

HEAD acoustics presents SQuadriga III

A new standard in mobile measurement technology

SQuadriga III redefines mobile measurement technology. With the familiar small form factor, the latest generation of SQuadriga offers an unprecedented scope of functionality, usability, and versatility – without losing any of its proven features. The delivery date for SQuadriga III is scheduled for the first quarter of 2019.

SQuadriga III system combines a multitude of built-in interfaces, eliminating the need for additional adapters. The mobile measurement system records signals from up to eight analog channels. With ICP power supply (2 mA or 4 mA), a wide range of different sensors can be connected: microphones, acceleration sensors, and many others. The connection of binaural sensors, such as the BHS II headset or an artificial head, allows binaural recordings and playback to be performed easily. A connector for equalized headphones provides for maximum flexibility in mobile measurements. Playback, monitoring, and real-time filtering become possible anytime and anywhere – in the field, in a measurement lab, or at a test bench – without additional equipment.

An all-in-one solution

The built-in FlexRay interface, the two CAN FD ports, and the two pulse inputs are electrically isolated. The pulse inputs allow revolution speed (rpm) sensors of any kind to be connected to SQuadriga III. With sensitive signal conditioning and adjustable trigger thresholds, connecting a wide range of pulse sources now becomes more convenient than ever. The HEADlink interface allows for a seamless integration with a HEAD*lab* system. Vice versa, SQuadriga III can also be extended using a HEAD*lab* module. For mobile operation, the module can be powered by the high-capacity battery. Adding a second SQuadriga III unit allows users to set up a mobile system with up to 16 analog channels. In stand-alone mode, analyses can be performed directly at the measurement site. In addition, three USB ports are available, e.g. for connecting an external USB camera for making photos or videos of measurement situations. All data can be saved either to the built-in 64 GB memory or to an external USB stick.

With a satellite receiver for GPS, Glonass, and Galileo, the device has access to the exact time, position, and speed. A special advantage: Recordings from devices used at different locations can be synchronized retroactively. The user-oriented design of SQuadriga III is completed by a large 7" display with a capacitive multitouch and intuitive handling. The powerful processor not only handles time-domain signals, FFT, and third-octave spectrum calculations, but is also prepared for future calculations of psychoacoustic analyses, such as sharpness or loudness.

About HEAD acoustics

For decades, HEAD acoustics has been one of the world's leading suppliers of products and services in the fields of binaural recording and playback technology, sound and vibration analysis and communication measurement technology. The company is internationally recognized for its expertise and leadership in the development of hardware and software for measurement and analysis to optimize noise, speech and audio quality.

Always at the cutting edge, we passionately develop high-tech solutions for data acquisition and analysis. For various acoustic requirements in vehicles, HEAD acoustics offers holistic solutions that take into account the aspects of human perception of sound and vibration events. The product portfolio includes integrated hard and software solutions as well as customer-specific solutions and services. The medium-sized enterprise from Herzogenrath nearby Aachen has seven subsidiaries all over the world, located in France, Italy, Great Britain, China, Japan, South Korea and the USA.





SQuadriga III: Handheld measurement front end featuring video



SQuadriga III with the binaural headset BHS II