

Model 5940-001 Shock SRS

Version 1.5

Features

Time series pre-conditioning/
data normalization

SRS results display

Multi-plot diagnostics

Shock Time History
Velocity Time History
Shock Response Spectrum
Waterfall

Multiple channel-selection
strategies

Minimum/maximum analysis
frequency control

Velocity scaling in metric or
English units

Arbitrary/continuous
Analysis Q control

Graphical analysis-period
selection

High- and low-pass filter and
frequency controls

High- and low-pass AF ratio
and number of poles controls

Output File Types

SDRC "Universal" ASCII
(Type 58)

Excel-compatible, "comma-
separated-value" (.CSV)

Fully-pedigreed ASCII file in the
CATS-File Format

Statistics

Graph JPEG

Ordering Information



Acquiring, Processing and
Managing the World's Data.

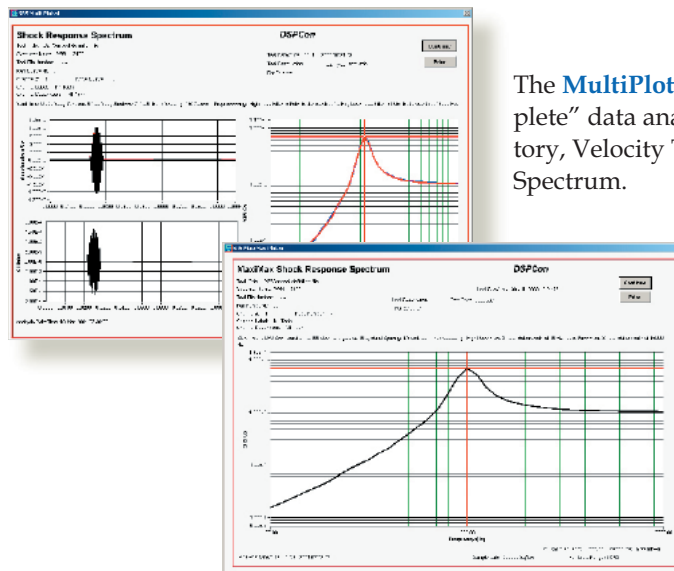
www.dspcon.com

Shock Response Spectra Analyzer

The SRS Analyzer processes data from a variety of file formats to produce Shock Response Spectra, and calculates the SRS using a Smallwood algorithm.

The Analyzer applies "time series pre-processing" functions that are designed to compensate for any errors or distortions induced in the data by the measurement and data acquisition processes. Pre-processing functions include initial-zero offset and band-pass filtering. Interpolation/re-sampling occurs transparently if there are fewer than 10 points/cycle at the highest analysis frequency.

The Analyzer offers correction and filtering operations that, for example, subtract the mean of the first 100 data points from a data set, remove offset biases from the data, or interpolate/resample any data set that contains less than ten points per cycle at the highest analysis frequency. A band-pass filtering operation applies your choice of Bessel, Butterworth, Elliptical high- and low-pass filters to the data. A "Sigma-Delta Emulation" high- and low-pass filter provides a simulation of other data acquisition systems so that data acquired by them can be directly compared.



The **MultiPlot Diagnostic** format plots the "complete" data analysis, and displays Shock Time History, Velocity Time History, and Shock Response Spectrum.

The **MaxiMax** format is a "report format" analysis of the MaxiMax Shock Response

Waterfall Plots display data in superimposed SRS analysis iterations; , and present each iteration in a different color. These plots can be zoomed to regions interest, and rotated to provide alternate views. The Waterfall window also provides a band definition/frequency synopsis and a metrics readout of the time band, range, and peak magnitude.

