PSV 9.1 Scanning Vibrometer Software

Polytec's Scanning Vibrometer Software is the "brain" behind all PSV systems. The software guides and controls all measurement tasks. This includes setting measurement parameters and scanning the laser as well as acquiring, displaying, processing and exporting measurement data. The latest release, PSV 9.1, incorporates the most recent recommendations of the vibrometer user community, leading to improved system functionality and performance.

How Can You Benefit from the Latest Innovations?

Polytec will design your personal software maintenance plan entitling you to receive your copy of the latest release.

Further Information

Please consult the documentation delivered with your software, including release notes, for a detailed description of

- further improvements
- hardware requirements and compatibility
- supported software interfaces and bug fixes

New Features

- Automatic 3D Alignment
- Improved High Contrast Laser Display
- Extended UNDO / REDO in Acquisition Mode
- TEDS support
- Calculation of Damping Values
- Differential cursor: frequency readout
- 64-bit support
- Compensation in Time Domain

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Setup, Measurement and Data Analysis

Datasheet

New Features in PSV 9.1

Automatic 3D Alignment
Machine vision is used to maneuver the 2 remaining lasers to one reference point indicated by 1 laser. This procedure works for all set-ups on smooth surfaces. Switching the lasers is no longer necessary. Only the TOP laser is moved manually.

Your Benefit:
- Speeds up the alignment process by a factor of 3

Improved High Contrast Laser Display
The High-Contrast Laser Display improves the visibility and clarity of the laser beam on the live video image. The laser position is now tracked and graphically marked, improving the visibility and operability.

Your Benefit:
- Improved alignment precision and point definition with shiny objects.

Extended UNDO / REDO in Acquisition Mode
UNDO is now available for acquisition settings, alignments, geometry and camera settings.

Your Benefit:
- Accelerates the setup process

TEDS Support
Support of TEDS sensors (Transducer Electronic Data Sheet; IEEE 1451). The sensitivity specification of each reference sensor is automatically stored in the A/D settings when connected to a PSV-F-500 Front-End.

Your Benefit:
- Removes a source of error
- Accelerates the setup process

Calculating the Damping Factor
For damping estimations the Q factor and Zeta are added.

Your Benefit:
- Easy estimation of modal damping parameters for an initial validation of FE results

Differential Cursor: Frequency Readout
Frequencies are calculated from two cursors that can be positioned anywhere on a time trace. Waveform frequency content can be quickly and easily studied.

Your Benefit:
- Quicker evaluation in time domain

Compensation in Time Domain
The propagation delay of the decoder relative to a reference channel is now compensated in time domain. In the past the compensation was only applied in the frequency domain.

Your Benefit:
- Timing between laser vibrometer and reference sensor can be used for analysis

64-bit Support
PSV software is running as a 64-bit application in a 64-bit environment. This allows access to data from other 64-bit applications via Polytec File Access (PFA). Over 4 GBytes of RAM is used.

Your Benefit:
- Enhances speed for large data files
- Improved overall performance in acquisition and presentation modes

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