X-Viber

Analysis and Route instrument with transfer to X-Trend PC-software trough USB

Measurements:

- Route via X-Trend pc-software
- Total level
- Envelope
- Bearing Condition
- Analysis
- Temperature
- Speed

Selectable:

- Measuring unit
- Average
- Frequency range
- Alarm levels
- Database and analysis in X-Trend software

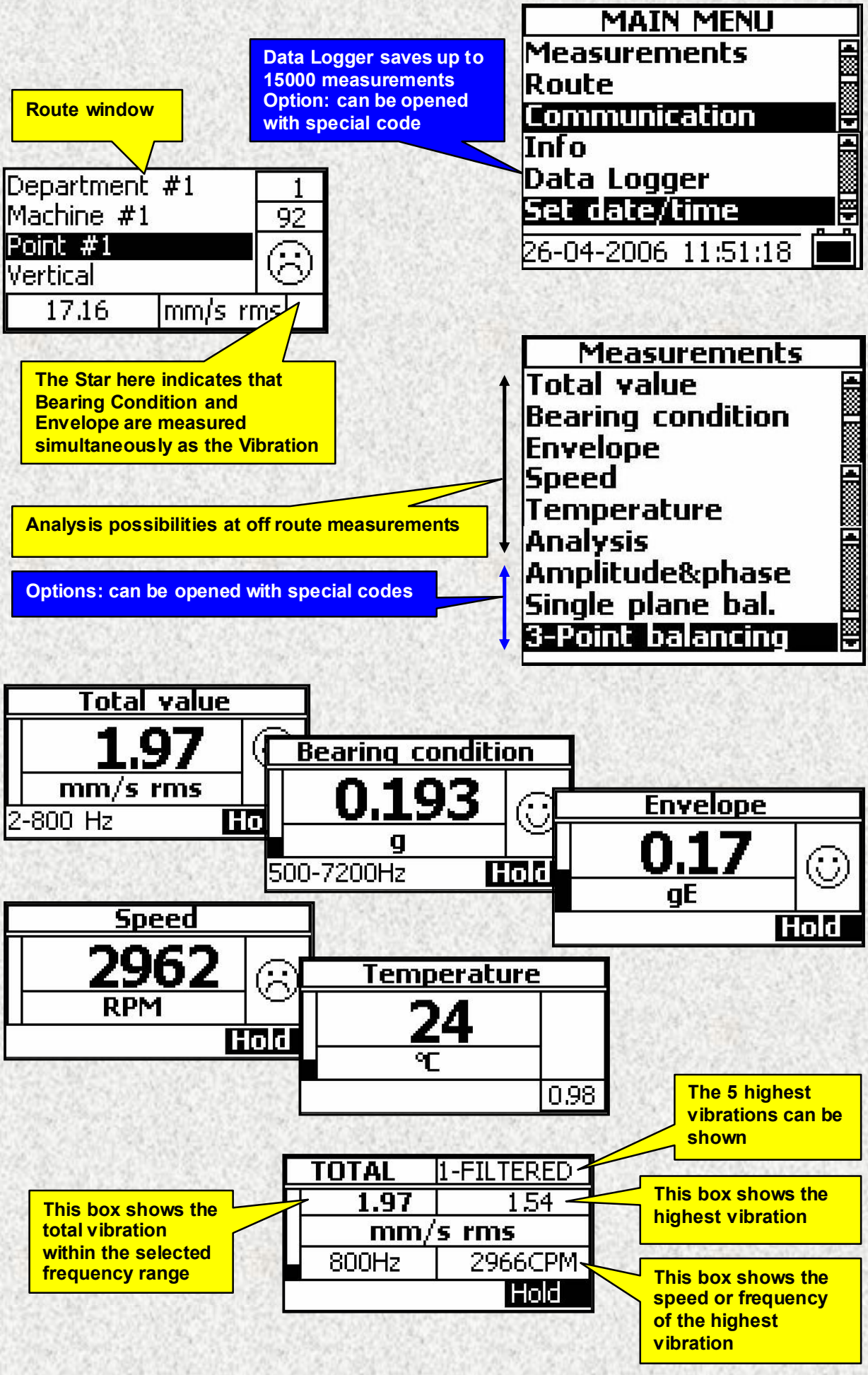
Options:

- Data logging
- Single plane balancing with the 3-point method
- Single plane balancing with the vector method
- Amplitude and phase measurements

Options:

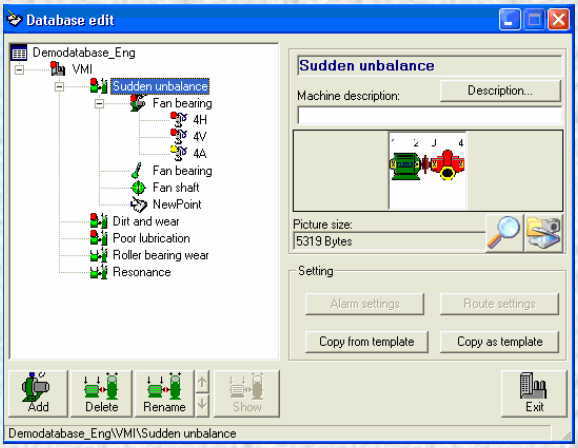
- Spectrum storage in route
- Analysis software SpectraPro(lite)

Measurement possibilities



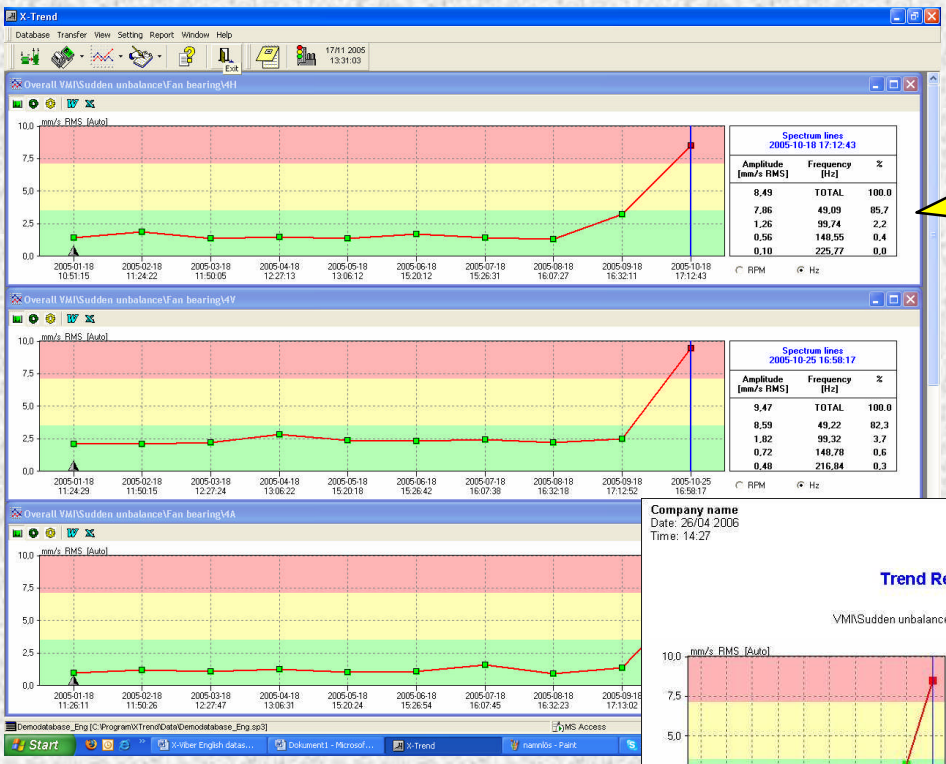
Communication and analysis

Edit database

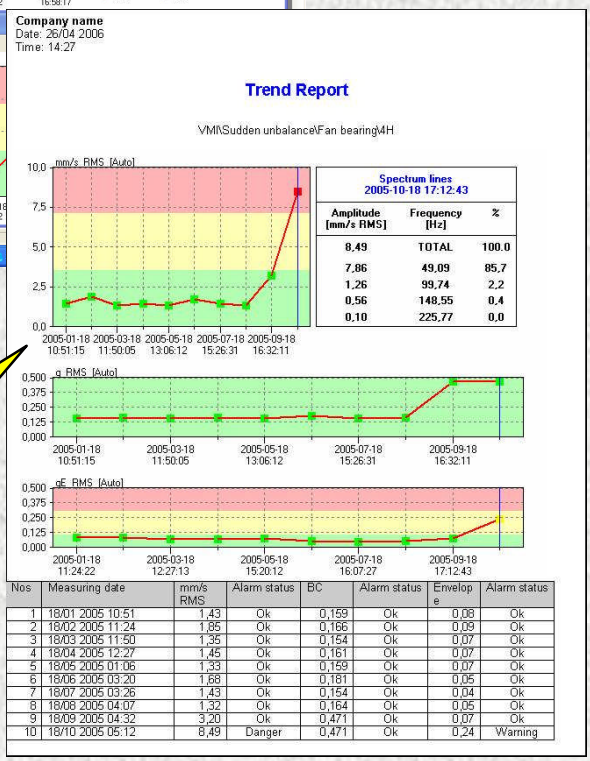


Load and collect route information from X-Viber

Analysing the trend information



Extended analysis with level and frequency of the 5 highest vibrations



Nos	Measuring date	mm/s RMS	Alarm status	BC	Alarm status	Envelope	Alarm status
1	18/01 2005 10:51	1,43	Ok	0,159	Ok	0,08	Ok
2	18/02 2005 11:24	1,85	Ok	0,166	Ok	0,09	Ok
3	18/03 2005 11:50	1,35	Ok	0,154	Ok	0,07	Ok
4	18/04 2005 12:27	1,45	Ok	0,161	Ok	0,07	Ok
5	18/05 2005 01:06	1,33	Ok	0,159	Ok	0,07	Ok
6	18/06 2005 03:20	1,68	Ok	0,181	Ok	0,05	Ok
7	18/07 2005 03:26	1,43	Ok	0,154	Ok	0,04	Ok
8	18/08 2005 04:07	1,32	Ok	0,164	Ok	0,05	Ok
9	18/09 2005 04:32	3,20	Ok	0,471	Ok	0,07	Ok
10	18/10 2005 05:12	8,49	Danger	0,471	Ok	0,24	Warning

Automatic pre-made reports for:

- **Trend**
- **Machine history**
- **Transfer report**
- **None measured machines**

Technical data

Transducers	
Standard vibration transducer	**Accelerometer type ACC199-28**
Sensitivity	100mv/g max measuring range ±50g
Frequency range (+/-3db	0.5-15000Hz
Resonance frequency	34000Hz
Temperature range	-50°C … +121°C
Mounting	Magnet holder, hand held or measuring pointer
Cable length	1m
Vibration input electrical specifications	
Maximum input signal	+/-5V Peak
Sensitivity, standard settings	Accelerometer 100mV/g
Current- and voltage supply to transducer	+2.1mA constant current at max 20V
Built-in speed transducer (tacho)	**Infrared photocell**
Measuring range	30 – 120.000 rpm corresponding to 0.5 -200Hz
Measuring distance	0.15 – 1m
Measuring object	Reflex tape on the shaft
Automatic comparison with selectable alarm levels	Yes, 2 different limit values
Built-in temperature sensor	
Measuring range	-20 to +120°C, adjustable emission factor
Accuracy	±2°C
Resolution	1°C
Measuring distance	0.2 till 0.5m
Automatic comparison with selectable alarm levels	Yes, 2 different limit values
Measuring properties	
Total vibration level:	
Selectable frequency ranges	2-800Hz, 4-1600Hz, 8-3200Hz, 10-6400Hz and ISO 10-1000Hz
Selectable units, Metric	mm/s, um, mm, m/s, g
Selectable units, Imperial	in/s, mils, thou, g
Selectable type of average	RMS, Peak, P-P
Automatic comparison with selectable alarm level	Yes, 1 limit value
Total Envelope level	
Frequency range	500 - 6400Hz
Envelope level within the frequency range	1 – 1000Hz
Unit	gE RMS
Automatic comparison with selectable alarm level	Yes, 1 limit value
Total Bearing Condition value	
Frequency range at Bearing Condition	Selectable between 0.5 – 6.4kHz, 1 -8kHz, 2 – 8kHz, 3 -8kHz
Unit	g RMS
Automatic comparison with selectable alarm level	Yes, 1 limit value
Analysis	Same properties as with Total vibration level
	Automatic analysis of 5 frequencies with the highest levels
Route	Downloaded from the X-Trend PC-software
Memory capacity	Appr. 999 measuring points, including Total vibration level, Bearing Condition level and Envelope level
Spectra in Route (Option)	
Memory capacity	Appr. 999 spectra
Frequency range	2-800Hz, 8-3200Hz, 10-6400Hz
Resolution	1.5Hz, 3.5Hz, 5Hz
Miscellaneous	
Dynamic measuring range	>80dB
Auto scaling	Yes
Main processor	Micro processor 38Mhz
Internal memory	512kb Flash, 512kb RAM, 64Mb Memory Card
Graphic Display	68x124 pixels with background light
Real time Clock	Yes
Computer communication	USB max 256kbaud/s
Power supply	4 x R6 2000mA rechargeable Nimh batteries
Power usage at measurement / sleep mode	120mA / 25uA ≈ 10 hours of continuous operation
Min/max environment temperature while measuring	-20°C … +50°C
Dimensions	180 x 80 x 40mm
Weight	400grams including batteries

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