

What's new in ACQUA 6.3.100

Significant changes since 6.2.210

The release of ACQUA 6.3.100 includes the newest *labCORE* firmware. Full functionality of all features requires the installation of this firmware.

New Features

ACQUA Options

New option *Advanced Psychoacoustics (ACOPT43)*

The Advanced Psychoacoustics Option includes various analyses for the instrumental, analytical description of auditory-perceived sound quality. All analyses are based on the hearing model according to Sottek, which is modeled after the special characteristics of human signal processing.

- Tonality (ECMA-74 (2018/2019), ECMA-418-2 1st (2020), 2nd (2022) and 3rd-4th (2025))

The tonality (based on the Hearing Model of Sottek) is a perception-based analysis method for the detection of tonal components and their characteristics in noises.

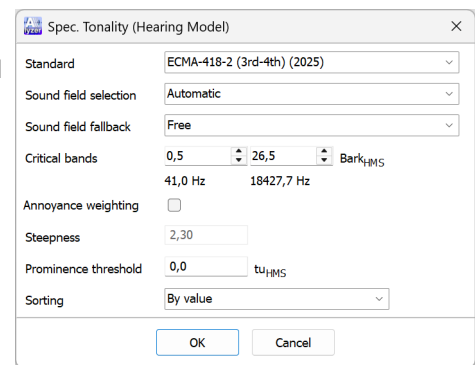
- Roughness (ECMA-418-2 1st (2020), 2nd (2022) and 3rd-4th (2025))

The roughness analyses take into account the human perception of all types of rough sounds (AM, FM, modulated noise, etc.) and all dependencies of roughness perception (modulation rate, degree of modulation, frequency, loudness, shape of modulation).

- Loudness (ECMA-418-2 2nd (2022) and 3rd-4th (2025))

- Impulsiveness

Impulsiveness analyses can be used to psychoacoustically examine fast and huge signal level fluctuations.



labCORE Options

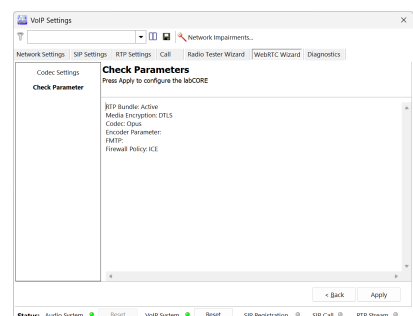
Dante (Option *corel/O-Dante*)

ACQUA now supports the new optional Dante module for *labCORE*.

Dante is a network platform by the company Audinate. It enables multi-channel audio signal transmission via Ethernet with low latency.

WebRTC (Option *corelP-WebRTC*, requires *corelP*)

This is a software extension for *labCORE* that adds the functionality of WebRTC (Web Real-Time Communication) to *labCORE*. It enables the ability to establish calls with, e.g., browser phones via a SIP server.



Miscellaneous

SMD Collections enhanced

Previously, only one SMD Collection could be active at a time; now, multiple collections can be selected simultaneously. SMD Collections can now also be set via script.

Run script on Measurement Object activate

This is new script variant runs after a measurement object is activated.

Project → *Project Options*

Result Diagram: Autoscaling can be disabled

Previously, manually adjusting the axis scaling of the Result Diagram would be reset to the default value from the SMD whenever the result selection in the SMD Tree was changed. This behavior can now be disabled.

Show licenses needed for a project

For the active project, you can generate a list of the licenses which are required to use the SMDs of the project.

Project → *Show encryption status*

Comparison Report allows combining of graphs

It is now possible to do some calculations, e.g., average and minimum, with selected graphs in the comparison report.

Context menu → *Calculations*

Evaluation of the tolerance scheme

When a tolerance scheme is centered, both x-coordinate values of the minimum distance (for lower/upper) are now displayed

Update to Python 3.13

Python Version 3.9 has been updated to Python 3.13.

Overview of the I/O Delays for the active *labCORE* configuration

ShowDelays generates a list of the delays for the input and output channels of *labCORE*. It displays both the individual delays for all blocks in use and the total delay for each channel.

Hardware Configuration → *ShowDelays*

Option *coreBT2LE*

Generic Attribute Profile (GATT) information is now cached after first successful connection establishment to speed up subsequent Bluetooth LE Audio connections.

Unified User Interface for Turning Devices

The turning devices move°S and HRT I are now controlled with a unified user interface.

Significant Bug Fixes

- Channels that were hidden in the Comparison Report selection still appeared in the report's legend.
- External Amp Gain setting was not included in the report.
- If *Hide Skipped Tree Items* was checked, the corresponding SMDs were hidden, but not the associated results.
- Result Diagram: The legend was not updated when the selection in the tree was changed.
- Result Diagram: Hidden curves became visible again when they were moved in the legend.
- Result Diagram: Complex data was not displayed or hidden correctly.
- Result Diagram: Overlaying two analyses from two separate projects no longer worked.
- File Manager: *Batch Import* did not import all files when *Overwrite all* was selected upon prompting.
- If additional channels were appended to the source file via a script during a measurement, they were not played.
- The *Font* and *Color* tabs were missing from the *More Properties* diagram settings.
- It was not possible to create a second *shared object*.
- BEQ settings have been incorrect in the report for a very unusual hardware configuration.
- *Project Main Page* did not display PDF files, and clicking on external links did not work.
- Disconnecting an MFE VIII.1 or labBGN could lead to an error message.