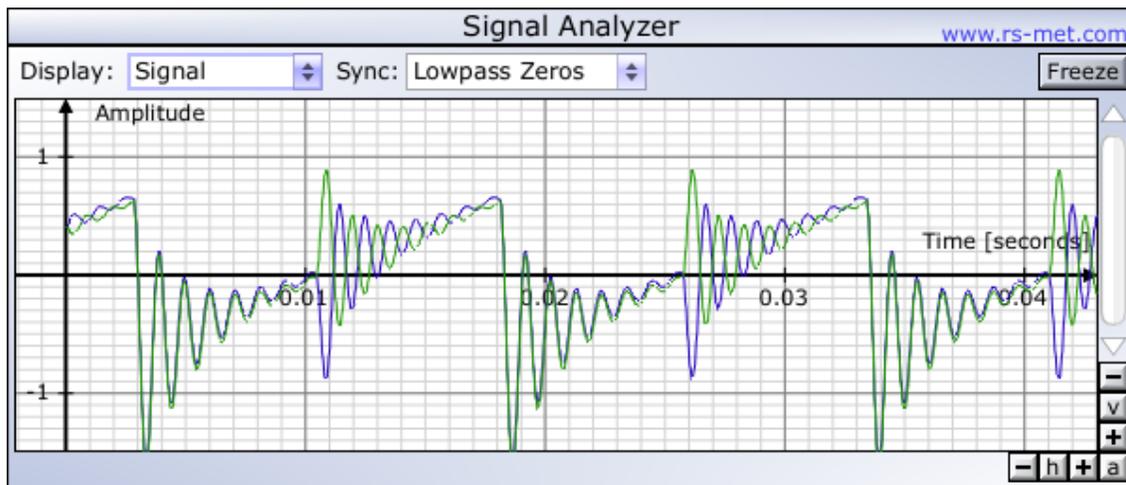


Signal Analyzer - User Manual

What is Signal Analyzer?

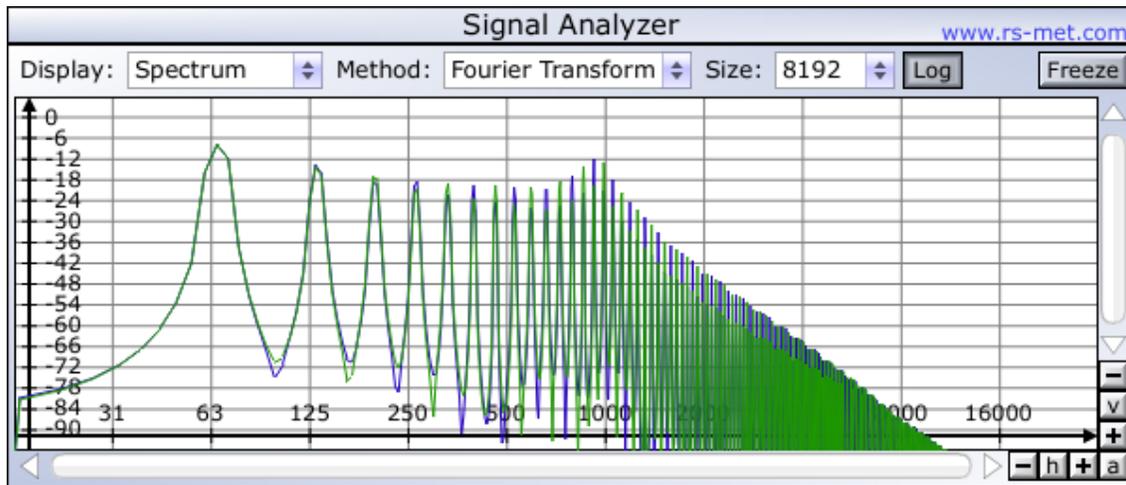
Signal Analyzer is a combined oscilloscope / spectrum-analyzer plugin for inspecting signals in realtime in the time- and frequency domain. The plugin displays the signals (or spectra) of two input channels (which are mostly left and right channel of a stereo signal) in blue and green respectively. The mode of operation (oscilloscope or spectrum-analyzer) can be selected via the 'Display' menu in the top left part of the user interface. In both modes, you can freeze the current content of the display with the 'Freeze' button to the right. With a right click on the display, you can also export the current content of the display as a .png image file or a .svg vector graphics file.

The Oscilloscope/Waveform View



When the option 'Signal' is selected in the 'Display' menu, the time signal itself will be displayed in an oscilloscope like fashion. To adjust the time window which will be shown, use the horizontal zoom-widgets at the bottom right of the display itself or alternatively the mouse-wheel. To synchronize the display to the signal, the 'Sync' menu should be used. At the moment the only option here (other than no sync at all) is a synchronization to the zero crossings of a lowpassed version of the input signal (option 'Lowpass Zeros'). For (quasi) periodic signals, this will have the effect to show a more stable waveform.

The Spectrum View



When the option 'Spectrum' is selected in the display menu, you will see a spectral analysis plot of the incoming audio signal. The menu 'Method' provides at the moment only the option 'Fourier Transform' which means, that the signal spectrum is estimated by the ubiquitous FFT algorithm. The menu was already included for future inclusion of other spectrum estimation methods. The 'Size' menu next to it, chooses the FFT blocksize which will be used. The 'Log' button toggles logarithmic scaling of the frequency axis on (or off). To see a section of the spectrum in greater detail, you can use the zoom- and scroll-widgets in the same way as in the oscilloscope view. Of course, freezing and export is available here as well.