

Intel® PRO/Wireless 2011B LAN

Adapter Quick Installation Guide



*Additional documentation is on the
Intel CD.*

Product Model

Intel® PRO/Wireless 2011B LAN PC Card product model:
WPC2011BWW
WPC2011BJP

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About This Document

Conventions

GUI Screen text	indicates the name of a control in a GUI-based application.
<i>Italics</i>	indicates the first use of a term, book title, variable or menu title.
Bold	indicates important user information, license provisions or warranty conditions.
<u>URL</u>	indicates a Uniform Resource Locator, such as a Web page address.

This document uses the following for certain conditions or information:



indicates tips or special requirements.



indicates conditions that can cause equipment damage or data loss.



indicates a potentially dangerous condition or procedure that only Intel® PRO/Wireless 2011B LAN-trained personnel should attempt to correct or perform.

Customer Support

Web and Internet Sites

Support: <http://support.intel.com>

Network Products: <http://www.intel.com/network>

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Customer Support Technicians

For the U.S. and Canada

If you are using this product in conjunction with Intel® PRO/Wireless 2011B LAN hardware in a business or office environment and want customer support, please call +1 916-377-7000 (7:00 – 17:00 M–F Pacific Time). You can also visit the Intel customer support web site (<http://support.intel.com>).

For Worldwide Access

Intel has technical support centers worldwide. Many of the centers are staffed by technicians who speak the local languages. For a list of all Intel support centers, the telephone numbers, and the times they are open, refer to the Customer Support Phone Numbers web site (<http://www.intel.com/support/9089.htm>).

Product Warranty

This product is covered by a Limited Lifetime Warranty. See the online manuals for details.

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Register Online

Register online to receive technical support, product upgrade notices, information updates, and special offers. To register online, re-insert the CD and click **Online Registration**.

Installation Steps

Step 1: Read About the Installation

Installing an Intel® PRO/Wireless 2011B LAN Adapter is part of the bigger process of installing a wireless LAN (WLAN). The steps in this guide are for installing the adapter only.

It is likely that part of the wireless network is already installed. If you are not sure, ask your network administrator.

If the wireless network uses access points, these access points are probably installed and you simply install the adapter. Continue with step 2 in this guide.

If you are setting up your computer to communicate with other computers in a peer-to-peer network, check to see if the other computers are already set up to communicate in a peer-to-peer network. If so, note the SSID, channel, and encryption keys the computers are using before continuing with step 2.

The Steps Outlined

Step 2: Attach regulatory compliance labels.

Step 3: Install the hardware for the Intel® PRO/Wireless 2011B LAN Adapter. This adapter is most likely a PC card.

Step 4: Install the driver software.

Step 5: Install the Intel® PRO/Wireless 2011B LAN Software.

Step 6: Configure the adapter.

Step 7: Make sure that the adapter is installed correctly.

For steps 2 through 7, read the subsection entitled “Before You Start.” Failure to read this subsection could result in the adapter not functioning in the network.



To install the Intel® PRO/Wireless 2011B LAN Adapter, you must log onto a computer with an administrative account. If you log onto the computer with an account that does not have administrative privileges, the installation fails.

Step 2: Attach the Regulatory Compliance Label

A sheet of peel and stick regulatory compliance labels is shipped with the adapter. Follow the directions on the sheet and affix the appropriate label to the adapter.

Step 3: Install the Hardware

Before You Start

If the hardware is already installed, go to step 4.

Notebook Requirements

Installing the Intel® PRO/Wireless 2011B LAN Adapter in a notebook computer requires the following minimum configuration:

- 233 MHz Pentium II
- 64 MB RAM
- A CD-ROM drive
- A video card capable of 256 colors
- One of the following operating systems: Microsoft Windows† 95C, Windows 98, Windows 98 SE, Windows ME or Windows 2000.

If you are unfamiliar with these terms, check with your network administrator to make sure that your computer meets these minimum requirements.

If the installation fails, the following information may be useful to a network administrator. You do not have to be familiar with these terms to continue with the installation. However, if you encounter a problem during the installation, present this information to your network administrator.

- A Type II PC card slot
- An available interrupt request line (IRQ)
- An available input/output (I/O) port address

If You Are Running Microsoft Windows 95, Windows 98, or Windows 2000

Installation and removal methods vary for different notebook computers. Refer to your owner's manual for specific instructions.

Installation Steps

1. Slide in the PC Card until it firmly seats. Align the card properly when inserting. Insert the card firmly without forcing. You may have to press very firmly.
2. Insert the PC Card in the notebook computer as shown below.



3. When fully inserted the PC Card antenna and LED protrudes as shown below.



4. If the power to the computer is off, turn the power on.
5. The computer automatically assigns resources to the adapter and displays a wizard for the driver software.

If You Are Running Microsoft Windows CE

Make sure that the Windows CE device has the hardware capability to accommodate a Type II PC Card. You do not need to insert the card into the Windows CE device yet.

Obtain the following information from your network administrator. You need this information to complete the installation.

- Network Name (SSID)
- Encryption Mode Open / 40-bit / 128-bit
- Encryption Keys if Encryption Mode is 40-bit or 128-bit
- Encryption Key Number (1, 2, 3, or 4)
- DHCP (Yes / No)
- IP Address if the DHCP setting is No
- Subnet Mask
- Default Gateway Address
- Primary DNS Server Address
- Secondary DNS Server Address
- Primary WINS Server Address
- Secondary WINS Server Address

Step 4: Install the Adapter Driver Software

Before You Start

In this step, you install the driver software for the adapter. The driver software allows the operating system to recognize the hardware. This software is different from the Intel® PRO/Wireless 2011B LAN Software that you will install later.

Make sure that you know what operating system you are running. The instructions differ for each operating system.



If you are running **Windows CE**, make sure that the Windows CE device is communicating with a desktop computer through synchronization software. If it is not already installed, install it now and make sure that it is working properly. Refer to the documentation that is shipped with the Windows CE device.

During the driver installation, the wizard asks you for the Network Name (SSID). You may also see the term ESSID. For more information, see the first section in this guide. Before continuing, obtain the appropriate Network Name (SSID) from your network administrator.

At this point, the hardware is installed and a wizard screen should display. If your computer recognizes the hardware and the new hardware wizard does not display, either one of the following is true:

- The latest version of the driver software is installed. Skip this step and go to step 5.
- A previous version of the driver software is installed. In this case, you must remove it first and return to step 2 in this guide. For instructions on how to remove the previous version, insert the Intel CD, click **View User Guides** in the Intel® PRO Network Connections window, and select PRO/Wireless 2011B LAN Adapter.

If you are not sure, contact your network administrator.

If You Are Running Microsoft Windows XP

1. The **Found New Hardware Wizard** begins. Do NOT click Next yet. Verify that **Automatic search for a better driver (Recommended)** is checked.
2. Insert the Intel CD in the CD-ROM drive. The Intel® PRO Network Connections window displays. Disregard this screen for now and click the wizard screen.
3. Windows XP installs the driver. The adapter's properties dialog box displays. Click **Close** to use the default profile and continue with the installation.
4. You can configure the adapter later on with either Windows XP or Intel PROSet II. However, if you want to configure the adapter at this point, click the **Setting** tab and type in the SSID for your wireless network.
5. The **Found New Hardware** dialog box displays again stating Windows has finished installing the software required for this device. Click **Finish**.

If You Are Running Microsoft Windows 2000

1. Insert the Intel CD in the CD-ROM drive. The Intel® PRO Network Connections window displays. Disregard this screen for now and click the wizard screen.
2. When the **Found New Hardware Wizard** begins, follow the wizard prompts and make sure that you select the **Search for a suitable driver for my device** button.
3. Enter the SSID for the network in the **Easy Setup** window. Click **OK**.
4. The **Found New Hardware** dialog box displays again stating Windows has finished installing the software required for this device. Click **Finish**.

If You Are Running Microsoft Windows 98

1. Insert the Intel CD in the CD-ROM drive. The Intel® PRO Network Connections window displays. Disregard this screen for now and click the wizard screen.
2. When Windows 98 recognizes the adapter, the **Add New Hardware Wizard** begins. Follow the wizard prompts and

make sure that you select the **Search for best driver for your device**.

3. Enter the Network Name (SSID), also called ESSID, for the network in the **Easy Setup** window. Click **OK**.
4. When prompted, restart the computer.

If You Are Running Microsoft Windows ME

1. Insert the CD-ROM in the CD-ROM drive. The Intel® PRO Network Connections window displays. Disregard this screen for now and click the wizard screen.
2. When Windows ME recognizes the adapter, the **Add New Hardware Wizard** begins. Follow the wizard prompts and make sure that you select the **Specify the location of the driver** and **Specify the best driver for your device** checkbox. Enter the SSID for the network in the **Easy Setup** window. Click **OK**.
3. Click **Finish**.
4. When prompted, restart the computer.

If You Are Running Windows NT



Note

Before starting the driver installation, make sure that WinNT Service Pack 6 and CardWizard 5.0 is installed and that network services or properties are not set up. Also, make sure that you have the Microsoft Windows NT Setup CD and the Microsoft Windows Service Pack CD ready.

1. If the computer is already on, reboot. Otherwise, turn on the computer.
2. The Wizard displays. Click **Correct**.
3. The CardWizard for Windows NT dialog box displays. Click **OK**.
4. When prompted to install Windows NT Networking, click **Yes**.
5. The next Wizard window displays. Click **Next**.

6. The next Wizard window displays. Click **Select from list...**
7. The Select Network Adapter dialog box displays. Click **Have Disk**.
8. Insert the Intel CD.
9. Type in the path to the CD-ROM drive followed by the directory "Wireless\Winnt". Click **OK**.
10. Select **Intel(R) PRO/Wireless LAN 3.3 volt PC Card**. Click **OK**.
11. Click **Next**. The next Network Setup Wizard window displays.
12. Click **Next** again.
13. Click **Next** again.
14. Click **Next** again.
15. Remove the Intel CD and insert the OEM CD.
16. Type in the path to the \I386 system folder on your OEM CD.
17. The Intel PRO/Wireless LAN Easy Setup window displays. Enter the Network Name(SSID) of your wireless network.
18. Click **OK**. When prompted about TCP/IP configuration, click **Yes**.
19. Click **Next**.
20. Click **Next** again.
21. Enter Workgroup or Domain information, if necessary. Click **Next**.
22. Click **Finish** to end the wizard. Click **Yes** to reboot the computer and remove any boot floppies or CDs.
23. Reinstall Service Pack 6.

If You Are Running Microsoft Windows 95C

1. Insert the Intel CD in the CD-ROM drive. The Intel® PRO Network Connections window displays. Disregard this screen for now and click the wizard screen.

2. When Windows 95 recognizes the adapter, the **Hardware wizard** begins.
3. Select **Next**. Select it only once.
4. When the Hardware wizard is finished, select **Other Locations**. Enter the drive name for the CD-ROM drive followed by the Win95 directory. Follow the prompts.
5. Enter the SSID for the network in the **Easy Setup** window. Click **OK**.
6. Click **Finish**.
7. When prompted, restart the computer.

If You Are Running Microsoft Windows CE

1. Insert the Intel CD. The installation file is called Intel PRO Wireless For PocketPC V1.0.exe and is located in the Wireless/WinCE directory.
2. Double-click the installation file. The installation begins.
3. When the Installing Application dialog box displays, click **Yes**. The installation program uses the default application install directory.
4. When the Application Downloading Complete dialog box displays, click **OK**.
5. When the download from the laptop/desktop computer to the Windows CE device is complete, the Easy Setup dialog box displays.
6. In the Easy Setup dialog box, enter the ESSID. This is also called the SSID or Network Name.
7. If the Easy Setup dialog box does not display on the Windows CE device, tap **Start**, **Settings**, and then **Intel PRO/Wireless Settings**. This is another way to display the Easy Setup dialog box.
8. Click the **Advanced** button. Select the tabs along the bottom of the Intel WLAN Setup window to make changes to the advanced settings. These settings include security settings. For more information, refer to the *Intel® PRO/Wireless 2011B LAN User's Guide*. This guide is available on the Intel CD or in the software package you downloaded from the Intel support website. The tabs you

see here are the same tabs in the Network Control Panel Applet (NCPA).

9. When you finish making changes, click **OK** to close the application.
10. Insert the adapter and reset the Windows CE device. On some devices, you are not prompted to reset the device. However, for the adapter to function properly, you must reset the device.

Step 5: Install Intel® PRO/Wireless LAN Software

Before You Start

You launch the software installation from the Intel CD. If you do not have an Intel CD, go to the Intel support website at <http://support.intel.com> and download the software package.

Instructions for Windows XP

You can manage adapters through either Intel PROSet II or Windows XP.

If you decide to manage your adapters through Windows XP, do not install the Intel PRO/Wireless LAN Software and do the following.

1. Left-click the Windows XP Network icon in the System Tray. This is typically in the lower right corner of your computer screen.
2. Click the **Properties** button.
3. Click the **Wireless Network** tab.
4. Make sure that the **Use Windows to configure my wireless network settings** checkbox is checked.

If you decide to manage your adapters through Intel PROSet II, do the following.

1. Left-click the Windows XP Network icon in the System Tray. This is typically in the lower right corner of your computer screen.
2. Click the **Properties** button.
3. Click the **Wireless Network** tab.

4. Make sure that the **Use Windows to configure my wireless network settings** checkbox is NOT checked.
5. Follow the instructions below for installing the software on a Windows 2000 system.

Instructions for Windows 98, Windows Me, and Windows 2000

1. If the Intel CD is in the CD-ROM drive, re-insert the CD into the CD-ROM drive. Otherwise, insert the CD in the CD-ROM drive. If you downloaded the software package from the Intel support website, navigate to the directory where the package is located and double-click the autorun.exe file.
2. Click **Install Drivers and Utilities** in the Intel® PRO Network Connections window.
3. Select either **Typical** or **Custom**.
 - If you are NOT a network administrator, select **Typical**. This option installs Intel PROSet II only.
 - If you are a network administrator, select **Custom** and select the Access Point Administration Tools. This option installs both Intel PROSet II and the Administration Tools.
4. Follow the instructions on the wizard screens.

Instructions for Windows 95

Install the Intel® PlusPack Utilities. To install this software, run the setup program.

If you have the Intel CD, the setup program is located in the wireless\apps\win95\setup directory. If you downloaded the software package from the Intel support website, navigate to the directory of the software package and then to the wireless\apps\win95\setup directory in that directory. Double-click setup.exe.

Step 6: Configure the Intel® PRO/Wireless 2011B LAN Adapter

Before You Start

In this step, configure the adapter.

If you are running Windows 95, configure the adapter with the **Intel® PlusPack Utilities**.

If you are running Windows 98, Windows ME, or Windows 2000, configure the adapter with **Intel® PROSet II**.

If You Are Running Microsoft Windows 98, Windows ME, or Windows 2000

1. Select the wireless adapter on the left side of the **Intel® PROSet II** window.
2. Select **Help** from the **Help** menu and select the topic “**Changing Network Settings**.” Follow the instructions for mobile and security settings.

If You Are Running Microsoft Windows 95

1. Click **Start**, select **Settings**, and then click **Control Panel**.
2. From the Windows 95 Control Panel, double-click **Network** and select **Intel PRO/Wireless LAN PC Card**. Click the **Properties** tab.
3. From the **Easy Setup** window, click the **Advanced** button to view the adapter settings.
4. Use the **NCPA Mobile Unit**, **Mobile IP**, **Encryption** and **WLAN Adapter** tabs to view or adjust the PC Card configuration settings. For more information, refer to the online help for **NCPA**.
5. Restart the system for the changes to take effect.
6. Intel recommends that you update the firmware on the adapter. To do this, run the **WLAN Update Utility**. To download the latest firmware, go to the Intel support web site (<http://support.intel.com>).

Step 7: Make Sure That the Adapter Is Working

To see if the adapter is installed correctly, try going to a popular external website like www.yahoo.com. If the browser reports an error, use the troubleshooting tips below.

If you do not have an internet connection, try pinging a device on the network. If you are unfamiliar with pinging devices, contact your network administrator.

Installation Steps

With exception of a wired network connection, the Intel® PRO/Wireless 2011B LAN Adapter is just like any mobile wired adapter. In addition to standard troubleshooting techniques for wired network adapters, try the following troubleshooting tips:

- The Network Name (SSID) of all access point and/or adapters must match. Make sure that they do.
- If you are using WEP encryption, the adapter must support this option. The encryption keys for the access point and adapter must match. Also, the key you selected must be identical. You can select keys 1, 2, 3, or 4.

Installation Steps
