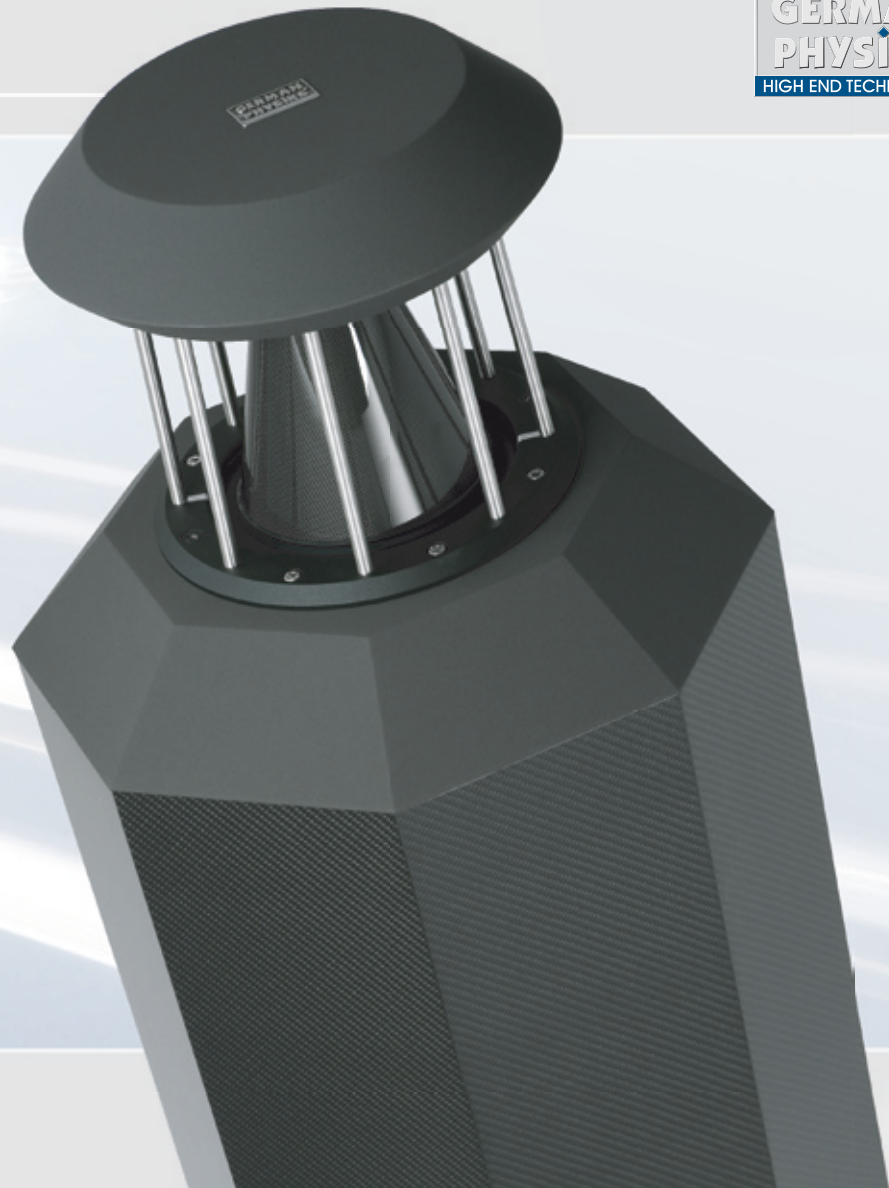
The combination of the Carbon Mk IV's high performance drivers and its extremely inert cabinet enable it to achieve an unprecedented level of articulation and to retrieve an impressive amount of musical detail from the input signal.

#### Adjustable High Frequency Output

Jumpers on the rear panel allow the high frequency output level to be adjusted in 4 steps; -2 dB, flat, +2 dB and +4 dB. This allows the user to easily compensate for the variations in the absorption of high frequencies that occur due to different types of furnishings and room constructions.

#### Hand Finished Cabinet

The Carbon Mk IV's cabinet is finished with a multi-layer lacquer. This is hand polished to a deep lustre that highlights the stylish character of the design.



# THE CARBON MK IV



## THE CARBON MK IV Specifications

Impedance	3.7 ohms at 375 Hz
Frequency Response	28 – 24,000 Hz
Power Handling	
Nominal	300 W
Short term	600 W
Amplification required	Minimum 160 W/4 ohms
Crossover frequency	190 Hz
Crossover slopes	
DDD section	12 dB/octave electronic & 18 dB/octave acoustic
Woofer section	12 dB/octave electronic & 18 dB/octave acoustic
High frequency adjustment	-2 dB, flat, +2 dB and +4 dB centred at 8,000 Hz
Sensitivity	86.1 dB for 1 W at 1 m
Operating principle	2 way speaker with 360° surround radiation using the DDD Bending Wave Converter
Input connectors	2 sets of binding posts
Drivers	1 x Carbon DDD driver 1 x 12 inch woofer
Dimensions	404 mm W x 1,229 mm H x 404 mm D 15.9" W x 48.4" H x 15.9" D
Weight	54 kg 119 lbs
Warranty	5 years



# THE CARBON MK IV

As part of our process of continually improving our products, we reserve the right to change specifications without notice.