



## A4400 VA4 PRO

4-CHANNEL VIBRATION ANALYZER

MASTER THE LANGUAGE OF YOUR MACHINERY



# A4400 VA4 Pro

## THE FASTEST 4-CHANNEL VIBRATION ANALYZER



- > Adash expert system for automatic machine fault detection
- > Large colour display



4 channel signal recording

The A4400 - VA4 Pro is a unique instrument for machinery vibration diagnostics.

The A4400 - VA4 Pro includes modules for analysing, data collecting and vibration signal recording. The instrument is enhanced by modules for dynamic balancing, measurement of run up and coast down, acoustic measurement mode, ultrasound measurement, monitoring and control of lubrication process and listening to the vibration signal with the stethoscope feature. The instrument is equipped with an expert system developed by Adash, which automatically detects 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

- › Automatic machine fault detection
- › ISO 10816-3 included
- › Bearing database included



## DATA PROCESSING

- › FFT 3 276 800 lines in real time
- › Frequency range up to 90 kHz
- › 35 hours recording of 4 channels
- › Demodulation - envelope analysis, Order analysis
- › ACMT - low speed bearing analysis
- › User defined frequency bands



## TOP PANEL

### INPUT CHANNELS

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

### A/D CONVERSION

- › 24 Bit A/D conversion
- › 64 Bit signal processing
- › 120 dB dynamic range
- › No Auto-Gain

### USB 2.0

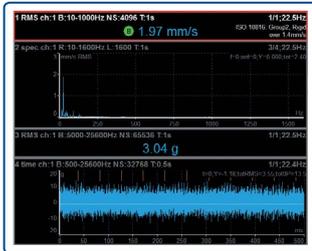
- › High speed data transfer

### HEADPHONES

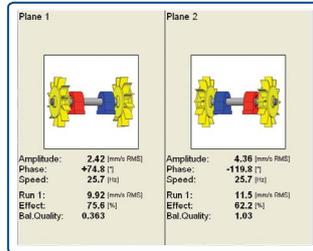
- › Listening to vibration signal



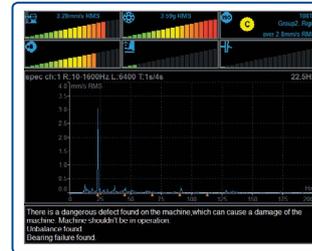
## A4400 VA4 Pro MEASUREMENT MODES



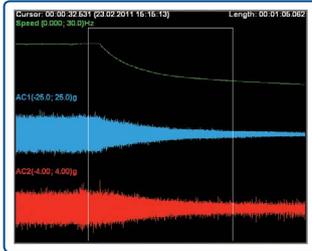
**ANALYZER**  
 › 4 channels simultaneously



**BALANCER**  
 › Intuitive graphical balancing procedure



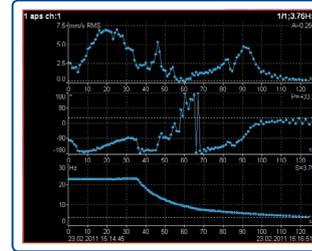
**EXPERT SYSTEM**  
 › Automatic fault detection



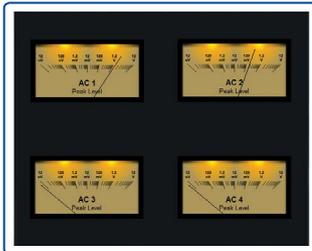
**RECORDER**  
 › 4 channels recording  
 › 35 hours signal recording



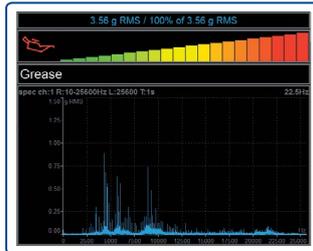
**ROUTE**  
 › 8000 measuring points  
 › DDS software



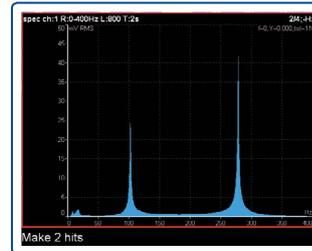
**RUN UP/COAST DOWN**



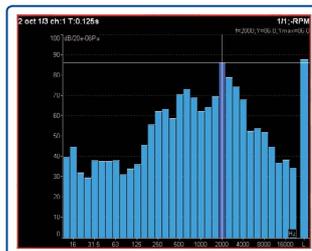
**STETHOSCOPE**  
 › Listening of vibration signal



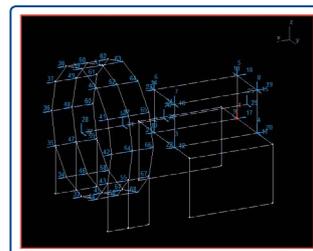
**LUBRI**  
 › Monitoring and control of lubrication process



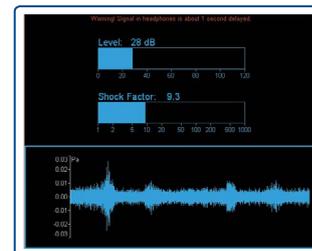
**BUMP TEST**



**OCTAVE ANALYSIS**



**ADS**  
 › Animated deflection shapes



**ULTRASOUND**



## A4400 VA4 PRO TECHNICAL SPECIFICATIONS:

<b>Input channels:</b>	4 AC, ICP® power supply on/off 4 DC for process values 1 TACHO for external trigger
<b>Input range:</b>	AC +/- 12 V peak-peak DC +/- 24V
<b>AD conversion:</b>	24 bit, 64 bit internal signal processing No AutoGain function!
<b>Dynamic range S/N:</b>	120 dB
<b>Frequency ranges:</b>	Maximum range: 1 Hz - 90 kHz (1 Ch, 194 kHz sampling) Maximum range: 1 Hz - 25 kHz (4 Ch, 64 kHz sampling) Minimum range: 1 Hz - 25 Hz (4 Ch, 64 Hz sampling)
<b>Sampling mode:</b>	Fully simultaneous for 4 channels
<b>FFT resolution:</b>	Min. 100 lines Max. 3 276 800 lines
<b>Unit modes:</b>	Analyzer - analytic measurement Data collector - route measurement Balancer - on-site balancing Run up/Coast down Recorder - signal recording Stethoscope FASIT - Expert system for fault detection Octave analyzer Bump test ADS - Animated Deflection Shapes Ultrasound
<b>Processor:</b>	Intel Atom 1.6 GHz
<b>Memory, Route:</b>	120 GB, max. 4 GB for one route, number of routes is limited by free memory only
<b>Data processing:</b>	Real time FFT DEMOD - ENVELOPE analysis ACMT - low speed bearing analysis Order analysis User band pass analysis RPM measurement DC measurement Orbit measurement
<b>Signal recorder:</b>	64 kHz sampling frequency 4 Ch memory consumption 3 GB/hour 4 Ch total recording - 35 hours
<b>Trigger:</b>	Manual, External, Signal level, Time Use for signal recording trigger Speed change, Time interval
<b>Display:</b>	Colour 800 x 600 pixels, LCD
<b>Communication:</b>	USB
<b>Operating temperature range:</b>	-10°C to +50°C
<b>Power:</b>	Battery 5 hours of operation, AC 230 V
<b>Case:</b>	Aluminium heavy duty
<b>Size &amp; Weight:</b>	230 x 140 x 60 mm, 2200g



Adash, spol. s r.o.

Hlubinská 1379/32  
702 00 Ostrava

e-mail: [info@adash.cz](mailto:info@adash.cz)

tel.: +420 596 232 670

+420 596 232 687

fax.: +420 596 232 671

[www.adash.com](http://www.adash.com)

[www.adash.cz](http://www.adash.cz)

© Adash 2016

Your local distributor can be found on our website [www.adash.com](http://www.adash.com) under 'Contacts'.

MASTER THE LANGUAGE OF YOUR MACHINERY

