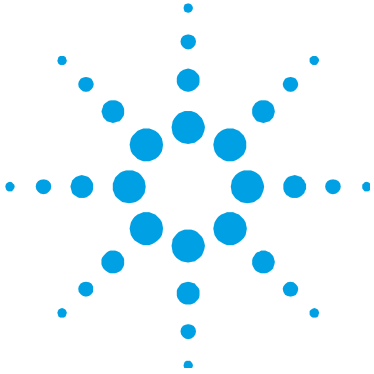

Agilent Cary 60 Spectrophotometer

User's Guide

Agilent Technologies

Notices

Manual Part Number

G6860-90001

Edition

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Agilent Technologies Australia (M) Pty Ltd
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Safety Notices

CAUTION

A **CAUTION** notice denotes a hazard. It calls attention to an operating procedure, practice, or the like that, if not correctly performed or adhered to, could result in damage to the product or loss of important data. Do not proceed beyond a **CAUTION** notice until the indicated conditions are fully understood and met.

WARNING

A WARNING notice denotes a hazard. It calls attention to an operating procedure, practice, or the like that, if not correctly performed or adhered to, could result in personal injury or death. Do not proceed beyond a WARNING notice until the indicated conditions are fully understood and met.

Contents

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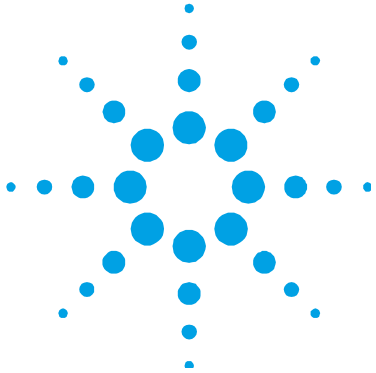


1. General Information and Safety Practices and Hazards

Your Agilent instrument and accessories have been carefully designed so that when used properly you have an accurate, fast, flexible and safe analytical system.

Information about safety practices appears throughout the documentation (both hard copy and online) provided with your instrument and accessories to help you safely operate the instrument and accessories. Before using the instrument or accessories, you must thoroughly read these safety practices. ALWAYS operate the instrument and accessories in accordance with these safety practices.

User Documentation

You have been provided with the following documentation to help you set up and operate your Agilent Cary 60 spectrophotometer:

- Cary 60 Installation Card (publication number G6860-90005), with information on unpacking the instrument and setting up the system.
- This manual, with safety practices and hazards information, instructions for installing and maintaining the components of the Cary 60, and troubleshooting information.

- Cary Tutorials which provide step-by-step instructions for installing selected accessories and programming applications.
- Extensive Help (in English only) provided with the Cary WinUV software containing context-sensitive Help, step-by-step instructions for frequently performed analyses and instructions for using any accessories you ordered.

Conventions

The following conventions have been used throughout the documentation:

- Menus, menu items, buttons and check boxes have been typed in bold. For example, 'click **OK**' and 'From the **Edit** menu, choose **Copy**'.
- ALL CAPITALS indicate keyboard commands. For example, 'Press ENTER' and 'Press SHIFT+F3'.

NOTE Throughout this manual, UV Dissolution and UV Fiber Optic Dissolution users should replace "Cary WinUV Software" with "UV Dissolution Software" or "UV Fiber Optic Dissolution Software" respectively.

Notes and Tips

A Note is used to give advice or information.

A Tip is used to give practical hints to help you achieve the best possible performance from your instrument.

Lamp Module

The lamp is enclosed in a self-contained module. This module contains components operating at high voltages. To avoid electric shock, NEVER disassemble the module.

When operating, the lamp module emits high intensity light that can cause serious damage to eyes. To avoid eye damage, never operate the lamp outside the instrument.

Modules, Covers and Panels

The Cary 60 spectrophotometer module that operators and other personnel will routinely access is the sample compartment module.

The only other cover and panel that is customer accessible is the main cover and lamp module and is to be removed ONLY when changing the lamp module and aligning it. Consult the Cary WinUV Help for instructions and safety information.

Any other panels or covers that are retained by screws on the spectrophotometer and accessories may be opened ONLY by Agilent service engineers.

Other Precautions

Do not block any ventilation grills present on the computer. Consult the manuals supplied with your PC, monitor and printer/plotter for their specific ventilation requirements.

Use of the Cary 60 system and accessories may involve materials, solvents and solutions that are flammable, corrosive, toxic or otherwise hazardous.

Careless, improper, or unskilled use of such materials, solvents and solutions can create explosion hazards, fire hazards, toxicity and other hazards which can result in death, serious personal injury, and damage to equipment and property.

ALWAYS ensure that laboratory safety practices governing the use, handling and disposal of such materials are strictly observed. These safety practices should include the wearing of appropriate safety clothing and safety glasses.

Warning and Other Symbols

The following is a list of symbols that appear in conjunction with warnings on the spectrophotometer. The hazard they describe is also shown.

A triangular symbol indicates a warning. The meanings of the symbols that may appear alongside warnings in the documentation or on the instrument itself are as follows.

Electrical shock

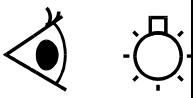
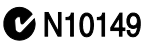
Eye hazard

Heavy weight (danger to feet)

Heavy weight (danger to hands)

The following symbol may be used on warning labels attached to the instrument. When you see this symbol, refer to the relevant operation or service manual for the correct procedure referred to by that warning label.

The following symbols appear on the instrument for your information:

	When attached to the rear of the instrument, indicates that the product complies with the requirements of one or more EU directives.
	When attached to the rear of the instrument, indicates that the product has been certified (evaluated) to CAN/CSA-C22.2 and No. 61010-1.
	Indicates high voltage Xenon flash lamp present.
	Indicates viewing hole to check the operation of the Xenon flash lamp.
	When attached to the rear of the instrument, indicates that the product complies with the requirements of ACMA.
	When attached to the rear of the instrument, indicates that the product complies with the requirements of WEEE ROHS directive.

CE Compliance

Your Agilent Cary 60 spectrophotometer has been designed to comply with the requirements of the Electromagnetic Compatibility (EMC) Directive and the Low Voltage (electrical safety) Directive (commonly referred to as the LVD) of the European Union. Agilent has confirmed that each product complies with the relevant Directives by testing a prototype against the prescribed EN (European Norm) standards.

Proof that a product complies with these directives is indicated by:

- the CE Marking appearing on the rear of the product, and
- the documentation package that accompanies the product containing a copy of the Declaration of Conformity. The Declaration of Conformity is the legal declaration by Agilent that the product complies with the directives listed above, and shows the EN standards to which the product was tested to demonstrate compliance.

2. Specifications

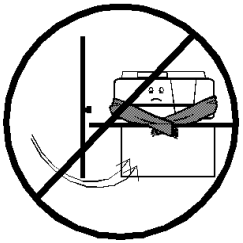
Measurement Category

The Measurement category is IEC61010:I. Do not to use this equipment for measurements within measurement categories II, III and IV.

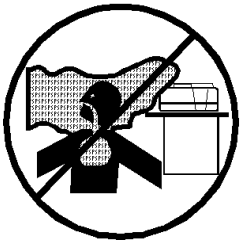
Pollution Degree

The pollution degree is IEC61010:2. Pollution degree ‘2’ applies to a normal indoor atmosphere.

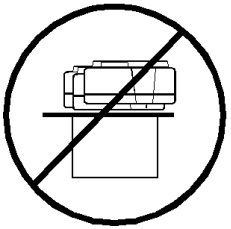
Environmental Conditions



No draughts



No corrosive fumes



No vibration

NOTE For **optimum analytical performance**, it is recommended that the ambient temperature of the laboratory be between **20 and 25 °C** and be held constant to within ±2 °C throughout the entire working day.

The area should have a dust-free, low humidity atmosphere. Air conditioning is recommended. The room should be temperature-controlled if your analyses are particularly sensitive.

Condition	Altitude (m, ft)	Temp. (°C, °F)	Humidity (%RH) non-condensing
Non-operating (transport)	0–4600, 0–15000	-40–75, -40–167	15-90
Operating within performance specifications	0–3100, 0–10000	5–40, 41–104	50–80

Weights and Dimensions

Weight

Packed	23 kg (51 lb)
Unpacked	18 kg (40 lb)

Dimensions (width x depth x height)

Packed	595 x 710 x 350 mm (24 x 28 x 14 in)
Unpacked	477 x 567 x 196 mm (19 x 23 x 8 in)

The Cary 60 has been designed to withstand 10 kg, the approximate weight of a 17 in. LCD monitor.

The workbench should be about 90 cm (36 in) high. Remember to provide space for the computer, monitor and printer.

To avoid damage through spillage of solutions and samples being analyzed, the worktops should be covered with a material that is corrosion resistant and impervious to liquids.

Allow at least two inches of space on both sides, and six inches at the rear of the system to permit free air circulation. Power cord and all other connections are located at the rear of the instrument. The Power switch is located on the front panel.

Electrical Specifications

Mains Supply

A standard 3.2 A/12 V plug pack is provided. Power cords are provided based on the user's country requirements. Only the supplied power supply is to be used with this equipment.

Table 1. System electrical specifications

System unit	Required supply voltage	Nominal rating
Spectrophotometer	100-240 V AC Frequency 47-63 Hz	Scanning: 18 W Idle: 9 W

The maximum power consumption 38 W, 130 BTU/hr.

The installation of electrical power supplies must comply with the rules and/or regulations imposed by local authorities responsible for the supply of electrical energy to the workplace.

WARNING

Shock Hazard

Danger of electrocution. Good electrical grounding is essential to avoid potentially serious shock hazards. A 3-wire outlet with ground connection must be provided for the Cary 60. Make certain that power outlets are earth-grounded at the grounding pin.

All power supplies for the Cary 60 must be single-phase, AC voltage, three-wire system (active, neutral, earth) and should be terminated at an appropriate power outlet receptacle that is within reach of the power cord. For safety reasons, a separate power outlet receptacle should be provided for each unit in the system. The use of extension cords or outlet adaptors is not recommended.

Computer Requirements

The Cary 60 was evaluated under Agilent's ISO9001 procedures using Cary WinUV software and a desktop computer. We strongly recommend a computer configuration that matches the system that was used during evaluations.

Manufacturer	Hewlett-Packard
Model	HP 8000 Elite Desktop
Processor	Intel Core 2 Duo E8500 Processor
Memory	2 GB PC3-10600 Memory (2x1 GB)
Storage	250 GB SATA 3.5 1st Hard Drive
Graphics	Integrated Intel Graphics Media Accelerator 4500
Communications	Integrated Intel 82567LM Gigabit
Optical Drive	16x SATA SuperMulti LightScribe DVD+/-RW
Audio	Realtek ALC261 High Definition Audio Codec (all ports are stereo)

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3. Installation

Use the following checklist to make sure you have the work area ready to install the Cary 60.

Preparation requirement	Complete
All equipment is on site and has been checked for damage	☐
The work area meets the environmental requirements (see Page 14).	☐
A suitable workbench is available (see Page 15).	☐
Suitable electrical power supplies are available (see Page 16).	☐
A computer that meets requirements is available (see Page 17).	☐
A working Microsoft® Windows® operating system is installed on the computer. For instructions on installing this, refer to the documentation supplied with the operating system.	☐
The Cary 60 has been unpacked (see Page 20).	☐

Installation on Microsoft Windows 7 Configured Computer

The Agilent Cary 60 spectrophotometer is designed to be completely customer-installable. When using Windows 7 computer operating system, instructions for setting up the system are included in the Cary 60 Installation Card (publication number G6860-90005) supplied with the instrument.

Installation on Microsoft Windows XP Configured Computer

Installation includes:

- Unpacking
- Installing the Cary WinUV software
- Installing hardware
- Installing the Cary 60 driver
- Validating and registering your Cary 60 and Cary WinUV software
- Running the tutorials

Unpacking

WARNING

Heavy Weight

The Cary 60 weighs 18 kg. To avoid injury to personnel or damage to equipment, always use two or more people when lifting or carrying the instrument. NEVER attempt to lift the instrument alone.

After accepting delivery, take the equipment to the installation site. Agilent instruments are inherently robust, and the packaging is designed to prevent internal damage. However, the contents form part of a precision measuring system and all packages should be handled with care. In transit, sharp jolts must be avoided and the packages should not be inverted or tilted unnecessarily. Markings on the shipping cartons generally indicate which side of the package should be kept on top.

Unpacking the equipment is your responsibility. As the packages are opened, ensure you received everything you ordered. If there are any discrepancies, notify the supplier. If any items are found to be damaged, immediately notify the carrier and supplier.

You should have received:

- 1x Cary 60 spectrophotometer
- 1x power supply and power cable
- 1x USB cable
- 1x Cary WinUV software installation CD
- This manual

NOTE Accessories ordered are not listed here.

Any differences from the original order should be referred immediately to your Agilent sales office. All contents of the shipping packages should be assembled together when installation is to be carried out by Agilent service personnel. Do not discard any packaging components or filler materials

To unpack the Cary 60 spectrophotometer:

1. Open the packing box.
2. Two people should lift the Cary 60 from the packaging.

Installing the Cary WinUV Software

NOTE This procedure is for computers configured with Windows XP only. When using Windows 7 computer operating system, instructions for setting up the system are on the Cary 60 Installation Card (publication number G6860-90005) supplied with the instrument.

1 Insert the CD into the computer's CD-ROM drive.

NOTE The installation program should automatically launch. If it does not, run d:\AgilentCaryWinUVSetup.

2 Follow the on-screen instructions.

3 Click **Continue Anyway** if the 'Windows Logo testing' message appears.

4 Click **Finish** when the installation is complete.

Installing the Hardware

To install the Cary 60 hardware:

1 Plug in the USB cable.

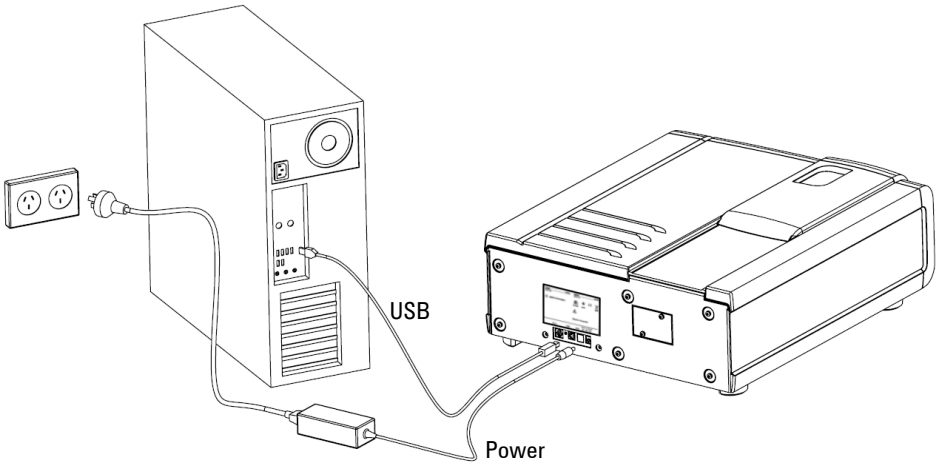


Figure 1. Hardware connections

2 Connect the power supply to the power cable and then plug in to the Cary 60 and wall power outlet. See Figure 1.

3 Turn on the computer.

Figure 2. Power button and serial number location

Installing the Cary 60 Driver

To install the Cary 60 driver:

1 Turn on the Cary 60.

The Cary 60 will calibrate for approximately 2 minutes. The 'Found New Hardware Wizard' dialog box will appear.

2 Select **No, not this time** and then click **Next.**

3 Select **Install the software automatically (Recommend)** and then click **Next**.

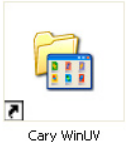
4 Click **Continue Anyway** on the Windows Logo testing dialog box.

5 Click **Finish** when the installation is complete.

Registering and Validating Your Cary 60

To register and validate your Cary 60:

1 Double-click the Cary WinUV icon on your computer desktop.



2 Double-click the 'Validate' application.

The Agilent Software Registration dialog box appears.

3 Click **Next** and follow the instructions.

NOTE The product key is found on the CD case.

4 Click **Add** next to the 'Instrument Model' section of 'Product Details' dialog box,.

5 Choose **Cary** from the 'Instrument Type' drop-down box.

6 Select the Model Name.

7 Enter the Cary 60 serial number. See Figure 2.

8 In the Accessories section, repeat Steps 4-7 for all accessories ordered.

9 Click **Next** and follow the instructions to finish registration.

10 Click **Start** when the Validate application appears.

NOTE The validation process takes approximately 7 minutes to complete.

11 Once validation is finished, print the generated report and then close the Validate application.

Running the Tutorials

To run the Cary 60 tutorials double-click the tutorial icon on your computer desktop or click **Start > Programs > Agilent > Cary WinUV > Cary Tutorial**.

The following tutorials are provided to get you started using the Cary WinUV software:

- Cary WinUV overview – describes the software layout, how to specify report settings and how to save and open methods.
- Measuring a sample at one or more wavelengths – describes how to perform absorbance readings of samples using the Simple Read application.
- Measuring multiple samples using the Multicell Holder accessory – describes how to measure multiple samples using the Advanced Reads application.

- Running a wavelength scan – describes how to scan multiple samples using the Scan application.
- Running a Concentration experiment using a Fiber Optic Dip Probe accessory – describes how to use the probe for rapid sample measurements.
- Running a temperature controlled single cell Kinetics experiment – describes how to use the Kinetics application to calculate reaction rates from absorbance versus time data.

To access the Cary WinUV Help:

Click **Start > Programs > Agilent > Cary WinUV > Cary Help** or press F1 on your keyboard with a Cary WinUV application open.

Cell Holder

A Microcell Holder is supplied as standard with the Cary 60. Follow the instructions below to install and align it.

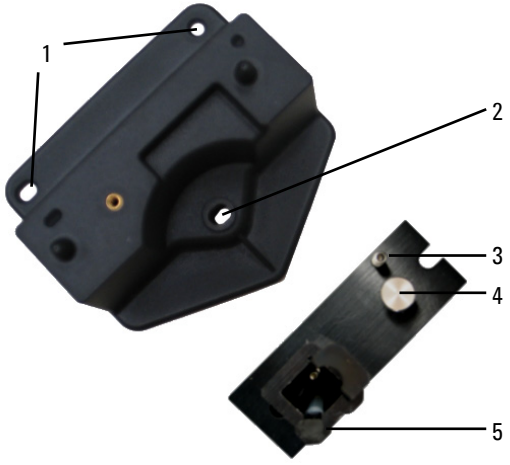


Figure 3. Cell holder base (left) and Microcell Holder

1. Locating holes
2. Cell holder base thumbscrew location
3. Adjustment screw
4. Microcell Holder thumbscrew
5. Cell lifter
6. Hexagonal ball driver (not shown)

Installation

To install the Microcell Holder:

1. Place a microcell in the Microcell Holder (if the cell has ground glass sides or sides featuring the Cary logo, hold the cell by these sides) and check that the cell aperture is vertically centered in the cell holder aperture.
2. If the cell aperture is not at the correct height, remove the cell and adjust the adjustment screw in the Microcell Holder accordingly using the hexagonal ball driver (2.5 mm). Replace the cell in the Microcell Holder.
3. Slide back the sample compartment lid (refer to Figure 4).

Figure 4. Cary 60 showing the sample compartment lid (1) and front door (2)

4. Remove the sample compartment front door (refer to Figure 4).
5. If not already fitted, install the cell holder base in the sample compartment as follows:
   a. Place the cell holder base in the sample compartment, aligning the two locating holes over the two locating pins in the floor of the sample compartment.
   b. Firmly tighten the thumbscrew on the cell holder base (item 2 in picture above).
6. Place the Microcell Holder on the cell holder base, aligning the holes in the Microcell Holder over the raised black knobs in the cell holder base.
7. Tighten the thumbscrew on the Microcell Holder.

You should now align the Microcell Holder.

Alignment

To align the Microcell Holder:

1. Start the Align application by clicking the Windows **Start** button, selecting **Programs > Agilent > Cary WinUV** (or **Agilent > UV/UV FO Dissolution**) and then **Align**.
2. Select the **Cary** tab.
3. Under Instrument Parameters, set the wavelength to 0 nm (white light) by selecting **Zero Order**.
4. Click **Apply**. The green power indicator on the instrument should start flashing to indicate that the instrument is active.
5. Place a cell in the Microcell Holder (if you have not already done so).
6. Place a small piece of white paper in the light path to the right of the cell. If the beam appears as though it will strike the cell aperture, move the paper to the left of the cell and check that the beam is passing through the cell. (If the beam does not appear as though it will pass through the cell, adjust the height of the cell as described in the 'Installation' section on Page 26.)
7. Using the hexagonal ball driver (2.5 mm), adjust the Microcell Holder adjustment screw (item 5 in picture above) and note the intensity of the light striking the paper. Continue to adjust the adjustment screw until the beam hitting the paper appears the most intense.

NOTE You may need to dim the room lights to see the light beam.

Other Sample Holders

Other sample holders are available for use with the Cary 60, such as the Solid Sample Holder. Instructions for their use are included in the Help provided with the Cary WinUV software.

Installing Accessories

For installation of all accessories to the Cary 60, please refer to the Cary WinUV Help. To access the Help, click **Start > Programs > Agilent > Cary WinUV > Cary Help** and then click **Accessories**. Also see the manual or instructions that came with the accessory.

4. Introduction

Instrument Overview

Figure 5. Cary 60 showing the sample compartment lid (1), sample compartment front door (2) and power button (3).

Indicator Lamp

The indicator lamp on the power button has several conditions:

Color	State	Description
Green	Static on	Powered on; instrument is calibrated/initialized and not scanning
	Flashing	Scanning (no fault condition exists)
Orange (yellow)	Static on	Instrument initializing (not scanning)
	Flashing	Scan in progress while initializing/calibrating
Red	Static on	Initialization or calibration failed. Instrument is still allowed to operate.
	Flashing	Instrument is scanning after initialization or calibration has failed.

Connections

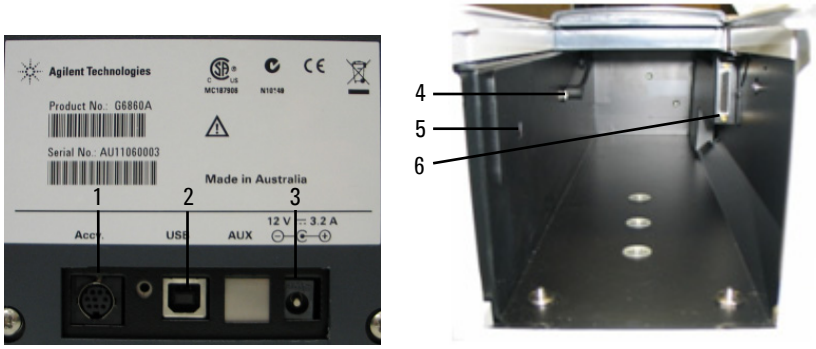


Figure 6. Back and sample compartment connectors

Where:

1 8-pin Mini Din socket at the back of the instrument for accessories

2 USB Type B connector at the back of the instrument for connection to the computer (2 on Figure 4)

3 5.5/2.5 mm power jack at the back of the instrument for the 12 V power supply (3 on Figure 4)

4 8-pin DIN connector in the left side of the sample compartment for the diode detector (4 on Figure 4)

5 3.5 mm phono jack socket in the left side of the sample compartment for accessories (5 on Figure 4)

6 25-pin D-range connector in the right side of the sample compartment for accessories (6 on Figure 4)

Using the Software

For information on how to use the software, please see the Cary 60 Tutorial and the Cary WinUV Help installed on your computer during the Cary WinUV software installation.

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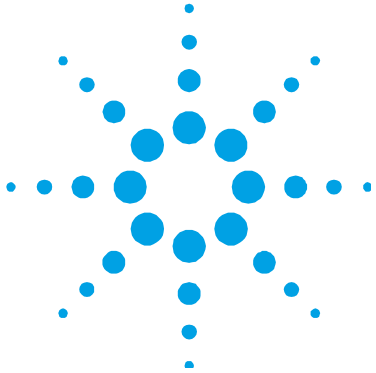

5. Troubleshooting

This chapter contains troubleshooting information to help you solve various problems you may encounter when setting up or using your Cary 60 hardware. If the suggested solutions do not fix the problem, please contact your local Agilent field service engineer or representative.

Access Denied

Problem

During installation of the Cary WinUV software, you see an 'Access is denied' message.

Solution

You must be logged on with administrator rights to install the Cary WinUV software.

1 Click the Windows **Start** button > **Log Off**.

2 Log on as an Administrator or ask your Administrator to log on for you.

3 Uninstall the Cary WinUV software.

To uninstall the Cary WinUV Software:

a Click **Start > Control Panel > Add/Remove Programs**.

b Scroll through the list on the 'Install/Uninstall' tab until you find (and select) **Agilent Cary WinUV**.

c Click **Add/Remove** and then **Yes**. Follow the instructions on the screen.

d Repeat Step 'c' for the Cary WinUV Help.

NOTE You will need to contact your local Agilent office, as a service call will be required to uninstall Cary WinUV Pharma software.

4 Uninstall the Cary 60 Driver.

To uninstall the Cary 60 driver:

a Click **Start > Control Panel > Add/Remove Programs**.

b Select **Agilent Cary 60 Driver**.

c Click **Remove** and then **Yes**. Follow the instructions on the screen.

5 Ensure the computer is turned off.

6 Restart the computer.

7 Re-install the Cary WinUV software according to the Cary 60 Installation Card (publication number G6860-90005) on Windows 7 enabled computers or on Page 20 of this manual for Windows XP.

No Green Light Indicating that the Cary 60 is Powered

The Cary 60 is powered from an external power supply. A green power indicator light on the front of the Cary 60 indicates when the instrument is powered.

Problem

The power indicator on the Cary 60 does not light when it is switched on.

Solution

Check the connection of the Cary 60 to the external power supply.

Start Button Replaced with Connect Button

Problem 1

I have a 'Connect' button instead of a 'Start' button.

Solution

Only one Cary application at a time can communicate with the instrument. If you want to change to another application you can press the 'Connect' button to bring this application online.

When you turn on the Cary 60, it performs an initialization routine. If you start another application such as Scan etc., before this initialization has finished, the application's 'Start' button will be grayed out. Wait for the status line at the bottom of the application to display 'Idle' and the 'Start' button will become active.

Problem 2

The ‘Start’ button will not become active or the ‘Connect’ button will not change to ‘Start’.

Solution

If the Cary WinUV software cannot locate the Cary 60, the ‘Start’ button will not become active or the ‘Connect’ button will not change to ‘Start’. This could be caused by:

- the power supply not connected
- the USB cable not connected
- the Cary 60 driver not installed
- A defective Cary 60 main board. Contact your Agilent field service engineer to replace this board if fixing the problems listed above does not help.
- Reboot the Cary 60 and wait for the power LED to turn solid green
- Reboot the controlling PC

Absorbance is 10 Abs and Fluctuates Wildly During a Scan

Problem

The Cary 60 is reporting 10 Abs and a scan like that shown below is displayed on the screen:

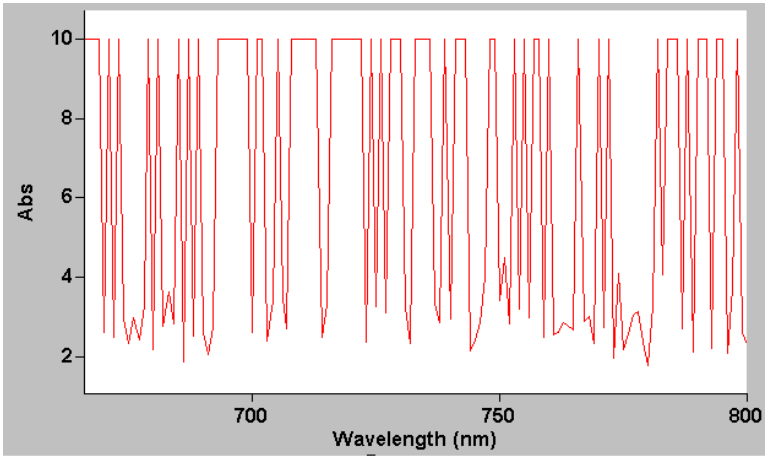

Figure 7. Wild absorbance fluctuation during a scan

Solution

The detector cable inside the Cary 60's sample compartment is not connected. Check that the 8 pin plug on the left side of the sample compartment is firmly plugged in.

The sample compartment is empty.

The beam inside the sample compartment is not clipped.

Instrument Performance Testing

Problem

The results of your instrument performance tests do not meet specifications (the results obtained during factory testing are included in the packing crate with the instrument).

Solution

Check the following:

- The sample compartment is empty.
- The lamp is pulsing. This is indicated if the green power indicator on the front of the instrument flashes (you should also hear the monochromator and the filter wheel moving). You should also turn the instrument on its side and look through the small lamp viewing hole in the base of the instrument while the instrument is scanning.
- The lamp is correctly aligned (refer to the Cary WinUV Help for instructions on aligning the lamp).
- 'UnCalibrated' appears on the 'Calibration' tab in **System Information**. To open System Information, double-click the Cary WinUV folder (UV Dissolution or UV FO Dissolution) on the Windows desktop, and then double-click on the 'System Information' icon. If the text reads 'UnCalibrated' on the 'Calibration' tab turn the Cary 60 off and then back on again. Wait for the instrument to finish initializing and calibrating. When the calibration routine finishes, the text will change to 'Calibrated'. Your instrument is now calibrated and is ready to use.

Repeat the Instrument Performance Test suite in Validate.

Wavelength Calibration

Problem

The position of an absorption (transmission or reflectance) peak appears to shift over a prolonged period of time.

Solution

Restart the Cary 60. The calibration procedure occurs automatically on start up. Agilent recommends that as part of your standard operating procedure you restart the Cary 60 monthly. Perform the Instrument Performance Test suite in 'Validate' to ensure the instrument results meet specification.

Front Panel LED Troubleshooting

LED Won't Light Up

No power to the instrument.

Check power cables and power point switches (if applicable).

Solid Red LED

The instrument is available to use but the previous initialization or calibration has failed.

Initialization or calibration failed.

Check or perform the following:

- The sample compartment for items blocking the beam.
- The cuvette is inserted correctly and clean.
- Reboot the Cary 60.
- Contact your local Agilent field service engineer or representative.

Flashing Red LED

The instrument is scanning but the previous initialization or calibration has failed.

Initialization or calibration failed.

Check or perform the following:

- The sample compartment for items blocking the beam.
- The cuvette is inserted correctly and clean.
- Reboot the Cary 60.
- Contact your local Agilent field service engineer or representative.

6. Maintenance and Spare Parts

Maintenance

Any procedures not specifically mentioned in this chapter or in the Cary WinUV Help should be carried out only by Agilent field service engineers.

WARNING

Eye Hazard

This instrument contains an intense light source. Direct viewing of the light source will cause eye damage. Operators and other unauthorized personnel must NEVER remove the main cover.

NOTE

This section refers only to maintenance procedures for the instrument. You should refer to your PC and printer manuals for their maintenance procedures, and to the Cary WinUV Help for the maintenance procedures for any accessories you ordered.

Any spills in the sample compartment should be wiped up immediately.

The exterior surfaces of the Cary 60 spectrophotometer should be kept clean. All cleaning should be done with a soft cloth. If necessary, this cloth can be dampened with water or a mild detergent. Do not use organic solvents or abrasive cleaning agents.

For additional maintenance procedures, please see the Help provided with the Cary WinUV software.

Spare Parts

The following spare parts are available for use with your Cary 60 spectrophotometer. Always use Agilent-supplied spare parts, unless otherwise indicated.

Part	Part Number
Sample compartment lid	6210133900
Sample compartment front door	0110855700
USB cable – 3 m gray	8121-0905
Cary 60 power supply	G6860-61008
Lamp module	0110639690

Ordering details for other Cary 60 accessories are available on the Agilent Technologies Web site, www.agilent.com

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www.agilent.com

In This Book

The manual describes the following:

- General Information and Safety Practices and Hazards
- Specifications
- Installation
- Introduction
- Troubleshooting
- Maintenance and Spare Parts

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