

## S2000 with ADC2000-PCI+ Installation Instructions

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### Package Checklist

Verify that your package contains the following:

- ❑ **Ocean Optics S2000 spectrometer**
- ❑ **ADC2000-PCI+ A/D Converter**
- ❑ **Interface cable (CBL-2):** Connects your S2000 Spectrometer to the ADC2000-PCI+ card in the PC.
- ❑ **Packing List:** Attached to the outside of the shipment box (the invoice arrives separately).
- ❑ **Wavelength Calibration Data Sheet and Diskette:** The calibration data on the data sheet and the diskette are the same. Copy the data from the diskette to your hard drive or manually enter the data from the sheet.
- ❑ **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.

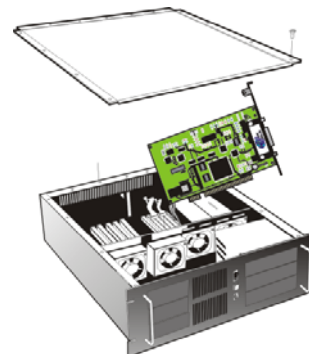
### Installation

**Caution!** Install the software **BEFORE** connecting the ADC2000-PCI+ and S2000 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 new hardware.

#### Installing the ADC2000-PCI+ Hardware

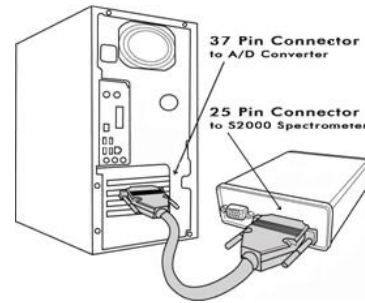
##### ► Procedure

1. Turn off the computer and remove the PC access panel.
2. Ground yourself to the computer chassis or power supply.
3. Remove the ADC2000-PCI+ card from its static-shielded bag.
4. Locate an open PCI-bus slot on the PC motherboard and remove the slot protector from the rear of the PC.



5. Insert the A/D card into a PCI slot on the motherboard. Press down gently and rock the card back and forth until it settles firmly into the PCI slot. The card must be fully seated in the motherboard for proper operation. Do not bend the card or move it from side to side once it is seated in the PCI slot.
6. Fasten a screw through the A/D card into the rear panel of the computer to secure the card in place.

7. Reinstall the PC access panel.
8. Attach the D37 end of the blue interface cable (CBL-2) to the PC and connect the D25 end to the spectrometer.
9. Power up the PC.



## 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 ADC2000-PCI+ under **Ocean Optics Devices**.

## 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 your **Spectrometer Type** (S2000/PC2000/USB2000/HR2000), **A/D Converter Type** (ADC2000-PCI), and **PCI Card Identifier** (0) from the drop-down list boxes. 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** (S2000/PC2000/USB2000/HR2000), **A/D Converter Type** (ADC2000-PCI), and **PCI Card Identifier** (0) from the drop-down list boxes. Click **OK**.
5. Select **Spectrometer | Configure** from the OOIBase32 menu. The **Wavelength Calibration** tab is selected. Enter the coefficients for your spectrometer from the Wavelength Calibration Data Sheet.
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. Be sure that your system is pointing to the hard drive and not to the floppy disk drive accessed in Step 5. At the prompt "Would you like to make the file \*.SPEC your default spectrometer configuration?", 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. 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.

## 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.