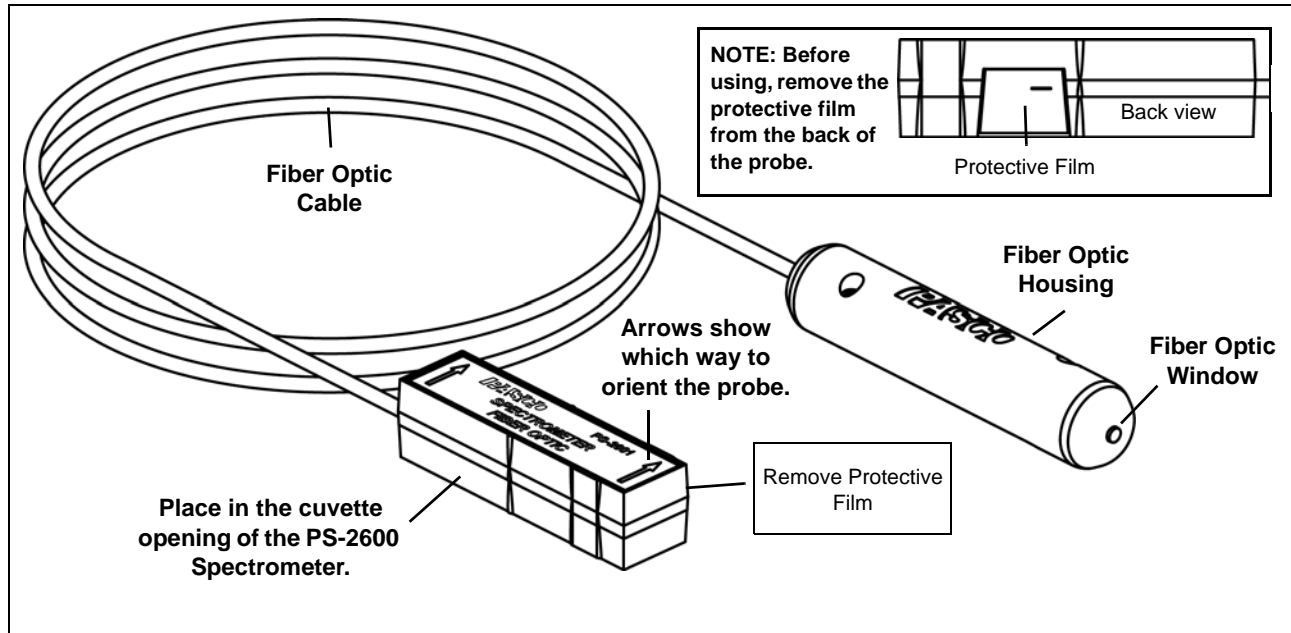


Spectrometer Fiber Optic Probe

PS-2601



Included Equipment	Part Number
Fiber Optic Probe	PS-2601

Required Equipment	Part Number
Spectrometer	PS-2600

Required for the Spectrometer

Software for Computer or Tablet

PASCO Spectrometry

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

*NOTE: The Android tablet needs Bluetooth capability.

Software: Other Sources

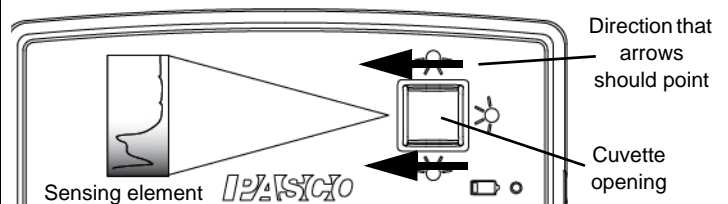
The PASCO Spectrometry software is also available from the Apple App Store and from Google Play.

Introduction

The PASCO Fiber Optic Probe is specifically designed for use with the PASCO Spectrometer (PS-2600) in introductory spectrometry experiments. The Fiber Optic Probe makes it possible to examine the spectra of various light sources. The Fiber Optic Probe and Spectrometer can measure light intensity.

Using the Fiber Optic Probe with the Spectrometer

The end of the Fiber Optic Probe that fits into the cuvette opening of the Spectrometer has arrows on its label. Turn the rectangular housing so that the arrows point toward the sensing element (away from the light emitting diode) inside the Spectrometer, and put the housing into the cuvette opening.

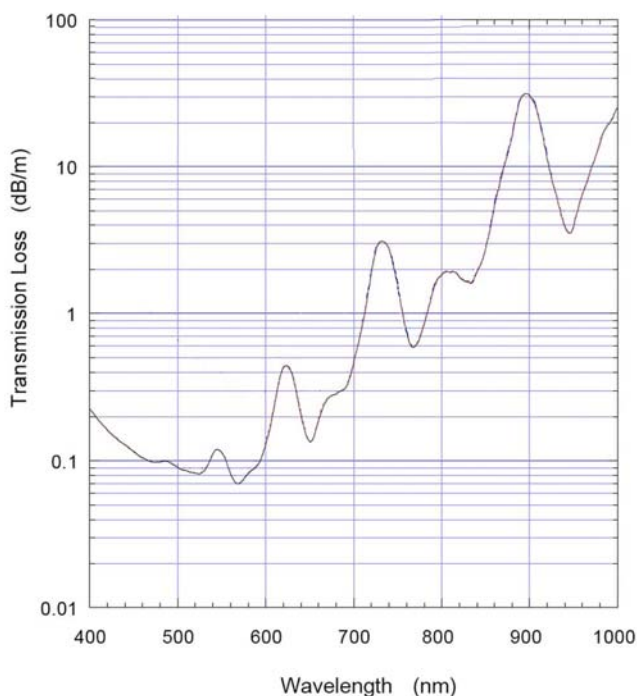


1. To turn on the PASCO Spectrometer, press and briefly hold the ON/OFF button on the right end. After all three status LEDs blink in sequence, release the ON/OFF button. The Bluetooth Status LED will blink blue.
2. Pair /connect through Bluetooth to your computing device. This step will depend on your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

Fiber Optic Probe Specifications

Item	Description
Core Material:	Polymethyl - Methacrylate Resin
Core Refractive Index:	1.49
Core Diameter (typical):	980 micrometers (μm)
Maximum Transmission Loss:	0.170 dB/m (for 650 nm collimated light)
Operating Temperature:	-40 to +85 °C
Minimum Bend Radius:	25 millimeters (mm)

Figure 1: Typical Fiber Optic Transmission Loss versus Wavelength



The graph of transmission loss versus frequency shows that the transmission loss over the visible spectrum is low, in the range of 0.1 decibels (dB) per meter.

Spectrometer Specifications

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

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 8384 (worldwide)
800-772-8700 (U.S.)

Web: www.pasco.com

Email: support@pasco.com

For more information about the product and the latest revision of this Instruction Sheet, visit the PASCO web site at www.pasco.com and enter “PASCO Spectrometer Fiber Optic” or the product number in the Search window.

Limited Warranty

For a description of the product warranty, see the PASCO catalog.

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