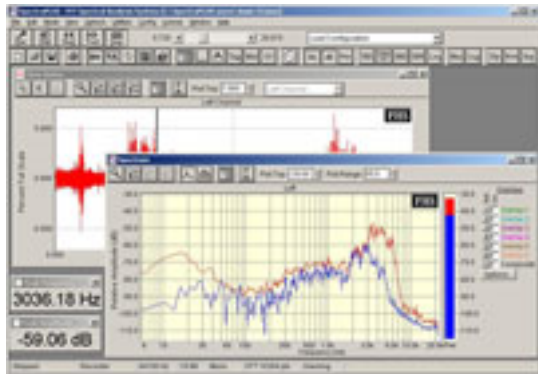


URL der Seite: http://5407-spectraplus-sc_5b_%28inkl_3_optionen%29.htm
[Home](#) - [Software](#) - [Messsoftware](#) - [SpectraPLUS-SC 5B \(inkl. 3 Optionen\)](#)

SpectraPLUS-SC 5B (inkl. 3 Optionen)



Art.Nr.: 69701

UVP inkl. MwSt.

695.00 €



Meßdatenerfassung & -analyse-Software - Basisversion plus 3 Optionen

Mit SpectraPLUS-SC (Sound Card Edition) ist es Pioneer Hill Software (PHS) gelungen, eine erstklassige und preiswerte Lösung für die PC basierte Meßdatenerfassung und -analyse im Bereich Akustik- und Vibrationsmessungen zu entwickeln. Mit Hilfe einer Windows-kompatiblen Soundkarte wird der PC zu einem mächtigen Echtzeit-Analyse-System.

SpectraPLUS-SC ist eine robuste, preiswerte und hochauflösende Spektralanalyse-Software für komplexe Signalanalysen mit optionaler Echtzeit-Oktavauflösung (bis zu 1/96), hochauflösender FFT Spektrum-Analyse (bis 1,048,576 pts), 24 Bit Genauigkeit und Sampling-Raten von bis zu 200 kHz und darüber. Über die optional erhältlichen Zusatzoptionen lässt sich SpectraPLUS optimal an alle Bedürfnisse anpassen.

Dieses Basis-Paket bietet Einkanal (Mono) Echtzeit-Operationen.

Die aktuelle Version SpectraPLUS-SC kombiniert alle Features vorhergehender SpectraPLUS Versionen sowie alle fortgeschrittenen Features von SpectraPRO und SpectraLAB. Das SpectraPLUS-SC Upgrade ermöglicht Besitzern dieser Versionen ein vollständiges Upgrade auf die aktuelle SpectraPLUS-SC Version.

SpectraPLUS-SC 5B enthält 3 Zusatzoptionen Ihrer Wahl.

Besonderheiten

SpectraPLUS-SC ist in unterschiedlichen Basisversionen erhältlich: Die Standard-Version A enthält Funktionen, die bereits die meisten Bereiche der Meßdatenerfassung abdecken. Die Versionen B und C enthalten jeweils eine unterschiedliche Anzahl Zusatzoptionen eigener Wahl und Version D ist die SpectraPLUS-Vollversion. Sie enthält sämtliche Zusatzoptionen. So können Sie SpectraPLUS-SC individuell nach Ihren Bedürfnissen zusammenstellen.

Features

- Real-time FFT analysis of live input
- Record, Playback and Post Process WAV files
- Displays: Time Series, Spectrum, Spectrogram, 3-D Surface, Phase

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- Full Featured Dual Channel Signal Generator
- High Resolution FFT Analysis up to 1,048,576 pts
- Octave Analysis from 1/1 to 1/96 octaveSpectrogram
- Up to 24 bit precision (hardware dependent)
- Digital Filtering, Distortion Analysis, Transfer Functions
- Acoustic Tools: RT60, Equivalent Noise Level (Leq)
- THD+N versus Frequency
- Vibration Testing and Analysis
- Impact Testing
- Automation Tools, Data Logging

Zubehör

WICHTIGER HINWEIS: Erfordert einen Spectra-USB-Hardware-Key (Artikelnr. 69750). Sollten Sie nicht bereits im Besitz eines Spectra-USB-Hardware-Keys sein, müssen Sie diesen zusätzlich mitbestellen.

Lieferumfang

CD.

Sprachen: Handbuch E, Software E

Systemanforderungen

Windows XP, Vista32, Vista64, Windows 7-32, Windows 7-64, Windows 8, Pentium CPU oder besser, 1MB RAM, 40 MB freier Festplattenspeicher, 16-Bit Soundkarte, VGA 256 Farben (1024 x 768 oder höhere Auflösung), freier USB-Anschluss für Spectra-USB-Hardware-Key. HINWEIS: Spectra-USB-Hardware-Key erforderlich.

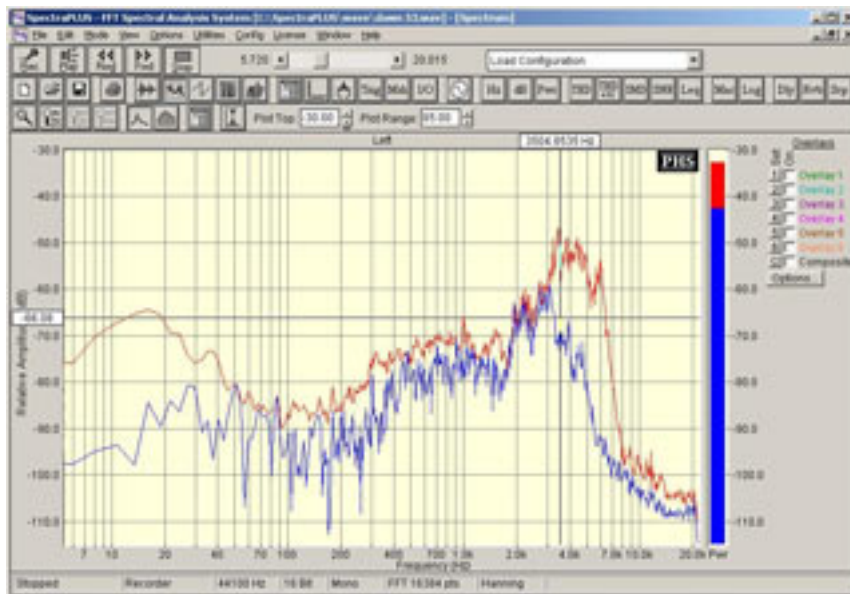
Microsoft Windows XP, Microsoft Windows VISTA, Microsoft Windows 7, Microsoft Windows 8

Details

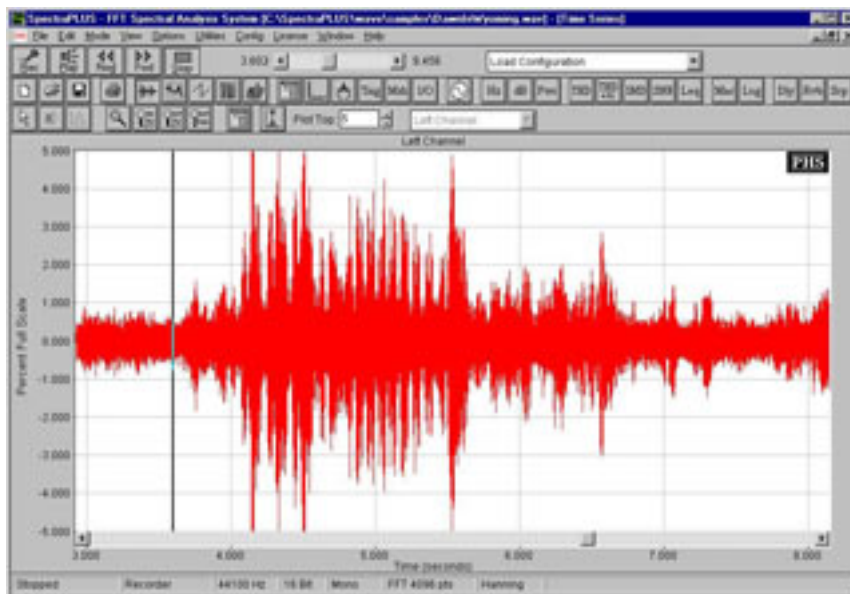
Screenshots

The screenshot below is of the main application window. All the frequently used menu commands are now available on the toolbar for quick access. Test configuration files can be loaded directly from the toolbar and multiple plots can be viewed simultaneously - it exceptionally easy to use.

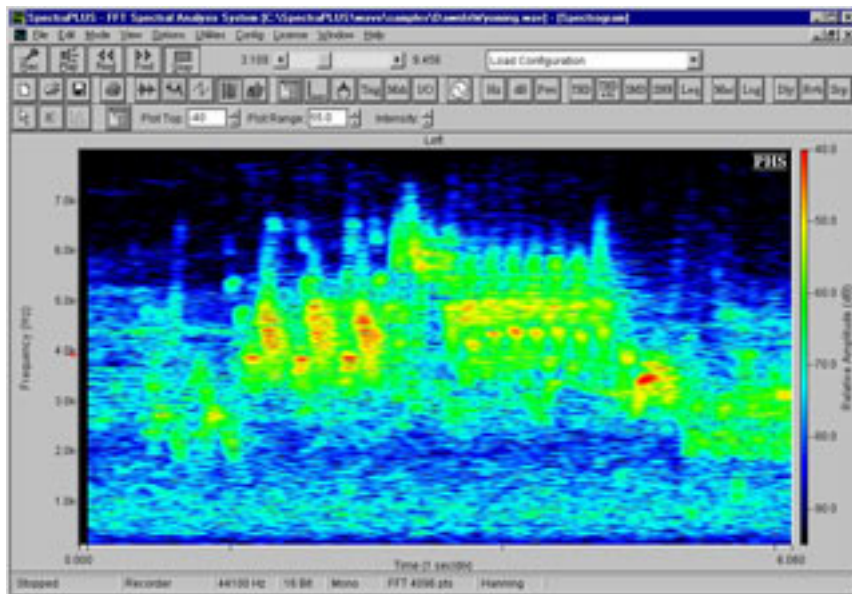
The screenshot below is of the Spectrum Display. This display is the workhorse of the analyzer and we have highly optimized its performance for quick updates and made it exceptionally easy to use. The example below shows several "overlays" where previous measurements have been saved and displayed together with the current spectrum. In addition, a differential cursor measurement are shown. You have complete control over scaling and labeling for all axis. The overlays can be saved and recalled from disk and labeled to meet your needs. This display is very fast - download the program and try it yourself!



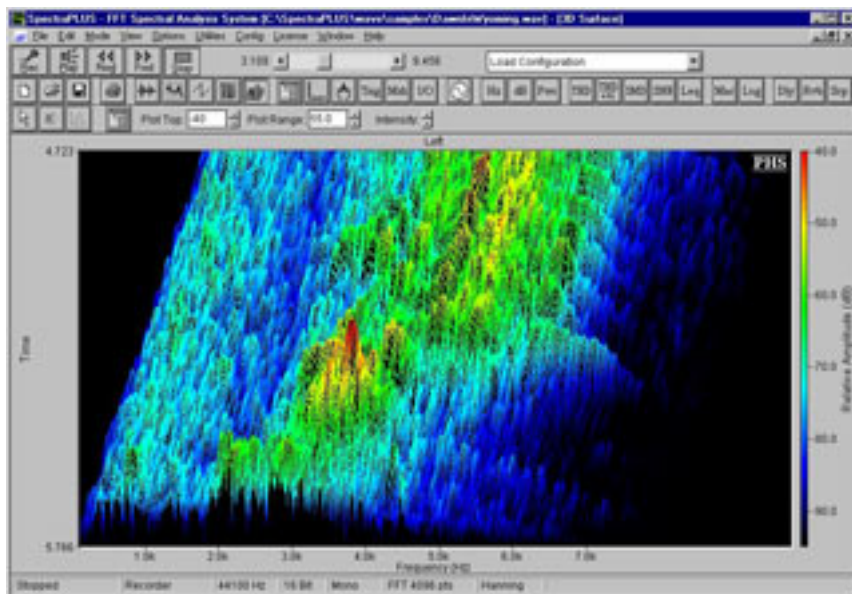
The screenshot below shows the Time Series display. Editing is supported in the Recording or Post Processing modes and full cursor measurements are provided.



The screenshot below is of the Spectrogram display. This display shows the spectrum versus time with the amplitude shown in color. You can select the color gradient, scroll direction and many other parameters. Cursor measurements are supported on all axis. This display is one of the finest spectrograms available for the PC.



The screenshot below is of a 3-D Surface plot which shows a perspective view of the spectrum versus time.



The screenshot below is of the THD+N versus Frequency utility. This measures and plots the distortion over a range of frequencies.

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Neu in 5.1

SpectraPLUS-SC version 5.1 adds many new features:

- New COM API - object based automation engine!
- Tabbed dialog box for all major setting (FFT settings, Scaling, Calibration, Triggering, Device I/O)
- New "Run Control" parameters - Stop after N FFT's or elapsed time. Start delay option.
- Tabbed dialog box for all major Plot Options
- Log Magnitude Spectrum Scaling option
- Plot Center control for time series plot
- Data Logging improved and expanded - multiple items can be logged, separate file for each channel
- New Trigger mode - run continuously after first trigger. Start signal generator on trigger event.
- ASIO device driver support - better performance on certain hardware
- File I/O parameter - automatically reopen wave file on program launch
- Support for Installation in "Program Files" and "My Documents"
- Added "Pull Cursor to Trace" and "Select All" to right click popup menus
- New Splash Screen logo and plot watermark graphics
- High resolution peak frequency readings when a Gaussian smoothing window type is used. This provides very high frequency resolution in the Peak Frequency Utility window and also in the Data Logging and Automation peak frequency values

High Resolution Analysis

- 24 bit sampling precision - high bit depths for high dynamic range and precision measurements (sound card dependent).
- Up to 200kHz sampling rate - greatly expands the upper limit of the analyzer (sound card dependent).
- FFT sizes up to 1,048,576 points - for ULTRA high frequency resolution Octave scaling to 1/96.

Acoustic Tools

- Reverberation Time (RT60) - utility features bar graph of reverberation time versus frequency band, 3-D Surface plot of the decay versus frequency and individual decay plots versus time.
- Delay Finder - measures delay between two channels in milliseconds, feet or meters. Speed of sound - converts the delay value between milliseconds, feet or meters.
- Equivalent Noise (Leq) - utility provides comprehensive noise level calculations for LeqT, Leq, Lpk, Lsel, Lmax, Lmin, L10, L50, L90.
- Stereo Phase Scope for real-time monitoring and analysis of signal phase. Phase scope mode displays a standard oscilloscope X-Y orientation (lissajous pattern) for analysis of phase, polarity, missing channel detection and stereo separation monitoring.

Automation Tools - VERY POWERFUL

- Macro Command Processor utility- allows you to easily automate measurements, record SPL and spectral data at user specified intervals/duration with time/date stamp, save files with user-defined names using a script-based programming language. It uses the underlying DDE syntax for an automation solution without requiring a third party program.
- Dynamic Data Exchange (DDE) - allows the capability for an external program to control and read results from the analyzer in real time. Works with any program that supports DDE such as C++, VB, Excel, Access and others.
- Data Logging - utility produces an output text file containing selected spectral parameters + time-stamp for dynamic signal tracking and "unattended" event monitoring.

Dual channel signal generator - now generate independent signals in each channel. Create single or multiple tones, pink or white noise, noise burst, frequency sweep, level sweep, pulse, saw, triangle, square, IMD test tones, DTMF, digital zero, and user defined WAV source. - very powerful. Also a added Frequency Step signal.

Quick Loading of Configuration Files - can now be loaded from a drop down list box directly from the main toolbar. Provides quick access to stored configurations and default settings as well as the ability to "Undo" the operation.

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Multicolor 3-D Surface Display - provides an effective analysis tool for analyzing complex spectrum content over time.

Digital Filtering - precision digital filtering of wave files; includes Low Pass, High Pass, Bandpass, Notch and User Defined filter response for truly "Custom" filtering!

Advanced Scaling and Calibration - allows independent channel calibration and scaling for both left and right channels with separate views for each. Useful for applications requiring separate channel scaling and calibration such as simultaneous sound and vibration measurements. Includes calibration conversions from Acceleration to Velocity or Displacement; also adds Power Spectral Density (PSD) scaling option for accurate noise measurements.

New toolbars - quick access to many of the settings and measurements.

Features

SpectraPLUS-SC Features

- Sampling Rate: highest rate supported by hardware (192 kHz cards are widely available)
- Frequency Span: Up to 1/2 of selected sampling rate
- Decimation (down sampling): Up to 50:1 ratio
- Sampling Precision: 8, 16 or 24 bit (hardware dependent)
- Maximum Channels: 2
- Sound card driver modes supported: ASIO or Multimedia Extension (MME)
- Modes: Real-Time, Recording, Post-Process
- Post-Process Editing: Cut, Copy, Paste, Play, Play Special, Mute, Gain Adjust, DC Offset, Filter
- Digital Filtering Options: Low Pass, High Pass, Bandpass, Notch or User defined filter shape
- Hard Disk Recording: Automatic rollover when Wave file size limit reached.
- Displays: Time Series, Spectrum, Phase, 3-D Surface Plot, Spectrogram
- Time Series Display options: Left, Right, Both, Difference, Left vs Right (X/Y) or Right vs Left (Y/X)
- Data Views: Popup window of underlying data values.
- Spectral Overlays: Up to 6 simultaneous overlay traces, unlimited save and retrieve from hard disk
- Composite overlay: average of any selected overlays or the difference between any two overlays.
- Video Zoom: Arbitrary Zoom In to any portion of overall frequency or time span
- Auto Scaling: Spectrum and Time series views
- Cursor Measurements: Absolute, Differential (Ctrl key), Harmonic cursors (Shift key), Sideband cursors (Ctrl + Shift key)
- Right Click Action Menus: Various Cross display functions, Inverse FFT, Cepstrum, Smooth Spectrum, Expand and other Edit functions
- FFT Sizes, 32, through 1,048,576 pts (in powers of two increments)
- Overlap Processing: Up to 99% of FFT size in Post Processing mode
- Smoothing Windows: Bartlett, Blackman, Flat Top, Hamming, Hanning, Kaiser, Parzen, Triangular, Uniform
- Averaging Modes: 1) Free Run with selectable block size. 2) Sound Level Meter mode (Off/Fast/Medium/Slow/Forever)
- Averaging Types: Exponential, Linear or Vector moving average
- Peak Hold: live peak hold with selectable timeout
- Dual Channel Processing: Average, Cross Spectrum, Real and Complex Transfer Functions, Coherence
- Cross Channel Delay: One channel can be delayed with respect to the other
- Delay Finder: Determines the time delay between two channels using cross correlation techniques. Delay units can be Milliseconds, Feet, or Meters
- Overload Detection: Flag and/or exclude data when maximum input level is exceeded
- Amplitude Axis Scaling: Linear or Logarithmic plus Power Spectral Density (PSD) option
- Frequency Axis Scaling: Narrowband Linear, Narrowband Logarithmic, 1/1, 1/3, 1/6, 1/9, 1/12, 1/24, 1/48 or 1/96 Octave
- Spectral Weighting: Flat, A, B, C ANSI weighting curves
- Microphone Compensation: Independent compensation for each channel
- Markers: Up to 8 user defined markers with user customizable labels

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- Triggering: Selectable threshold, channel and delay. Edge or Level detection
- Amplitude Calibration: V, mV, dBV, dBmV, dBu, SPL or PA (in air or water), psi, or custom units
- Vibration Measurements: Acceleration (G), Velocity (ft/sec, in/sec, mils/sec, mm/sec), Displacement (ft, in, mils, mm)
- Independent Calibration and Scaling: each channel can be scaled and calibrated independently.
- Signal Generator: Pink Noise, White Noise, Tone Burst, Noise Burst, 1 kHz Tone, Multiple Tones, Frequency Sweep, Frequency Step, Level Sweep, IMD test tones, Pulse, Sawtooth, Triangular, Squarewave, User Defined (from .WAV source). DTMF, Digital Zero
- Utility Measurements: Peak Frequency, Peak Amplitude, Total Power
- Distortion Measurements: THD, THD+N, SNR, IMD
- THD+N versus Frequency utility - quickly and conveniently measure the distortion characteristics of a device over a range of frequencies. Results are shown on a semilog/log plot and can be saved/loaded from disk or printed.
- Acoustic Tools: Reverberation Time (RT-60), Delay Finder, Stereo Phase Scope, Equivalent Noise Level (Leq, LeqT, Lsel, Lpk, Lmax, Lmin, L10, L50, L90).
- Automation Tools: COM based Application Programming Interface (API). Data Logging - output text file (per channel) containing selected spectral parameters + time-stamp. Dynamic Data Exchange (DDE), Macro Scripting Language.
- Import/Export: .WAV, ASCII, and Binary file formats
- File Merge: Join two mono files into a single stereo file
- Configuration Files: Store and recall common analyzer test setups from disk. Quick load from toolbar
- Color Printing: All displays plus annotation, comments, and margin control
- Clipboard support: WAV segments, tabular data and bitmap images

Video

Demo

Download SpectraPLUS-SC 5

Laden Sie sich hier die aktuelle Version 5 von SpectraPLUS-SC herunter und probieren Sie die Software 30 Tage im praktischen Einsatz aus. Es handelt sich hier um das vollständige Programm, keine funktional eingeschränkte Demoversion. Sie sollten nach der Installation das Demonstrations-Makro ausführen, um einige der fortgeschrittenen Funktionen von SpectraPLUS-SC kennen zu lernen.