Scope Software

*Scope software running with **e-corder** hardware unit*

- Virtual oscilloscope or XYT plotter
- Signal vs time or XY display
- 1 Hz to 200 kHz sampling speed
- Windows or Macintosh
- No programming required — just plug and play
- Records most analog voltage signals
- Average multiple sweeps
- Pre- or post triggering
- Up to 999 sweeps stored in one file
- Ideal for educational or research use

Description

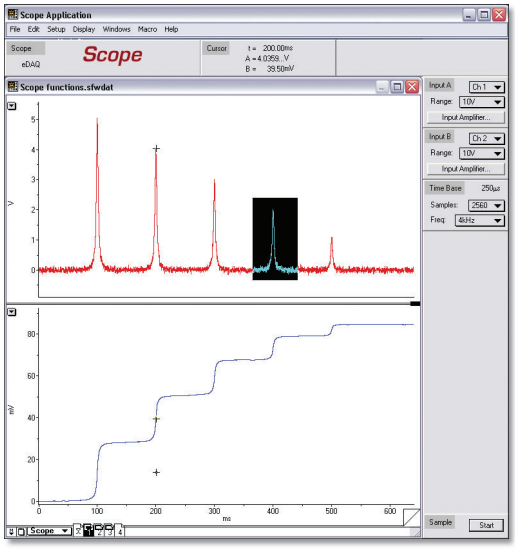
Turn your computer into a virtual oscilloscope or XYT plotter! Scope™ software runs on Windows or Macintosh computers with an **e-corder**® hardware unit.

Scope is suitable for recording analog voltage signals up to ±10 V, and can be used with a wide range of instrumentation. It is also fully compatible with the range of eDAQ Amps and Pods, providing full software control of these devices.

Display Modes

Data can be displayed as one or two channels versus time, or as an XY plot where the data recorded on one channel is plotted against the data recorded on the second channel. There is also a FFT display mode for power spectrum analysis.

Repeated sweeps can be collected individually, or averaged to give improved signal-to-noise ratios. Any selection of sweeps in a file can be overlaid for ease of comparison.



Main scope window

Signal Calibration

The signals can be displayed in true physical units, using single or double point calibration.

Data Pad

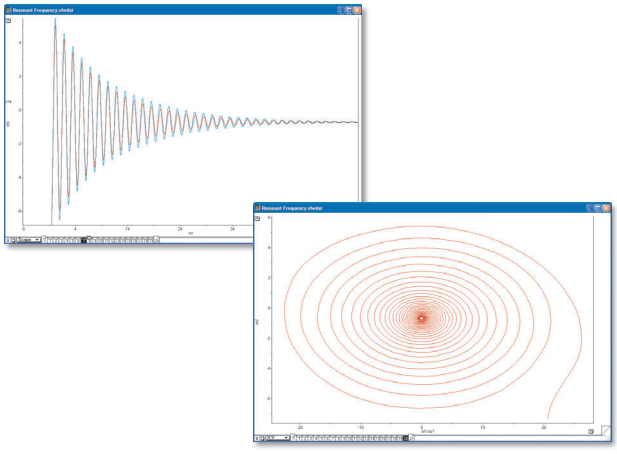
The Data Pad is an internal mini-spreadsheet that helps analyze data by extracting useful parameters (mean, standard deviation, slope, integral, etc.) from selections of data.

Notebook and Page Comments

Store your experimental description and observations with the data file in the internal Notebook. Page comments let you store information about individual sweeps.

Transform Data

Functions include smoothing, integrating or differentiating data. The raw data is always maintained internally and can be recovered.



Display channel data against time or as an X-Y plot

Export friendly

You can export raw signals (as graphics or tabular data), Data Pad reports, and Notebook contents to other graphing software, word processors, and spreadsheets, to prepare publication quality reports. Data files can be exchanged between Windows and Macintosh computers.

Triggering

An extensive array of trigger options allow you to trigger sweeps from an external device, or using an incoming signal. Pre- and post-trigger facilities are offered, as well as triggering from a rising or falling slope.

Background Sweeps

Select a sweep to be the background. It is subtracted from all other sweeps to enhance small differences from sweep to sweep.

Macros

Macros can be used to automate a sequence of commands, either for data collection or analysis.

Menu Editing

Delete, or lock, menu items to simplify the appearance of the software for routine student or technician use.

Computer Requirements

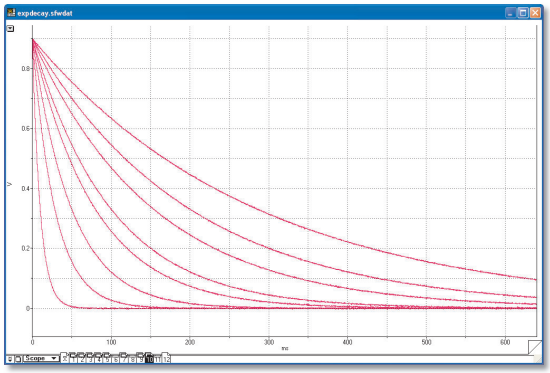
Scope requires Windows 98, 2000, Me, XP, or MacOS 9 or later. A USB port (2.0 or 1.1) is required to collect data.

Specifications

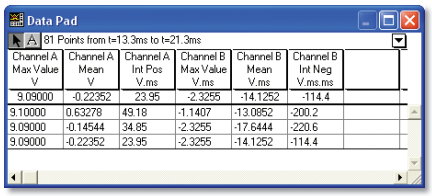
Number of channels: 2
Recording speeds: 1 Hz to 200 kHz
Sweep duration: 2.56 ms to 2560 s
Sweep modes: Single, Multiple, Repetitive, Average, Superimpose
Input ranges: ±2 mV to ±10 V in 2:5:10 steps
Signal resolution: 16 bits
Analog output ranges: ±200, 500 mV, 1, 2, 5, 10 V
Waveform output: Pulse, Pulse Train, Ramp, Triangular, Freeform
Trigger modes: External, signal, or line (mains).
External trigger: TTL or contact closure
Pre-trigger: up to one sweep duration
Post-trigger: up to eight sweep durations
Number of data points per sweep: 2560 maximum
Number of sweeps in one file: 999 maximum

Ordering

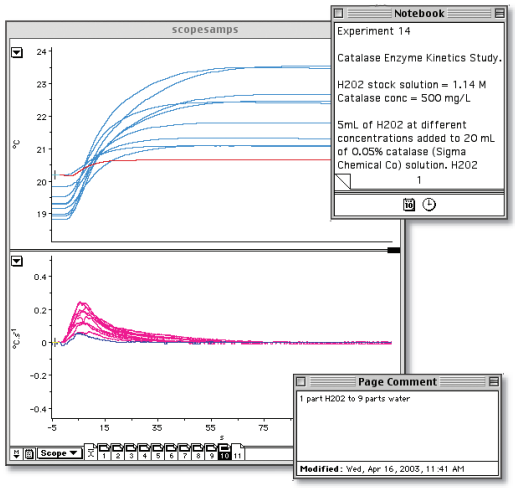
Scope software is supplied as part of an **e-corder** system but can also be ordered as individual licenses, including Chart software (ES500).



Overlay multiple sweeps



Use the Data Pad to extract parameters from selected data



Use Notebook & Page Comment windows to document experimental observations and conditions

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