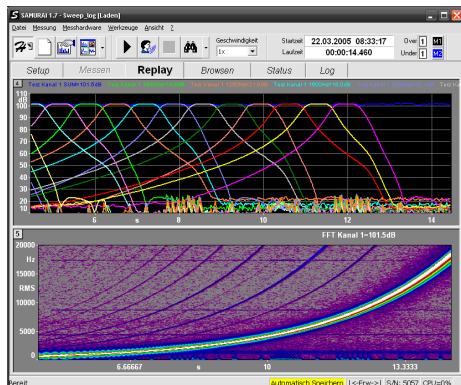


## SAMURAI option: MULTI GENERATOR



### Field of Application:

This option provides four independently operating signal generators, which can produce various shapes of signals. The option is applied for measurement tasks which require particular signal shapes (e.g. [building acoustics](#) or the control of shakers).

### Description:

The signals produced by the generators are provided via the four output channels of the measurement hardware as electrical signals in the range of  $\pm 3.16$  V. Pink and white noise (full bandwidth or band-limited) as well as sine-sweep (for reverberation time measurements) are provided in the SAMURAI basis functionality.

This option includes the signal shapes: sine, rectangle, triangle, impulse, multi-sine, logarithmic and linear sine-sweep as well as pseudo-random noise. Furthermore, .WAV files may also be output. It is also possible to use the output channels to provide a DC representation of the level values.

A graphical preview shows the signals as well as the signal FFT resulting with the application of various FFT windows. The preview allows the effects of the FFT window to be assessed.

### Technical Data

Resolution	16 Bit
Maximum output voltage	$\pm 3.16$ V peak
Frequency range	DC...20 kHz
Features	<ul style="list-style-type: none"> <li>• Four independently configurable signal generators</li> <li>• Synchronizable with the FFT analysis</li> <li>• Signal shapes: sine, rectangle, triangle, impulse, multi-sine, logarithmic and linear sine-sweep as well as pseudo-random noise</li> <li>• Output of .WAV files</li> <li>• Output of levels as proportional DC signal</li> <li>• Signal preview with spectrum</li> </ul>

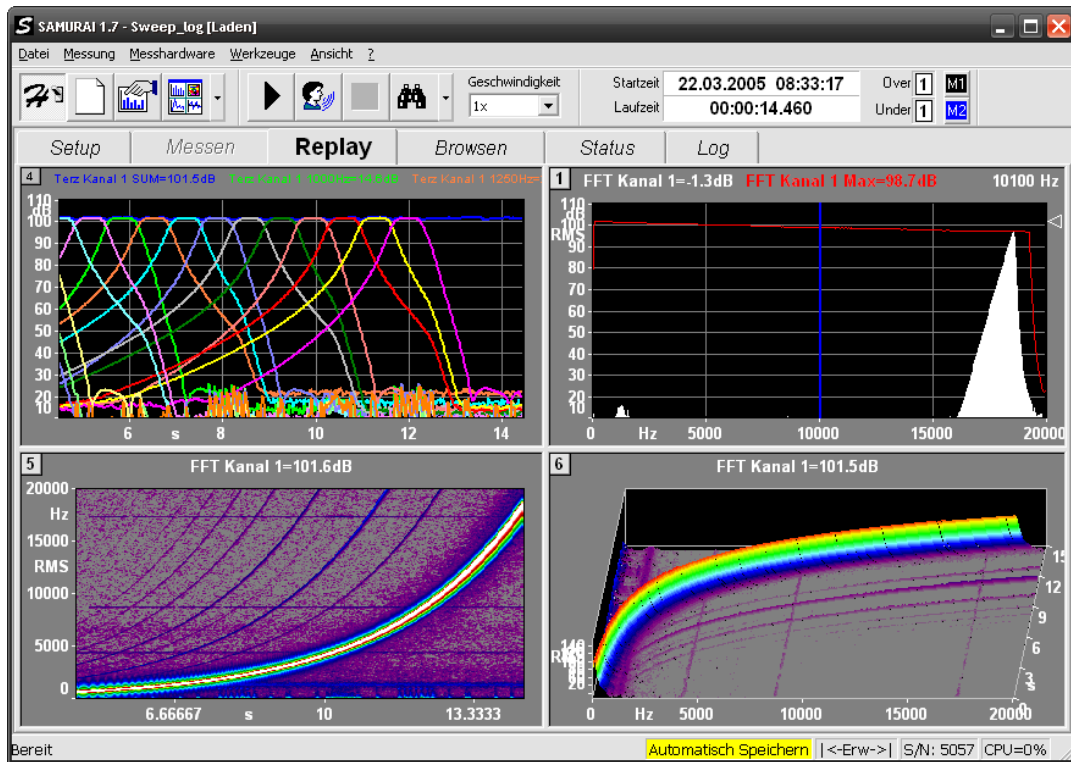


Figure 1: Sweep

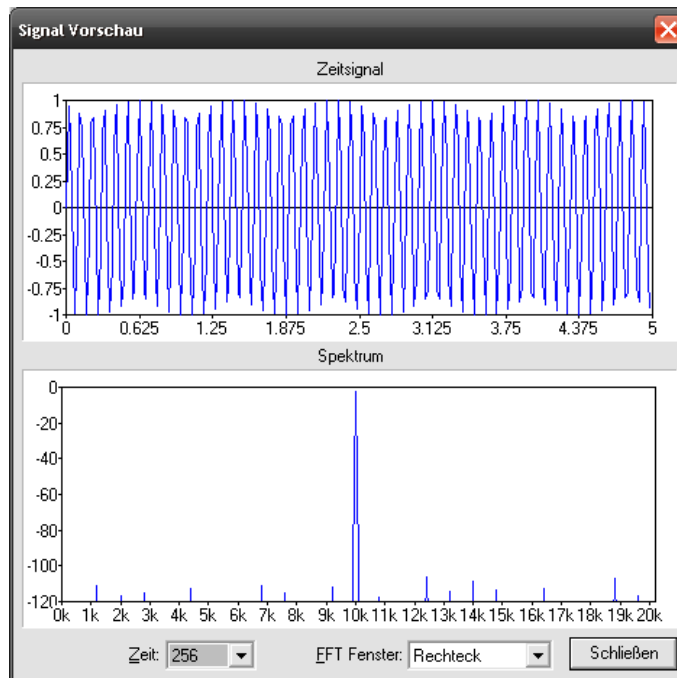


Figure 2: Signal preview