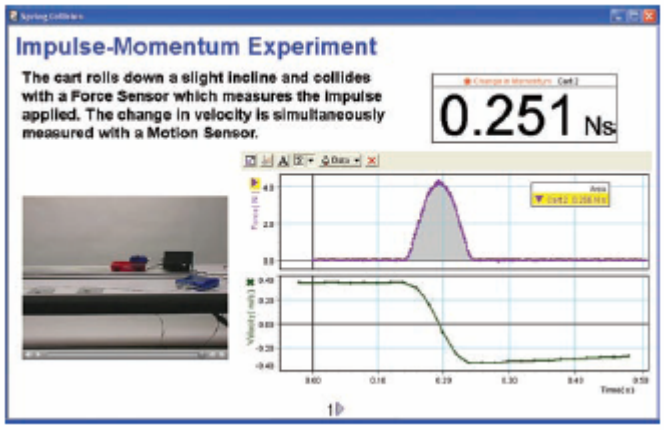
DATA STUDIO SOFTWARE:

DataStudio is the only software needed to operate any of PASCO's interfaces. It is a powerful program for collecting, analyzing, and displaying data. DataStudio Software works with any PASCO interface on both Macintosh and Windows Computers.

New Features of DataStudio:



- **Video Player and Synchronization:**

Play a movie or synch a movie to experimental data

- **Improved Curve Fitting:**

Greatly improved curve fitting algorithms allow difficult fits such as sine series and logarithmic data to be analyzed

- **Presentation Style Graph:**

Additional graph style that moves measurements and units outside the graph; ideal for

- publication of DataStudio graphs in educational journals

- **Improved Number Handling:**

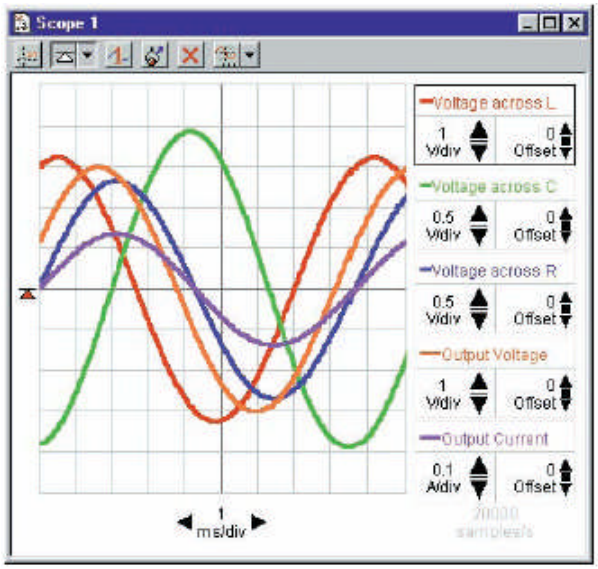
Choose from a variety of number displays including significant figures, scientific and fixed precision

- **Predictive Sketching:**

Students can draw directly on
The graph to predict a relationship between two variables.
A predicted data set is created as they draw on the graph.

- **Data Run Colors and Symbols**

Standard Features of DataStudio:



- **Powerful Displays/Analysis Tools:**

Analyze data using a Graph, Table, Meter, Digits Display, FFT, Oscilloscope or Histogram

- **Change or Calculate Anytime, Anywhere:**

No need to stop data collection to make a calculation, choose a curve fit or select data of interest

- **Compatible with ScienceWorkshop or PASPORT sensors:**

DataStudio is the one software needed regardless of the PASCO probeware used

- **Use Any Combination of Sensors:** No restrictions

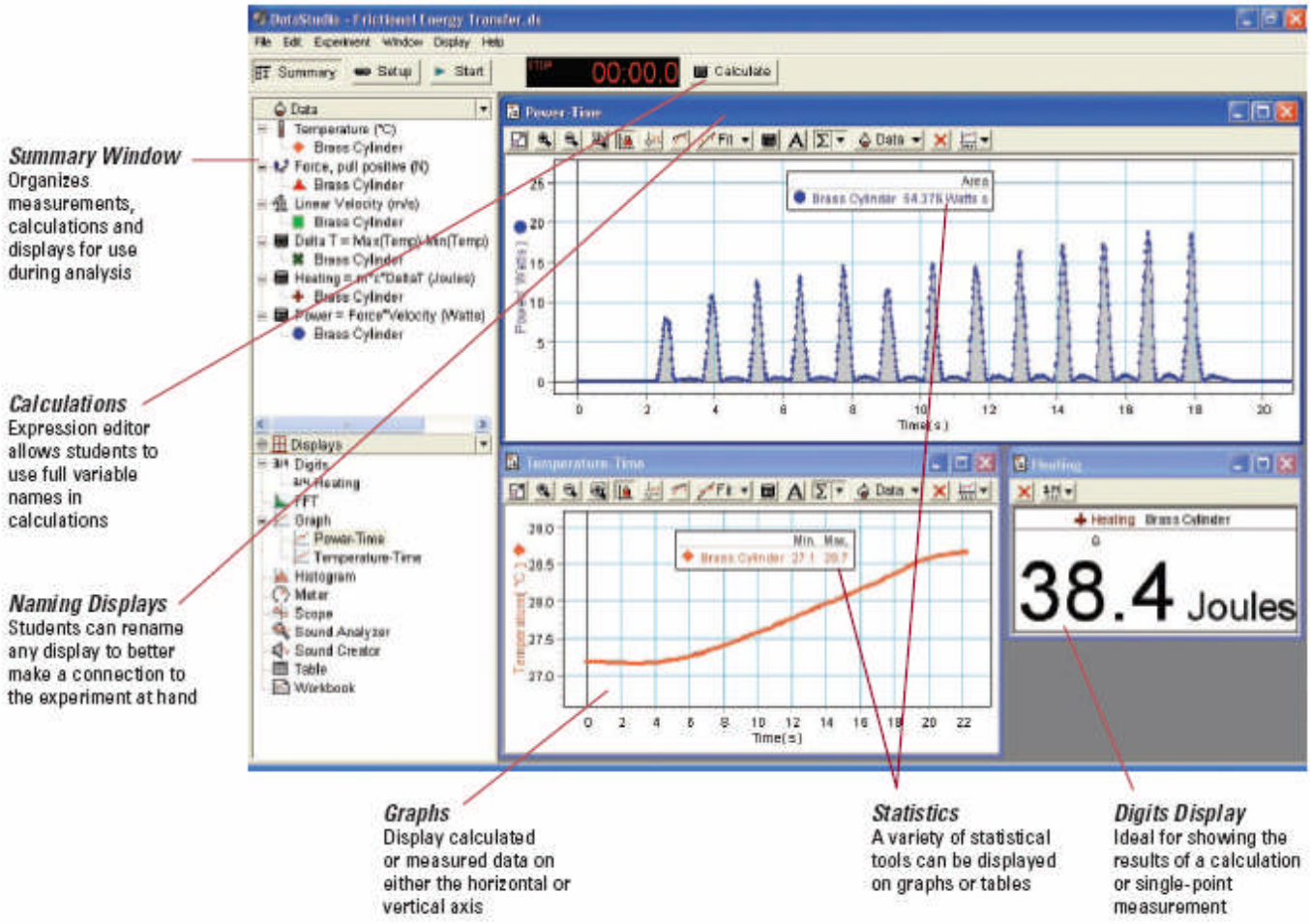
on using digital and analog ScienceWorkshop sensors
simultaneously

- **Multiple Languages:** Twelve languages of DataStudio included on each CD

System Requirements

Windows: Windows 98/2000/ME/XP, Pentium or equivalent processor, 50 MB hard drive space, 16 MB RAM
Macintosh: OS 8.6 or higher (including OS X), 50 MB hard drive space, 16 MB RAM.

Data Analysis with DataStudio:
Using DataStudio, a detailed analysis of the data can be performed:



Why Buy the Full Version of DataStudio?

Whenever your purchase includes an interface or a sensor, a Lite version of DataStudio is included with your order.

DataStudio Lite is limited to:

- Viewing and taking data using pre-configured files and electronic workbooks made with the full version
- Taking data and displaying it on a graph, table, or digits display (only one run on each)
- Autoscale, Smart Tool, Statistics, and Data Run Selection on the graph
- Using WAVEPORT, our sound plug-in software (purchased separately, see page 94)

The full version of DataStudio allows:

- Creating DataStudio experiment files Authoring electronic workbooks
- Additional displays: meter, FFT, oscilloscope, histogram
- Multiple instances of each type of display and more than one run on each display
- Start and stop conditions
- Manual sampling
- Calculator
- Curve-fitting
- Graph annotations
- Data Editing
- Synchronizing QuickTime videos and data

500 Interface Physics Solutions

A versatile solution for all sciences. Combines good desktop performance with datalogging capability. Compatible with over 40 *Science Workshop* sensors for use in Chemistry, Biology, Earth Science and Physics.

Features

Datalogging: The *Science Workshop 500* Interface collects data directly to a computer, or students can collect data with just the interface and a sensor. Students can set up an experiment using the *500*, disconnect from the computer to collect data outside the classroom and then reconnect for data analysis.
Portability: With a built-in battery compartment for 4 “AA” batteries (not included) the *Science Workshop 500* Interface can go just about anywhere and still collect data.
50 KB Storage Buffer: Stores data runs and experiment setup information.
Cross-Platform Data: Logged data will open on either a Macintosh or a Windows compatible computer. The interface stores the sensor and data display information so it knows what experiment setup to open.

Unique Characteristics

Ports: Two Digital, three Analog
Connection: Serial (also USB compatible with USB/Serial Converter)
Datalogging: Collect up to 17,000 Analog (force, voltage, etc.) data points or 7,000 Motion Sensor data points
Portable: Built-in battery compartment
Designed for: Starter, Biology, Chemistry, General Science, Earth Science, Physics, Math

750 ***Interface Physics Solutions***

750 Interface is the measurement center for the modern physics laboratory. Using a computer and the 750 Interface, students can measure force, position, temperature, pressure, angular velocity, acceleration, current, magnetic field and more. Each 750 Interface includes a built-in function generator and real-time
Oscilloscope mode.

Seven Input Channels
With the 750, all seven channels may be used simultaneously. There are no limitations on what combinations of sensors can be used. Analog and digital inputs may be mixed in any combination.

Four Digital Channels
Use up to four Photogates or two Rotary Motion Sensors, a photogate and Motion Sensor II, or any other combination.

Three Analog Channels
Max sample rate of 250,000 Hz when using a single channel.

Features

250,000 Hz Sampling Rate: Sample at 250,000 samples per second on a single analog channel. Students will see a true, real-time oscilloscope and incredibly responsive sound sensor data.
Built-in 1.5 W Function Generator:
Any experiment requiring a frequency up to 50 kHz and 1.5 watt (300 mA) output can be run without additional power amplification.
Output current and voltage can be monitored internally by the *750* Interface.
20 kHz Oscilloscope: With the *750's* increased sampling rate, the oscilloscope becomes a real-time scope with refresh rates up to 40 frames per second.
Reduced Noise, More Accurate Data:
When sampling at rates less than 100 samples per second, the *750* Interface provides 8X over sampling to reduce noise and provide smoother data curves.

Unique Characteristics

Ports: Four Digital, Three Analog, One Output
Connection: USB
Data Sampling: Simultaneous Analog and Digital Recording
Analog Rates: Up to 250,000 samples/sec (20 KHz Oscilloscope)
Digital Rates: 0.1 msec digital timing accuracy (1 mm resolution for Motion Sensor)

750 Interface Output Waveforms:

Data Studio software controls the 750 interface to output the following waveforms (from 0.001 Hz to 50 khz):