

Agilent MSD with OpenLAB CDS

Quick Start



Agilent Technologies

Notices

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Warranty

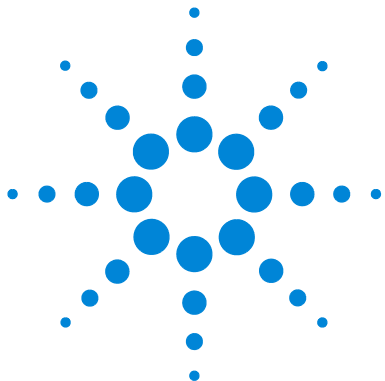
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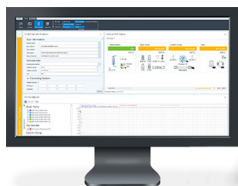
Quick Start

Welcome to the Agilent MSD System



Your system includes:

- The popular **Agilent 597X series MSD** featuring advanced technology, increased analytical abilities, and reduced maintenance requirements. The 5977B MSD is shown here. Your system may be equipped with the 5977B, the 5977A, or the 5975 MSD.
- One of Agilent's reliable, accurate, and precise Gas Chromatograph systems, such as the **Agilent 9000 GC, 7890 GC, 7820 GC, 6890 GC, or 6850 GC**. The Agilent 7890 Series GC, shown here, has advanced separation abilities, self-monitoring intelligence, faster oven cool-down, and robust backflushing.
- The **Agilent GC and GC/MS User Manuals and Tools DVD set**, an extensive collection of manuals, tools, and videos for your GC and GC/MS hardware.
- The **Agilent OpenLAB CDS Workstation Software**, a comprehensive portfolio of software, manuals, videos, eFamiliarization, user applications, and method development tools for your system.



This book provides a brief summary of your system documentation and where to find it.



The Agilent 597x Series MSD

The **Agilent 597x Series MSD** includes the **5975**, **5977A**, and **5977B** MSD.

The 597x is a stand-alone capillary GC detector for use with an **Agilent 9000**, **7890 Series**, **7820 Series**, **6890 Series**, or **6850 Series** Gas Chromatograph. (The 5977B MSD is pictured with a 7890B GC.)

See the full library of hardware information available for your GC and GC/MS systems on the **Agilent GC and GC/MS User Manuals and Tools DVD set** (G4600-64006). Refer to **“Your GC and GC/MS Hardware Library”** on page 10 for details on how to install and access this wealth of information.



Figure 1 Agilent 5977B GC/MSD system, shown with the Agilent 7890B GC

The Agilent OpenLAB CDS Workstation

Agilent OpenLAB CDS software provides powerful and easy-to-use tools for data acquisition and analysis. Click **Status**, **Method**, **Single Sample**, or **Sequence** to access corresponding detailed screens. The one shown here is an example of what the 597x Method Editor screen will look like. Your screens will be customized to the exact instruments you have configured.

The screenshot displays the Agilent OpenLAB CDS Workstation interface for editing an acquisition method. The main window is titled "Acquisition Method – firstmethod.amx" and is divided into several sections:

- General:** Includes Properties, Chromatograms, and Timed Events.
- Instrument Setup:** Lists the Agilent 7890B and MSD.
- Method:** Contains sub-sections for Tune, Autotune, Advanced Autotune, Custom Tune, Manual Tune, Parameters, Acquisition, and Maintenance.
- Tune File:** Shows the current tune file as "atune" and the tune type as "EI". The tune EM volts are set to 1200. A table displays the source and quad temperatures, comparing actual values to setpoint values.
- Detector Settings:** Configures parameters such as Run time (10.0 min), Solvent delay (3.0 min), Trace ion detection, Electron multiplier (EM) mode, Delta EM volts (0), Applied EM volts (1200), EM saver, and Limit (Sum limit 1e8).
- Time Segments:** A table lists the scan parameters for a single segment.

Time (min)	Start mass (m/z)	End mass (m/z)	Threshold	Scan speed	Frequency (scan/s)	Cycle time (ms)	Step size (m/z)
3	50	550	150	1,562 [N=2]	2.92	342.63	0.1

The "Instrument Status" window provides a dashboard for the Agilent 7890B MSD, showing the status of the 78xx ALS, Front Injector, and MSD. The MSD status includes the current tune file, ion source temperature (230°C), ion source pressure (0.0%), and ion source vacuum (1.11E-06 Torr). The "Online Signals" window displays a "TestPlot" graph with a y-axis labeled "Signal Selection" ranging from -1 to 1 and an x-axis labeled "Time (minutes)" ranging from -55 to 0.

Figure 2 Agilent OpenLAB CDS Workstation 597x Method screen

OpenLAB Help and Learning

Included with OpenLAB CDS is a comprehensive portfolio of manuals, videos, getting started lessons, user applications, and method development tools for your system.



To install the Help and Learning material on PCs other than those using the OpenLAB CDS software, select **Documentation > Install OpenLAB Help and Learning Only** from the OpenLAB CDS software installation disk.

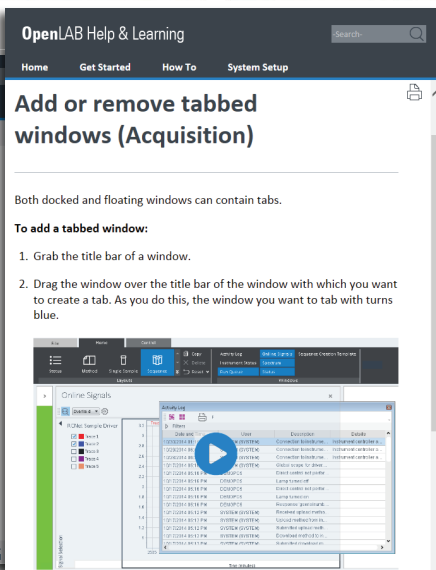
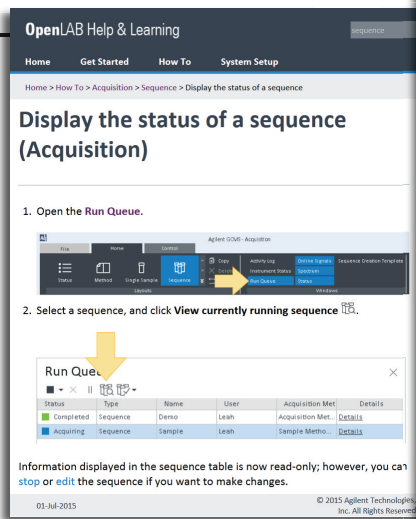
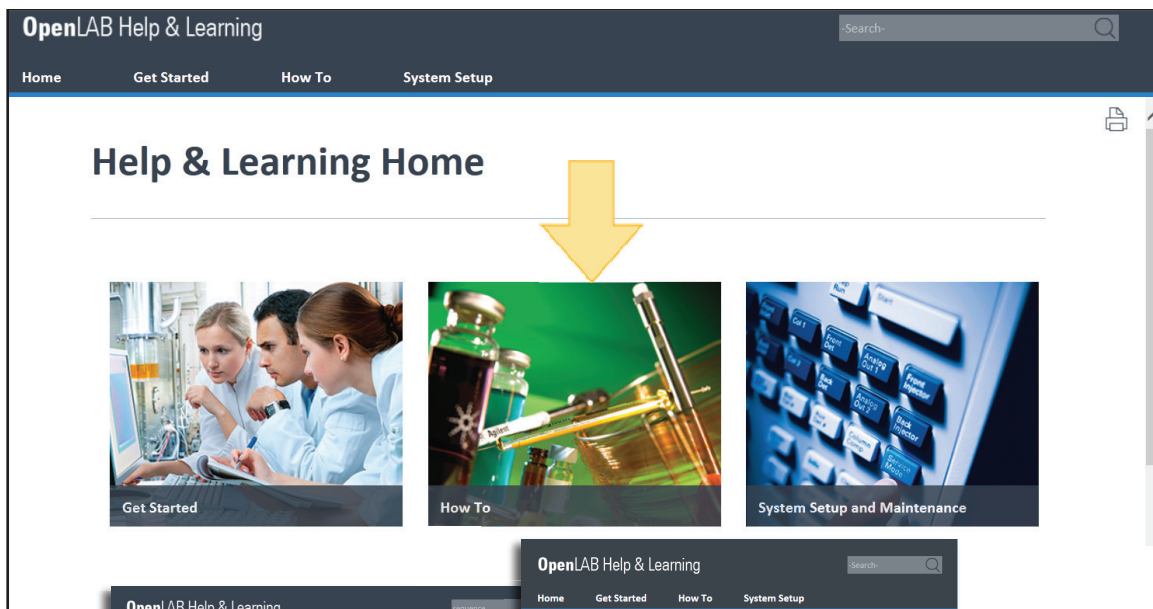
On-Demand Training Tool

Included in Help & Learning, under **Get Started**, is the powerful, interactive, on-demand training tool for OpenLAB CDS. This can help you easily learn the new functionality at your own pace, whenever you want. The modules walk you through detailed steps of using the OpenLAB CDS software.

The screenshot displays the 'OpenLAB Help & Learning' web interface. At the top, there is a navigation bar with 'Home', 'Get Started', 'How To', and 'System Setup' tabs. A search bar is located in the top right corner. The main content area features the heading 'Help & Learning Home' with a large yellow arrow pointing down to a 'Get Started' module. This module includes three small images: a group of scientists in a lab, laboratory glassware, and a computer keyboard. Below these images, the text reads 'Getting Started with OpenLAB CDS 2.0' and 'User Interface'. The main visual is a large image of a computer monitor displaying the OpenLAB CDS software interface, with a laboratory instrument in the background. At the bottom right of the module, there are 'PREV' and 'NEXT' navigation buttons.

How To

In **Help & Learning**, under **How To**, you will find hundreds of topics written as detailed step-by-step instructions that walk you through routine tasks. Topics with a Play button, include software demonstration videos.



System Setup and Maintenance

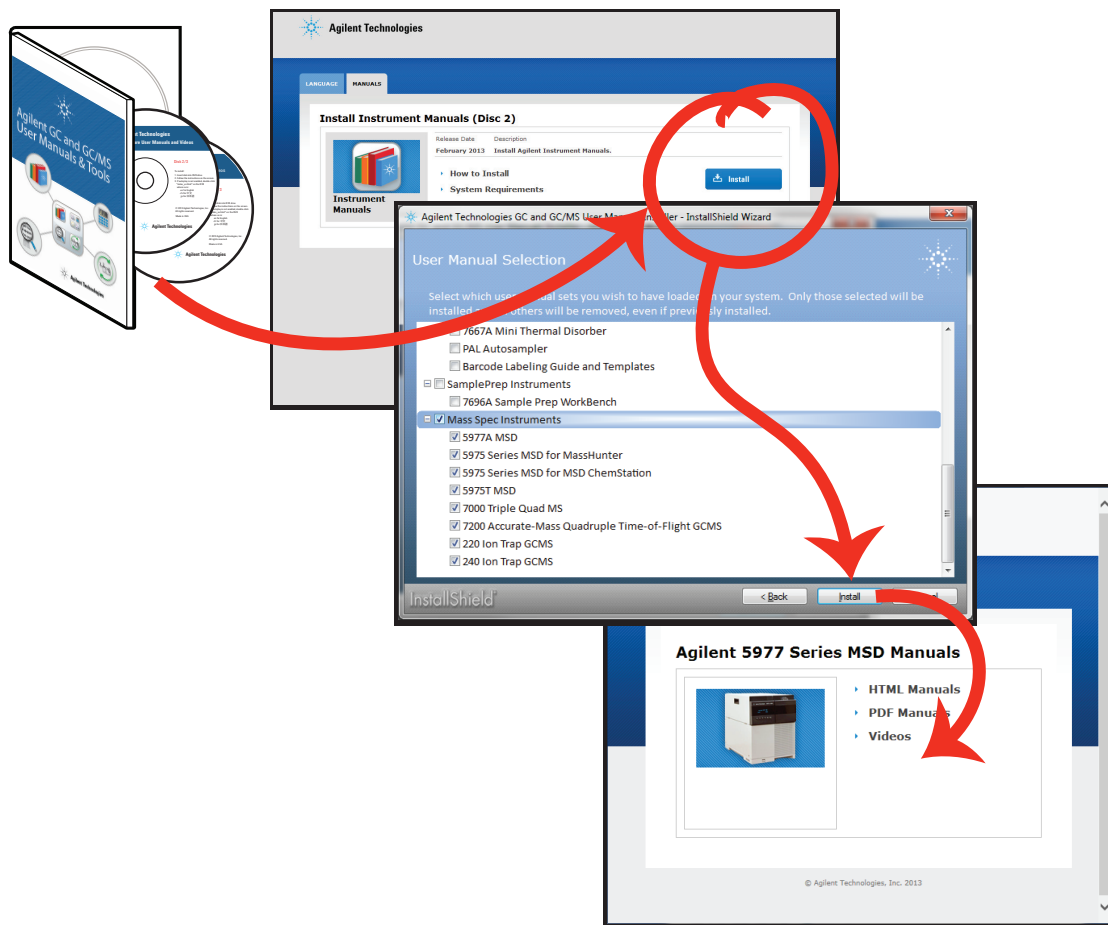
In Help & Learning, under **System Setup and Maintenance**, you will find selected GC hardware Operating Manuals, Concept Guides, Maintenance Guides, Site Preparation Checklists, Installation Guides, and more. For the complete collection of hardware information for your GC and MSD, see “Your GC and GC/MS Hardware Library” on page 10.



Your GC and GC/MS Hardware Library

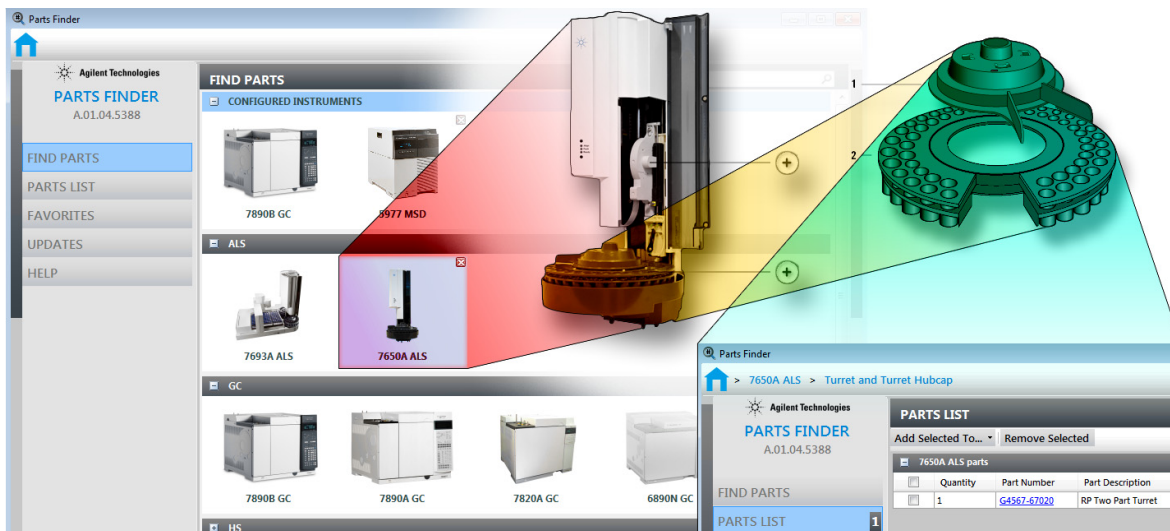
Use the **Agilent GC and GC/MS User Manuals and Tools DVD set (G4600-64006)** to install the full library of Learning Products (in HTML and PDF formats). Here you will find the latest **manuals** and **videos** that explain how to install, operate, maintain, and troubleshoot your system plus valuable **user applications** and **method development tools**. Also included is an electronic **Parts Finder** tool which allows you to locate parts quickly by clicking on nested photos rather than thumbing through a paper catalog. See **“Parts Finder Tool”** on page 11 for more about this tool.

Insert Disk 2 into your DVD drive and follow the system prompts to install these tools on your computer. Once installed, icons will be placed on your desktop for quick access to your material.

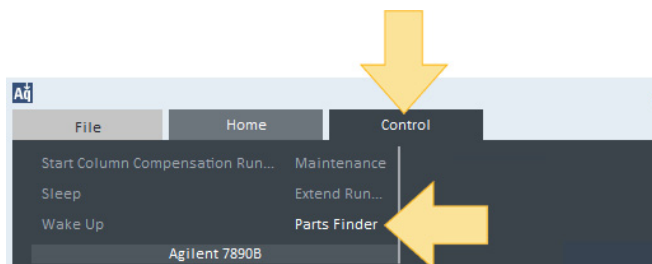


Parts Finder Tool

Included with your system is the Agilent **Parts Finder** tool. This interactive software features an intuitive search with image-based inventory for quick identification of needed parts and supplies for your Agilent instruments. Using **Parts Finder**, rather than thumbing through a paper catalog, you can click on nested photos to quickly locate parts you need.



To open **Parts Finder**, click the Parts Finder desktop icon, or, in OpenLAB CDS, click **Control>Parts Finder**.



The **Parts Finder** tool is installed on your PC along with OpenLAB CDS. It is also available on the **Agilent GC and GC/MS User Manuals & Tools DVD** described on page 10.



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