



Optimize Voice & Audio Quality

Advanced Testing Methods

Testing Headphones, Headsets and Hearables

The HEAD acoustics test suites HQS-ANC-Headset and HQS-Audio are databases for the ACQUA analysis system providing complete and comprehensive test arrangements for assessing and optimizing the communication quality of all types of headphones, headsets and hearables.

In particular, the complex tests developed for active noise cancellation (ANC) headphones are outstanding and can be used in a wide variety of applications. Classical tests setups and analysis methods are complemented by new test procedures, providing better insight into the performance of ANC headphones based on realistic simulation of noisy environments and using procedures and models based on psychoacoustics.

The analysis of the communication performance of headsets or hearables covers all conversational quality aspects. Besides standard parameters, tests covering delay, double talk capability, background noise performance and other parameters relevant for communication quality are included.

HQS-ANC-Headset and HQS-Audio enable to value the impact on audio quality in different ANC settings, on the communicational performance of headsets and hearables, gain better data, and allows drawing stronger conclusions about audio, ANC and communication performance.



HQS-ANC-Headset and HQS-Audio – Highlights at a glance

Automated test sequences for all applications

Realistic speech signals, sine-based and other technical signals

Realistic background noise simulations with realistic noise (in conjunction with 3PASS flex)

Relative Approach analysis for all applications

Performance of passive and active noise cancellation

Loudness and speech quality (including perceptual based POLQA analyses)

Echo Performance (including perceptual based EQUEST analyses)

Double talk capability (ITU-T P. 340)

Speech quality with background noise (including perceptual based 3QUEST analyses)

Listening Effort (new perception based HEAD acoustics model)

All access technologies covered (analog, digital, USB, Bluetooth®; appropriate interfaces required)

www.head-acoustics.com