

HEAD/*lab* II - Powerful Next Generation Data Acquisition System for Sound and Vibration Measurements

The new generation of the HEAD/*lab* modular multi-channel data acquisition system takes the lead with a range of advanced features and is even better suited for demanding mobile applications than its well-known predecessor. The new models, with their clean and robust design, feature a double data rate protocol, high-speed CAN-FD support and synchronization capabilities of multiple, spatially distributed controllers via GPS and LAN (PTP). And optional stand-alone recording enables measurements without an external computer.

Robust, easy to configure and more powerful than ever before

HEAD/*lab* II systems consist of one or more controllers with different input, playback and power supply modules. They are easy to configure: Depending on the application, the user selects the appropriate module for the different sensor types and combines it with one controller. Both, modules and controller, are robust, fan- and noiseless and can be flexibly combined. An integrated locking mechanism allows the modules to be combined into robust units and easily separated again.

Here beats the heart: Controller *lab*CTRL II.1 with new interface protocol HEAD/*link* 2.0

The heart of the HEAD/*lab* II system is the powerful controller *lab*CTRL II.1 with the new interface protocol HEAD/*link* 2.0 enabling very high channel numbers or higher sampling rates (8 to 204.8 kHz per channel) compared to its predecessor. *lab*CTRL II.1 bundles and synchronizes the data, supplies the connected modules with power and establishes the connection to the PC. Connecting multiple controllers creates systems with up to 600 channels for large and complex projects. With additional accessories such as the Isofix mount for crash-proof installation in the vehicle, HEAD/*lab* II systems can be conveniently and safely attached or transported.

Fully compatible and extremely flexible

Whether for vibro-acoustic analyses regarding sound transmission of technical products, for aerospace applications or automotive measurements in vehicles and test benches: HEAD/*lab* II takes the lead in mobile sound and vibration measurement technology with its bundling of performance, a large number of channels and optional stand-alone recording. This modular system, which scores with robust technology in a small installation space, convinces even in difficult application scenarios and measurement situations with easy handling and high performance.

All HEAD/*lab* modules of Generation I and II are fully compatible with each other. HEAD/*lab* Generation I modules can be combined with a Generation II controller, and the new input modules can also be combined with a Generation I controller using the HEAD/*link* 1.0 protocol (data rate as for HEAD/*lab* Generation I modules). In mixed operation, it is negotiated per HEAD/*link* connection which protocol can be used. This guarantees full flexibility and maximum performance for every module.

About HEAD acoustics

HEAD acoustics GmbH is one of the world's leading providers of holistic sound and vibration analysis solutions. The company also enjoys global recognition in the telecom sector due to its expertise and pioneering role in developing hardware and software to measure, analyze, and optimize voice and audio quality and customer-specific solutions and services. HEAD acoustics' range of services covers sound engineering for technical products, investigation of environmental noise, speech quality engineering, consulting, training, and support. The company from Herzogenrath near Aachen in Germany has subsidiaries in China, France, Italy, Japan, South Korea, the UK, and the USA, as well as numerous sales partners worldwide.

Picture: HEADlab Gen II

