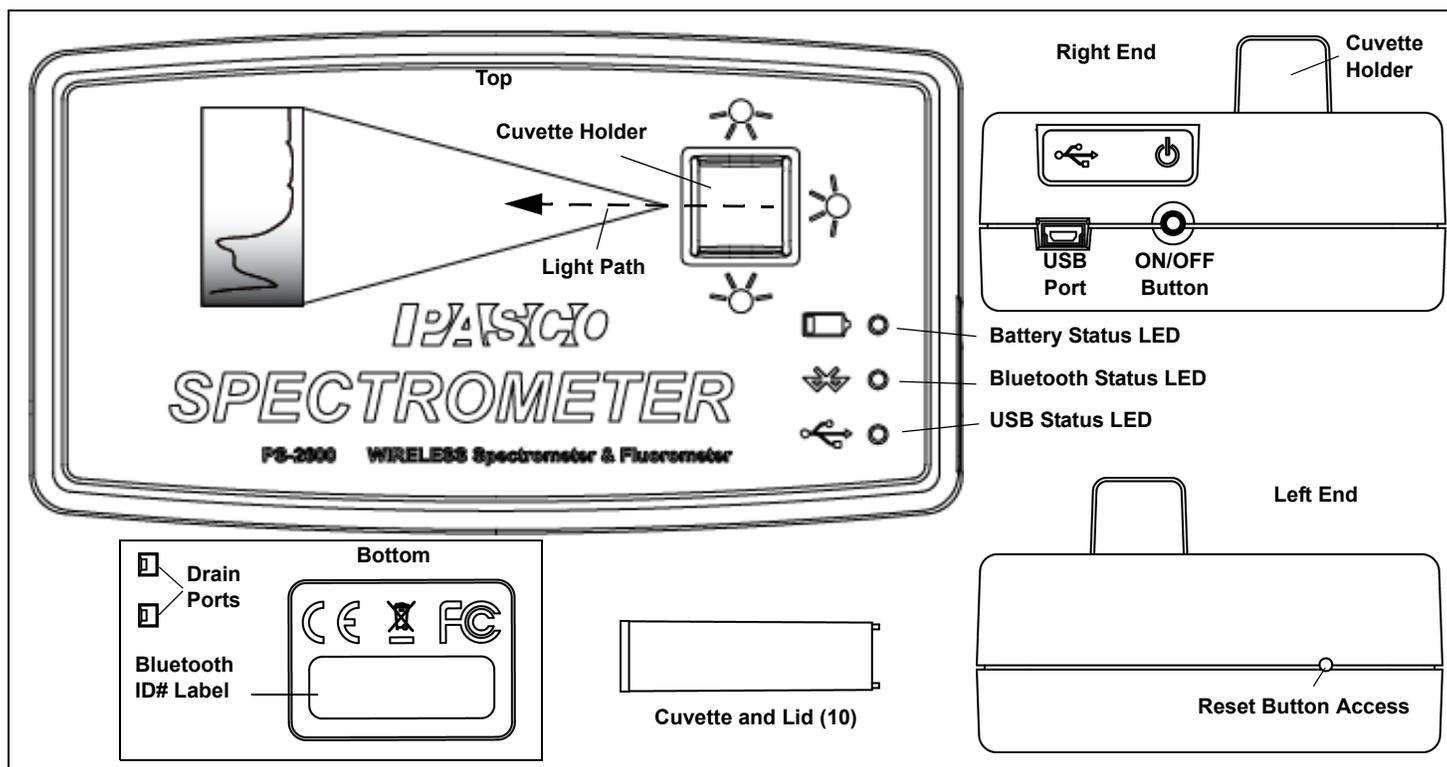


Spectrometer

PS-2600



Included Equipment	Part Number
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Spectrometer	PS-2600
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Cuvette and Lid (10)	
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USB Cable	
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Optional Equipment	Part Number
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Fiber Optic Probe	PS-2601
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Also Required

Software for Computer or Tablet

Spectrometry

Available free for Mac and PC computers and iOS devices at the PASCO web site: www.pasco.com/spectrometer

Download the software from the PASCO web site or from another source.

Software: Other Source

The Spectrometry software is also available from the App Store.



Initial Step: Charge the Battery

The Spectrometer is partially charged at the factory. The Spectrometer battery is charged using the USB cable connected to a USB port or USB charger. Leave the Spectrometer off while charging. As the battery is charging, the Battery Status LED (light-emitting diode) will blink red. When the battery is fully charged, the Battery Status LED shines green. The charger circuit inside the unit turns itself off when the unit is fully charged, so it can't be overcharged.

Introduction

The spectrometer is specifically designed for introductory spectroscopy experiments. The Bluetooth and USB connectivity enable its use with tablets and computers. With this one apparatus, you can measure intensity, absorbance, transmittance, and fluorescence, making this a powerful and intuitive tool for your spectroscopy needs.

Specifications

Item	Value
Resolution:	2 to 3 nanometers (nm)
Range:	380 to 950 nm
Fluorescence Excitation Wavelengths:	405 nm and 500 nm
Light Source:	LED boosted tungsten

Connecting the Spectrometer to a Tablet or Computer via Bluetooth

1. Turn on the spectrometer, and briefly hold the ON/OFF button on the back. After all three status LEDs blink in sequence, release the ON/OFF button. The Bluetooth Status LED will blink blue.
2. Pair /connect to through Bluetooth to your computing device. This step will depend on your computing device and operating system. The Bluetooth Status LED will shine blue.
3. Open the Spectrometry software.
4. If the Spectrometer is not found, select "Choose Wireless Device".
5. In the Menu, select the Spectrometer with the ID # that matches the ID # on the bottom of the device.

Connecting the Spectrometer to a Computer with a USB Cable

1. Connect the small end of the included USB into the USB port on the back of the Spectrometer
2. Connect the other end of the USB cable to a USB port on the computer, or into a USB hub connected to the computer.
3. Turn on the Spectrometer, and briefly press and hold the ON/OFF button on the side. After all three status LEDs blink in sequence, release the ON/OFF button.
4. The USB Status LED will shine green. (NOTE: The Bluetooth Status LED will slowly blink blue. The Battery Status LED may also blink to indicate that the battery is charging through the USB cable.)

Usage

Place the sample to be examined in a cuvette. Fill the cuvette to the point where the top of the sample is at least 3.0 centimeters (cm) or 1.2 inches above the bottom. Put the lid on the cuvette and put the cuvette in the cuvette holder of the Spectrometer.

NOTE: The cuvette has two smooth sides and two ribbed sides. When putting the cuvette into the Spectrometer, the smooth sides need to be along the light path (perpendicular to the light path).

Replacement Cuvettes

Order Model **SE-8739 Cuvettes and Caps** to get 100 replacement cuvettes and lids.

There are two drain ports in the bottom of the cuvette holder to allow for drainage if something spills into the holder. To clean the holder, moisten a small cotton swab with deionized water and gently wipe the interior.

Battery

Life

On a full charge, the Spectrometer will run in Analyze Light mode for eight to nine hours. The battery is replaceable.

Replacement

If the Spectrometer fails to recharge, the battery may need to be replaced. The battery is field replaceable using the Model **PS-2569 Replacement Battery**. Removing the battery requires a Torx T8 screwdriver and a small Phillips head screwdriver.

CAUTION: Make the area as dust-free and static-free as possible before opening the Spectrometer. Do not touch the optical components inside the Spectrometer.

- Use the Torx screwdriver to remove the four screws from the bottom of the Spectrometer case.
- Lift the top half of the case off the Spectrometer and set it aside.
- Disconnect the battery leads from the connector on the bottom edge of the printed circuit board.
- Use a small Phillips head screwdriver to remove the one small screw that is near the middle of the top edge of the printed circuit board.
- Lift the printed circuit board aside, and replace the square shaped battery pack. Reconnect the battery leads to the connector on the bottom edge of the printed circuit board.
- Check that the printed circuit board and its components are free of dust.
- Reverse the other steps to close the Spectrometer.

Contact PASCO Technical Support for more information.

Light Source Replacement

The small printed circuit board that holds the incandescent bulb and the three light-emitting diodes can be removed and replaced. Order PASCO part number 004-14026. Replacing the light source requires a Torx T8 screwdriver and a small Phillips head screwdriver.

CAUTION: Make the area as dust-free and static-free as possible before opening the Spectrometer. Do not touch the optical components inside the Spectrometer.

- Use the Torx screwdriver to remove the four screws from the bottom of the Spectrometer case.
- Lift the top half of the case off the Spectrometer and set it aside. The light source is on the right side of the main printed circuit board (PCB).
- Disconnect the battery leads from the connector on the bottom edge of the printed circuit board.
- Use a small Phillips head screwdriver to remove the one small screw that is near the middle of the top edge of the main PCB.
- Lift the printed circuit board up so that both screws on the light source PCB can be reached. Use the small Phillips head screwdriver to remove the two small screws that hold the light source PCB in place.
- Grasp the middle of the edges of the light source PCB and gently pull it away from the connector.
- When replacing the light source PCB, be careful to align the slot on the light source PCB with the pins on the connector. Gently push the light source PCB onto its connector, and replace the two small screws to hold the PCB in place.
- Reconnect the battery leads. Make sure that the components are dust-free. Reverse the other steps to close the Spectrometer.

Contact PASCO Technical Support for more information.

Troubleshooting the Spectrometer

- If the Spectrometer loses Bluetooth connection and will not reconnect, try cycling the ON/OFF button. Press and *briefly* hold the button until the status LEDs blink in sequence, and then release the ON/OFF button to turn on the Spectrometer.
- If the Spectrometer stops communicating with the computer software or tablet application, try restarting the software or application. If the problem remains, try cycling the ON/OFF button.

- As a last resort, push a pin into the Reset port on the left end of the Spectrometer.

Technical Support

For assistance with any PASCO product, contact PASCO at:

Address: PASCO scientific
10101 Foothills Blvd.
Roseville, CA 95747-7100

Phone: +1 916 462 8380 (worldwide)
877-373-0300 (U.S.)

Web: www.pasco.com

Email: support@pasco.com

For more information about the product and the latest revision of this Reference Guide, visit the PASCO web site at www.pasco.com and enter “Spectrometer” or the product number (PS-2600) in the Search window.

Limited Warranty

The Spectrometer has a five year warranty. For a more thorough description of the product warranty, see the PASCO catalog.

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Made for iPad

“Made for iPad” means that an electronic accessory has been designed to connect specifically to iPad and has been certified by the developer to meet Apple performance standards. Apple is not responsible for the operation of this device or its compliance with safety and regulatory standards. Please note that the use of this accessory with iPad may affect wireless performance.

iPad, iPad Air, and iPad mini are trademarks of Apple, Inc, registered in the U.S. and other countries.

FCC Statement

This Class A digital device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

CE Statement

This device has been tested and found to comply with the essential requirements and other relevant provisions of the applicable EU Directives.

Product End of Life Disposal Instructions:

This electronic product is subject to disposal and recycling regulations that vary by country and region. It is your responsibility to recycle your electronic equipment per your local environmental laws and regulations to ensure that it will be recycled in a manner that protects human health and the environment. To find out where you can drop off your waste equipment for recycling, please contact your local waste recycle/disposal service, or the place where you purchased the product.

The European Union WEEE (Waste Electronic and Electrical Equipment) symbol (to the right) and on the product or its packaging indicates that this product **must not** be disposed of in a standard waste container.

**Battery Disposal Instructions:**

Batteries contain chemicals that, if released, may affect the environment and human health. Batteries should be collected separately for recycling, and recycled at a local hazardous material disposal location adhering to your country and local government regulations. To find out where you can drop off your waste battery for recycling, please contact your local waste disposal service, or the product representative.

The Lithium Polymer (Li-Poly) rechargeable battery used in this product is marked with the International symbols to indicate the need for the separate collection and recycling of batteries.



Li-Poly

