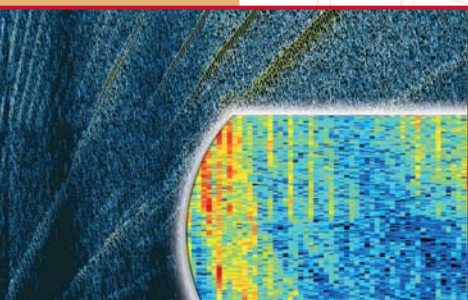


- ☞ Multi-platform real time recording and analysis for daily operations? That's what dBFA Software Suite is offering you and even more!
- Significant improvement of your NVH Measurements and Analysis:
  - Parallel Real time processing and recording
  - Applications oriented processing tools
  - Automated functions for time and cost saving
  - Data Import/Export capabilities

dBFA with its modular architecture allows you to buy just what you need for fulfilling industrial requirements in numerous fields:

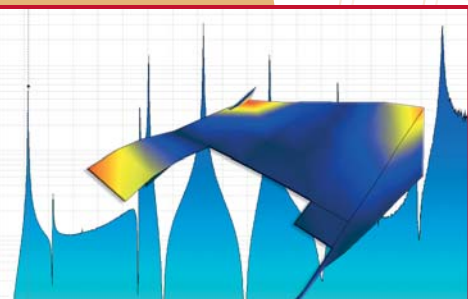
*Automotive, Railway, Aeronautics, Space, Mechanics, Materials, Household appliances, Electro-acoustics, Information technology, Telecommunications, ...*

### dBFA Key Features...



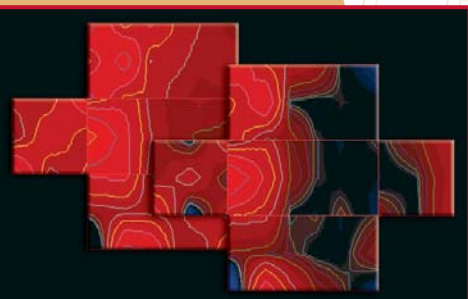
#### ☞ Multi-platform data acquisition up to 2048 channels

- ▶ Solo; Symphonie; Harmonie; Orchestra; NetdB-DAQ; NI USB-9233, PXI & PCI; VXI E1432A, ...
- ▶ Networking of different analyzer configurations with time conditions in order to reduce your test time
- ▶ Real-time monitoring of the recorded Noise & Vibration signals
- ▶ Replay mode for the measured data stored with all real time processing



#### ☞ Multi-platform

- ▶ Simultaneous real-time multi-analysis: Averaged and multi-spectra with FFT and 1/1 down to 1/48 octave, cross-spectra, and frequency response functions, order analysis, ...
- ▶ Transient & Impact Testing analysis customizable, with an enhanced path management for modal analysis
- ▶ Numerous application oriented post-processing functions with analysis scripts



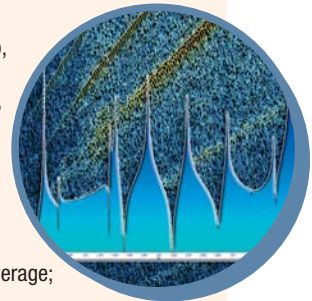
#### ☞ A complete set of tools for data management and reporting

- ▶ Transducers Database management: Sensors, calibrators, calibration history,...
- ▶ Data Import: UFF58, Wave, nCODE, Matlab™, ASAM/ODS, SONY, TEAC (Digital format)
- ▶ Data Export: ASCII, Wave, MeScope™, Matlab™, mp3, Lexade, SDF...
- ▶ Powerful bi-directional link to Matlab™ and compatibility with Office software
- ▶ Automatic reporting capabilities from real-time and post-processing modules

# dBFA Technical Specifications

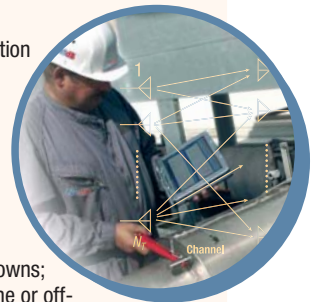
## GENERAL NOISE AND VIBRATIONS

Features	dBFA
<p><b>Signal Overall levels</b></p> <p><b>Statistics</b></p> <p><b>FFT</b></p> <p><b>1/N octave</b></p> <p><b>Tacho</b></p> <p><b>Order</b></p>	<ul style="list-style-type: none"> <li>Decimation; Resampling; HP, LP, BP, Stop-band, Notch Filters; Denoising...</li> <li>Leq with frequency weightings; Lp with time (Fast, Slow) and frequency weightings (A, B, C); Acceleration; Velocity; Displacement with Human vibrations weightings...</li> <li>Min; Max; Peak; Peak to Peak; Average; RMS; RMS band; Standard deviation; Skew; Kurtosis. Averaged and vs. time, ...</li> <li>Up to 12800 lines; Overlap from 0 to 75%; Hanning, Hamming, Flat-top, Rectangular...; Zoom up to 256; Multispectrum vs. time and rpm with user-defined analysis step; Averaged spectrum with linear, exponential, hold max; Auto and Cross spectrum; H1, H2, 1/H1, 1/H2, Coherence; Auto- and Cross-correlation, ...</li> <li>From 1/1 to 1/48 octave; digital filtering according IEC61260 class 1; Multispectrum vs. time and rpm with user-defined analysis step; Averaged spectrum with linear, exponential, hold max, ...</li> <li>Real time conversion to rpm profile with trigger, hysteresis, hold-off; Average; Pulses per revolution; Conversion factor; Min and Max limits, ...</li> <li>Both FFT and Resampling techniques available; Order resolution down to 0.01; Rpm resolution down to 1 rpm; Fast and accurate</li> </ul>



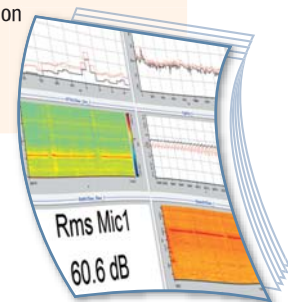
## APPLICATIONS

<p><b>Time Frequency Sound Intensity</b></p> <p><b>Human Vibrations</b></p> <p><b>Structural Analysis</b></p> <p><b>Rotating Machines</b></p>	<ul style="list-style-type: none"> <li>FFT; 1/N octave; Wigner-Ville; Wavelets; Capon; Auto-regressive</li> <li>Simultaneous Li and Lp measurements; Sound power According to ISO 9614 part 1 &amp; 2; Sound Mapping</li> <li>All frequency weightings according to ISO8041, ISO 2631 1&amp;2, ISO 5349 and BS6841 for Whole Body and Hand / Arm Vibrations; VDV, eVDV (estimated), MTWV and 3 axis overall vibration values calculations (performed with individual or axis combination with different weightings); VDV time history with variable time integration and cumulative or noncumulative Time</li> <li>Real-time and off-line transient analysis on impulses, shocks, sparks, gun shots; Impact testing analysis (structural analysis); Real-time vibration signals recording and frequency analysis (hammer testing); Management of the acquisition geometry (excitation and response location on the tested, structure); Trigger capabilities (channel, positive or negative delay, AND/OR conditions, ...); Customized signal windowing and filtering; Auto and cross-functions (cross-spectra, FRF's, coherence); Export capability (UFF58, Me'Scope,...) for modal analysis processing</li> <li>Tachometric acquisition and real time RPM profile calculation; Order analysis for rotating machinery, rotation run-ups and coast downs; Order extraction, cycle defaults, order filtering; Order tracking; Real-time or off-line mode providing overall levels of rotation speed orders (Automatic speed profiles processing based on accurate dating of rotation speeds); 2D and 3D FFT and Orders spectrograms for sound and vibration signals</li> </ul>
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## GRAPHICS & REPORT

<p><b>Cursors Display</b></p> <p><b>RT Automation</b></p> <p><b>Automatic report</b></p>	<ul style="list-style-type: none"> <li>Single; Double; Harmonics; Sidebands; Max; MultiMax</li> <li>2D; 3D; Spectrogram and Waterfall; Graphical zoom</li> <li>Optimize your test time; Customize your tests; Chain and/or repeat different acquisition and real-time analysis with time conditions (hour, delay,...) and user confirmation between each</li> <li>Generate your own report automatically in Word™ after your real-time analysis or from dBFA post-processing; Fully customizable</li> </ul>
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**PRODUCT REQUIREMENTS**  
 Recommended PC: Minimum configuration with Pentium IV™ (2.4 GHz) or Centrino™ (1.6 GHz) with 512MB RAM, 40GB HDD; X VGA display; OS Win 2000 SP4 or Win XP SP1

The presented characteristics are subject to change without notice. Rev: 08/2006

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