

USB Spectrometer Installation Instructions

We here at Ocean Optics want you to know that we appreciate your business. To speak to a Technical Support representative or an Ocean Optics Applications Scientist, please call (727) 733-2447. Our office hours are 8 a.m.– 8 p.m. (Mon-Thu), 8 a.m.– 6 p.m. (Fri) EST.

Package Checklist

Verify that your package contains the following:

- ❑ **Ocean Optics spectrometer**
- ❑ **USB cable (USB-CBL-1):** Connects your spectrometer to a PC's USB port.
- ❑ **Packing List:** Attached to the outside of the shipment box (the invoice arrives separately).
- ❑ **Wavelength Calibration Data Sheet:** OOIBase32 Operating Software reads this calibration data from your spectrometer when it interfaces to a PC via the USB port.
- ❑ **Software and Technical Resources CD:** Contains software, operating instructions, and product information for all Ocean Optics software, spectrometers, and spectroscopic accessories. You need Adobe Acrobat Reader version 6.0 or higher to view these files (version 7.0 is included on the CD).
- ❑ **Passwords:** For any password-protected software that you have purchased. OOIBase32 software does not require a password. Passwords are located on the back of the *Software and Technical Resources* CD jacket.

Spectrometers requiring a power supply have one included in the package.

Installation

Caution! Install the software **BEFORE** connecting the spectrometer to your PC. The OOIBase32 software installs the drivers required for spectrometer installation. If you do not install OOIBase32 first, the system will not properly recognize the spectrometer.

Installing an A/D Converter

If your hardware configuration requires you to connect an external A/D Converter to the PC, consult the documentation for your particular model of A/D Converter for instructions on properly configuring the equipment for use with OOIBase32. When using a USB-based spectrometer (USB2000, QE65000, or any of the HR spectrometers), you do not need to perform this step.

Installing OOIBase32 Software

► Procedure

1. Close all other applications running on the PC.
2. Start installing OOIBase32 from either the *Software and Technical Resources* CD or from the Ocean Optics website:

To install from CD: Insert the *Software and Technical Resources* CD, click on **Install Ocean Optics Software**, then click on **OOIBase32 Operating Software**. The installation process begins.

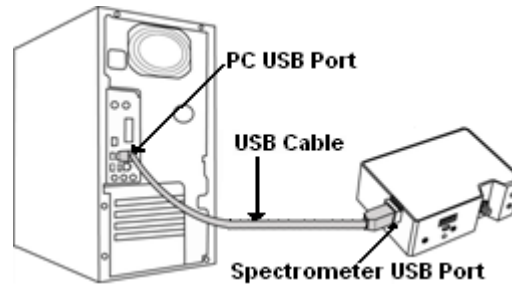
To install from the web: Go to <http://www.oceanoptics.com/technical/softwaredownloads.asp>. Right-click on **OOIBase32™ Spectrometer Operating Software** and select **Save Target As...** to download the executable to your machine. Then, double-click on the downloaded file. The installation process begins.

3. Click the **Next** button at the **Welcome** screen. The **Read Me File** screen appears.
4. Follow the instructions in the Installation Wizard.

5. Click the **OK** button to restart your computer. You have now installed the OOIBase32 software. Navigate to your PC's Device Manager to check that the device drivers have been loaded correctly. You should see your USB spectrometer under either Ocean Optics Devices or Universal Serial Bus Controllers.

Installing Your Spectrometer via the USB Port

To connect to a PC via the USB port, the PC must be running the Windows 98/ME/2000/XP operating system. For information on connecting via the Serial port, see the manual for your spectrometer (see **For More Information**).



► Procedure

1. Locate the USB cable (USB-CBL-1) provided with the spectrometer.
2. Insert the square end of the cable into the side of the spectrometer (USB port).
3. Insert the rectangular end of the cable into the USB port of the PC (the USB port can be on either the front or the rear of the PC). The **Add New Hardware Wizard** appears and installs the spectrometer's drivers.

Start-up

► Procedure

1. Run the OOIBase32 software by selecting **Start | Programs | Ocean Optics | OOIBase32 | OOIBase32**.
2. The **Configure Hardware** screen normally appears automatically for an initial OOIBase32 software installation. Select the type of spectrometer, A/D converter, and serial number of the spectrometer. Click **OK**. The **Select Default Spectrometer** dialog box appears.
3. Select your default.SPEC configuration file in C:\Program Files\Ocean Optics\ OOIBase32. Choose **Open**.
4. Select the **A/D Interface** tab. Select your **Spectrometer Type**, **A/D Converter Type**, and the **USB Serial Number** from the drop-down list boxes. Click **OK**. A dynamic trace line appears in the graph window of OOIBase32 to indicate that you have properly configured the software and that it is acquiring data.
5. Select **Spectrometer | Configure** from the OOIBase32 menu. The **Wavelength Calibration** tab is selected. OOIBase32 should automatically load the coefficients for your spectrometer. NOTE: Some ADC1000-USB spectrometer configurations have more than one channel.
6. Select **Spectrometer | Save Configuration As** from the menu to save your spectrometer configuration. In the **Save Spectrometer Configuration** dialog box, save the .SPEC file to your hard drive. The prompt **"Would you like to make the file *.SPEC your default spectrometer configuration?"** appears. Choose **Yes**.
7. Select **File | Exit** from the menu to close OOIBase32. When you exit OOIBase32, this configuration is stored in a file named [your serial number].SPEC. This file will load as the default .SPEC file the next time you open OOIBase32.
8. When the program has completely closed (about 10 seconds), reopen the OOIBase 32 application.

For More Information

You can access complete documentation for Ocean Optics products on the *Software and Technical Resources* CD or by visiting our website at <http://www.oceanoptics.com>. Select **Technical | Operating Instructions**. Choose the appropriate document from the drop-down lists or use the **Search by Model Number** field.

Please feel free to call Ocean Optics Technical Support at (727) 733-2447 for help or more information.