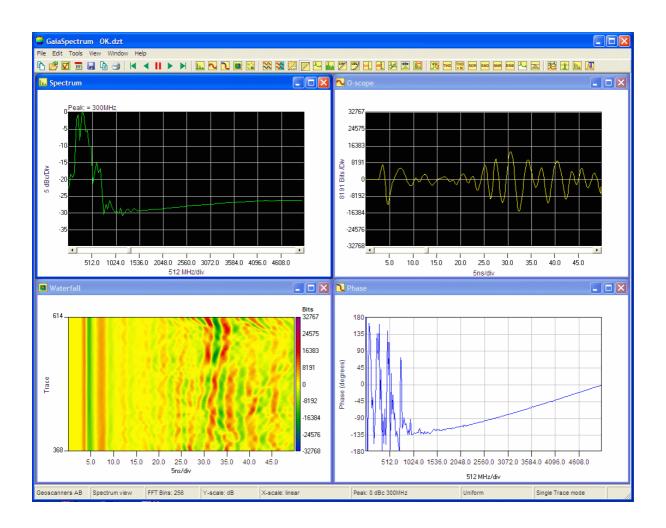


# $\begin{array}{ll} \textbf{GaiaSpectrum} \\ \textbf{R} \\ \textbf{The Geophysical Data analyzer} \\ \end{array}$



# GAIASPECTRUM®

GaiaSpectrum® is a compact yet powerful set of tools for analyzing and comparing geophysical data collected from different instruments from the same or different manufacturers. It is designed to import all major GPR(Ground Penetrating Radar) file formats, geophysical data formats such as SEG-Y, SEG-2 and a wide variety laboratory instruments. The data can be viewed in five different ways and there are several tools for automatic and semi-automatic analysis of the data sets.

### The problem

From time to time one hears the complaining about center frequencies not being exact at the center, sometimes completely away from what the manufacturer stated. Or for instance: "Manufacturer's A 500 MHz antenna is much cleaner and better than Manufacturer's B 400 MHz antenna" or vice versa. But in either cases is quite hard to say for sure what's going on, manufacturers use different ways of getting their performance data and many times not even close to one another.

#### The solution

Whether you are trying to implement the best possible filters for your GSSI system or post-processing software, or trying to compare the performance of different yet very close products you can always trust GaiaSpectrum®. The set of tools that allows comparing different devices and finding out what does it look like the raw data I was promised and never got. The basic version of GaiaSpectrum® is generously equipped with many automatic and semiautomatic tools to make your judgment easier and accurate.

#### Collect it, Store it, Analyze it!

## Supported File Formats:

- CSV Comma separated values format according to CSV format.
- DAT ASCII data (MATHCAD® or MATLAB®) file with inputs parameters specified in the options menu or dat header file.
- DT (S&S) Ground penetrating radar from Sensors & Software Inc., Canada.
- DZT Ground penetrating radar from Geophysical Survey Systems Inc., USA.
- RD3 Ground penetrating radar from Malå Geoscience AB, Sweden.
- SEG-Y Geophysical data exchange format rev 1, 2002.
- SEG-Y (Radsys) Ground penetrating radar from Radar Systems Inc., Latvia.
- · SEG-2 Seismic/radar data file based on special report from SEGEGGC.
- SEG-2 (SPRScan) Ground penetrating radar from ERA Ltd, UK.
- SHT wavestar® Oscilloscope data files from Tektronix Inc., USA.
- WAV Microsoft and IBM audio file data format.
- · ZON Ground penetrating radar from IDS GeoRadar Division, Italy.

#### **List of Features:**

- 1. Time and frequency domain analysis.
- 2. Phase and time/frequency domain waterfall plots.
- 3. Fully synchronized playback forward and backward for all data views.
- 4. Fully automatic toolbars for easy access depending on the data view.
- 5. One button access to all data views.
- 6. Windowing functions with view in the time domain.
- 7. Single trace, infinite persistence (stacked), average and peak hold modes.
- 8. Direct import from more than a dozen of geophysical and general purpose file formats.
- 9. Export into GaiaSpectrum® files for quick launch.
- 10. Export into DZT compatible files, this allows converting other GPR manufacturers into GSSI Inc. compatible data.
- 11. Fast transforms, FFT size 65536 in just under 100 mS.
- 12. Padding with zeroes or truncating methods are available for data sets with a non power of two amounts of samples.
- 13. Low pass decimation tool for continuous wave up to 1:20
- 14. Fully customizable scales.
- 15. Auto scale function for the spectrum analyzer data view.
- 16. Vertical gain for the o-scope data view.
- 17. Gain function synchronized in all data views.
- 18. Palette selection and loading for the waterfall data view.
- 19. Bar or line spectrum plot.
- 20. X-Y Measurements in all data views.
- 21. Color Print-outs with header and footer from all data views.
- 22. Flip function for the O-scope data view, this is reflected in the time domain waterfall plot.
- 23. Maximum, Minimum and Peak to Peak measurements for the time domain plot of the
- 24. Reference waveforms for the O-scope data view that can be saved and called upon. NEW!
- 25. Cursors with increment as volts or bits for the time domain plot.
- 26. Zoom for the time series plot with dynamic playback.
- 27. Auto tune function for the spectrum data view with selectable bandwidth for the tuned frequencies.
- 28. Span and center frequency selection tools.
- 29. Markers with increment measurement for the frequency domain plot.
- 30. Reference plots for the frequency domain plots that can be saved and called upon.
- 31. Ground Penetrating Radar filter selection tools.
- 32. Full set of automatic measurements in the frequency domain for periodic signals.
- 33. Whitening tool for the spectrum.
- 34. FFT filters for the data sets.
- 35. Level tool for finding out bandwidth limits easier.
- 36. Screen labels available for all data views including the new time domain waterfall plot.
- 37. Reference functions for the phase data view that can be saved and called upon. NEW!
- 38. Waterfall plot for the time and frequency domain.

# **Download The Fully Functional Trial Version Today!**

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