

# 4Sight™

4D Technology

## Dynamic Interferometry® and Wavefront Analysis Software

4Sight analysis software is the most comprehensive platform for accurate wavefront analysis and surface shape measurement. Its smart, straightforward interface puts features and displays where you need them. Stable, glitch-free operation boosts productivity, day after day. 4Sight's Windows-standard menus and screens make learning 4Sight easy, and put impressive analysis power at your fingertips.

### Fast Acquisition, Easy Data Access

4Sight is the driving force behind 4D Dynamic Interferometers, supporting advanced features such as continuous measurement and dual mode (temporal and dynamic) operation. Fast Acquisition burst mode even lets you generate video of moving or changing samples.

Data access and analysis are also easy and straightforward with 4Sight. The Measurement Screen groups common alignment and measurement controls into one location. The Measurement Stack lets you drag and drop data for comparison and complex manipulation. And the unique Measurement Flow interface lets you visualize all steps in the analysis sequence, from raw interferograms to processed phase.

### Extensive Analysis Capabilities

4Sight has earned a reputation as the industry's leading software for analyzing interferometric data. Zernike, Seidel, geometric and diffraction analyses are easy to perform. Measurement-specific analyses include prism, corner cube and island analysis, as well as the most complete support for measuring large optics.

### Visualization and Data Sharing Tools

Numerous tools for data transformation and manipulation help you get the most information from your data. 4Sight's 2D and 3D displays, masks, filters and palettes let you communicate information about your test samples with unprecedented clarity.

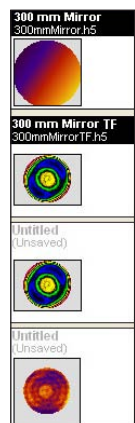
4Sight's comprehensive data sharing capabilities let you read, write, save and print from most file types, including MetroPro IDL®, MatLab®, Opticode®, Vision®, HDF5 and CodeV®. Images and tabular data can be cut, copied and pasted to other applications as well.

### Update Your Capabilities

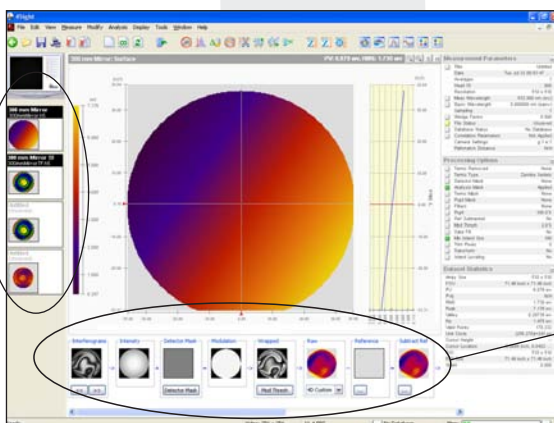
4D Technology's Upgrade Kits let you use the power of 4Sight to extend the life of temporal phase-shifting and dynamic interferometers and greatly increase their capabilities. Upgrade packages are available for instruments from Wyko, Zygo, Veeco, ADE Phase-Shift and others.

## FEATURES

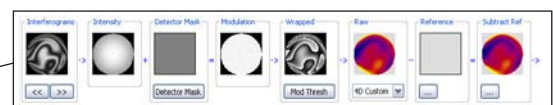
- Easy-to-Learn, Quick-to-Navigate Interface
- Comprehensive Analysis, Manipulation and Visualization
- Versatile Data Exchange with Most Popular Data Formats
- Robust, Reliable Operation for Maximum Productivity



Measurement Stack



Measurement Screen



Measurement Flow

# 4Sight™

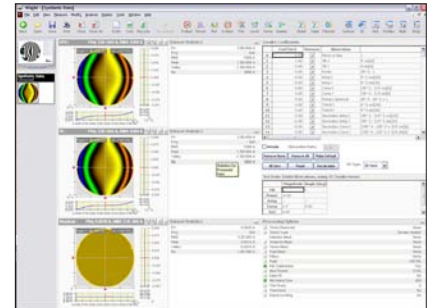
4D Technology

## Analysis Software Features

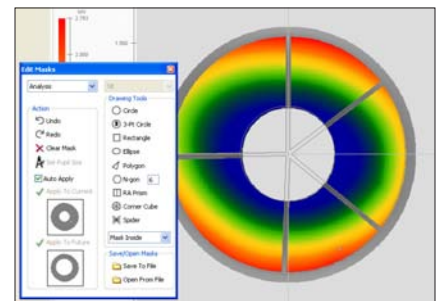
Data Acquisition	Single, average, continuous, difference and Burst (movie) modes. User selectable phase algorithms and unwrappers.
Stack Calculations	Drag and drop arithmetic operations between data sets. All measurement results can be promoted to the stack and saved to disk.
Masking	Detector, Analysis, Pupil, Trim and Terms masks. Mask Editor lets you create, copy, scale and rotate multiple shapes using real dimensions for accurate masking. Special corner cube, prism and spider masks. Masks are stored with data and can be edited upon recall.
Fiducials	Place fiducials and transform data arrays from a single screen.
Data Analysis	Statistical parameters, PVq, Zernike, Seidel, Histogram, Slope (X, Y, Magnitude), Geometric (spot diagram, encircled and ensquared energy diagrams), Fourier Diffraction (MTF, PSF, PSD, Auto-covariance) and others.
Modal Analysis	Use 4Sight as control software for modal evaluations.
Display	Outstanding graphics include 2D and 3D displays, cross-sections, palette options, max contrast, zoom, Z-scale adjustment and rotation. The Measurement Flow shows all steps in the analysis sequence.
QC Measurement	Accuracy and repeatability analysis across multiple measurements.
Shop Screen Interface	Standard shop screen interface for fast factory-floor analysis.
Scripting	Custom script editor for creating advanced measurement and analysis sequences.
Remote Operation	4Sight Web Service for remote acquisition, manipulation and data exchange.
Database	Extensive databasing with pass/fail criteria and at-a-glance results view.
Data Exchange	Open HDF5 data format enables exchange with IDL, MatLab and Mathematica, Opticode, WYKO Vision, CodeV, Intellwave and others. Database and analysis results can be exported in .csv format. Copy and paste images, screens and tabular data. Movies exportable as .wav files.
System Requirements	Windows® XP® minimum configuration: 3 GHz Pentium IV, 3 GB RAM, 160 GB hard drive.
System Upgrades	Free during warranty period.
Software Upgrade Kits	Use 4Sight with temporal phase shifting interferometers for greatly improved capabilities.

All specifications subject to change without notice. U.S. Patents 6,304,330 and 6,552,808, others pending.

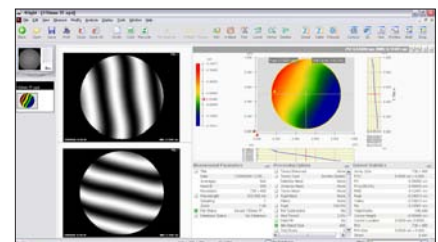
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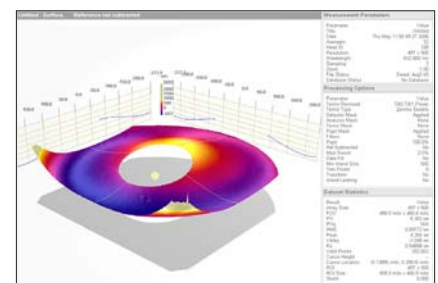
▲ Zernike Worksheet



▲ Mask Editor



▲ Shop Screen



▲ 3D Display