

TA Instruments Installing/Updating Advantage™

Notice

Your Advantage accessory kit includes all the components necessary to install or update the Advantage and Instrument Software, as well as the supporting instruction documentation. The version of Advantage contained on the CD-ROM in this kit may be higher than that installed on your new Advantage controller. It is strongly recommended that you take the time to install or update it on your controller.



NOTE: To arrange for installation of your system, contact our U.S. Service Department (302-427-4050) or your local TA Instruments Service Representative.

Important: TA Instruments Manual Supplement

Please click the <u>TA Manual Supplement</u> link to access the following important information supplemental to this Getting Started Guide:

- TA Instruments Trademarks
- TA Instruments Patents
- Other Trademarks
- TA Instruments End-User License Agreement
- TA Instruments Offices

Table of Contents

Notice	1
Important: TA Instruments Manual Supplement	2
Advantage [™] Installation Requirements	
Free Disk Space Required	
Other Software Considerations	7
Upgrading an Existing Advantage Controller	8
Installation Instructions	9
Basic Steps for Installation	9
Detailed Installation Instructions	
(1) Log into Windows with Administrator Rights	
(2) Install Network Service (Thermal Advantage for Q Series [®] Only)10	
(3) Install Microsoft Operating System Service Pack, Internet Explorer, and/or Direct X1	1
(4) Install Adobe Acrobat Reader	
(5) Uninstall Older Versions of Advantage Software12	2
(6) Set Up the Ethernet Switch (Thermal Advantage Q Series Only)	2
(7) Install TA Instruments Advantage Software14	4
(7a & 7b) .Install TA Instruments Rheology Navigator and/or Enhanced Polymer Library (Options Available for Rheology Advantage Only)	
(8) Install Network Service (Rheology Advantage for AR-G2/AR 2000ex/AR 1500ex Only)1:	5
(9) Install Instrument Software (Firmware)	0
Windows 7 Service Pack 3 Security Options	2
Firewall Exceptions	2
Windows 8 and Windows 10 "The Requested Operation Requires Elevation" Message2.	3
Ways to Get Assistance While You Work22	5
Screen Tips	5
Instructional Videos	5
Printing a Manual	5
Online Help	5
TA Instruments Offices	7

Advantage[™] Installation Requirements

Before installing the TA Instruments software, ensure that the computer system meets the following specifications for Windows[®] 7, Windows 8, and Windows 10 (Thermal or Rheology Advantage or Orchestrator):



NOTE: Advantage software supports both 32- and 64-bit versions of Windows 7, 8, and 10 Business or Ultimate. Rheology Advantage Integrity systems are not supported on Windows 7, 8 or 10.

Description	Requirement
Operating system*	Supported Operating Systems: 32- and 64-bit versions Windows 7, Windows 8, or Windows 10 Business or Ultimate.
Processor	Intel [®] Core [™] 2 Duo (2.93 GHz with 3 MB L2 cache) or better
Memory	≥2 GB RAM
Hard drive	≥80 GB hard drive
CD-ROM	≥48X CD-ROM
Screen resolution	1280 x 800 (1280 x 1024 recommended) with >24-bit colors
Graphic memory	128 MB

* Install Microsoft Operating System Service Pack, Internet Explorer and/or Direct X (if required). If you don't have the required versions of these packages, they can be obtained through the Microsoft web site (at www.Microsoft.com/downloads) or by using the Microsoft Windows Update mechanism (accessed through the Start menu or by accessing http://update.Microsoft.com).



NOTE: The following Microsoft components are automatically installed as part of Advantage V4.7 or higher: MS.NET Framework 2.0 and Microsoft Visual C++ 2005. These components support the latest software development tools used in Advantage V4.8, as a result software installation may take longer than in previous versions.

Additional Requirements for Thermal Advantage Q Series $^{ extsf{R}}$

Description	Requirements
Network card	3Com or Intel 10/100TX PCI Ethernet Network Interface Card (NIC) for Advantage Q-Series [™] .
Ethernet hub/Switch ethernet cabling	10/100BaseTX Ethernet hub/switch for Advantage Q-Series [™] . Must be EIA-568B Category 5 UTP.
Ethernet cabling	Must be EIA-568B Category 5 UTP.
TCP/IP ports	Network Services, as well as File & Printer Sharing for Microsoft Networks, Client for Microsoft Network, and Internet Protocol (TCP/IP).



NOTE: User Account Control (UAC) must be disabled for Windows 7 to locate and connect to instruments through explorer.

Additional Requirements for Universal Analysis

Description	Requirements
Support for custom reporting feature of data analysis	Microsoft Word [®] 97 or higher, Microsoft $\text{Excel}^{\mathbb{R}}$ 97 or higher, and Adobe Acrobat Reader (provided with Advantage) are also required.
Color scheme	For Windows 7, Windows Aero is required (other schemes may result in broken line display)

Optional Requirements for AR-G2, AR 2000ex, AR 1500ex, and Rheology Advantage

Description	Requirements
USB II port	Required for AR-G2 and AR 2000ex with ETC and Peltier Camera Viewer options, Small Angle Light-Scattering (SALS) Accessory, and Automatic Asphalt Calibration kit.
Network card	Ethernet 10Base T/100 Base TX
Additional ethernet card	Only necessary if connecting instrument directly and need access to Corporate LAN.
Ethernet cabling	EIA-568B Category 5 UTP
Client-server protocol	DHCP
Additional networking components	Networking Services, as well as file and printer sharing for Microsoft Network and Internet Protocol (TCP/IP)
Image capture (camera option)	DirectX 9.0 or higher
Support for custom reporting	Microsoft Word 97 or higher
9-Pin serial RS 232 port	9-pin serial port needed for communications with Rheology Advantage Integrity software and UV Light Guide Accessory.
Second monitor	Recommended for SALS Accessory image viewing



NOTE: For Rheology Advantage, disable dual core processor capability (if applicable to your system components).



NOTE: For performing fast oscillation procedures, communication between the rheometer and controller must be by Ethernet connection.

Description	Requirements
User log-in capability	While multiple users may still use the "Fast User Switching" function when running Windows 7, only one user at a time may use the TA Instruments Q Series, Thermal, or Rheology Advantage Instrument Control software. This limit, which is applicable to most programs, is a result of hardware resources that are used by each of these programs.

Additional Requirements for Instrument Control Software with Windows VISTA/Windows 7

Free Disk Space Required

To help you determine which components to install, we have provided the following table containing the approximate amount of free disk space required for installation of the TA Advantage Software.



NOTE: This amount is above that required for the operating system, plus the other software products supplied on the installation CD-ROM. In addition, an extra 15 MB of free disk space is required during the install process (for temporary install files.)

Software	Instrument Control and Data Analysis	Data Analysis Only	Full Installation
Q Series	380 MB	15 MB	525 MB (includes all manuals and available languages)
Rheology Advantage TM	60 MB (includes manuals)	59 MB	90 MB (includes all videos)

Other Software Considerations

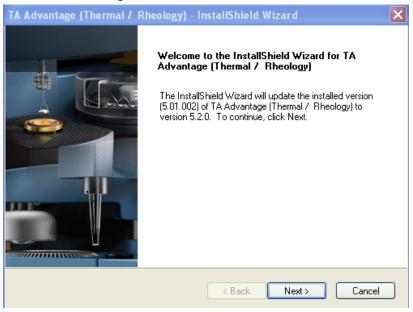
- The computer must be manufactured by Lenovo, Dell, Compaq, Hewlett-Packard, Gateway or Micron.
- The computer should be a new computer that is not already attached to any other analytical instruments (except for existing TA Instruments products).
- Before the TA Instruments Service Representative schedules a visit to install new instruments, please obtain a hard copy of the Windows system summary (as instructed below) to verify that your system is adequate. Please fax this verification sheet along with your company identification and phone number to TA Instruments Service at 302-427-4054.
- Peripherals (e.g., printer) must be from the known Windows-compatible list. (See Microsoft's website at http://www.microsoft.com/hwtest for the most current list.)
- TA Instruments is not responsible for resolving issues associated with connections to your corporate network. [See further information in the next section.]
- TA Instruments is not responsible for resolving hardware/software conflicts created by the addition of third party hardware or software to the computer.

Upgrading an Existing Advantage Controller

If you have an existing TA Instruments controller with a previous version of Advantage Software already installed, follow these instructions to upgrade to a newer version. To fully install the software on a computer that does not currently have Advantage installed, consult the instructions beginning on the next page.

Please note, if you have Advantage version 3.2 or older currently installed, it is recommended that you uninstall the software prior to upgrading as directed. Proceed to follow the steps detailed in section (5) of this document, "Uninstall Older Versions of Advantage Software."

- 1 Log into Windows with Administrative rights.
- 2 If you are updating an existing Advantage controller with a new release, simply place the Advantage software CD into the CD-ROM drive. Select **Install Advantage Software**. During this process, the installation program checks for system requirements. If any additional software is needed, you will receive a message to install that software.



You may be prompted to install Microsoft Internet Explorer 6.

3 Select the **Standard Update Option**. The software will guide you through the installation update. Select **Custom Update** to install/remove individual components.



NOTE: If you uncheck an already checked component, it will be removed during this procedure.

- 4 Restart the computer when prompted by the installation software. You must log into Windows again using an Administrator-level account to complete the installation process.
- 5 Once the installation is complete, follow the instructions outlined in "(9) Install Instrument Software (Firmware)" on page 20 of this document to verify/install the instrument software version before beginning your experiments.

Installation Instructions

Based on your computer and whether it meets the installation requirement details on the previous page, you will need to perform all or some of the following steps. These steps MUST be performed in the correct order as outlined below.

Basic Steps for Installation

Follow the steps below to install your software. Consult the individual section in this document for detailed information, if needed.

- 1 See "(1) Log into Windows with Administrator Rights" on page 10.
- 2 See "(2) Install Network Service (Thermal Advantage for Q Series® Only)" on page 10.
- **3** See "(3) Install Microsoft Operating System Service Pack, Internet Explorer, and/or Direct X" on page 11.
- 4 See "(4) Install Adobe Acrobat Reader" on page 12.
- 5 See "(5) Uninstall Older Versions of Advantage Software" on page 12.



NOTE: Advantage V4.5 and higher no longer includes Thermal Advantage for 29xx series software support. If you update Advantage without uninstalling the currently installed software, support for the 29xx series will be unaffected. However, if you uninstall the existing software prior to installing the new release, you will lose 29xx series software support. If this occurs, you can simply install an earlier version of Advantage software, then upgrade the software to the new release or contact TA Instruments to obtain an Advantage for 29xx Series installation CD.

- 6 See "(6) Set Up the Ethernet Switch (Thermal Advantage Q Series Only)" on page 12.
- 7 See "(7) Install TA Instruments Advantage Software" on page 14.



NOTE: After installation you must log into Windows again using an Administrative-level account to complete the installation process.

Additional Program- and Instrument-Specific Considerations During Installation

7a& 7b For Rheology Advantage Only: See "(7a & 7b) Install TA Instruments Rheology Navigator and/or Enhanced Polymer Library (Options Available for Rheology Advantage Only)" on page 15.

- 8 See "(8) Install Network Service (Rheology Advantage for AR-G2/AR 2000ex/AR 1500ex Only)" on page 15.
- 9 See "(9) Install Instrument Software (Firmware)" on page 20.

Detailed Installation Instructions

Follow the detailed instructions on the next several pages, if needed, to install your software.



NOTE: It is assumed that the drive letter for your CD is **D**:. If your drive letter is different, substitute it in the information below.

(1) Log into Windows with Administrator Rights

If you are already logged in with these rights, close any open applications. Install an operating system Service Pack, if required by following "(3) Install Microsoft Operating System Service Pack, Internet Explorer, and/or Direct X" on page 11.

(2) Install Network Service (Thermal Advantage for Q Series[®] Only)

The instructions needed to install networking services vary depending upon network configuration.

Section 1: One Network Interface Card (NIC), One or More Q Series Instruments, No Connection to LAN

- 1 Verify the services and protocols:
- 2 Select Start/Settings/Control Panel.
- 3 Choose Network and Internet Connections/Network Connections.
- 4 Double-click on Local Area Connection/Properties.
- 5 Verify installation of File & Printer Sharing for Microsoft Networks, Client for Microsoft Network, and Internet Protocol (TCP/IP).
- 6 Installation of NETBEUI protocol is optional.
- 7 Select Internet Protocol/Properties.
- 8 Select "Use the following IP address."
- 9 Set the address to 172.23.188.xxx where xxx is in the range 1 to 254.
- **10** Set the subnet mask to be 255.255.224.0.
- 11 Leave gateway address blank (NOT zeroes, blank).
- 12 Leave DNS address blank (not zeroes).
- 13 Click on OK and close.
- 14 Select Start/Settings/Control Panel/Performance and Maintenance.
- 15 Double-click on System.
- 16 Select the Computer Name tab, then select Change.
- 17 Give the system a name that is meaningful to you. The name can be a maximum of 15 characters. You can use hyphens for separators.
- 18 Specify a workgroup name (NOT a domain name).
- **19** Reboot the computer.

- **20** After logging in, ensure that the NIC and instrument are plugged into hub. (Do not use the MDI/MDI-X port, which is usually the first or last port, unless you are SURE the port is set for MDI-X. This port is normally used for hub uplinking to other hubs.)
- **21** Verify communications by "pinging" the instrument's IP address (i.e., "ping 172.23.1yy.xxx" where yy will be in the range 64-83, and xxx will be in the range 1-254).



NOTE: The previous steps assume instrument is still in as-shipped configuration.

22 Continue with the installation instructions to install Advantage Q-Series controller software.

Section 2: Integration Into an Existing LAN using Two NICs



NOTE: The main responsibility for configuration of the NIC attached to an existing corporate LAN should lie with the user's MIS department and already be properly set up. These instructions are provided to assist you in the configuration.

- 1 Select Start/Settings/Control Panel.
- 2 Choose Network and Internet Connections/Network Connections.
- 3 Rename the item Local Area Connection to "Primary LAN."
- 4 Shut down the computer.
- 5 Open the computer case and install the second NIC (PCI-based boards only, please).
- 6 Make sure that the stated board found by the computer is the board that was installed. If the board model recognized is not exactly correct, use the driver software included with the board; if "Plug n Play" sniffing seems accurate, use the Microsoft driver. Reboot the computer.
- 7 Select Start/Settings/Control Panel.
- 8 Choose Network and Internet Connections.
- **9** There are now TWO Local Area Connection items; the one you renamed in step 3 above, and the new one. The new item, named Local Area Connection, is associated with the new board.
- 10 From "Section 1: One Network Interface Card (NIC), One or More Q Series Instruments, No Connection to LAN" on page 10, perform step 4 through step 13, then perform step 19 through step 22 from the same section.

(3) Install Microsoft Operating System Service Pack, Internet Explorer, and/ or Direct X

If you don't have the required versions of these packages, they can be obtained through the Microsoft web site (at www.Microsoft.com/downloads) or by using the Microsoft Windows Update mechanism (accessed through the Start menu or by accessing http://update.Microsoft.com). You can check your Service Pack version by selecting **Programs/Accessories/System Tools/System Information** from the **Start** menu.

(4) Install Adobe Acrobat Reader

All of the manuals, application notes, etc. supplied by TA Instruments are supplied in Adobe PDF format. You will need to install the Acrobat Reader to view these files. Install Acrobat Reader from the Advantage CD using the Run menu.

(5) Uninstall Older Versions of Advantage Software

If you have a previous version of Advantage (V2.0 or higher) on your computer, by default it will automatically be updated by running the Advantage setup program on this CD. However, if you have Advantage V 3.2 or older currently installed, it is recommended that you uninstall this Advantage software before you install the new version. Follow the instructions here.



NOTE: If you are upgrading your Windows operating system on a computer that already has the Advantage software installed, you MUST uninstall, then reinstall the TA Instruments Advantage software after upgrading the operating system for proper operation.

Cleanup from Previous Versions:

If you have an older version of the Advantage software that is lower than V2.0, you MUST uninstall that software before installing the newer version.

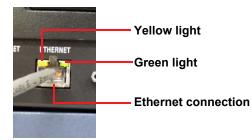
- 1 Select Settings/Control Panel from the Start menu. Open Add/Remove Programs.
- 2 Select and remove AR1000, Rheology Advantage, TA Advantage [Thermal / Rheology], if present.

(6) Set Up the Ethernet Switch (Thermal Advantage Q Series Only)

In order to connect the instrument to a network, you will need to make the necessary cable connections as described below. The instrument and controller will be connected to an Ethernet switch. In addition, there are instructions for connecting the controller to a LAN.

Connecting the Instrument to the Switch

1 Locate the Ethernet port on the left rear of the instrument (shown in the figure below).

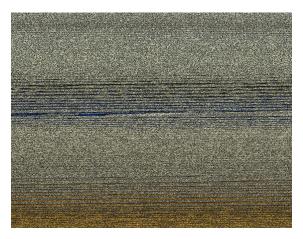


2 Connect one end of the Ethernet cable into the instrument's Ethernet port.

3 Connect the other end of the Ethernet cable to one of the network ports on the Ethernet switch (shown in the figure below).



4 Check the configuration switches (shown below), located on the back panel. They must be set to off, or the up position, for the controller to communicate to the instruments.



- 5 Check the Ethernet port on the rear of the instrument. If communication between the instrument and the switch has been properly established, a solid green light and flashing yellow light will appear at the port.
- 6 Follow the directions in the next section to connect the controller to the Ethernet switch.

Connecting the Controller to the Switch

- 1 Locate the Ethernet port on the back of the computer.
- 2 Plug one end of the Ethernet cable into the computer's Ethernet port.
- 3 Connect the other end of the cable to one of the network ports on the switch.
- 4 Check the Ethernet port on the rear of the computer. If communication between the computer and the switch has been properly established, a solid green light and flashing yellow light will appear at the port.
- 5 Follow the directions in the next section to connect the controller to a LAN for networking capabilities.

Connecting the Controller to a LAN

Before you can connect the controller to a LAN, you will need to have already installed a network interface card into the computer.

- 1 Locate the second Ethernet port on the back of the computer.
- 2 Plug one end of the Ethernet cable into the computer's Ethernet port, shown below.



- **3** Plug the other end into the LAN.
- 4 Check the Ethernet port on the rear of the computer. If communication between the computer and the LAN has been properly established, a solid green light and flashing yellow light will appear at the port.

(7) Install TA Instruments Advantage Software

Once you have completed installing the additional software listed previously, you can install the Advantage software and TA Update. The installation package allows you to install Thermal Advantage for Q Series or Rheology Advantage or both. Insert the TA Instruments Advantage software CD into your CD-ROM drive. The installation program will automatically begin. (If the set-up program doesn't start, double click **SETUP** on the CD-ROM.) Run the following set-up program from the CD-ROM: **D**:**SETUP.EXE**

- 1 Select **Install Advantage Software**. If you already have Version 2.0 or higher of the Advantage software installed, see page 4.
- 2 Continue advancing through the windows and review the information and license agreement.
- **3** Enter your name and company.
- 4 Select the desired directory for the program installation or accept the one displayed. (This directory does not affect the default data storage paths. These files are stored in the subdirectory, TA.)
- 5 Select the desired Advantage package(s) to install.
- 6 Choose the desired setup type. (The **Custom** option allows you to manually select which components to install.)
- 7 Select any optional components to install. (If you are installing Thermal and Rheology Advantage Instrument Control, you will be prompted for additional instrument information. Press the HELP button on this window if you need assistance configuring these options.)
- 8 Select the desired items that you want to create desktop icons for.
- 9 Restart Windows once the installation is complete.

(7a & 7b)Install TA Instruments Rheology Navigator and/or Enhanced Polymer Library (Options Available for Rheology Advantage Only)

Insert the TA Instruments appropriate software CD into your CD-ROM drive. The installation program will automatically begin. (If the set-up program doesn't start, double click **SETUP** on the CD-ROM.) Run the following set-up program from the CD-ROM: **D:\SETUP.EXE**

- 1 Select Install Rheology Navigator or Enhanced Polymer Library, depending on the CD inserted.
- 2 Continue advancing through the windows and review the information and license agreement. Follow the instructions shown on the windows.

(8) Install Network Service (Rheology Advantage for AR-G2/AR 2000ex/AR 1500ex Only)

Follow the instructions below to configure communications for the AR-G2/AR 2000ex/AR 1500ex instruments.

Ethernet: DHCP Network

If your Network is DHCP, follow these instructions:

- 1 Connect your control computer to a Network port and configure it as necessary.
- 2 Connect the electronics module to a Network port using the cable provided and turn the power on.
- **3** Use TA Instrument Explorer (TAIE) to connect to your rheometer.

Ethernet Direct Connect

For connecting the rheometer directly to the PC follow these instructions:

- 1 Connect the electronics module to the PC using the cable provided and turn the power on.
- 2 It will be necessary to wait 2 minutes while the electronics attempts to find a DHCP server. Once this has timed out, the system will default to a fixed IP address (192.168.1.2).

3 Configure the PC network card as shown below.

Internet Protocol (TCP/IP) Prope	rties 🛛 🛛 🔀
General	
You can get IP settings assigned autom this capability. Otherwise, you need to a the appropriate IP settings.	
O <u>O</u> btain an IP address automatically	y
• Use the following IP address:	
IP address:	192.168.1.1
S <u>u</u> bnet mask:	255.255.255.0
Default gateway:	· · ·
○ 0 <u>b</u> tain DNS server address autom	
• Use the following DNS server add	resses:
Preferred DNS server:	
Alternate DNS server:	· · ·
	Ad <u>v</u> anced
	OK Cancel

4 Use TA Instrument Explorer to connect to your rheometer.

TA Instrument Explorer

TA Instrument Explorer will show all instruments connected to your network or single instrument (in the case of direct connect).

The TA Instrument Explorer can display the instruments that are connected to the network using two

different views. Click the 🗳 button to display the online instrument view (as icons) or click the 💷 button to display the instrument information in tabular form. See the figures below for examples.

🗷 Q Series Explorer							3				
All locations 💌 All types 💌 📃 📰 🗐 💈 💈	9 🕥										
Silver Fox 25.014°C Bluey -999.000°C Darth -999.000°C @R&D @Service shop @Test Lab											
	Q Series										
		 All types 	-		1 🗐 📓 😂 🕥		IP Address			Installed Options	Luca
	Instrument Name Silver Fox		AR-G2		Physical Address 00-50-C2-28-B1-1AM			Update Time 10:55:06, 04/11/2005		Installed Options	0
	Bluey	@Service shop	AR-G2	/8.6	00-50-C2-28-B1-1BM	300027	172.25.184.112	10:55:08, 04/11/2005	p1081		ŏ
	Darth	@Test Lab	AR-G2 V	/8.6	00-50-C2-28-B0-05M	300005	172.25.184.113	10:55:05, 04/11/2005	P1123		0
For Help, press F1											1
	-										
	For Help, press	F1								2	

Double-click on the instrument icon or on the table entry to connect to a selected instrument and automatically open the Rheology Advantage instrument control software for that instrument.

Limiting Access to Your Rheometer

If you want to stop unauthorized access to a specific rheometer, you can configure your rheometer with a password. Follow these steps to set-up password access:

1 Select **Instrument/Settings** from the main menu. The dialog shown in the figure below is displayed.

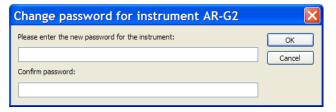
AR Instrumer	nt settings		? 🔀
Iype AR-G2 Agphalt Mormal force	Comms <u> Comms</u> <u> R</u> S232	⊙ тср/р	OK Cancel
	IP address	172 . 25 . 184 . 113	Network setup
<u>D</u> isplay name	AR-G2]
Eile name	ar]

2 Click on Network Setup. The figure shown below will be displayed.

Network setup		
Name	Darth	ОК
Location	Test Lab	Cancel
MAC address	00-50-c2-2b-b0-05	
ODHCP	○ Eixed address	
Fixed address		
IP address	172 . 25 . 184 . 113	
Subnet mask	255 . 255 . 224 . 0	Set password
DNS Address	172 , 25 , 184 , 3	Gerpassiona
<u>G</u> ateway address	172 . 25 . 184 . 254	
Current address		
I <u>P</u> address	172.25.184.113	
Su <u>b</u> net mask	255.255.224.0	
DNS Address	172.25.184.3	
Gateway address	172.25.184.254	

3 Select Set Password.

4 Enter and confirm a password using the dialog shown in the figure below.



The selected rheometer will now be password protected. The next time someone attempts to connect to that specific rheometer, a password will be required as shown in the figure on the next page.



NOTE: To remove the password, follow steps 1 to 4 and leave the change password fields empty. If you forget your password, you will need to reconnect via RS232. This mode of communication requires a logon, so the existing password can be cleared or changed by following steps 1 to 4.

	3 ⊯ ? №) = <u>0</u> +×	0./		
Silver Fax	Imm 2° steel cone 🛛 🗧 O	sollation procedure New sample (VrResults-0	001o)	
Parameter	Actual Value	Required Value	Units	
temperature			°C	
P				
shear stress			micro N.m Pa	
			Fd	
velocity			rad/s	
shear rate		o instrument Silver Fox	1/s	
9 6	Please enter the password for the i	nstrument: O		
displacement	1	Can	rad la	
strain				
normal force			N	
viscosity			Pa.s	
gap			micro m	
sample compression mode				
gap monitor mode				
oven				
- Over				
bearing mode				

TA Instrument Explorer and Rheology Navigator

To run Rheology Navigator on a rheometer communicating via the Ethernet, right-click on the instrument you want to connect to and select **Connect to Instrument using Navigator** from the pop-up menu.

TA Instrument Explorer	
Al locations 💽 AR2000EX 💽 🧾 🗐 🚺 🤔 🥥	
AR2000EX_683018 21.744*C @R4D	
Connect to the instrument Connect to the instrument using Navigator Setup instrument	
For Help, press F1	🎽 🔛 🔲 🏼

(9) Install Instrument Software (Firmware)

Each instrument that operates with the Advantage software requires a specific version of instrument software to properly communicate with the controller.



NOTE: Instruments that do not have the proper version of the software (firmware) will not communicate with the instrument control software.

Q Series Instruments:

The current version of module software can be determined by going to the main menu and clicking **Help****About Q Advantage****More information** or by opening the Q Series Explorer and selecting the Instrument Information view icon and viewing the column labeled Instrument Version. If the instrument has a touch screen, the version can be displayed by touching the DISPLAY MENU key followed by the INFORMATION key. Check this number against the latest version contained in this kit.

Q Series Instrument	Software Version w/o Platinum with Platinum	
DSC Q2000/Q200/Q20		V 24.11
DSC Q1000/Q100/Q10	V 9.9	—
TGA Q5000 IR		V 3.17
TGA Q50/Q500	V 6.7	V 20.13
Q5000 SA		V 3.17
DMA Q800	V 7.5	V 20.28
SDT Q600	V 8.3	V 20.9
TMA Q400	V 7.4	V 22.5

If you need to update the module software, please follow the directions detailed in online help under "Updating Module (Instrument) Software." (This document can also be found on the Advantage CD in the HelpDocs folder.)

Rheology Advantage Instruments

To check the version of your instrument firmware either look at the LCD display on the front of the electronics during power up, or go to **Options\Instrument\ID** in the Instrument Control software.

Rheology Instrument	Software Version
AR 1000/500	V 4.35
AR 550	V 4.35
AR 2000	V 7.20
AR-G2	V 8.32
AR 2000ex	V 8.32
AR 1500ex	V 8.32

The version displayed should be as listed in the table below or higher.

If you need to update the instrument software, follow the instructions detailed in the document, "Updating AR Rheometer Firmware" (PN 500026.000).

Installation of AR 2000ex and AR 1500ex Asphalt Support Files:

If the asphalt box was checked during installation of Rheology Advantage then asphalt scripts and their associated support files are copied to **Documents and Settings****All Users****Documents****TA**. When Navigator is installed instrument specific files are copied from the support folder to the working folders. For the AR 2000ex and AR 1500ex certain files are not copied automatically so this task has to be performed manually.

Follow these instructions:

- 1 Open \\Documents and Settings\All Users\Documents\TA\Rheology\Support and open the folder that most accurately describes your rheometer system. For example if you have an AR 2000ex with Peltier and UHP then open \\Documents and Settings\All Users\Documents\TA\Rheology\Support\AR 2000ex Peltier files.
- 2 Copy 8mm plate.argeom and 25mm plate.argeom to \\Documents and Settings\All Users\ Documents\TA\ Rheology\Geometry.
- 3 Copy csaii.ssar and default csaii.ssar to \\Documents and Settings\All Users\Documents\TA\ Rheology\Session.

Windows 7 Service Pack 3 Security Options

Firewall Exceptions

If Windows 7 Service Pack 3 is detected, the installation program will ask permission to modify the Windows Firewall Exceptions List. These additions must be allowed for Q Series Advantage software to communicate with the Q Series instruments.

If you prefer to manually make the additions, follow these steps to configure the Q Series instruments communications:

- 1 Click Start/Settings/Control Panel and select the Windows Firewall on the General tab.
- 2 Ensure that the Firewall is either off or, if it is on, uncheck the **Don't Allow Exceptions** box.
- 3 Select the Exceptions tab, click Add Program then click Browse.
- 4 Browse to locate and add the following programs to the Exceptions, one at a time:

C:\Program Files\TA Instruments\Thermal Advantage\QSeries\QAdv.exe C:\Program Files\TA Instruments\Thermal Advantage\QSeries\QAdvX.exe C:\Program Files\TA Instruments\Thermal Advantage\QSeries\TAIE.exe C:\Program Files\TA Instruments\Thermal Advantage\QSeries\TAMA.exe C:\Program Files\TA Instruments\Thermal Advantage\QSeries\TAMA.exe

If you have chosen to install the TA Mail and Messaging Option, you will also need to add the following programs to the Exceptions list:

C:\Program Files\Microsoft SQL Server\MSSQL\$QAdvX\Binn\SQLAgent.exe C:\Program Files\Microsoft SQL Server\MSSQL\$QAdvX\Binn\SQLServr.exe

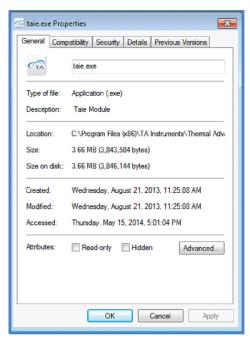
5 Check the boxes next to each of these programs in the **Exceptions** list and click **OK** to save and close the Firewall application.

Windows 8 and Windows 10 "The Requested Operation Requires Elevation" Message

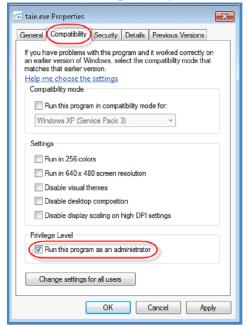
The message "The requested operation requires elevation" displays when trying to connect to an instrument via TA Instrument Explorer in Windows 8 and Windows 10. When you receive this message, follow the instructions below.

- 1 For 32-bit operating systems, navigate to C:\Program Files\TA Instruments\Thermal Advantage\Qseries. For 64-bit operating systems, navigate to C:\Program Files (x86)\TA Instruments\Thermal Advantage\Qseries.
- 2 Right-click TAIE.exe and select Properties.

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👃 Queries	State, chudi	01/58/2010 5:08 PM	Applicati
WinGARA.sip	State, deputt	01/19/2018-405 PM	Applicati
Thermal GetLoop	S Tain jury di	01/03/0000-4/05 PM	Applicat



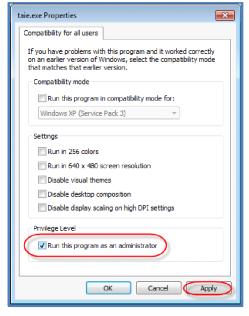
3 Click the Compatibility tab and select Run this program as an administrator.



4 Click Change settings for all users.



5 The Compatibility for all users dialog box displays. Select **Run this program as an administrator** and then click **Apply**.



- 6 For a 32-bit operating system, navigate to C:\Program Files\TA Instruments\Thermal Advantage\Qseries. For a 64-bit operating system, navigate to C:\Program Files (x86)\TA Instruments\Thermal Advantage\Qseries.
- 7 Locate QAdvX.exe and TAMA.exe and repeat steps 1–6 for both.

Ways to Get Assistance While You Work

Everything that you need to know about using the Advantage software is now online. This online information should be your primary source of information to help you use the programs.

Screen Tips

ScreenTips show information about different elements on the screen. To see a ScreenTip for a dialog box option, click the question mark and then click the option. (If the dialog box doesn't have a question mark button, select the option and then press the F1 key.) To see information about a tool bar button, position the mouse pointer over the button until the text appears.

Instructional Videos

Within the Rheology Advantage help system there are many instructional videos. To view these videos, you will need to insert the appropriate video CD-ROM into the CD-ROM drive before accessing the help topic, unless you have installed these videos onto your computer using the **Custom** installation option.

Printing a Manual

During installation, you have the option to display one or more of the icons for the TA Q Series Manuals, TA Advantage Manuals, and Rheology Manuals. These shortcuts allow you to access the library of available printable manuals for both hardware and software for the specified software packages.

Online Help

The Advantage thermal and rheology programs use online help. The help provides access to extensive information on the instrument control and data analysis software and the instruments themselves. To access the help, double-click the TA Help icon located on your desktop. Select the desired help from the list. You may need to click "Allow blocked content" should a security message display. Click TOC to access a table of contents for the Help file. Click Index to search for topics by using an index of subjects. Click Search to use full-text search and look for specific words or phrases. Links are also provided within the help system to various Adobe Acrobat Reader files that can be opened and printed, if you desire.



NOTE: Selecting "Help Topics" within the application will not launch online help. Help can only be launched by clicking the icon on the desktop.



TA Instruments Software Registration Card

<u>Mail, email, or fax to</u>: TA Instruments, Inc. 159 Lukens Drive New Castle, DE 19720 Email: upgrades@tainst.com Fax: 302 427-4054 Attn: Upgrades - Services Department

Company:							
Address:			. Boxes, please)				
Primary Contact		Secondary Contact					
Name:		Name:					
Phone:		Phone:					
Email:		Email:					
Do you have internet access?	□Yes □No						
Equipment (check all that apply):							
 DSC Q2000 DSC Q200 DSC Q20 DSC Q20P DSC Q1000 DSC Q100 DSC Q10 DSC Q10P Modulated DSC AutoDSC DSC Q2910 DSC Q2010 	 Q5000 SA TGA Q5000 IR TGA Q500 TGA Q50 AutoTGA High Resolution TGA Modulated TGA TGA 2950 TGA 2050 TMA Q400 TMA 2940 SDT Q600 SDT 2960 	 DEA 2970 μTA 2990 DMA Q800 DMA 2980 RSA NanoDSC NanoITC MCDSC TAM III VTI-SA VTI-SA3 TGA-HP50 TGA-HP150 TGA-HP150S 	□AR-G2 □AR 2000ex □AR 1500 ex □ARES-G2 □ARES				
Other (specify)							
Computer Make: Model: TA Serial Number:							

TA Instruments Offices

For information on our latest products, contact information, and more, see our web site at: <u>http://www.tainstruments.com</u>

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