



HEADlab

Data Acquisition Meets Flexibility



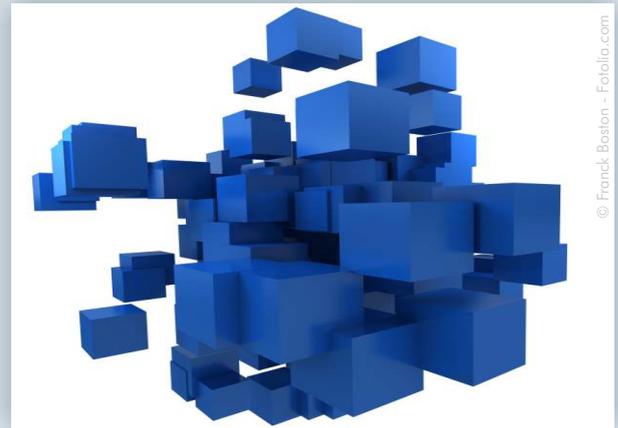
> HEADlab – the Modular Multi-Channel Front-End System from HEAD acoustics

Data Acquisition Meets Flexibility!

HEADlab is a rugged multi-channel front-end system from HEAD acoustics for flexible data acquisition. Its modular concept comprises control modules as well as various power supply and signal acquisition modules.

Individual modules are easily configured into flexible, customized systems that adapt to your changing requirements. The combination possibilities reach from compact systems to decentralized multi-channel systems for extensive measurements with a large number of channels.

HEADlab is perfectly suited for both stationary and mobile operation. Thanks to the powerful battery integrated into the power supply module, you can power even large HEADlab systems without external power. Since no cooling fan is required, operation of the system is absolutely silent.



HEADlab is a natural extension to the product range of HEAD acoustics. Combined with the HEAD Recorder software and the ArtemiS analysis software, you get a complete measurement system from a single source.

> Application Areas

You can use HEADlab for data acquisition in sound and vibration evaluations. Its range of applications include sound optimization and sound design for technical products, evaluation of environmental noise, or almost any other task requiring sound or vibration measurements.

With the possibility to connect both a digital artificial head and a CAN bus directly to the system, HEADlab is particularly well suited for use in the automotive industry. Furthermore, it can be used in all areas where artificial head recordings are relevant.



> Configuration Possibilities

HEADlab can be set up very quickly and is ready for operation immediately. To set up a compact measurement system, you can easily combine the individual modules into a stable array thanks to the integrated locking mechanism.

If you want to use HEADlab for measurements with a large number of channels, the star wiring between the controller and the signal modules with only one cable per module provides an uncomplicated, decentralized system with a short distance to the measurement object.



> Accessories

To make sure that you can use HEADlab for your daily work in the most convenient way, a number of accessories are available that allow you to transport and securely fasten HEADlab anywhere your test needs take you.

The mounting plate was developed specifically for mounting HEADlab systems on a car seat. Openings for the safety belt and for cables facilitate the setup.

For measurements in a vehicle involving an artificial head measurement system, the HEAD Seat Mount HSM V, which allows an artificial head to be mounted on top, is the perfect choice.

Housing the system in a 19" rack is particularly suitable for stationary setups, e.g. in acoustics laboratories.

Flexible positioning close to the measurement object is possible with magnets. For example, to measure engine noise, HEADlab can be set up decentrally with a signal acquisition module attached directly to the bottom side of the engine hood.

For safe and convenient transport using one hand, you can attach a carrying handle to your HEADlab system.



> Features

Mobile

The Power Box serves as an uninterruptible power supply. The built-in battery can power your HEADlab for up to several hours depending on your system configuration.

Flexible

The controller can be connected to the PC or notebook via USB or MADI & LAN – the right connection in any situation.

Easy to handle

The configuration of the entire systems is done on the PC via the controller. For your recordings, you can use the programmable HEAD Recorder software.

Silent

HEADlab works without a cooling fan. This ensures that you only record the sound you are actually interested in.

Efficient

The modules and the controller have low energy consumption, produce little heat and work reliably over long periods of time.

Precise

One controller module synchronizes up to 60 external channels, accurate to one sample. The labV6 signal modules feed the controller with phase-accurate data with 24-bit resolution and a signal-to-noise ratio of 108 dB.

All types of information

The controller comes with built-in pulse inputs, a CAN-OBD2 input and an artificial head input. You don't need separate modules for recording these types of data.

Easy to connect

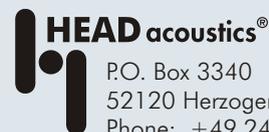
Both the mechanical and the electrical connection of the modules are as simple as it can be. The modules can be attached to each other using the built-in locking mechanism. The star wiring between the controller and the signal modules requires only one cable per module.

Future-proof

The modular HEADlab system grows with your needs. Additional modules extending the product family and allowing significantly higher numbers of channels are in development.



Discover HEADlab at
[www.head-acoustics.de/eng/nvh_headlab.htm!](http://www.head-acoustics.de/eng/nvh_headlab.htm)



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