Norsonic

RELEASE NOTE

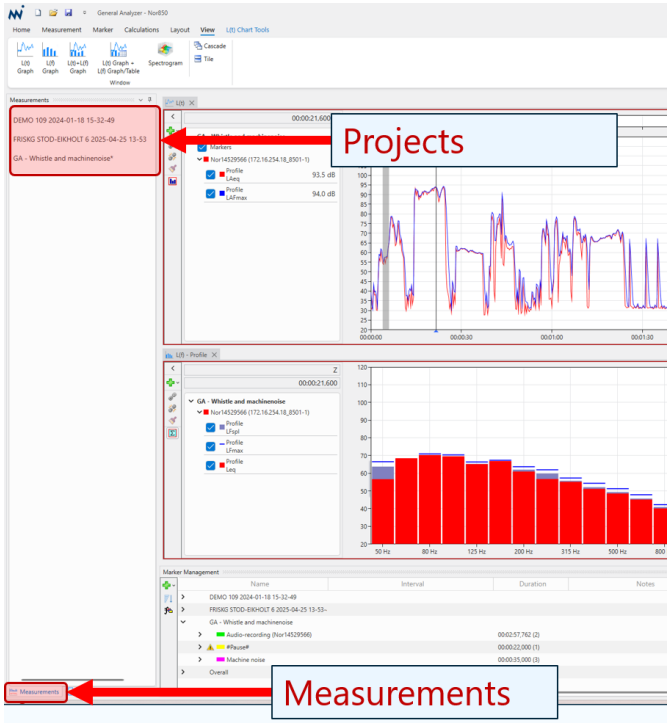
Version 4.3 - Nor850

Version 4.3 improves the General Analyzer module with possibility of multi-project management, event analysis, intervall-based L(t) calculations, Tonality improvememnts and several improvements and bugfixes for all modules

General Analyzer Features

Project Collection

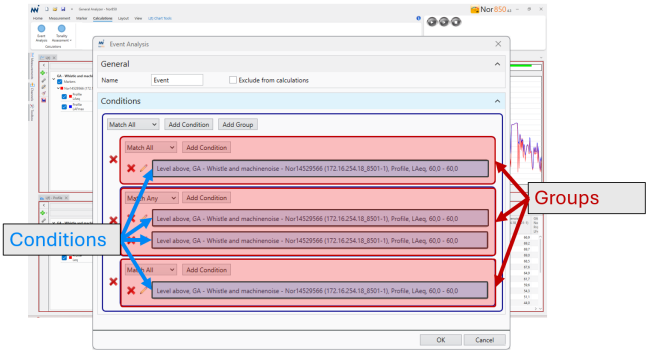
Inspired by the workflow in NorReview, multiple projects may be opened at the same time and displayed simultaneously in graphs and tables.



Event Analysis

The Event Analysis feature allows users to define custom analysis parameters using ***Level Above*** and ***Level Between*** conditions, which can be combined and nested for greater flexibility. Additionally, the Sliding Window ***High/Low*** function identifies the highest and lowest values within a user-defined moving time window.

Unlike the Event Analysis functionality previously available in NorReview, Nor850 supports nested conditions using Groups. These groups function similarly to parentheses in a logical expression, allowing conditions to be combined using logical operators both within and between groups.

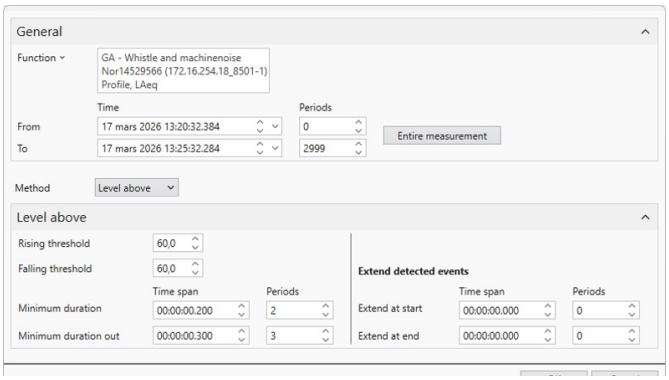


This release supports two logical operators

- ***Match All (AND)***: All specified conditions must be satisfied.
- ***Match Any (OR)***: At least one of the specified conditions must be satisfied.

The example in the figure above can be expressed using parentheses and logical operators, as illustrated below.

(Condition_1) AND (Condition_2 OR Condition_3) AND (Condition_4)



Each condition can be configured individually, including duration, measurement function, threshold levels, and marker extensions before and after detected events.

Markers During Playback

Marker placement has been improved to support live marker insertion during audio playback. Users can select any position within an audio recording marker and start playback using the spacebar or the **Play** button in the Audio Recorder menu.
While listening to the recording, markers can be inserted directly using the Marker toolbar or the corresponding keyboard shortcuts.

Spectrogram Linking

A time-cursor in the spectrogram graph is now added, making it possible to link the graph window to another L(t) or L(f) graphing window.

Restore Functionality

Measurements or projects can now be restored to either the last saved state or its original state from when the measurement was taken with all markers placed from triggers or marker bar selections. This is accessed by right-clicking the project of interest and select between the two restore options.

Interval-Based Calculated L(t) Functions

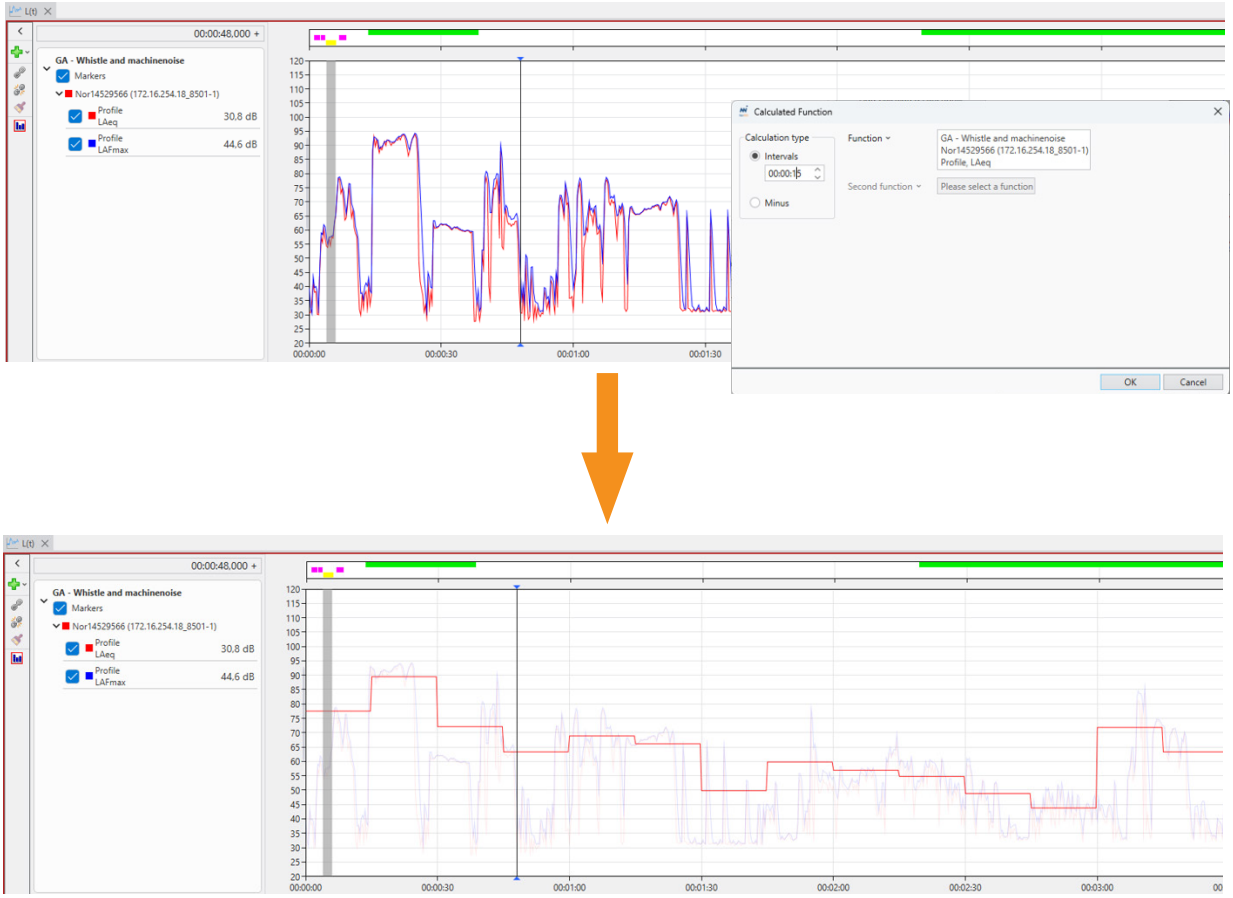
It is now possible to recalculate functions with a longer time period. This feature can be synchronized to start the recalculation at certain timestamps

Concatenate

Concatenate have now been included in two different methods. Both can be found in the ”**Open**” dialogue in the General Analyzer module. When selecting more than one projects, the ”concatenate and open” button in the bottom right corner becomes available. It will then concatenate all selected projects and then opening it. The other method is by selecting several projects, then pressing the ”**Concatenate**” button in the top ribbon. This will create a concatenated project in the selected folder without exiting the ”Open” window.

Tonality

Tonality was introduced in version 4.1, and is now improved with further support for different samplingrates. Nor145 support both 12 KHz and 48 KHz, and Nor850 tonality assessement now support 12, 24, 44.1, 48 and 96 KHz.



Multi-File Excel Report Templates

The new version now have support for Profile B, Moving window, NoiseCompass and Weather data in the multi-file Excel report template.

Sound Power Features

EU Directive 2000/14/EC

Following the ISO 6395 standard, the new directive has been implemented, adding new guidelines and features for Loaders.

Building Acoustics Features

ISO 15186:2000

Building on the implementation of ISO 15186-2, Nor850 now also supports ISO 15186-1:2000 - Measurement of Sound Insulation in Buildings and of Building Elements Using Sound Intensity - Part 1: Laboratory Measurements.

To further enhance measurement flexibility, support for box-shaped measurement surfaces has also been introduced.

Curvature Calculation

Curvature [C%], expressing the relationship between T30 and T20, is now available for all reverberation time measurement methods. Previously, this parameter was only supported for the Swept Sine method

Sound Intensity Features

Extended Frequency Range in Excel Reports

The Standard template-based measurement Excel report now supports frequency bands outside the standard range (50 Hz - 10 KHz 1/3 octave).
To make use of this, templates must be manually altered and customized by the user.

General Features

Collapse All Groups

Added a “Collapse All Groups” option to the View drop-down menu in the Open and Save dialogs, allowing users to collapse all grouped entries simultaneously.

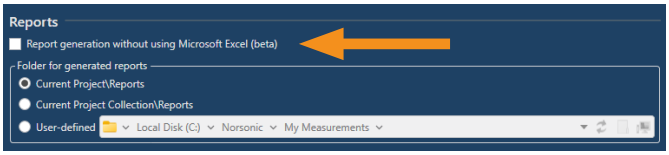
The expanded or collapsed state of each group is now retained.

Reset All Filters

Added a “**Reset All Filters**” option to the View drop-down menu in the Open and Save dialogs, allowing users to clear all active column filters.
Added a “**Clear All Filters**” option to the context menu in the Project Management - Overview table for all modules except General Analyzer and Sound Intensity.

Improved Filter Capabilities

Enabled column filtering for user-defined report information in Project Managegement and the Open dialog.



Report Generation Without MS-Excel

A beta version for report generation without Microsoft office Excel has been included. This must be turned on from the Options menu and will then make it possible to create pdf reports without the use of Excel.

Bugfixes

- Fixed an issue where user-defined views in the “**My Measurements**” list did not retain saved grouping, filtering, and sorting settings in the Open and Save dialogs.
- Fixed an issue where resizing the Open dialog could completely hide the instrument section, requiring a reset to restore it
- Fixed an issue where the “**Single Project - Rating**” window displayed the default primary rating instead of the rating selected in Project Management.
- Fixed an issue where deleting files or folders from Nor850 that was exceeding the Recycle Bin capacity got permanently deleted without notifying the user.