

How to use an Agilent single-mode spectrometer

Article Overview

Operating an Agilent single-mode spectrometer involves careful setup, calibration, sample preparation, and data acquisition using the instrument's software.

Safety and Preparation

Before using the spectrometer, ensure the workspace is safe and the instrument is in proper condition. Check for hazards such as flammable materials if using infrared sources, and confirm that the spectrometer is indoors and on a stable surface . For UV-visible spectrometers, ensure the lamp is properly installed and the instrument is connected to the computer . Always read CAUTION and WARNING notices in the user manual to prevent damage or personal injury .

Instrument Setup

- **Power On:** Turn on the spectrometer and allow it to initialize. For UV-visible instruments, switch on the lamp and wait for it to stabilize .
- **Software Launch:** Open the associated Agilent software (e.g., Cary 630 software for FTIR or 8453 software for UV-visible). Wait for the software to fully load and establish a connection with the instrument .
- **Select Method:** Choose a pre-defined measurement method or create a new one. Methods define parameters such as wavelength range, scan speed, and resolution .

Calibration...



Article Content

Sep 12, 2025

Agilent 8453 UV-visible Spectroscopy System

To be able to use your new Agilent 8453 UV-visible spectroscopy system quickly, this book gives you step-wise procedures and

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Agilent GC/MSD Instructions

Mass spectrometry is several orders of magnitude more sensitive than NMR, so please do not use the same samples you have

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User's Guide Agilent 1100 Series HP

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Agilent 6200 Series TOF and 6500 Series Q-TOF LC/MS System

What is the Agilent 6500 Series Q-TOF LC/MS system? The Agilent Q-TOF LC/MS is a liquid chromatograph-quadrupole time-of

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7000 7010 Series Triple Quadrupole Operating Manual

About This Manual This manual contains information for operating and maintaining the Agilent 7000/7010 Series Triple Quad (TQ)

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Agilent 6400 Series Triple Quad LC/MS Concepts Guide

Each uses the same Data Acquisition program, Quantitative Analysis programs, and Qualitative Analysis program to enable these

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Transmission FTIR Mode, FTIR Sampling Techniques | Agilent

Transmission FTIR mode is suitable for liquids, gases, powders and films. Learn about how transmission FTIR spectroscopy works,

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Ultivo_Concepts.book

This mode is used for target detection of known compounds. The mass spectrometer acquires and records ion current at only one or

Jan 03, 2026

Agilent Cary 630 FTIR – Attenuated Total Reflectance Module Operation

In this video, the operation of single reflection ATR modules is demonstrated—ideal for

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Single quadrupole mass spectrometer, HPLC mass detector | Agilent

The Agilent single quadrupole LC/MS suite gives your lab HPLC mass detectors for chromatographers.

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5977B Series MSD Operating Manual

Accompanying your hardware and software is a comprehensive collection of manuals, videos, user applications, and method

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Agilent Cary 60 User Manual PDF | Manualsnet

The Agilent Cary 60 spectrophotometer is designed to be completely customer-installable. Instructions for

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Optimizing Conditions for GC/MS Analyses

Solvent blank – May contain contaminant peaks (for example, phthalates, siloxanes)
Best practice: Use the same bottle of solvent

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Agilent 6400 Series Triple Quad LC/MS System Quick Start Guide

What is the Agilent 6400 Series Triple Quad LC/MS? The Agilent 6400 Series Triple Quad LC/MS is a liquid chromatograph triple

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Agilent GC/MSD Instructions

Open the Agilent software that controls the GC, by clicking on the Instrument #1 icon. When prompted, enter: manager as both the

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Agilent 4500 Series FTIR Operation Manual

The Agilent 4500 Series FTIR instruments are small sized, mid-infrared region spectrometer platforms specifically designed for

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4.5.1: Operating the Agilent GCMS

Load the desired method using the Method tab (Figure 4.5.1.1). If the desired method is not listed in the quick access menu, you

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Basics of LC/MS (5988-2045EN)

In scan mode, the mass analyzer monitors a range of mass-to-charge ratios. In SIM mode, the mass analyzer monitors only a few

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Agilent Cary 600 Series FTIR Spectrometers and Microscopes

The Agilent Cary 600 Series FTIR spectrometers use a helium-neon laser operating in the visible region at 632.8 nanometers. The

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ATR-FTIR Spectroscopy, FTIR Sampling Techniques | Agilent

ATR-FTIR spectroscopy is the most widely used sampling methodology for FTIR spectroscopy. Quickly and easily measure liquids,

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User Manual

The Agilent Cary 60 spectrophotometer is designed to be completely customer-installable. Instructions for setting up the system are

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AGILENT TECHNOLOGIES 8453 OPERATOR'S MANUAL Pdf

View and Download Agilent Technologies 8453 operator's manual online. UV-visible Spectrophotometer. 8453 laboratory equipment

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Operation manual for Agilent 8453 Spectrophotometer

Operation manual for Agilent 8453 Spectrophotometer r connected to the Agilent 8453 Spectrophotome Turn the power on from the

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Agilent 6400 Series Triple Quadrupole LC/MS System

16 Agilent 6400 Series Triple Quad LC/MS Concepts Guide 2 Inner Workings – Triple Quadrupole MS versus Single Quadrupole MS

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The Basics of UV-Vis Spectroscopy

Spectroscopy allows the study of how matter interacts with or emits electromagnetic radiation. There are different types of

Contact Us

For more information, pricing, or custom solutions, please contact us:

Website: <https://www.iiss.co.za>

Email: sales@iiss.co.za

Phone: +27 63 174 2895

Address: Unit 8, Innovation Park, 15 Rivonia Road, Sandton, Johannesburg, 2196, South Africa

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