

# A4400 - VA4 Pro

The Fastest 4-Channel Vibration Analyzer



... Your best partner for vibration diagnostics

# A4400 VA4 Pro - The Fastest 4-Channel Vibration Analyzer

The A4400 - VA4 Pro is a unique instrument for machinery vibration diagnostics. It is capable of analyzing, data collection, and recording vibration signals. The instrument is enhanced with modules for dynamic balancing, measurement of run up and coast down, acoustic measurement mode, monitoring and control of the lubrication process, and listening to vibration signals with the stethoscope feature. The instrument is equipped with an expert system developed by Adash that can automatically detect machinery faults.

The A4400 - VA4 Pro is designed for engineers, technicians, and researchers dealing with machinery and structural diagnostics, as well as dynamic balancing of rotating machinery.



Expert System includes:

- Automatic detection of machine faults
- ISO 10816-3 included
- Bearing database included

Data processing:

- FFT 25 600 line in real time
- Frequency span up to 76.8 kHz
- Envelope analysis
- Order analysis
- ACMT - very low speed bearing analysis
- User defined frequency bands

35 hours of signal recording  
4 channels simultaneously  
25 600 Hz frequency range  
Real Time FFT 25 600 lines



Industrial design:

- Heavy-Duty aluminum case
- Large color display

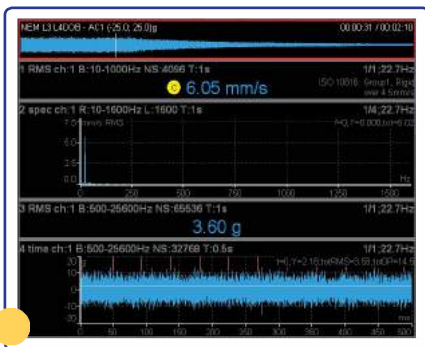
# A4400 VA4 Pro - The fastest 4 channel vibration analyzer

- Input channels:
  - 4 AC, ICP® (On/Off), +/- 12 V pp
  - 4 DC process values, +/- 24 V
  - 1 TACHO

- USB 2.0:
  - High speed data transfer

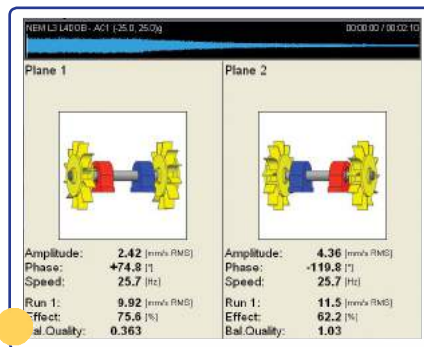


- A/D conversion:
  - Conversion of signal 24 Bit
  - Signal processing 64 Bit
  - Dynamic 120 dB
  - Auto-Gain less

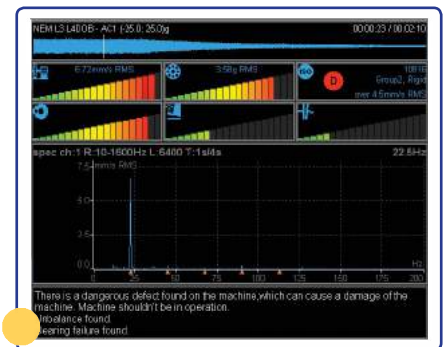


## ANALYZER:

- 4 channels simultaneously
- 25 600 FFT lines



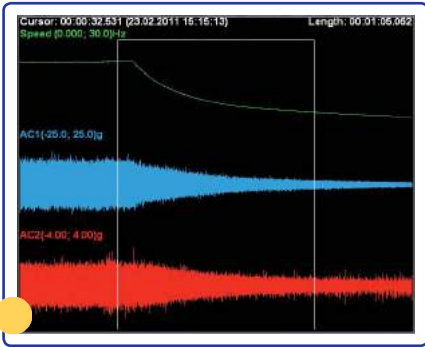
## BALANCER



## EXPERT SYSTEM:

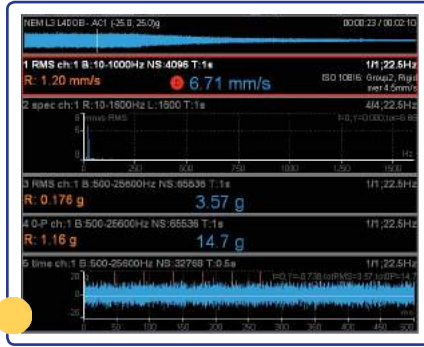
- Automatic fault detection





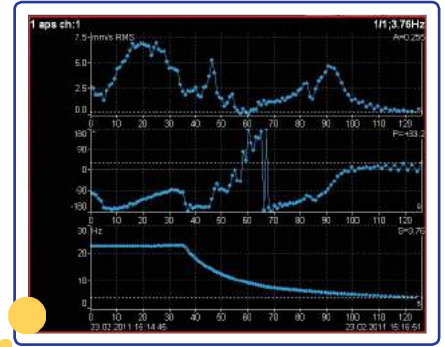
### RECORDER:

- 4 channels recording
- 120 GB memory

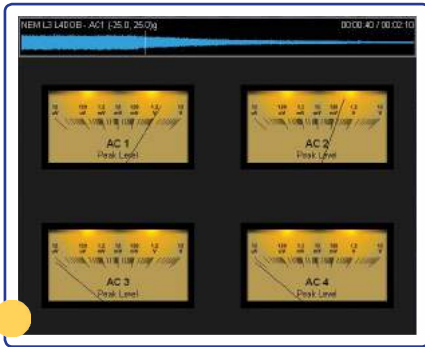


### ROUTE:

- 8000 measuring points
- New DDS 2014 software

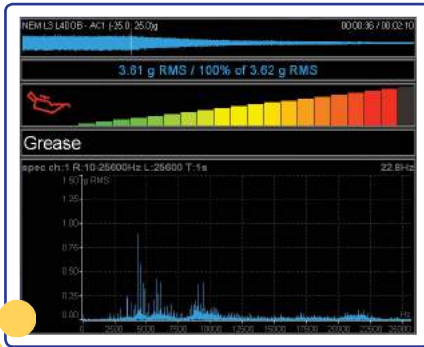


### RUN UP/COAST DOWN



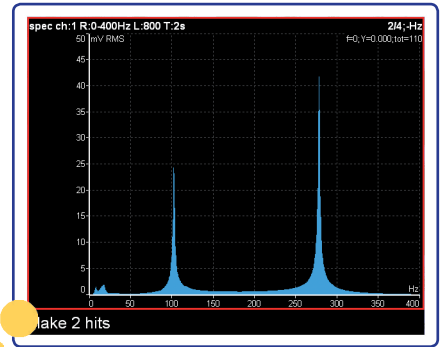
### STETHOSCOPE:

- Listening of vibration signal

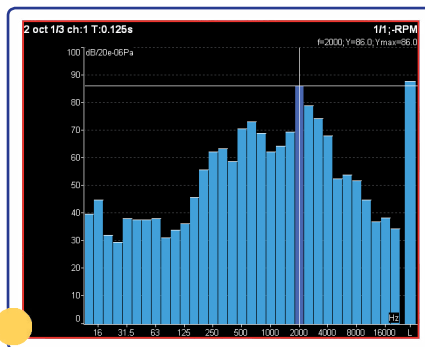


### LUBRI:

- Monitoring and control of lubrication process



### BUMP TEST



### OCTAVE ANALYSIS

Keep your machinery in good condition.



## Adash 4400 – VA4 Pro Technical Specifications:

<b>Input channels:</b>	<ul style="list-style-type: none"> <li>• 4 AC, ICP® power supply on/off</li> <li>• 4 DC for process values</li> <li>• 1 TACHO for external trigger</li> </ul>	<b>Data processing:</b>	<ul style="list-style-type: none"> <li>• FFT real time analysis</li> <li>• DEMOD - ENVELOPE analysis</li> <li>• ACMT - low speed bearing analysis</li> <li>• order analysis</li> <li>• user band pass analysis</li> <li>• RPM measurement</li> <li>• DC measurement</li> <li>• Orbit measurement</li> </ul>
<b>Input range:</b>	<ul style="list-style-type: none"> <li>• AC +/- 12 V peak-peak</li> <li>• DC +/- 24 V</li> </ul>	<b>Signal Recorder:</b>	<ul style="list-style-type: none"> <li>• 64 kHz sampling frequency</li> <li>• 4 Ch memory consumption 3 GB/hour</li> <li>• 4 Ch total recording - 35 hours</li> </ul>
<b>AD conversion:</b>	<ul style="list-style-type: none"> <li>• 24 bit, 64 bit internal signal processing</li> <li>• No AutoGain function!</li> </ul>		
<b>Dynamic range S/N:</b>	<ul style="list-style-type: none"> <li>• 120 dB</li> </ul>	<b>Trigger:</b>	<ul style="list-style-type: none"> <li>• manual, external, signal level, time</li> <li>• use for signal recording trigger</li> <li>• speed change, time interval</li> </ul>
<b>Frequency ranges:</b>	<ul style="list-style-type: none"> <li>• max. 76 kHz (1 Ch, 196 kHz sampling)</li> <li>• max. 25 kHz (4 Ch, 64 kHz sampling)</li> <li>• min. 25 Hz (4 Ch, 64 Hz sampling)</li> </ul>	<b>Display:</b>	<ul style="list-style-type: none"> <li>• color 800 x 600 pixels, LCD</li> </ul>
<b>Sampling mode:</b>	<ul style="list-style-type: none"> <li>• fully simultaneous for 4 channels</li> </ul>	<b>Communication:</b>	<ul style="list-style-type: none"> <li>• USB</li> </ul>
<b>FFT resolution:</b>	<ul style="list-style-type: none"> <li>• min. 100 lines</li> <li>• max. 25600 lines</li> </ul>	<b>Temperature range:</b>	<ul style="list-style-type: none"> <li>• -10°C to +50°C</li> </ul>
<b>Unit modes:</b>	<ul style="list-style-type: none"> <li>• Analyzer - analytic measurement</li> <li>• Data-collector - route measurement</li> <li>• Balancer - on-site balancing</li> <li>• Run up / Coast down measurement</li> <li>• Recorder - signal recording</li> <li>• Stethoscope</li> <li>• FASIT -expert system for fault detection</li> <li>• Octave analyzer</li> <li>• Bump test</li> </ul>	<b>Power:</b>	<ul style="list-style-type: none"> <li>• battery 5 hours operation, AC 230 V</li> </ul>
<b>Processor:</b>	<ul style="list-style-type: none"> <li>• Intel Atom 1,6 GHz</li> </ul>	<b>Case:</b>	<ul style="list-style-type: none"> <li>• Aluminum Heavy Duty</li> </ul>
<b>Memory, Route:</b>	<ul style="list-style-type: none"> <li>• 120 GB, max. 4 GB for one route, number of routes is limited by free memory only</li> </ul>	<b>Size &amp; Weight:</b>	<ul style="list-style-type: none"> <li>• 230 x 140 x 60 mm</li> <li>• 2200 g</li> </ul>



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