

Configuration example, playback of reverberated audio file

Description

3PASS *reverb* works with an impulse response that has been recorded in a target room. The impulse response describes the acoustic fingerprint of the room. 3PASS *reverb* simulates the reverberation of the room by applying the impulse response to a source signal. Simultaneously, an artificial head or loudspeaker plays back the source signal via ACQUA without reverberation. Consequently, 3PASS *reverb* simulates a realistic sound field with the reverberation of a determined room.

Reproduction rooms must comply with ETSI TS 103 557 requirements.

General requirements

Software

- **3PASS lab (Code 6990)**, background noise simulation software and / or **3PASS flex (Code 6995)**, background noise simulation software
- **ACQUA (Code 6810)**, Advanced Communication Quality Analysis

Hardware

- **Hardware for 3PASS lab or 3PASS flex**, refer to the respective data sheets
- **HMS II.3 (Code 1230)**, HEAD measurement system

- **labCORE (Code 7700)**, modular multi-channel hardware platform with extension modules:

- **coreBUS (Code 7710)**, I/O bus motherboard

labCORE output module for direct signal

- **coreOUT-Amp2 (Code 7720)**, power amplifier output module (two channels)

labCORE input module for preparation measurements

- **coreIN-Mic4 (Code 7730)**, Microphone input module

DATA SHEET

3PASS *reverb* (Code 6996)

Option for 3PASS lab and 3PASS flex – Simulation for Reverberation Scenarios

Overview

3PASS *reverb* is an option for 3PASS *lab* and 3PASS *flex*. It extends 3PASS *lab* / 3PASS *flex* to simulate reverberation of a single talker at the DUT position. 3PASS *reverb* supports measurements according to ETSI TS 103 557.

Key features of 3PASS *reverb*:

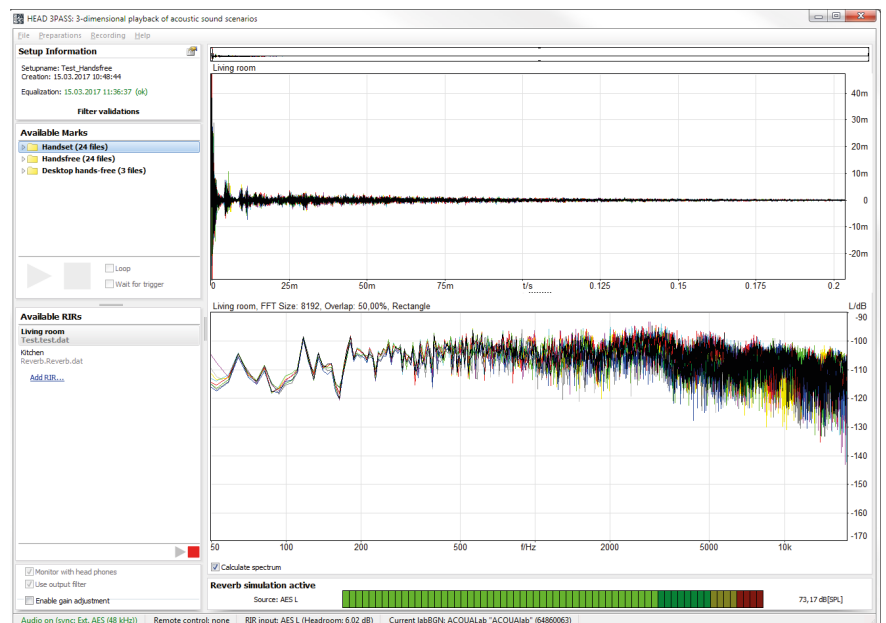
- Reproducible simulation of reverberation for arbitrary source signals
- Works with existing and equalized setups from 3PASS *lab* / 3PASS *flex*
- Included set of impulse responses from various rooms

Third party equipment for preparation measurements

- **Measurement microphone** with LEMO 7-pin connector

Delivery items

- **V2C file**
- **Prepared room impulse responses, background noises, and ACQUA demo database**



Waveform and calculated spectrum of an impulse response in 3PASS *lab*