## $Model\ CV395B$ DynamicPRO<sup>TM</sup> Signal Analyzer



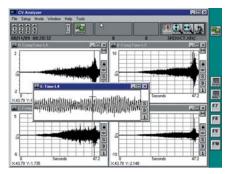
Cognitive Vision DynamicPRO<sup>TM</sup> Series Dynamic Signal Analyzers are designed to solve problems where dynamic measurements are required. These instruments have been applied in machinery and acoustical analysis, electronic and biochemical measurements, structural analysis, and physical testing by engineers, operators, designers, and technicians worldwide.



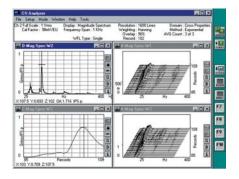
## **FEATURES**

- Multichannel analysis using up to eight parallel channels plus external trigger/tachometer input.
- Frequency ranges from dc to 100 KHz.
- User-friendly Microsoft® Windows™ user interface for easy operation, reporting, data exchange, and communication.
- Powerful digital signal processors with fast, accurate real time analysis.
- Easy access to analyzer data by other analysis programs through Dynamic Data Exchange (DDE), ASCII file export, Universal File Format, STAR Format, or native (binary) translation programs.
- Expandable and upgradable through the use of modular architecture.
- 16-bit analog-to-digital conversion with full analog and digital filtering for outstanding dynamic range and noise floor.
- Configuration available to meet a variety of users' needs.
- Standard AC only Universal Power Supply or optional Dual AC/DC switch selectable Power Supply.

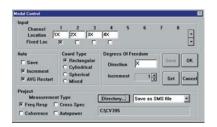
## Model CV395B - Dynamic PROTM Signal Analyzer



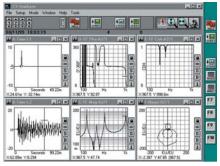
The CV395B includes a variety of time and frequency domain functions in one unit. Multichannel extended time histories can be acquired, processed, displayed and stored for later review or report writing. These time histories can be recalled and replayed for detail analysis of time events and investigation of frequency domain signal characteristics.



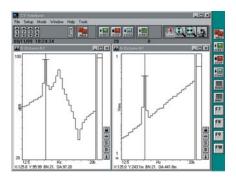
3D cascade, or waterfall, spectrum displays of machinery vibration signatures measured during operation can reveal significant diagnostic information about the health or condition of the device under test. A single magnitude spectrum, record or profile amplitude vs. RPM can be conveniently displayed from any active channel on-line or as a post processing selection.



The CV395B is not only user friendly, but also "data centric." That is to say that during data acquisition, processed information can be easily transferred to other third party software programs such as STAR Modal or to other CV analysis programs via DDE links or native files. In addition, files can be exported in ASCII or UFF format which allows them to be read by almost any application that the analyst might want to use.



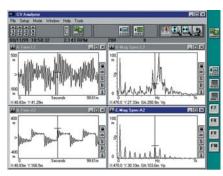
Impact testing with the CV395B is tailored for the structural analyst. The user can see up to nine displays from different channels of data and processing functions that are most useful for the measurement. Scaling and overlaying of structural response functions can simplify interpretation of the results. The extensive library of cross property functions provided by the CV395B gives the user the ability to get to the bottom of the structural analysis problems quickly. Data export capability allows the processed information to be used by other software application programs.



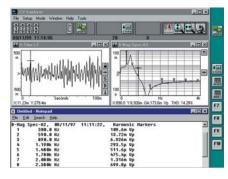
The CV395B implements an all digital technique for full octave and third-octave acoustic measurements on multiple inputs, significantly reducing measurement times. Magnitude spectrum displays can be viewed as real time or averaged data.

Noise regulations often require product compliance testing with sound pressure levels measured with either flat, A, B, C, or D acoustic weighting curves, all of which are included in CV395B Octave option. Amplitude values can be displayed in dBR relative to a known calibration reference for each channel. Acoustic spectrum displays can be presented in 11 full octave or 33 full third-octave bands in one display. Cursor readouts include frequency, amplitude, band number, and overall level for each display window.





The CV395B has the triggering features and input sync time averaging capabilities to enhance the signal-to-noise ratio when processing noisy electronic or vibration signals. Complex periodic waveforms can be extracted from these noisy signals and displayed as Sync Time Averaged waveforms and processed for their respective sync spectrum content. A software option enables further processing of the Sync Time Averaged data into its Transfer Function and Phase Cross Property functions.



When you need to get detailed information on specific magnitude spectrum data, nothing beats the CV395B Marker and List capabilities. You can choose peaks above a threshold, harmonic markers, maximum amplitude tracking marker, RPM tracking marker, or define your own marker locations. The Marker List is automatically placed in the Windows™ Notepad for on-screen display or appended to the printout of the respective data trace. This allows the user to quickly mark a spectrum trace, have it automatically recorded, and insert it into a report on demand.

Other Y-axis cursor readout features in each window display include volts, engineering unit names, decibels, PSD units, and English or metric units from integrated or differentiated vibration parameters. Calibrated results can be accessed in each display window for quantifying application specific measurements.

Specifications and product availability subject to change without notice.