



DYNAMIC TRACKING SOFTWARE

NDI First Principles[™] HD Real-Time Motion Capture Software

Designed for the OPTOTRAK Certus HD advanced measurement system, First Principles is a powerful yet simple-to-use software package that captures and rapidly displays 3D/6DOF dynamic motion data.

NDI Advantage

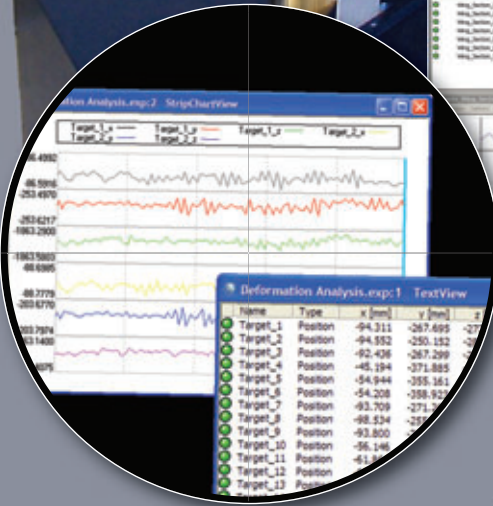
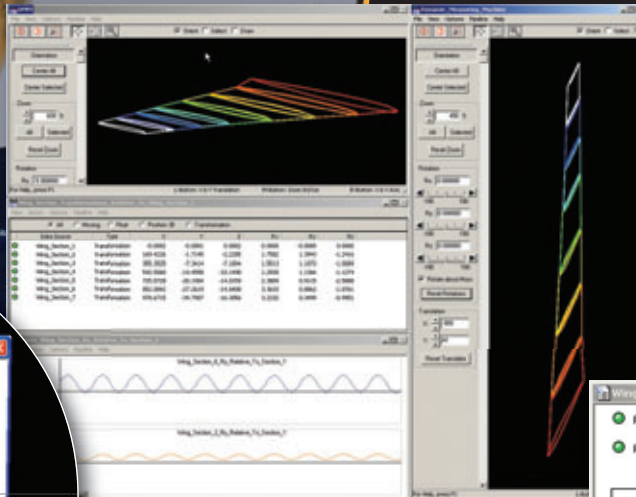
When combined with NDI's optical technology, First Principles is the industry's most advanced tool for performing high-speed, real-time object tracking such as structural testing and vibration analysis.

Easy to Use

A user-friendly interface eliminates complicated learning curves, allowing new users to collect and analyze motion data almost immediately.

True Synchronization

A simple interface allows you to synchronize and collect data from other digital and analog devices.



Point	x [mm]	y [mm]	z [mm]
1	237.349	-174.067	-274.600
2	7.449	-189.862	-257.937
3	-23.522	-85.011	-256.258
4	135.237	-93.880	-323.490
5	25.920	-28.146	-111.438
6	-34.605	5.375	-66.774
7	51.529	-106.988	-188.837
8	51.535	-75.198	-132.610
9	-177.092	-10.607	-54.383
10	22.729	-15.131	-107.195
11	230.207	-234.367	-237.520
12	175.091	-49.101	-409.363

Rapid and Easy 3D/6DOF Motion Tracking and Analysis

With real-time visual feedback, simple setup, and the ability to export data during or after measurement, First Principles comes with all of the features and capabilities required to conveniently track complex object movement in all six degrees of freedom, including:

- Integrated probe support
- Track and record up to 512 targets simultaneously
- Track and record up to 170 objects simultaneously
- Display data as:
 - Text
 - 3D
 - Digital read out
 - Strip chart

Measure

- Vibrations
- Traveled Paths
- Velocities
- Accelerations
- Positions
- Displacements
- Orientations
- Deformations
- Angles
- Transformations

To run NDI First Principles HD, you will need:

- Windows 2000/XP (32 bit)
- Internet Explorer 5.0 or above
- Video card with Open GL support
- Monitor that supports a resolution of 1024 x 768
- Pentium 4 Processor
- 256 MB RAM

Also recommended:

- 512 MB RAM or more
- 100 MB or more of free hard drive space
- Monitor that supports a resolution of 1600 x 1200
- Wheel mouse



Real-time Feedback

Experiment Setup



Export Data



NDI

CANADA
Tel: +1 (877) 634-6340
Email: info@ndigital.com

NDI EUROPE GmbH

GERMANY
Tel: + 49 (77 32) 939 19 00
Email: info@ndigital.com

NDI ASIA PACIFIC

HONG KONG
Tel: + (852) 2802 2205
Email: info@ndigital.com

www.ndi.ca