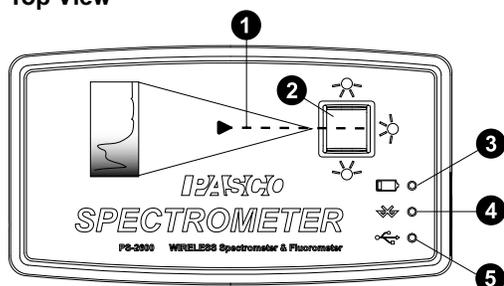


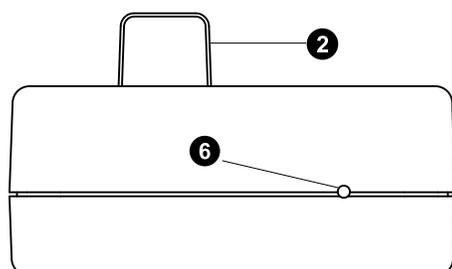
# Wireless Spectrometer (PS-2600)



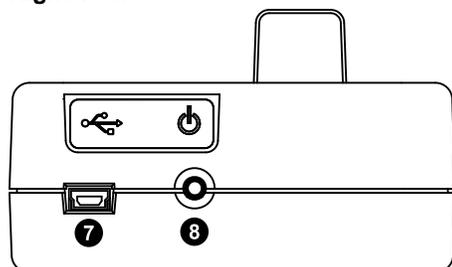
Top View



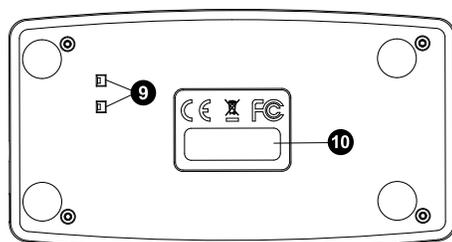
Left View



Right View



Bottom View



- 1 Light Path
- 2 Cuvette Holder
- 3 Battery Status LED
- 4 Bluetooth Status LED
- 5 USB Status LED
- 6 Reset Button Access

- 7 USB Port
- 8 ON/OFF Button
- 9 Drain Ports
- 10 Bluetooth ID# Label

## Equipment and Requirements

### Included Equipment

- Spectrometer (PS-2600)
- Cuvette and Lid (10 each)
- USB Cable

### Optional Equipment

- Fiber Optic Probe (PS-2601)

### Also Required: Spectrometry Software



Software for Computer or Tablet

#### Spectrometry

Available free for Mac and PC computers and iPad and Android\* tablets at the PASCO website:

[www.pasco.com/downloads](http://www.pasco.com/downloads)

Download the software from the PASCO website or from another source.

\*Android tablet must be Bluetooth-compatible.

### Software: Other Sources

The Spectrometry software is also available from the App Store and from Google Play.



### Initial Step: Charge the Battery

The Wireless Spectrometer is partially charged at the factory. The 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 Wireless Spectrometer is specifically designed for introductory spectroscopy experiments. The Bluetooth and USB connectivity enables 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.

## Connecting the Wireless 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 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. Start the Spectrometry software. (Refer to the **Spectrometry Software User Guide** at the PASCO web page: [www.pasco.com/spectrometer](http://www.pasco.com/spectrometer) under **Resources**.)
4. If the wireless Spectrometer is not found, select **Choose Wireless Device**.
5. In the Menu, select the Wireless Spectrometer with the Device ID # that matches the Device ID # on the bottom of the device.

## Connecting the Wireless 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, then 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). The body of the spectrometer is made from ABS. Only use solutions in the spectrometer to which ABS shows good chemical resistance. Avoid letting any solution come into contact with the spectrometer housing.

## 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. The cuvettes included with the spectrometer are made from polystyrene. With these cuvettes, only use solutions to which polystyrene shows good chemical resistance.

## Battery

### 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 by a **skilled technician**. Contact Technical Support **regarding availability and installation instructions** for PASCO part number 004-14026.

## 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.

## Specifications and accessories

Visit the product page at [pasco.com/product/PS-2600](https://www.pasco.com/product/PS-2600) to view the specifications and explore accessories. You can also download experiment files and support documents from the product page.

## Experiment files

Download one of several student-ready activities from the PASCO Experiment Library. Experiments include editable student handouts and teacher notes. Visit [pasco.com/freelabs/PS-2600](https://www.pasco.com/freelabs/PS-2600).

## Technical Support

Need more help? Our knowledgeable and friendly Technical Support staff is ready to answer your questions or walk you through any issues.

- Chat [pasco.com](https://www.pasco.com)
- Phone 1-800-772-8700 x1004 (USA)  
+1 916 462 8384 (outside USA)
- Email [support@pasco.com](mailto:support@pasco.com)

For more information about the product, and the latest revision of this Reference Guide, visit the PASCO website at [www.pasco.com/manuals](https://www.pasco.com/manuals) and enter "Spectrometer" or the product number (PS-2600) in the Search window.

### Limited Warranty

For a description of the product warranty, see the Warranty and Returns page at [www.pasco.com/legal](https://www.pasco.com/legal).

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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 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



*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 or disposal service, or the place where you purchased the product.*

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

### Battery disposal



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 battery used in this product is marked with the European Union symbol for waste batteries to indicate the need for the separate collection and recycling of batteries.