



VIBRATION DATA COLLECTOR



True 2/4 Channel Vibration Analyzer Cum Alignment Tool

701TXV



ISO 9001:2015

"Quality management systems. Requirements"
INTERNATIONAL STANDARD



VibAnalyst™

Visualize & Analyze Vibration

Vibration Route and Analysis Management Software



for KOHTECT Instruments



701TXV



C911 SA



107VF

Cost Effective Solutions with Unbeatable Quality is Our Priority!

CONTACT



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True 2/4 Channel Vibration Analyzer Cum Alignment Tool - 701TXV

Application



Features – Technical Specifications

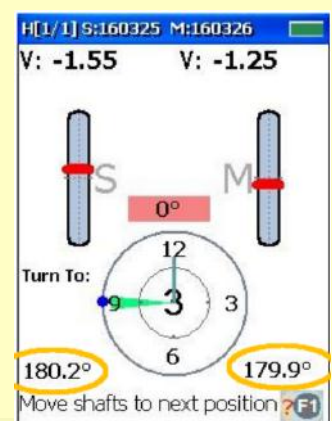
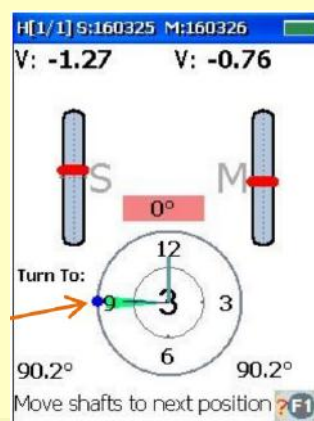
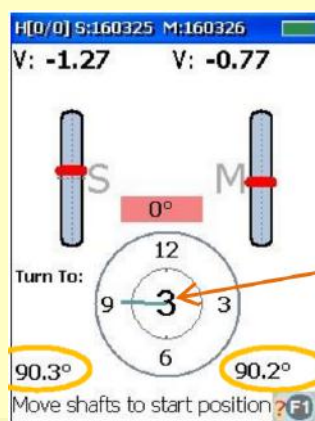
- Display: TFT¼. VGA 320x240 with a built-in backlight, sunlight-readable 3.5" standard size.

Measured parameters:

- Acceleration, velocity, displacement & dynamic signal including current.
- Real-time measurement and display of Time waveform, FFT spectrums, enveloping, and overall amplitude on a single sensor
- Simultaneously 4 channel spectrum display.
- Window: Hanning, Blackman, rectangular and flat
- The MCSA of the machine for locating fault frequencies on current spectra
- Condition monitoring and fault detection of induction motors.
- Synchronous analysis.
- Measurements: Overall acceleration, velocity, and displacement, time wave from
- Detection: RMS, peak, peak to peak, and true peak
- Amplitude detection modes: O to peak, true peak, peak to peak, RMS.
- Severity: ISO 10816
- Tachometer measurement range – 10...200,000 rpm
- Accuracy – $\pm 0.1\%$ and $\pm 1\text{rpm}$
- Frequency range independently selectable F min and F max, minimum from 0.5 Hz and maximum up to 50 kHz, with suitable anti-aliasing filters.
- Window: Hanning, Blackman, rectangular and flat
- Trigger: External, Internal, Free Run. Selectable Measurement units– English/ Metric.
- Ruggedized to withstand humidity, temperature, and impact on dropping of equipment.

- Cursor: Single, harmonic, peak, band cursor, and mark cursor
- Laser Alignment functions with transducers
- AD conversion – 24 bits | Dynamic range: 106dB
- Number of channels: 2 or 4 analog channels and one additional channel for the tachometer probe
- Memory: 8 GB | PC Communication interface: USB
- Operating Temperature: 0°C to 50°C
- IP 65 & CE certification
- Impact-resistant ABS enclosure with TPE protector
- Carry case with foam insert.
- Dimensions: 215 x 100 x 40mm. & Weight: 0.4 kg.
- Rechargeable built-in battery: Li-Ion, up to 8 hrs continuous operation and include battery charger module
- Resolution: 100 – 25,600 lines
- Pen drive with software, manuals
- Carry case
- Vibration sensor: 3-axis measurement
- All channels are individually configurable for different frequency ranges, windowing, average type, and synchronous operations
- Alphanumeric comments (notepad utility) for any special observation during data collection

Laser shaft alignment system Temperature sensor



Hardware

- IEPE/IOP or charge type accelerometers with known sensitivity switchable, proximity sensor, Optical RPM transducer.
- CPU Processor: 400MHz.
- Ruggedized aluminum enclosure with TPE protector.
- Dimensions: 210 x 170 x 50mm.
- Accelerometers, cable, magnet for mounting – (Triaxial& uniaxial), Laser/Optical Tachometer probe, cable, and magnetic stand
- Pen drive with software, manuals
- Instrument memory– 8/16/32 GB

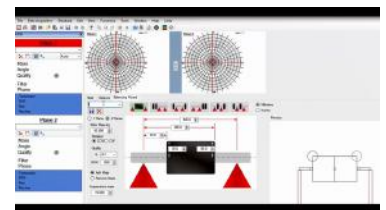
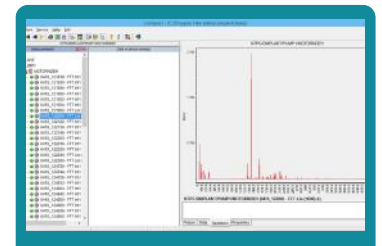


Severity: ISO 10816

VIBRATION SEVERITY PER ISO 10816					
Machine		Class I small machines	Class II medium machines	Class III large rigid foundation	Class IV large soft foundation
Vibration Velocity Vrms	in/s	mm/s			
	0.01	0.28			
	0.02	0.45			
	0.03	0.71		good	
	0.04	1.12			
	0.07	1.80			
	0.11	2.80		satisfactory	
	0.18	4.50			
	0.28	7.10		unsatisfactory	
	0.44	11.2			
	0.70	18.0			
	0.71	28.0		unacceptable	
	1.10	45.0			

Software features

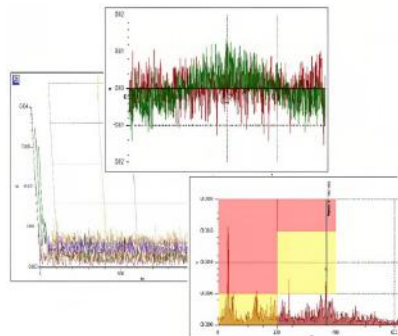
- Simultaneous display of trend and spectrum.
- Basic statistical alarm management
- Large in-built library of bearings of all manufacturers.
- Dashboard showing a bird's eye view status, via data in the backend.
- Backup storage of data
- Equipment Hierarchy configuration
- Post-collection filtering and FFT range measurement
- Machine History viewer, asset history management, copy and paste of similar machines
- Software includes database management, trending, report generation, and Bearing analysis
- Standard analysis software for data download/upload from instrument to PC with lifetime validity.
- Alarms based on values (overall limit, % change limit) for overall as well as unlimited narrow-band spectral data.



Single and Dual plane Balancing.



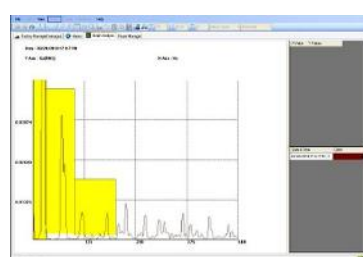
Fast but simpler navigation, naming prioritizing & labeling freedom within the hierarchy



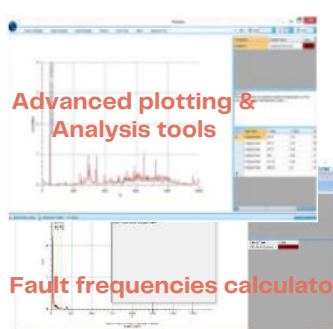
Smooth & super-easy management of display toolbars & graphs-color



Reporting: Multiple layout designation(s) in other word processors /spreadsheet formats



Database management of Machine Vibration, 2D and 3D trend plot



Advanced plotting & Analysis tools

Fault frequencies calculator

Multi-window plotting with different frequency range for analysis



The software has incorporated a large array of analytical functions. Managing, data/graph/zoom/area display/ alarm/ cursor management, and single, dual or multidimensional analysis.

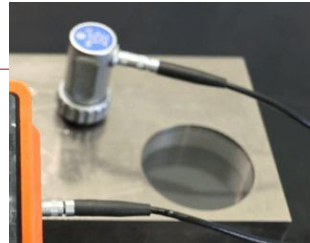
Coming Soon

Hardware

- Types of measurement: temperature, and process parameters.
- Temperature measurement range: -70°C to 380°C
- Cross-channel analysis facilities include cross-phase, cross-spectrum, and cross-channel waveform.
- Various fault & root cause identification: Including bearing, misalignment unbalance & looseness.
- Natural frequency estimation
- Automated Diagnostic Software
- Orbit Analysis
- Coherence

Display Options

- **Touch Screen - 5" inch - 800x480 (resolution)**
- **Touch Screen - 7" inch - 800x480 (resolution)**



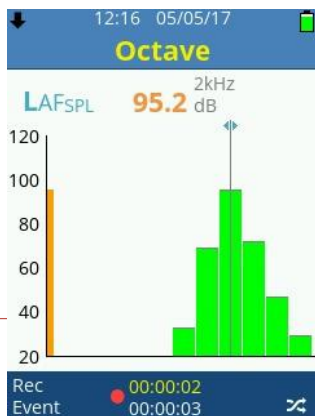
Ultrasound measurement facility by using acoustic sensors



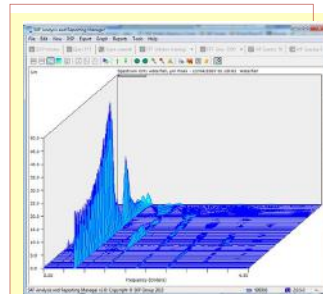
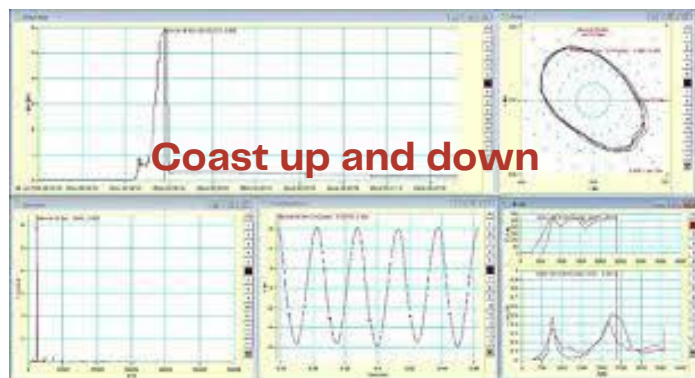
Headphone

Software

- Machine Fault Finder software
- Dual monitor support, management reporting, quick report
- Advanced statistical alarm management, different report format.
- Fault details of peaks, severity, reference spectra repair requirement.
- Cascadeplotting: FFT spectrum waterfall during machine start-up and coast down with plot display, storage, and download facilities, both in the instrument and software.
- Alarms on Fault Frequencies



1/1 octave and 1/3 octave analysis



Periodical overall data trend and band parameter trend, FFT spectral trend in a waterfall manner, with the projection of failure lead time prediction (in software).

Velocity (mm/s, rms)	Machine type			
	Class I	Class II	Class III	Class IV
0.18 to 0.28	A	B	C	D
0.28 to 0.45				
0.45 to 0.71				
0.71 to 1.12	B	C	D	E
1.12 to 1.8				
1.8 to 2.8	C	D	E	F
2.8 to 4.5				
4.5 to 7.1	D	E	F	G
7.1 to 11.2				
11.2 to 18	E	F	G	H
18 to 28				

A Good
B Allowable
C Tolerable
D Not permissible

Alarms based on values (overall limit, % change limit) for overall as well as unlimited narrow-band spectral data