

TECHNOLOGY-RICH MERIDIAN AUDIO FOR HIPHI'S NEW PREMIUM EV

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PRESS RELEASE

Technology-rich Meridian Audio for HiPhi's new premium EV

- One of the most technologically advanced in-car audio systems
- Multiple digital signal processing technologies and up to 1,920 Watts@1%THD. Maximum output up to 2820 Watts @10%THD
- European debut at Goodwood Festival of Speed

Human Horizons has collaborated with Meridian Audio to create one of the world's most technologically advanced in-car audio experiences for its new luxury EV, the HiPhi Y. Already China's best-selling premium EV brand, HiPhi debuted in Europe at this year's Goodwood Festival of Speed (UK – July 13-16). Meridian has worked with new and ambitious luxury vehicle brands since 2010, helping them create astonishing in-car listening experiences optimised for all applications, including music, movies and games.

The HiPhi Y builds on the brand's TECHLUXE® concept, combining technology, luxury and space with extreme performance. To meet its ambitions for the audio experience, Human Horizons brought Meridian's specialists into their team at an early stage, before the interior design had been finalised. Together, the two companies integrated Meridian's advanced audio technologies, developed the HMI (Human Machine Interface) and ensured that the tuning was optimised for the unique NVH (Noise Vibration Harshness) characteristics of a luxury electric SUV.

"This allowed a fully bespoke approach in which our specialists in psychoacoustics were able to influence key interior design decisions such as speaker placement, size, mounting and covering materials," explains Meridian Audio CEO, John Buchanan. "Together we were able to deliver a very high quality system, fully integrated with their design language, without the frustrating compromises that can occur when audio isn't considered until the interior design is largely fixed."

This collaborative approach also helped with the challenge of designing for global markets. "HiPhi is already established in China so the new vehicle had to encompass the high-tech perspective of

luxury that is dominant in that market,” Buchanan continues. “Yet as the brand’s debut car in Europe, HiPhi Y also has to appeal to more traditional European definitions of luxury. Both companies thought deeply about how that should influence all attributes of the sound system and its HMI.”

Buchanan also points out that the pace at which Human Horizons operates was both impressive and challenging. “Our programme management and attention to detail was expected to be more than world-class,” he states. “Because this is the third HiPhi vehicle to be specified with Meridian’s technologies, they knew they could trust us and could push us hard to meet ambitious timing and performance targets.”

A Meridian audio system is available in two vehicle trim levels: Sonic Line with 14+2 speakers and Sonic Pro with 23+2 speakers. Both systems include the +2 capability, which refers to additional speakers in the driver’s head rest enabling optimised sound quality and clarity and can also provide navigation and other command signals while minimising disturbance of other vehicle occupants.

To take HiPhi system into manufacturing, Meridian worked with Human Horizons hardware supplier to optimise the performance, weight and packaging requirements for each hardware component.

Technical Specification

Meridian’s innovations in audio electronics and signal processing allow a hardware-independent route to flexible, upgradeable in-car audio platforms. At the heart of the HiPhi system is a suite of Meridian software technologies that optimise the sound for different conditions and allow managed customisation by vehicle occupants.

One of the key challenges of the automotive interior is that two-channel stereo recordings have a relatively small natural "sweet-spot" where accurate imaging is experienced. Move even slightly off-axis and the imaging breaks down: a particular challenge in vehicle interiors because the listeners are so close to the speakers. Meridian Horizon technology employs adaptive upmixing to psychoacoustically optimize sound localisation cues, creating more natural and stable sound imaging throughout the cabin.

Another challenge is that the noise profile against which the audio system must work changes with

changing vehicle conditions. Meridian Intelli-Q uses available vehicle data such as occupancy, window position, and vehicle speed to automatically optimise the audio performance for every condition.

Meridian Digital Precision maximises the signal-to-noise ratio of digital audio, ensuring the finest details are retained and listener fatigue is minimised. Meridian RE-Q intelligently tunes the audio system to the precise acoustics of the listening space, preserving the natural rhythm of the performance. True Time is Meridian's apodising filter, which reduces errors that can occur in some compression formats by converting pre-echo to post-echo.

About Meridian Audio

Meridian is a multi-award winning British audio technology innovator with a rapidly growing automotive business. In home audio, Meridian is best known for the hi-fi and surround sound cinema products chosen for many of the world's most astonishing residences and super yachts. For the demanding in-car environment, the company focusses on pioneering DSP and other software technologies, supported by deep expertise in electronics, hardware integration and system tuning. Many of the world's most ambitious vehicle manufacturers trust Meridian to support their audio system design, adding value to their most premium systems through the addition of the Meridian brand. Meridian is a technology-driven business that invests around 15% of revenue in R&D, ensuring a full pipeline of innovations that deliver exciting upgrade paths for its customers.

Press Contact for Meridian Audio's automotive business

To arrange an interview on this or any related topic, call Meridian Audio's automotive PR specialist, who is always happy to talk through ideas.

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High resolution images are available from the press contact



The new HiPhi Y, debuted in Europe at the Goodwood Festival of Speed, is the latest luxury vehicle from technology-driven Chinese manufacturer Human Horizons.



Technologies from British high performance audio specialist Meridian provide one of the world's finest in-car audio experiences.



John Buchanan, CEO at Meridian Audio