TA Instruments
What's New in TRIOS Software

TRIOS Software Overview

TRIOS is TA Instruments' state-of-the-art software package that uses cutting-edge technology for instrument control, data collection, and data analysis for thermal analysis and rheology instruments. The intuitive user interface allows you to simply and effectively program experiments and move easily between processing experiments and viewing and analyzing data. TRIOS software delivers a whole new experiment experience.

- Easy organization and data file management
  - A unique file-naming system allows for effortless organization of data files
  - The History View and File Manager offer simple data file location
- Compatibility with the latest Windows Operating System platforms
- Maximum flexibility
  - Instrument control and data analysis via any networked computer
  - Configurable for multiple monitors
  - Ability to control multiple instruments at once
  - Remote data analysis
- Seamless integration between instrument control and data analysis
- Easy data export in a variety of output formats, including XML, Word, Excel, and PDF
- Simple graph formatting using The Ribbon
- Customization of the display

The TRIOS software is supported by a full range of services, including onsite training, customer service that is only a phone call away, and easy-to-use, easy-to-understand online help. All of these items reflect TA Instruments' commitment to providing thermal analysis and rheology products and related services that deliver maximum value for your investment.

What's New in TRIOS Software V3.0

TRIOS software is now better than ever with increased stabilization and key fixes and enhancements. The next generation of instrument control and data collection and analysis, TRIOS V3.0 is more efficient and intuitive, allowing you to work faster and easier.

General TRIOS Enhancements

New Connection Dialog

The new connection dialog is a new user-friendly graphic-based design. It removes the need for Instrument Explorer, providing fast, easy, and reliable instrument connection.

Instrument icons are color-coded to indicate instrument status at a glance: Red indicates the instrument is offline; Green indicates the instrument is online; Green with people icon indicates that someone is already connected to the instrument; Gray indicates status of the instrument is unknown.

Instruments are automatically located on your network; simply double-click an instrument icon or click Connect to connect to an instrument. Use the Add button to manually add an instrument, if needed.

Additional features for the connection dialog include:

- Left-click an instrument icon and hover the mouse over the icon to display instrument information, including the temperature and status of the instrument.

- Right-click an instrument icon for additional options: Connect, Connect Offline, Remove, Create Desktop Shortcut, and Show Large Icon

Single Connection

To simplify connection status and priority, TRIOS no longer permits more than one connection per instrument. Users wishing to view their test progress remotely may do so thorugh Windows Remote Desktop.

Moving Window Type

The Moving Window Type is an additional option added to the Analysis section of TRIOS Options that allows you to control accuracy for data smoothing. No longer a fixed number, you can now choose to select Percentage of curve or Number of points to determine the width of the window, giving you more precise control over your data output.

Properties Panel

Properties are now even easier to locate and adjust. Any attribute that can be accessed from the Ribbon has been removed from the Properties panel to eliminate redundancy.
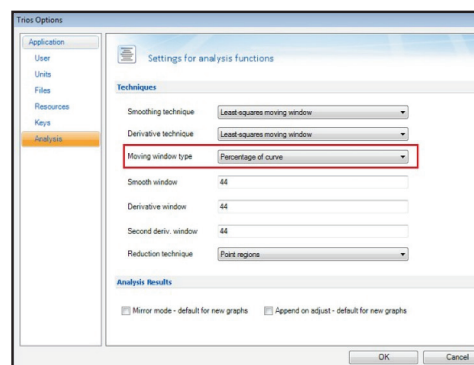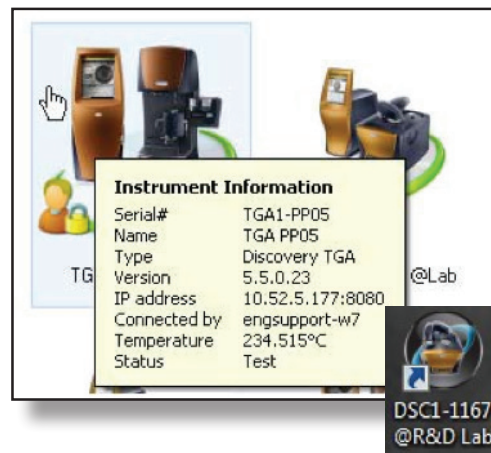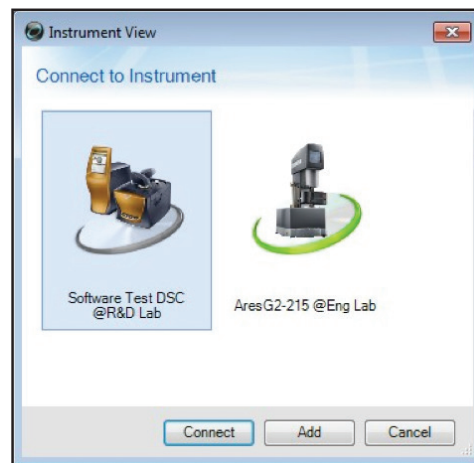
RHEOLOGY

New Data Analysis Models

The following rheological analysis models have been added, giving you even more options for analyzing your data:

- Area under the curve for calculating partial areas under a curve
- Thixotropy for calculating the area of thixotropy from the stress in up and down stress or rate ramps
- Modulus crossover (for determining the point at which G'=G" or tan δ =1) analysis now allows you to select whether to interpolate based on linear, cubic spline, or linear/cubic spline combination methods.
- Carreau-Yasuda: The Carreau-Yasuda model is an extension of the Carreau model

Navigator Launcher

Access Rheology Navigator software easily for test and analysis automation. During TRIOS installation, you may now opt to install a shortcut for Navigator on your desktop, making connection to the Navigator software quicker and easier than ever. Please note that you must already have the Navigator software installed for the shortcut to work.

ARES-G2 Enhancements

- Axial Force control: Once gap change limits are exceeded, force control is disabled and test continues
- Advanced Options conditioning block added: Allows you to change the default filter settings. For standard operation, the instrument will choose the best settings. The manual filter setting via the advanced option conditioning block should therefore only be used for special applications.
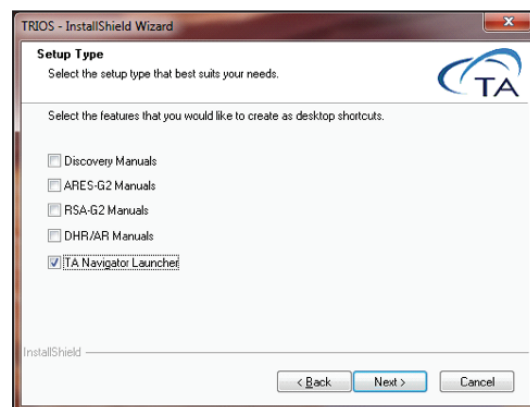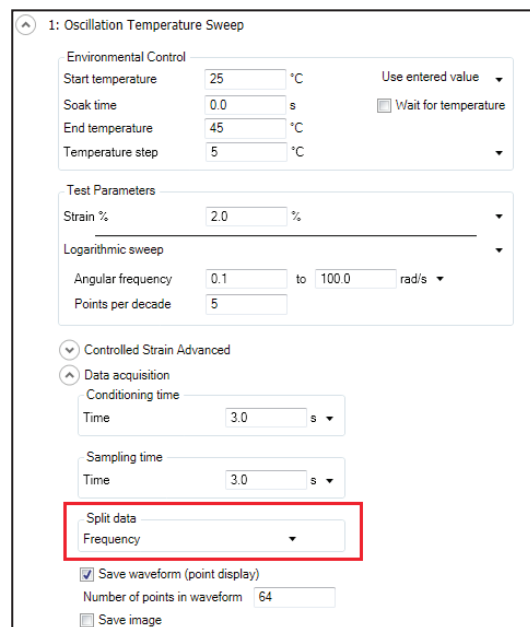
RSA-G2 Enhancements

- End of Test (EOT) conditioning block is now available for the RSA-G2. The EOT defines the instruments settings for environmental system, transducer, motor and stage control after the procedure is completed.

Note that the end of test condition step is a passive step and sets the conditions when the test is terminated, either normally, or by the user or the instrument. If you want the end of test conditions applied even if the test is terminated prematurely, the EOT conditioning block should be placed at the beginning of the procedure. If it is desired to change the EOT conditions based on when the procedure is terminated, more than zone EOT can be used in a procedure. The position within the procedure in reference to the step when the procedure is terminated defines the EOT conditions that are applied. With the addition of this new step, the End of Test Options that were previously accessed from the TRIOS Options menu have been removed.

Discovery Hybrid Rheometer/AR Enhancements

- Extensional Test now allows extensional rate/velocity/torque to be positive or negative. Negative values should be used when used in conjunction with the ETC camera viewer.
- Split data option added to oscillation time sweep, temperature sweep, and temperature ramp. When multiplexing frequency, you can now split the data during the experiment based on frequency.
- End of step behavior: For certain flow steps (ramp, peak hold, and temperature ramp) it is possible to control the behavior of the motor at the end of the step. The default condition is to zero the torque. It is now possible to zero the velocity, or maintain the torque/velocity.

THERMAL ANALYSIS

Discovery DSC and TGA Enhancements
- Removed restart option on touch screen
- Reduced the number of power cycles required during upgrades

INSTALLING TRIOS SOFTWARE

For instructions on installing TRIOS software, refer to the Installing TRIOS Software instructions.

ADDITIONAL RESOURCES

A number of additional resources are available to you. For assistance with the TRIOS software, first consult the Online Help.

For immediate assistance contact the TA Instruments Hotline at +1 302-427-4000 from 8:00 am to 4:30 pm EST.

For email support, please send your question to thermalsupport@tainstruments.com, rheologysupport@tainstruments.com, or microcalorimetersupport@tainstruments.com

PREVIOUS WHAT'S NEW DOCUMENTS

For Previous What's New in TRIOS Software documents, click here.

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