Installing Thermo TSQ 8000 1.1 SP1 Software

Before installing the Thermo TSQ 8000 1.1 SP1 software, ensure that your system is running the following Thermo Foundation/Xcalibur configuration:

• Foundation 2.0 SP1 and Xcalibur 2.2 SP1

Contents

- Introduction
- System Requirements
- Important Information
- Windows 7 Configuration
- New Installations
- System Upgrades
- Trademarks

Introduction

Thermo TSQ 8000 1.1 SP1 includes the driver and software for the Thermo Scientific TSQ 8000 triple quadrupole GC-mass spectrometer.

TSQ 8000 1.1 SP1 is one component of the software and driver set you need in order to operate a TSQ 8000[™] GC-MS system.

Your TSQ 8000 GC-MS arrived from the factory with software already installed. If you need to reinstall or upgrade the TSQ 8000 control software, follow the steps in this document.

This program installs the following components for use with the TSQ 8000 GC-MS.

- TSQ 8000 Instrument Method Editor
- TSQ 8000 Dashboard
- TSQ 8000 User Documentation and Manuals

Note You must have administrative privileges on the computer being loaded with the new software.

System Requirements

TSQ 8000 1.1 SP1 requires the following software to be loaded on your data system (PC) to operate properly.

System	Requirements
Software	 Microsoft[™] Windows[™] 7 Professional (32-bit) Service Pack 1, or
	Microsoft Windows 7 Professional (64-bit)
	 Microsoft Office[™] 2010
	4GB of RAM are recommended if you are routinely performing full-scan acquisitions.



Important Information

To install TSQ 8000 1.1 SP1 on a new data system (PC), you must configure the Ethernet port to ensure proper communication and remove the firewall. In addition, you must modify power settings on the data system to ensure that the system does not go into hibernation or sleep mode, which will disconnect the PC from the TSQ 8000 GC-MS system. Finally, it is important to set any virus scan software to exclude the following folders from scanning:

C:\Program Files\Thermo\ C:\Thermo\ C:\Xcalibur\

Instructions for making the appropriate changes are given below for Windows 7 operating systems.

Windows 7 Configuration

Configure the Ethernet Port and Change Firewall Settings

Note The TSQ 8000 mass spectrometer **must** be connected to the data system (PC) using the communication cable that ships with the system. No other Ethernet cables are supported, and failure to use the supplied cable will result in problems with operation.

- 1. Turn on the computer and allow it to complete its boot processes.
- 2. Select Start | Control Panel | Network and Internet | Network and Sharing Center to open the Network Connections window.



- 3. Configure the network card that will connect to the TSQ 8000 mass spectrometer:
 - a. Right-click on the card and select Rename to rename this connection. Rename it as TSQ 8000.



- b. Right-click on the TSQ 8000 connection and select Properties to set the IP address.
- c. Disable all the protocols, except the Internet Protocol (TCP/IP) Version 4, by un-checking the boxes.

TSQ 8000 Properties
Networking Sharing
Connect using:
Broadcom NetXtreme Gigabit Ethemet
<u>C</u> onfigure
This connection uses the following items:
Client for Microsoft Networks
File and Printer Sharing for Microsoft Networks Internet Protocol Version 6 (TCP/IPv6)
Internet Protocol Version 8 (TCP/IPv6) Internet Protocol Version 4 (TCP/IPv4)
□ -▲ Link-Layer Topology Discovery Mapper I/O Driver
Link-Layer Topology Discovery Responder
Install Uninstall Properties
Description
Transmission Control Protocol/Internet Protocol. The default wide area network protocol that provides communication across diverse interconnected networks.
OK Cancel

- d. Click on the Internet Protocol (TCP/IP) line to highlight it, and then select Properties.
- e. Set the IP address of the TSQ 8000 MS by choosing the Use the Following IP Address radio button.

Note The IP address can be anything between 192.168.1.1 and 192.168.1.254, except for 192.168.1.234, which is the default address used on the TSQ 8000.

f. Click **OK** to confirm, and click **OK** to save the changes and close the window for the TSQ 8000 connection properties.

1. To change Windows Firewall Settings select Start | Control Panel | System and Security | Windows Firewall.

G v Control Panel > System and Security > Windows Firewall ✓ ← Search Control Panel Q 0 Control Panel Home Help protect your computer with Windows Firewall Allow a program or feature through Windows Firewall Windows Firewall can help prevent hackers or malicious software from gaining access to your computer through the Internet or a network. Change notification settings How does a firewall help protect my computer? Turn Windows Firewall on or off What are network locations? 🕑 Domain networks Not Connected 🕑 😚 Restore defaults Advanced settings In the second se Not Connected 🕑 Troubleshoot my network Connected 🔿 🛛 🕑 Public networks Networks in public places such as airports or coffee shops Windows Firewall state On Incoming connections: Block all connections to programs that are not on the list of allowed program Active public networks: thermo.com 2 (Unauthenticated) H Unidentified network Notification state: Notify me when Windows Firewall blocks a new program See also Action Center Network and Sharing Center

Change Firewall Settings

- 2. Select Allow a Program or Feature Through Windows Firewall.
- 3. Depending on the User Account Control settings, you may need to select **Change Settings** to edit the firewall settings.



4. Scroll through the list to select **Xcalibur**. Under the domain selection, click the checkbox as show below.

Vame	Domain	Home/Work (Private)	Public	
Symantec Ghost Client Agent			~	
Windows Collaboration Computer Name Registrati				
Windows Firewall Remote Management				
Windows Management Instrumentation (WMI)				
Windows Media Player				
Windows Media Player Network Sharing Service				
Windows Media Player Network Sharing Service (In				
Windows Peer to Peer Collaboration Foundation				
Windows Remote Management				
Wireless Portable Devices				
Z Xcalibur		\checkmark	✓	
		Details	Remov	

5. Click OK to confirm the firewall changes

6. Close the control panel.

Change the System Memory Settings

1. Go to Start | Control Panel | System and Security | System, then select Advanced System Settings.



2. A new window opens. Select the **Advanced** tab, then select the **Settings** button in the **Performance** section. This opens the **Performance Options** window.

sual Effects Advan	Data Execution Prevention
Processor scheduli	ng
Choose how to allo	ocate processor resources.
Adjust for best per	rformance of:
Programs	Background services
Virtual memory	
A paging file is an a if it were RAM.	area on the hard disk that Windows uses as
Total paging file siz	ze for all drives: 3291 MB

- 3. In the Performance Options window, select the Advanced tab.
- 4. Under **Virtual Memory**, select **Change**. This brings up a popup window that allows you to change the virtual memory settings.

Drive [Volume Label] C: [OS]	
D: [DATAPART1] G:	System managed None None
Selected drive: Space available:	
Oustom size: Initial size (MB):	
Ma <u>x</u> imum size (MB):	
System managed s	size
🔘 <u>N</u> o paging file	Set
Total paging file size f	for all drives
Minimum allowed:	16 MB
Recommended:	4936 MB

5. De-select Automatically Manage Paging File Size for All Drives by un-checking the checkbox.

Drive [Volume Label]	th drive Paging	; File Size (MB)
C: [OS]		System managed
Selected drive: Space available:	C: [OS] 258601 MB	
Oustom size:		
Initial size (MB):		
Ma <u>x</u> imum size (MB):		
System managed s	size	,
© <u>N</u> o paging file		<u>S</u> et
Total paging file size f	or all drives	
Minimum allowed:	16 MB	
Recommended:	4936 MB	

6. Confirm that **System Managed Size** is selected, then click **OK** to close, then click **OK** again to close the **Performance Options** window.

Note You will need to restart the data system for this change to take effect.

Change the System Power Settings

1. Under Start | Control Panel | Hardware and Sound | Power Options, select Change Power-saving Settings.



- 2. Select the Balanced Plan radio button, then click Change Plan Settings.
- 3. Change **Turn Off the Display** to **Never** and **Put the Computer to Sleep** to **Never**, then select **Save Changes** to apply these power plan settings.

	Control Panel > Hardware and Sound > Power Options > Edit Plan Settings
	Change settings for the plan: Balanced
	Choose the sleep and display settings that you want your computer to use.
	Turn off the display:
	Put the computer to sleep: Never
	Change advanced power settings
	Restore default settings for this plan
	Save changes Cancel
	Note These power settings must be changed for any new users who are added to the system. Only an administrator is allowed to change these settings.
New	
Installations	To install TSQ 8000 1.1 SP1 for the first time: 1. Ensure that your data system (PC) meets the system requirements above. Layered software applications may have
motunitiono	different requirements. Please refer to applicable documentation for details.
	2. Verify that Foundation, Xcalibur, and any required service packs or quick fixes for Xcalibur have been installed. Confirm that GC Devices 2.2 has been installed for operation of the GC and/or autosampler.
	3. Insert the TSQ 8000 1.1 SP1 CD into your computer's CD/DVD-ROM drive. If Auto-Play is enabled, the
	Xinstall menu will open. If Auto-Play is not enabled or if the Xinstall menu does not appear automatically after inserting the CD, double-click on the CD drive icon to begin the Xinstall program.
	4. Install TSQ 8000 1.1 SP1 software by clicking the TSQ 8000 1.1 SP1 button. Follow the steps to install the
	software.
	Note For important information regarding this release, refer to the release notes for TSQ 8000 1.1 SP1 by selecting the Read Me button.
	5 To install the TSO 2000 mere menual which the TSO 2000 Mereody Install button. The mereody will be
	5. To install the TSQ 8000 user manuals, click the TSQ 8000 Manuals Install button. The manuals will be installed as PDF files along with the software components for the TSQ 8000. These manuals are found under
	Start All Programs Thermo Instruments Manuals TSQ 8000. You may also reference the PDF files on the TSQ 8000 1.1 SP1 software CD by selecting TSQ 8000 Manuals.
	6. After installation, an installation qualification (IQ) report will be automatically generated.
	 Configure your TSQ 8000 GC-MS through Start All Programs Thermo Foundation 2.0 Instrument Configuration. See the user manuals for more information.
System	To reinstall the TSQ 8000 1.1 SP1 software or to upgrade you TSQ 8000 system to TSQ 8000 1.1 SP1:
Upgrades	1. Ensure that your data system (PC) meets the system requirements above. Layered software applications may have
	different requirements. Please refer to applicable documentation for details.
	 Open Instrument Configuration. Under Configured Devices, click TSQ 8000, then click Remove. Select Done to close Instrument
	Configuration.
	4. Select Start Control Panel Uninstall Program to uninstall the previous TSQ 8000 installation.
	5. Under the list of currently installed programs, locate the Thermo TSQ 8000 program and click on it. Click Uninstall .
	6. The TSQ 8000 driver will be uninstalled automatically, and an IQ report will be generated. Review the IQ report to confirm the success of the uninstall process.

7

7. Open the Task Manager, select the **Processes** tab, and click on **Image Name** to sort the processes alphabetically. Verify that the following processes are **not** in the list:

e Options View Help oplications Processes Services Performance	e Networking Users				
Image Name	User Name	CPU	Memory (Description	
TSQ 8000.InstControlServer.exe TSQ 8000.InstControlService.exe	Xcalibur_System SYSTEM	00 00	10,562 K 8,424 K		=

- 8. Complete the Foundation and Xcalibur installation according to the Installation instructions included on the Xcalibur 2.2 SP1 and Foundation 2.0 GC-MS Core Components CD provided with your instrument. Verify that all service packs and quick fixes have been installed. Verify that GC Devices 2.2 has been installed for operation of the GC and/or autosampler.
- 9. Insert the Thermo TSQ 8000 1.1 SP1 CD into your computer's CD/DVD-ROM drive. If Auto-Play is enabled, the Xinstall menu will open. If Auto-Play is not enabled or if the Xinstall menu does not appear automatically after inserting the CD, double-click on the CD drive icon to begin the Xinstall program.
- 10. Install TSQ 8000 1.1 SP1 software by clicking the TSQ 8000 1.1 SP1 button. Follow the steps to install the software.

Note For important information regarding this release, refer to the release notes for TSQ 8000 1.1 SP1 by selecting the **Read Me** button.

- The TSQ 8000 user manuals are automatically installed as PDF files along with the software components for the TSQ 8000. These manuals are found under **Start | All Programs | Thermo Instruments | Manuals | TSQ 8000**. You may also reference the PDF files on the TSQ 8000 software CD by selecting TSQ 8000 Manuals.
- 12. After installation, an installation qualification (IQ) report will be automatically generated. Review and confirm as needed.
- 13. Configure your TSQ 8000 system through **Start | All Programs | Thermo Foundation 2.0| Instrument Configuration**.
- 14. Select the TSQ 8000 icon in the Available Devices column and click **Add** to move it into the Configured Devices column. Click **Done** to close Instrument Configuration. See the user manuals for more information about configuring your TSQ 8000 instrument.

Trademarks

Xcalibur is a registered trademark of Thermo Fisher Scientific Inc. in the United States. Windows, Office, Windows 7, and Microsoft are registered trademarks of Microsoft Corporation in the United States and other countries.

All other trademarks are the property of Thermo Fisher Scientific Inc. and its subsidiaries.