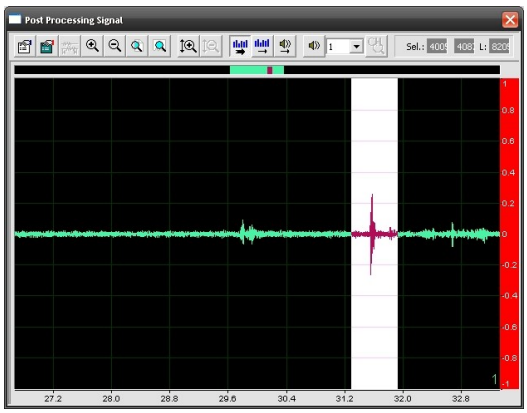
Many improvements, large and small, in the SAMURAI software make your measurement system faster as well as even more reliable and user-friendly

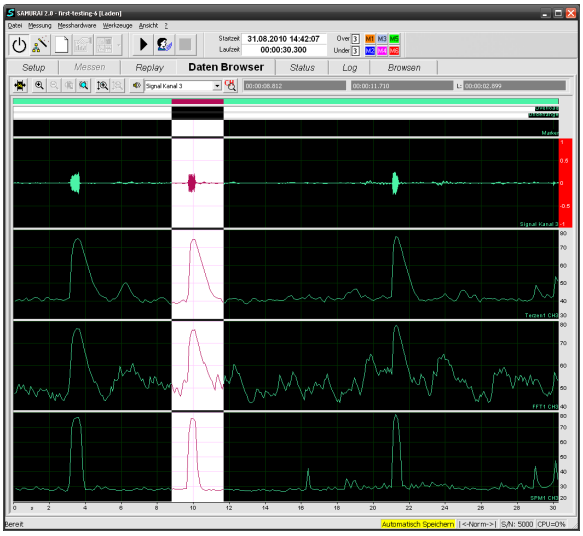
SAMURAI 2 is specially designed for use with our new Soundbook MK2 and Apollo® hardware; however, it also provides many improvements when applied with our existing Soundbook® and HARMONIE®-devices. The following examples show how these improvements noticeably enhance the measurement system.

Analysis of Stored Time-Signals within a familiar, clearly-arranged graphical user interface (POST PROCESSING)

The SAMURAI-Option: Post Processing allows you to perform new analyses of stored time data. The new analysis is done similarly to a normal SAMURAI measurement, except that stored time data from a SAMURAI measurement or WAV files are used for the analysis.

Using the Data Browser, it is possible to limit the new analysis to a section of interest within the signal.





The new Data Browser - stored measurement data at a glance

The new Data Browser ensures that you always have an overview of the stored measurement data.

The picture on the left shows the clear representation of the values stored for a single-channel measurement in the Data Browser. It shows the time signal, the time history of a sound level meter value, and the total levels of the third-octave and FFT analyzers.

The zoom function allows sections of a measurement to be selected, replayed and saved as new SAMURAI measurements.

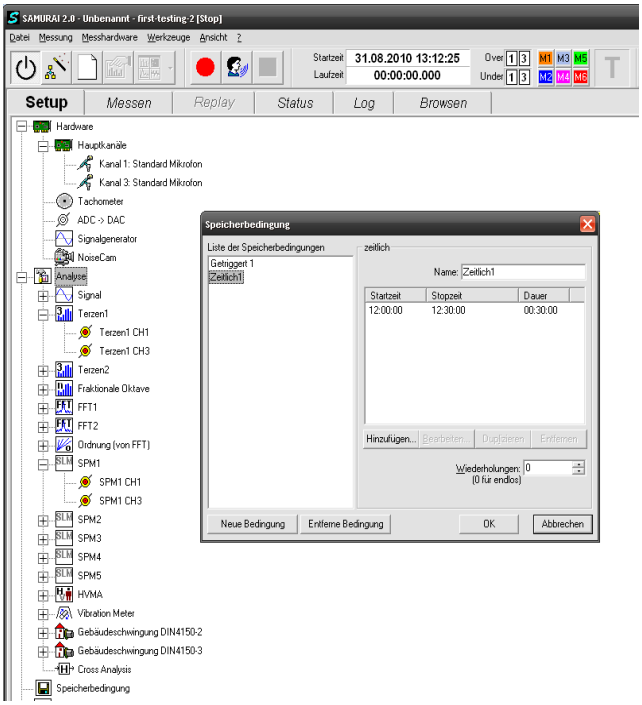
The new Storage Concept

The memory management scheme for the analyzed data has been radically improved. The new "Storage Conditions" allow individual measurement data to be stored only when specific, freely-definable conditions are met. The virtual measurement instruments (Signal, FFT analyzer etc.) only save their measurement data when their configured Storage Conditions are satisfied. Storage Conditions can, for example, be defined via triggers.

The trigger mechanism has also been extended, e.g. combined triggers can now be further combined to a new trigger.

Data reduction is now possible via a selection of the level values to be saved in the sound level meter.

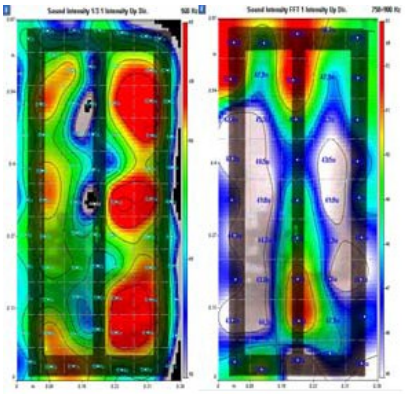
Furthermore, analyses are now possible which use several virtual measurement instruments of the same type (up to 5 sound level meters, 5 FFT analyzers or 5 octave analyzers per channel). For example, during the course of a measurement, several FFT analyses per channel with different parameters can be calculated and displayed simultaneously.

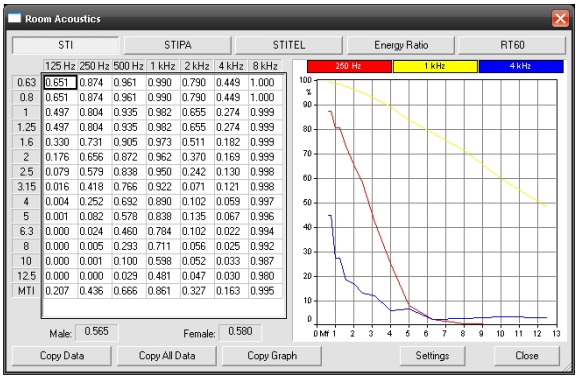


Sound-Mapping without great effort

The new SAMURAI-Option: Sound Intensity Map enables sound-mapping of objects simply by means of an intensity probe.

During the intensity measurement on an imaginary surface, the position of the moving intensity probe is automatically captured with a laser and a camera. The "scan track" of the intensity probe is shown superimposed on the picture of the measured object during the measurement. Afterwards, the third-octave and FFT analysis data are mapped.





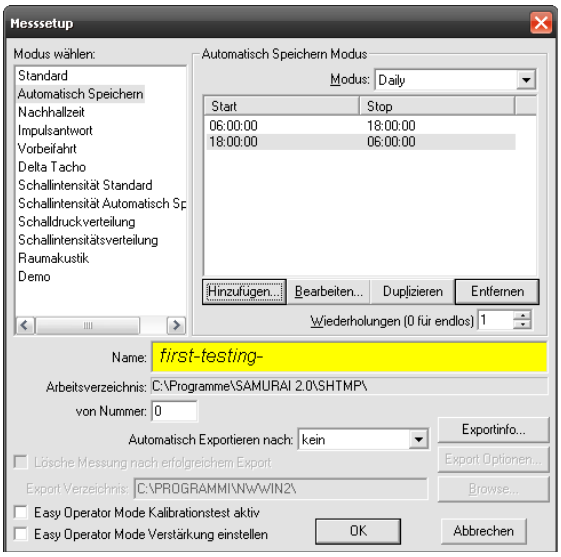
The new Room Acoustics option

For the determination of the acoustic characteristics of a room, in addition to the reverberation time, the new SAMURAI-Option: Room Acoustics is now available. This option provides values for clarity, distinctness and speech intelligibility according to standards.

Weather Data in SAMURAI

Long-term monitoring according to the TA-Laerm regulations requires the capture of weather data synchronously with the acoustic measurement data.

With the new SAMURAI-Option: Weather Station, weather data are shown in a separate window and saved synchronously with the acoustic measurement data in a single SAMURAI measurement.



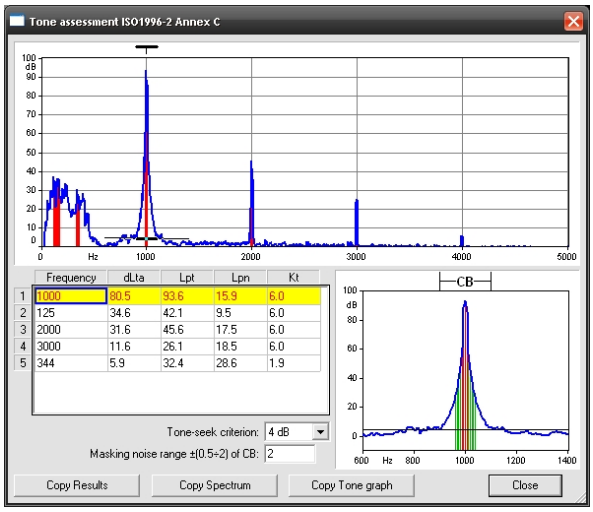
The new Measurement Modes

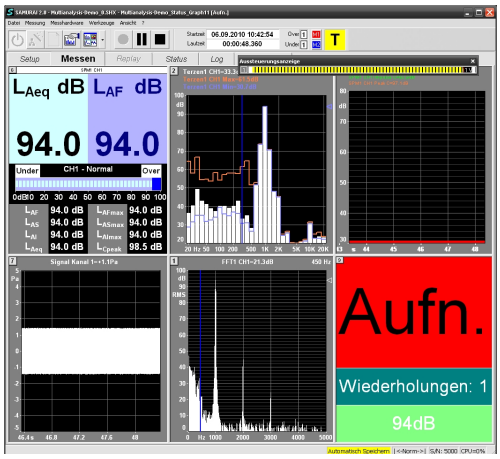
The measurement modes, together with the chronological control of the measurements, have been completely redesigned.

Several measurement modes of the previous version have been consolidated to a single "Autosave" measurement mode with freely configurable time-management. In particular for monitoring tasks, this consolidation results in a significant simplification simultaneously with an increased flexibility.

Determination of Tonality according to ISO 1996-2

With SAMURAI 2 and the new SAMURAI-Option: Tone Assessment ISO1996-2, tonality analysis according to ISO1996-2 Annex C is possible.





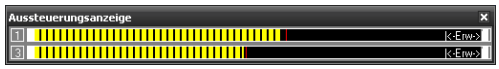
Status Graph

The new status graph provides easily recognizable visual information about the status of the current measurement (Run, Pause, Stop, Trigger active).

This graph is useful e.g. for measurements in moving vehicles.

Level Indicator

In order to detect a possible overload of the signal inputs as soon as possible, ideally before the start of the measurement, the level indicator now runs permanently (also in STOP-Mode).



Sensor Error Detection

SAMURAI 2, together with the new Soundbook_MK2 or Apollo®, detects cable breaks for ICP sensors.